



1. Application details

1.1. Permit application details

Permit application No.: 2831/1
 Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Shire of Jerramungup

1.3. Property details

Property: ROAD RESERVE (BREMER BAY 6338)
 ROAD RESERVE (BREMER BAY 6338)
 ROAD RESERVE (BREMER BAY 6338)
 ROAD RESERVE (BREMER BAY 6338)
 LOT 796 ON PLAN 30496 (BREMER BAY 6338)

Local Government Area: Shire Of Jerramungup
 Colloquial name: White Trail Road reserve

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.6		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: (42) & (50) 42 is described as shrublands; mallee & acacia scrub on south coastal dunes. 50 is described as shrublands; dwarf scrub on granite (south coast). (Shepherd et al. 2001)	The area under application consist of coastal shrubs and mallee trees. There is an existing road which runs through the middle of the area under application.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The area under application has been described from aerial imagery.

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 proposed clearing involves selectively removing 2.6 hectares of native vegetation for the purpose of road upgrades. The area under application is described as being in a very good (Keighery 1994) condition.

There are numerous records of priority flora species recorded within the local area (10km radius), however these species are associated with different soil and vegetation types.

Given the size of the proposed area to be cleared (2.6ha) and the amount of surrounding remnant vegetation (75%) within the local area (10km radius), it is not likely to be a remnant in an already cleared area and is not likely to be at variance to this principle.

The area under application and the local area (10km radius) consists of large intact remnants, which is likely to comprise high biodiversity and acts as a linkage to state forests, national parks and nature reserves. Avoid minimise conditions and weed and dieback conditions will be placed on the permit to preserved linkages where possible.

Methodology EPA (2000)
 Keighery (1994)

GIS Database:

- CALM Managed Lands and Waters - CALM 01/06/05
- Bremer Hood Point 1.4m Orthomosaic - Landgate 2004
- SAC Biodatasets - accessed 19/11/08
- Pre European Vegetation - DA 01/01
- NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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

Within the local area (10km radius from the proposed clearing) there are 4 records of threatened fauna and 3 records of priority species.

The area under application is proposed to clear 2.6ha of native vegetation of which the area is in a very good (Keighery, 1994) condition. Within the local area (10km radius) there is 75% remaining native vegetation of which is well represented fauna habitat. Given these factors proposed clearing is not considered to be significant habitat for the fauna, therefore not likely to be at variance to this principle.

Methodology GIS Database:

- Bremer Hood Point 1.4m ORTHOMOSIAC - Landgate 2004
- CALM Managed Lands and Waters - CALM 01/06/05
- Threatened Fauna, SAC Bio Dataset (19/11/08)

(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

There are two records of rare flora (*Boronia clavata*, 1.5km north and *Eucalyptus nutans*, 4.7km north) within the local area (10km radius). The rare flora was found in different soil and beard vegetation type as the proposed clearing area. It is unlikely that the proposed clearing area is necessary for the continued existence of rare flora.

Methodology GIS Database:

- Bremer Hood Point 1.4m ORTHOMOSIAC - Landgate 2004
- DEFL, SAC Biodataset (19/11/08)

(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

There are no known Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing site. Therefore is not at variance to this principle.

Methodology GIS Database:

- Bremer Hood Point 1.4m ORTHOMOSIAC - Landgate 2004
- DEFL, SAC Biodataset (19/11/08)
- TEC Database, SAC Biodatasets - accessed 19/11/08

(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 likely to be at variance to this Principle

	Pre-European	Current Extent	Remaining
IBRA Bioregion			
Esperance Plain	2,899,948.91	1,500,348.10	51.74
Shire			
Jerramungup	648,566.30	285,269.19	43.98
Beard Vegetation			
42	310,084.50	294,202.45	94.88
50	6,099.85	4,523.37	74.16

The area under application is located in the Esperance Plain Bioregion and is in the Shire of Jerramungup. The extent of Esperance Plain is 51.74%. The extent of the pre-European vegetation (42) is 94.88% and (50) is 74.16% (Shepherd et al. 2001) within the Shire of Jerramungup is 43.98% (Shepherd et al. 2001). Beard vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000). The area under application is situated within the agricultural area described within EPA Position Statement Number 2. As the area under application is small and the catchment area is well vegetated (95%) the clearing is unlikely to cause land degradation including salinisation.

The local area (10km radius) is approximately 75% vegetated. Due to the amount of surrounding vegetation present and the purpose to clear be for a road upgrade (not agricultural purposes), the proposed clearing is not likely to be at variance to this principle.

Methodology EPA (2000)
Shepherd (2006)
Shepherd et al. (2001)
GIS Database:
- Bremer Hood Point 1.4m ORTHOMOSIAC - Landgate 2004
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Pre European Vegetation, SAC Bio Dataset (19/11/08)

(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 at variance to this Principle

There is one perennial swamp 620m north of the proposed clearing site and the coastal waterline 60m east of the area under application. The site is not considered to be in association with any water courses or wetlands and therefore clearing will have no impact on the tributary banks, habitat for aquatic fauna or water quality. The proposal is therefore is not at variance to this principle.

Methodology GIS Database:
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 proposed clearings topography is 5 to 15m AHD (Australian Height Datum). The mean annual rainfall is 700mm per annum and the evapotranspiration rate is 600mm. The soil type is described as chief soils seem to be shallow sandy soils and possibly with leached sands on colluvial material. Associated are various soils containing ironstone gravels and also their erosion products, areas may be banked up against the granite, and some aeolianite areas of undescribed soils (Northcote et al, 1968). The groundwater salinity is 3000-7000mg/L (High salinity risk), however the catchment area has not been highly cleared and the area under application is small (2.6ha) and spread across a long area therefore salinity is not considered a risk.

Given the soil type (sandy well drained), low relief in topography and size of the area (2.6ha), water erosion, water logging and salinity is unlikely to occur on the site. The area under application therefore is unlikely to be at variance to this principle.

Methodology Keighery (1994)
Northcote et al. (1968)
GIS Database:
- Evapotranspiration Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- 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 proposed clearing is 1.8km east of Fitzgerald River National Park which is a Registered National Estate and is 1.8km west of Glasse Island Nature Reserve.

As the area proposed to clear is small (2.6ha) and there is well represented remnant (90%) vegetation within the local area (10km radius). The area in question is unlikely to have any impact on the registered national estate or DEC managed lands.

The area under application and the local area (10km radius) consists of large intact remnants, which acts as a linkage to state forests, national parks and nature reserves. A weed and dieback conditions will be placed on the permit to preserved linkages where possible and prevent long term spread of the pathogen.

Methodology GIS Databases:
- Bremer Hood Point 1.4m ORTHOMOSIAC - Landgate 2004
- CALM Managed Lands and Waters - CALM 01/06/05

(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 at variance to this Principle

There is one perennial swamp 620m north of the proposed clearing site and the coastal waterline 60m east of the area under application.

Given that the small scale of the area under application (2.6ha) and the proposed clearing is not associated with any wetlands or water courses, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water and therefore is not at variance to this principle.

Methodology GIS Database:

- Evapotranspiration Isoleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05

(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

Given the soil type (Sandy well drained), low relief in topography and size of the area (2.6ha), it is unlikely to cause or exacerbate the incidence or intensity of flooding.

Methodology Northcote et al. (1968)

GIS Database:

- Evapotranspiration Isoleths
- WRC 29/09/98 - Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The White Trail Road Reserve is vested with the Shire of Jerramungup.

Methodology EPA (2000)

GIS Database:

- Town Planning Scheme Zones - MFP 31/08/98

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is not likely to be at variance to Principles (a), (b), (c), (e), (g), (h) & (j) and the remaining principles are not at variance.

5. References

- Commonwealth of Australia (2001) National Targets and Objectives for Biodiversity Conservation 2001-2005, AGPS, Canberra.
- DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2831/1, White Trail Road Reserve (including Lot 796 on Plan 30496), Jerramungup. Site inspection undertaken 3/12/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC69924).
- 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, Western Australia.
- 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.
- 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.

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)

