



1. Application details

1.1. Permit application details

Permit application No.: 472/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: City of Geraldton

1.3. Property details

Property:
Local Government Area: City Of Geraldton
Colloquial name: Coastal Reserves and Lots 2851, 2333 and 1142

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
3		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 129: Bare areas; drift sand.	The vegetation to be cleared has been described as open heath over grassland dominated by	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	Observed during site visit: The area of vegetation will be cleared to construct an all-weather, dual-use pathway by the City of Geraldton, referred to as Stage 2. The path will be constructed along the roadside and vegetation a maximum of 6m in from the edge of the bitumen will be required to be removed. In most cases the native coastal vegetation does not grow within two metres of the road verge, meaning that less vegetation will need to be removed. The vegetation also contains weeds such as African Boxthorn, Tamarisk trees and grasses such as fountain grass (Site visit photos, TRIM - GD 477).
Beard vegetation association 371: Low forest; Acacia rostellifera	Acacia rostellifera, Scaevola crassifolia, Nitraria billardierei and Spinifex longifolius (Van der Moezel 2005).		
Beard vegetation association 440: Shrublands; Acacia ligulata open scrub (Hopkins et al 2001, Shepherd et al 2001)			

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 biodiversity of the area to be cleared has been highly altered due to past clearing, road construction and introduction of weeds. The area to be cleared is also relatively small (0.84Ha). Therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00.
Site visit

(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**
In 1983 Idiosoma nigrum Shield Backed Trapdoor Spider (vulnerable) was recorded within 3km of the site that is now proposed to be cleared. The primary coastal dune system found at this site is unsuitable for this species to construct its burrow. Idiosoma nigrum is therefore unlikely to be found at this site. The listed marine-based fauna are not likely to be affected by the proposed clearing. The record of Macropus irma Western Brush Wallaby is historic (1954), and the likelihood of Macropus irma being extant at the site is now considered to be low, due to the significant changes associated with urban development and related infrastructure. The proposal is not likely to be at variance to this Principle (CALM 2005).

Methodology CALM's Threatened and Priority Fauna Database - It should be noted that the supplied data do not necessarily represent a comprehensive listing of the Threatened and Priority Fauna of the area in question. Its comprehensiveness is dependent of the amount of survey carried out within a specified area.

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

Comments **Proposal is not likely to be at variance to this Principle**
It is likely that the soil types found at the site of the proposed clearing would be a typical primary coastal dune system, and therefore unsuitable to support the P2 taxon *Eremophila brevifolia*, which is known from heavier soil types, typically found further inland. The proposed clearing is not likely to be at variance with this principle (CALM 2005).

Methodology CALM's Threatened and Priority Flora Data Management System [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. The determination of the presence of rare or priority flora can only be made through appropriate flora survey (CALM, 2004)].
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 not at variance to this Principle**
There are no known Threatened Ecological Communities (TECs) found within 10km of the proposed clearing. However within 32 km to the south there are 3 records of TEC 'Acacia rostellifera low forest.' In common with the site of the proposed clearing, they are in reasonable proximity to the coast, however the community description is dissimilar in terms of floristic and geomorphological composition. These TECs are not likely to be found at the site of the proposed clearing (CALM 2005).

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 not at variance to this Principle**
The Geraldton Sandplains Bioregion and Beard vegetation associations 129 and 440 have greater than 50% of the native vegetation remaining making them of 'least concern' by conservation status standards. Beard vegetation association 440 has <10% of the native vegetation remaining making it 'endangered' by conservation status standard. However the proposed clearing covers an insignificant amount of this Beard vegetation type. Therefore proposed clearing is not at variance to this Principle.

	Pre-European Reserves/CALM-area (ha)	Current extent (ha)	Remaining %*	Conservation status**	managed land,
%					
IBRA Bioregion - Geraldton Sandplains	4,026,769	2,215,659	55.0	Least Concern	Not Available
Local Government Authority - City of Geraldton	Not Available	Not Available	Not Available	Not Available	Not Available
Beard Veg type 129	95,663	51,747	54.1	Least Concern	53.4
Beard Veg type 371	37,651	3,703	9.8	Endangered	3.7
Beard Veg type 440	6,670	3,977	59.6	Least Concern	3.8

* (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**
The proposed area to be cleared does not occur near or effect any watercourse or wetland.

Methodology GIS Database: Hydrography, linear - DoE 01/02/04
Site Visit

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

Comments Proposal is not at variance to this Principle

As this is a coastal area the only land degradation likely to occur if the vegetation is removed is erosion of the sand dune system. The City of Geraldton will address this issue by mulching and revegetating dunes left bare from vegetation removal. This has been an effective method used in other dune restoration works in the City of Geraldton. Therefore the proposed clearing is not at variance to this Principle.

Methodology GIS Databases - Rainfall, Mean Annual - BOM 30/09/01, Salinity Risk LM 25m - DOLA 00 , Soils, Statewide - DAWA 11/99
Site Visit

(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

Geraldton Townsite Lot 2623 Crown reserve 33799 is situated in very close proximity (50metres) to the proposed clearing. This reserve is significantly degraded and is unlikely to be further impacted by the proposed clearing being carried out. The advice given by CALM is as follows: The proposed clearing is unlikely to impact on the remaining environmental values of Geraldton Townsite Lot 2623 Crown reserve 33799. The proposal is not likely to be at variance to this Principle (CALM 2005).

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
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 at variance to this Principle

Due to the proximity of the area to the coast it is highly unlikely that the proposed clearing will have an impact on the quality of surface or underground water.

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.
Midwest Gascoyne Hydro Unit, 2005.

(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 at variance to this Principle

Due to the proximity of the area to the coast it is highly unlikely that the proposed clearing will have an impact on the peak flood height of this area.

Methodology GIS Databases - Rainfall, Mean Annual - BOM 30/09/01
Midwest Gascoyne Hydro Unit, 2005.

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

Comments

The City of Geraldton has not indicated that there are any planning requirements/approvals that would affect the clearing.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction o maintenance	Mechanical Removal	3	Grant	The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted.

5. References

- Department of Conservation and Land Management (2005) Land Clearing Proposal Advice - Application Number 472, Perth, 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.
- 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.
- 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.
- Van der Moezel, P (2005) Geraldton-Greenough Coastal Strategy and Foreshore Management plan - Version 4, ATA Environmental, Perth, Western Australia