



1. Application details

1.1. Permit application details

Permit application No.: 740/4

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Department of Planning and Infrastructure

1.3. Property details

Property: LOT 1225 ON PLAN 219775 (JURIEN BAY 6516)

Local Government Area: Shire Of Dandaragan

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.3		Mechanical Removal	Miscellaneous

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 1026; Mosaic; Shrublands; Acacia rostellifera, A. cyclops (S) and Melaleuca cardiophylla (N) thicket (Hopkins et al. 2001, Shepherd et al. 2001).	Native flora species that may be affected by this proposal include Olearia axillaris, Scirpus nodosus, Spinifex hirsutus, Scaevola crassifolia, Carpobrotus virescens, and Pittosporum sp. (Oceanica Consulting, 2005).	Degraded; Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Observed during site visit: the area covered by clearing permit 740 consisted of Acacia sp., Scaevola crassifolia, Carpobrotus virescens, Hardenbergia comptoniana, Cassytha racemosa and Spinifex hirsutus with obvious signs of disturbance. The site was previously used for dredged materials when the port was constructed in 1987. Some regeneration has occurred however it appears that wind erosion was not managed well and as a consequence large cleared areas remain.

3. Assessment of application against clearing principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

The area under application falls within the Swan Coastal Plain Bioregion; an area recognised for its biodiversity. The vegetation being considered was degraded when the site was used to dispose of dredged material in 1987 (DPI, 2005) and has only partly regenerated (Oceanica Consulting, 2005). The large cleared areas remaining, suggest that the vegetation under application does not represent an area of outstanding biodiversity. Therefore, this proposal is not at variance to this Principle.

Methodology GIS Databases: Interim Biogeographic Regionalisation of Australia-EA 18/10/00. Site visit, DoE Officer, 2005. DPI, 2005. Oceanica Consulting Pty Ltd, 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

The vegetation under consideration was degraded in 1987 when the site was used for dredged material disposal and has only partly regenerated. The large cleared areas that remain indicate that the site would not provide a significant habitat for fauna species. Upon completion of the works the site will be contoured, stabilised and revegetated to the same condition as the surrounding intact dunal vegetation. The vegetation management program is likely to improve upon the current environmental value of the site, in terms of providing habitat for fauna species, therefore this proposal is not at variance to this Principle.

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)]. Site visit, DoE Officer, 2005.

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

Comments

No specially protected flora species have been recorded within the area under application (Oceanica Consulting, 2005) and the large cleared areas remaining indicate that the site would not be necessary for the continued in situ existence of significant flora or the continued in situ existence of significant habitat for priority flora species. This proposal is therefore not at variance to this Principle.

Methodology GIS Databases: Declared Rare and Priority Flora list - CALM 13/08/03.Site visit, DoE Officer, 2005.Florabase, 2005.CALM's Threatened and Priority Flora 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)].Oceanica Consulting Pty Ltd, 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 threatened ecological community.

Comments

The Threatened Ecological Community (TEC) data base did not include the vegetation affected by this application, therefore this proposal is not at variance to this Principle.

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

(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

There is greater than 30% pre-European vegetation remaining in the Swan Coastal Plain Bioregion, the Shire of Dandaragan and Beard vegetation association 1026, therefore this proposal is not at variance to this Principle.

	Pre-European Reserves/CALM-status**	Current managed land	Remaining area (ha)	Conservation extent (ha)	%*
availableShire - Dandaragan	1,498,297	626,512	41.8	Depleted	Not
availableBeard veg type - 1026	668,507	326,283	48.8	Depleted	Not
		124,905	85,076	68.1	Least concern

46.3* (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

The area under application falls within the Coastal catchment and lies immediately adjacent to the coastal waterline. None of the vegetation affected by this application is growing in, or contributes to the ecological functions, of a watercourse with significant environmental values, therefore this proposal is not at variance to this Principle.

Methodology GIS Databases: Hydrography, linear - DoE 01/02/04, Hydrographic Catchments (Basins and Catchments) - DoE 03/04/03.Site visit, DoE Officer, 2005

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

Comments

The vegetation under consideration forms part of a fore dune complex adjacent to the coast and beach with calcareous deep sands supporting coastal heath. The removal of vegetation from a dunal system is likely to increase wind and water erosion (DAWA, 2005), however the proponent intends to contour the area to match the existing dune profile and then stabilise and revegetate with native species on completion of the works. Therefore, this proposal is unlikely to increase on or off site land degradation.

Methodology Department of Agriculture (2005) Map Unit Database.Site visit, DoE Officer, 2005DAWA, 2005.

(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

The area proposed to be cleared is adjacent to the Jurien Bay Marine Park but does not include any

conservation areas. Given the degraded nature and small area of the remaining vegetation, it is unlikely that the area under consideration contributes to, provides a buffer for or an ecological linkage to the conservation area. This proposal is therefore not at variance to this Principle

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 Site visit, DoE Officer, 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

The area under application is in the Coastal catchment and does not include any Public Drinking Water Source Areas (PDWSA) or PDWSA Protection Zones. Any rainfall freely drains through the sandy soils directly into the ocean, therefore this proposal will not increase sedimentation, erosion, turbidity, eutrophication, or pH. This proposal is therefore not at variance to this Principle.

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.DAWA, 2005

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments

The vegetation under application lies in the Coastal catchment in an area that experiences an average (600mm) rainfall. The area does not fall within a designated floodway or flood fringe zone (Waters and Rivers Commission, 2000). The area features sand through which water drains directly into the ocean and is therefore unlikely to lead to an incremental increase in peak flood height or duration.

Methodology GIS Databases - Rainfall, Mean Annual - BOM 30/09/01, 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

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

Comments

The Shire of Dandaragan has not indicated that there are any planning requirements/approvals that would affect the clearing. A Native Title claim has been registered over the entire area by the South West Aboriginal Land Corporation (NNTT No - WC97_071) therefore the granting of a permit to clear vegetation may constitute a Future Act. DPI have advised that Native Title claim for this area has been extinguished.

Methodology

4. Assessor's recommendations

Purpose	Method Applied	area (ha)/ trees	Decision	Comment / recommendation
Miscellaneous	Mechanical Removal	2.3	Grant	Disposal site for sand dredged from harbour entrance to improve safety for vessels. 1.1ha of clearing area is largely without vegetation. Site to be rehabilitated. The assessable criteria have been addressed and no objections were raised. The assessing officer therefore recommends that the clearing permit be granted with conditions relating to the fencing and rehabilitation of the site. Fencing is required because the site forms part of a sand dune system that experiences heavy traffic from recreational users. Rehabilitation would not be successful unless this area was protected.

5. References

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management
DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)