Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 512/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Water Corporation**

1.3. Property details

Property: LOT 0 ON PLAN 14297
Local Government Area: Town Of Kwinana
Colloquial name: Rowley Rd/Satinover Way - Drain Reserve for Peel Main Drain

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.03		Mechanical Removal	Road Maintenance (old)

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: 1001: Medium very sparse woodland; jarrah, with low woodland; banksia & casuarina Heddle vegetation complex: Bassendean Complex - Central and South: Vegetation ranges from woodland of *E. marginata* - *C. fraseriana* - *Banksia* spp. to low woodland of *Melaleuca* species, and sedgelands on the moister sites. This area includes the transition *of E. marginata* to *E. todtiana* in the vicinity of Perth.	The proposal includes the clearing of 0.03 of a hectare of vegetation located adjacent to the Peel Main Drain. This vegetation is comprised primarily of a mixture of *Adenanthos cygnorum* and *Kunzea glabrescens*, with numerous weed and grass species.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The description of the vegetation under application was obtained after a site visit to the property on Monday 5 September 2005.

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

Vegetation within the Peel Main Drain reserve has been extensively altered through past landuse practises. Vegetation under application is limited to Adenanthos cygnorum and Kunzea glabrescens, with a weed and grass understorey. With the limited size of this application, and a relatively high number of reserves and vegetated areas present within close proximity, it is not considered that the application area is representative of higher biological diversity in the region.

Methodology Site inspection (5/9/2005)

(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

Proposal is not likely to be at variance to this Principle

The vegetation under application has been degraded through past clearing of the area, and associated edge effects. Vegetation currently present consists of a both *Adenanthos cygnorum* and *Kunzea glabrescens*, with a mixture of weed and grass species. A lack of trees and logs present makes this area unlikely to contain significant habitat not well represented in surrounding areas.

Methodology Site inspection (5/9/2005)

(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 36 known populations of Declared Rare and Priority Flora in the local area, defined as a five kilometre radius surrounding this application. Of these populations, 18 are present within the same Heddle vegetation complex as that under application, with the closest example being *Caladenia huegelii*, located approximately one kilometre to the east.

Based on the condition of the vegetation under application, it is unlikely that any Declared Rare or Priority Flora would be impacted through the granting of this permit.

Methodology GIS Database: Declared Rare and Priority Flora List - CALM 01/07/05
Site inspection (5/9/2005)

(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

Proposal is not likely to be at variance to this Principle

There are no records of Threatened Ecological Communities (TEC) in the vicinity of the proposed clearing (the nearest approximately seven kilometres away). Based on the limited area of vegetation under application, and its degraded condition, it is unlikely that the proposed clearing will impact on any TEC.

Methodology GIS Database: Threatened Ecological Communities 12/4/05
Site inspection (5/9/2005)

(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 likely to be at variance to this Principle

The vegetation proposed to be cleared is defined as Beard vegetation association 1001 (Hopkins et al. 2001) and Heddle vegetation complex 'Bassendean Complex - Central and South' (Heddle et al. 1980), of which both have a representation below 30%.

The State Government is committed to the National Objective Targets for Biodiversity Conservation, which includes targets that prevent clearance of ecological communities with an extent below 30% of that present pre-1750 (Department of Natural Resources and Environment 2002; EPA 2000). Beyond this value, species extinction is believed to occur at an exponential rate and any further clearing map have irreversible consequences for the conservation of biodiversity and is, therefore, not supported.

While these representation figures are below those recommended, the vegetation on site is in such a degraded condition, that it is unlikely to be representative of these communities.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves/CALM-managed land
IBRA Bioregion	1,529,235	657,450	43%	Depleted	
Town of Kwinana	11980.55	4760.18	39.7%	Depleted	
Beard vegetation association - 1001	68,475	18,907	27.6%	Vulnerable	4.2%
Heddle vegetation complex - Bassendean Complex - Central and South	87,477	23,624	27%	Vulnerable	0.7%

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)

Methodology Hopkins et al. (2001)
Heddle et al. (1980)
Department of Natural Resources and Environment (2002)

EPA (2000)
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 likely to be at variance to this Principle

The area under application is highlighted as an area subject to inundation under the ANCA wetlands classifications. The vegetation in this area is on the side of the Peel Main Drain that is approximately 2-3 metres deep. The purpose of this drain to remove the seasonal inundation by digging the drain below the highest annual maximum groundwater level. The area under application is also within ~60 of a resource enhancement wetland.

The location of the drain immediately parallel to the vegetation under application means it is unlikely to be part of a seasonally inundated waterlogged area/wetland identified under the ANCA wetland classification. It is considered that a 50 metre buffer is adequate between the clearing and the resource enhancement wetland. Given the relatively small scale of the proposal it is unlikely that the clearing will have a detrimental impact on the surrounding watercourse and wetlands.

Methodology

Site inspection (5/9/2005)
GIS Databases:
- ANCA, wetlands - CALM 08/01
- Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain - DOE 15/9/04
- EPP (Lakes) - DEP 1/12/92

(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 vegetation under application is located directly adjacent to the Peel Main Drain, in an area which has obviously been impacted through historic management activities. The area surrounding the applied vegetation falls within Class 2 risk of Acid Sulphate Soils (ASS) - Low risk of shallow ASS or PASS occurring (< 3m), but moderate to high risk of ASS or PASS occurring at greater than 3 metres from the soil surface.

Based on the amount of vegetation proposed for removal, and the already degraded nature of the area under application, approval of this proposal in considered unlikely to appreciable impact on on-site or off-site land degradation.

Methodology

GIS Database: Acid Sulphate Soil Risk Map, SCP - DOE 04/11/04
Site inspection (5/9/2005)

(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

Proposal is not likely to be at variance to this Principle

The area of vegetation under application within the Peel Main Drain Reserve is located approximately 2km north of Wandi Nature Reserve, 3km south-east of Harry Waring Marsupial Reserve, and 7km north of Modong Nature Reserve. Based on the current condition of the vegetation, and the distance to remaining stands of remnant vegetation, it is not considered likely that the vegetation under application contributes significantly as an ecological linkage or buffer to nearby conservation areas.

Methodology

Site inspection (5/9/2005)
GIS Database: CALM Managed Lands and Waters - CALM 01/07/05

(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 likely to be at variance to this Principle

The area under application is located within a proclaimed groundwater area (Jandakot GWA) and a Priority 2 Public Drinking Water Source Area (PDWSA). Given the relatively small size of the proposed clearing, and the degraded nature of present vegetation, approval of this proposal is considered unlikely to impact on surface or groundwater quality.

Methodology

Site inspection (5/9/2005)

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

Comments **Proposal is not likely to be at variance to this Principle**
Due to the scale of the proposed clearing, flooding impacts are unlikely to occur.

Methodology Site inspection (5/9/2005)

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

Comments
Town of Kwinana had no objection to the proposed clearing.

Methodology Direct Interest Letter - Town of Kwinana (DOE Trim ref: 2005I/479)

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road Maintenance (old)	Mechanical Removal	0.03	**Grant**	Assessable criteria addressed and no objections were raised. The assessing officer therefore recommends that the permit should be granted

5. References

ANCA (1996) A Directory of Important Wetlands in Australia. Second Edition. Australian Nature Conservation Agency, 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.

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.

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, 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, 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.

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)