Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2101/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: City of Albany

1.3. Property details

Property: LOT 6471 ON PLAN 208279 (GREEN RANGE 6328)
LOT 6472 ON PLAN 208279 (GREEN RANGE 6328)
Local Government Area: City Of Albany
Colloquial name: Gravel extraction on private property.

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2		Mechanical Removal	Extractive Industry

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 Type 980: Shrubland; jarrah mallee-heath	The Vegetation present on the application area is in 'Excellent' condition (keighery 1994), with the only signs of disturbance being situated adjacent to an old fence line on the northern side of the area. A DEC site visit report (2007) described the condition of the area under application to be in 'Very good' to ' Excellent condition.'	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Description and condition of the vegetation was obtained by the use of Orthomosaic mapping and a DEC site visit.

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 area under application is considered to be in "Very good" to "Excellent" condition (Keighery 1994), a DEC Site Visit (2007) listed a total of 37 flora species present on the proposed area to be cleared, however none of these were rare or priority listed species. Within the local area (10km radius) a total of 16 Priority listed species of flora were recorded.

The vegetation complex of the area proposed to be cleared is Beard Vegetation Association 980 and is well represented in the Bioregion, subregion and local shire. Due to the absence of rare flora in the local area and on the area under application, as well as the size of the area (2 ha), it is considered unlikely to be an area of outstanding biodiversity.

Methodology

GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Pre-European Vegetation

DEC Site VIsit (2007) Trim Ref: DOC43647
keighery (1994)

(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

There are 2 Threatened species present within the local area (10km radius), Setonix brachyurus (Quokka) and Botaurus poiciloptilus (Australasian bittern), with the Quokka having 2 recorded occurrences, the closest being 5.7km west of the area under application, and the Australasian bittern, recorded 9.8km from the proposed cleared area, although as detailed in the Action Plan for Australian Birds (2000), the vegetation currently present on the area to be cleared (Beard Veg Association 980) is not a suitable habitat for the Australasian bittern, as this species has a narrow habitat range, preferring shallow, vegetated freshwater or brackish swamps.

The vegetation present on the area under application does exhibit qualities of which the Quokka may utilise, as they inhabit areas that provide refuge such as low dense heath, low forest and lakeside communities (NatureBase 2008).

Given the size of the area under application, and the remaining vegetation within the area, it is not considered likely that the area provides significant habitat for fauna.

Methodology

GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Sac Bio Data Sets (Fauna)
- Pre-European Vegetation

Garnett, S & Crowley, G (2000)
DEC Site Visit (2007) Trim Ref: DOC43647
NatureBase (2008)

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

Comments

Proposal is not at variance to this Principle

The condition of the area under application is considered to be in "Very good" to "Excellent" condition (Keighery 1994). There is no known declared rare flora (DRF) mapped within the local area (10km radius). As detailed in the Site Visit Assessment Report (2007), the area under application contains 37 flora species, none of which are declared rare or priority (although a spring survey may return different results) and due to its size (2 ha) this is considered to be of moderately high biodiversity.

Within the local area there were no recorded occurrences of rare flora, therefore the area under application is not necessary for the continued existence of rare flora.

Methodology

GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Sac Bio Data Sets

DEC Site Visit (2007) Trim Ref:DOC43647
Keighery (1994)

(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

No Threatened Ecological Communities (TECs) were present within the local area (10km radius), therefore the proposed clearing of 2 ha of native vegetation is not at variance to this principle.

Methodology

GIS Datasets:
-Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Sac Bio Data Sets (TEC and PEC)

(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 area under application consists of the Beard vegetation type 980, this vegetation association is well represented throughout the IBRA bioregion (Esperance sand plains) and sub-region (Fitzgerald) with 40.9% and 40.4% remaining (Shepherd et al. 2006). The vegetation type 980 is also still above thresholds outlined in the National Objectives and Targets for Biodiversity Conservation 2001-2005, and is currently at 33.3% of pre-European extent within the local shire, however, the application area lies within an agricultural area and the EPA states that from an environmental perspective the EPA is of the view that it is unreasonable to expect to be able to clear native vegetation from land within the agricultural area other than relatively small areas and where alternative

mechanisms for protecting biodiversity are addressed (EPA 2000).

To mitigate the further loss of vegetation a condition to revegetate the application area will be imposed should a permit be granted.

Methodology GIS Datasets :
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Pre-European vegetation

Shepherd et al. (2006)
National Objectives and Targets for Biodiversity Conservation
2001-2005, (2001), Canberra.

(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 a significant wetland (Venns Road) located 300 north east, however the area under application is not considered to be part of a watercourse or wetland due to the absence of riparian vegetation, therefore the proposed clearing is not at variance to this principle.

Methodology GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- South Coast Significant Wetlands

(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 under application is situated at a raised elevation in the landscape (130m), has large areas of surrounding vegetation and there is currently no evidence to suggest that dry land salinity or waterlogging in the adjacent areas has taken place (DEC Site Visit 2007), this being considered, it is unlikely that the proposed clearing of 2 ha of native vegetation will cause land degradation or related issues.

Methodology GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Topography

DEC Site Visit (2007) Trim Ref: DOC43647

(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**
Within the local area (10km radius) there are 2 Nature reserves present. Basil Road Nature Reserve, which is located 6.3km east, and Tinkelelup Nature Reserve, which is 6.3km west of the area under application. The proposed area to be cleared (2 ha), while helping to contribute to the coastal macro corridor (Site Visit 2007), does not significantly influence the environmental values of the conservation areas in the local area.

Methodology GIS Datasets:
-Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- CALM Managed Lands and Waters

Site Visit (2007) Trim Ref: DOC43647

(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 has an elevation of 130m, depth to groundwater varies from 10 m to greater than 20 m and the pH is typically neutral, from 6.1 to 6.6. (Lillicrap 2004) There is a moderate risk of shallow watertables occurring in the subregion (Fitzgerald). Given that groundwater levels are currently rising at 0.1 - 0.15 m/yr, it is estimated that it will be more than 50 years before levels are close to the surface (Lillicrap 2004). The proposed clearing of 2 ha of vegetation is not likely to cause the deterioration of water quality on the surface or underground.

Methodology GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03

- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- topography
Lillicrap (2004)

(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 raised position of the area under application in the landscape, especially in relation to nearby wetlands, it is considered unlikely that the clearing of 2 ha of native vegetation will lead to an incremental increase in peak flood height or duration of flood peak.

Methodology

GIS Datasets
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Topography
- Rainfall, Mean Annual

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

Comments

Some concerns for the possible occurrence of dieback were raised in the DEC Site Visit Report (2007), which detailed suspicious deaths of proteaceous species within the site and adjacent abandoned gravel pits, subsequently a dieback disease test was recommended to take place before the removal and distribution of potentially affected soil could occur, dieback control conditions will be implemented should a clearing permit be issued. There is also a current Native Title Claim over the area under application.

Methodology

GIS Datasets:
- Albany 1.4m Orthomosaic DLI March 03
- Pallinuop Cheyne 1.4m Orthomosaic DOLA 98
- Native Title Claims
- Aboriginal Sites of SIgnificance

DEC Site Visit (2007) Trim Ref: DOC43647

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	2	The assessment against clearing found: Principles (c), (d) & (f) are not at variance All other Principles are not likely to be at variance

5. References

DEC Site Visit Assessment Report (2007) Permit Application for Clearing Native Vegetation CPS 2101/1 Trim Ref: DOC 43647

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.

Garnett, S & Crowley, G (2000) Action Plan for Australian Birds, Department of the Environment, Heritage and the Arts

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Lillicrap (2004) Groundwater Trends in the Fizgerald Biosphere sub-region, Department of Agriculture Western Australia

National Objectives and Targets for Biodiversity Conservation2001-2005, (2001), Canberra.

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 2006).

www.NatureBase-accessed February 2008

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)