Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2085/1

Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **City of Geraldton-Greenough**

1.3. Property details

Property: LOT 300 ON PLAN 42900 (Lot No. 300 HADDA MAHOMETS FLATS 6530)
LOT 300 ON PLAN 42900 (Lot No. 300 HADDA MAHOMETS FLATS 6530)
LOT 301 ON PLAN 42900 (Lot No. 301 HADDA MAHOMETS FLATS 6530)
UNALLOCATED CROWN LAND (GERALDTON-GREENOUGH, CITY OF)

Local Government Area: City Of Geraldton

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.144		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 371: Low forest; Acacia rostellifera (Hopkins et al. 2001, Shepherd et al. 2001)	The area under application consists of approximately 0.144 ha of native vegetation and is located on the back of a dune system. The Beard Vegetation Association expected to occur was not found to be the vegetation cover under application (Site visit Report 2005). The vegetation under application is dominated by Atriplex isatidea (coastal saltbush) and the groundcover consists mainly of the non-native Tetragonia decumbens (sea spinach). Numerous weed species are also scattered throughout the area under application. (Site visit Report 2005)	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description and condition of the vegetation under application was obtained from a previous site visit conducted on 23 November 2005, to the area including an adjacent property (Site Visit Report 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

The area under application consists of approximately 0.144 ha of native vegetation and is located on the back of a dune system. The vegetation under application consists mainly of Atriplex isatidea (coastal saltbush) and the groundcover consists mainly of the non-native Tetragonia decumbens (sea spinach). Numerous weed species are also scattered throughout the area under application. (Site Visit Report 2005) The vegetation under application is in 'good' condition (Keighery 1994).

Given that the presence of weeds and non-native plants is significant and the area of proposed clearing is small (0.144 ha) it is unlikely that the vegetation is representative of outstanding biodiversity.

Therefore, the proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
Keighery 1994
Site Visit Report 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 area under application consists of approximately 0.144 ha of native vegetation and is located on the back of a dune system. It is surrounded by urban landuses. Further inland, one record of a Declared Threatened Fauna, one record of a Priority 4 Fauna and one record of a Priority 1 Fauna were located within a radius of 10 km. The vegetation under application is dominated by Atriplex isatidea (coastal saltbush) and the groundcover consists mainly of the non-native Tetragonia decumbens (sea spinach). Numerous weed species are also scattered throughout the area under application. (Site Visit Report 2005) The vegetation under application is in 'good' condition (Keighery 1994).

The Declared Threatened and Priority Fauna occur inland with the closest population being located 2.1 km away from the proposal area. Medium sized shrubs within the area under application may provide some habitat for fauna, however the level of disturbance is likely to limit the habitat value of the site (Site Visit Report 2005). In addition, the area of the proposed clearing is small (0.144 ha) and is fragmented by urban landuses. The significant fauna occur further inland and the coastal vegetation is not likely to contribute to their existence.

Therefore, this proposal is not likely to be at variance with this principle.

Methodology GIS Databases:
- Threatened Fauna - CALM 30/09/05
Keighery 1994
Site Visit Report 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**
A single record of a Priority 2 Flora was located approximately 7.6 km north of the proposal area. The area under application consists of approximately 0.144 ha of native vegetation and is located on the back of a dune system. The vegetation under application consists mainly of coastal saltbush and the groundcover consists mainly of the non-native sea spinach. Numerous weed species are scattered throughout the area under application. (Site Visit Report 2005)

Given the distance to any Priority Flora and the small area under application, it is unlikely that the proposal area is necessary for the continued existence of significant flora.

Methodology GIS Databases:
- Declared Rare and Priority Flora list - CALM 01/07/05
- Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05
Site Visit Report 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 known records of Threatened Ecological Communities (TECs) within a radius of 10 km of the area under application. Therefore, this proposal is not likely to be at variance with this Principle.

Methodology GIS Databases:
- Threatened Ecological Communities - CALM 12/04/05

(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 area (ha)	Remaining extent (ha)	Conservation %*	Reserves/CALM-status**	managed land,
IBRA Bioregion - Geraldton Sandplains	3,136,277***	1,324,440***	42.2	Depleted	35.5
Shire - Geraldton-Greenough	Not available	Not available	Not available	Not available	Not available
Beard veg type - 371	32,818	3,304	10.1	Vulnerable	3.6

* (Shepherd et al. 2001; Shepherd 2006)
** (Department of Natural Resources and Environment 2002)
*** Area within the Intensive Landuse Zone

The proposal area lies within the Geraldton Sandplains Bioregion with 42.2 % of the pre-European extent remaining (Shepherd et al. 2001; Shepherd 2006) and therefore 'depleted' in terms of biodiversity conservation (Department of Natural Resources and Environment 2002). The vegetation under application is a component of Beard Vegetation Association 371 (Hopkins et al. 2001) of which there is 10.1 % of the pre-European extent remaining (Shepherd et al. 2001; Shepherd 2006) and therefore of a 'vulnerable' status of biodiversity conservation (Department of Natural Resources and Environment 2002). However it was noted during the site visit that this was not consistent with the vegetation within and surrounding the area under application. The vegetation found under application consisted mainly of Atriplex isatidea, which is shown to have a wide distribution along the coastal strip throughout the region (FloraBase 2005).

The area under application falls within the Intensive Landuse Zone; however, the proposed clearing is within an urban area.

Considering the wide distribution of the vegetation found in the area under application (i.e. Atriplex isatidea), the extent of the pre-European vegetation in the Geraldton Sandplains Bioregion being higher than the recommended threshold of 30%, as set out by the National Objectives Targets for Biodiversity Conservation 2001-2005 (AGPS 2001), and the area to be cleared is small (0.144 ha), this proposal is not likely to be at variance to this principle.

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
- EPA Position Paper No 2 Agriculture Region - DEP 12/00

AGPS 2001
Department of Natural Resources and Environment 2002
FloraBase 2005
Shepherd 2006
Shepherd et al. 2001
Site Visit Report 2005

(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 are no watercourses or wetlands within the area under application. The closest watercourse is the coastal waterline, which is located approximately 60 m away from the area under application. Due to the small area of the proposed clearing and the distance from the coast this proposal is not at variance with this Principle.

Methodology

GIS Databases:
- Hydrography, linear - DoE 01/02/04
- Hydrographic Catchments - Catchments - DoE 23/03/05

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

Comments

Proposal may be at variance to this Principle

The area of proposed clearing is 0.144 ha. The proposal area lies on an undulating dune landscape comprised mainly of sandy soils. The mean annual rainfall for the region is 500 mm and the area under application is known to have a low to medium risk of salinity.

Water logging is not likely to be an issue because the area of proposed clearing is small (0.144 ha) and the regional rainfall is low (500 mm). Due to the close proximity of the coastal waters, it is reasonable to assume that the area under application is experiencing saline groundwater conditions and therefore clearing is not likely to further exacerbate its salinity.

Due to the sandy nature of the soil, the proposal area may be subjected to wind erosion after vegetation clearing has taken place. Therefore this proposal may be at variance to this Principle. To minimise the potential of wind erosion, a condition will be placed on the Permit requiring the applicant to maintain a ground cover on the areas not required for vehicle access.

Methodology

GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Soils, Statewide - DA 11/99

(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

A Nature Reserve (Flora Conservation Area) is situated approximately 2 km northwest of the area under application. The area under application is isolated by urban landuses. There are no other Conservation Areas within a radius of 10 km of the area under application.

The area under application does not provide a buffer for or the potential to contribute to an ecological linkage to the Nature Reserve as it is fragmented and isolated by urban landuses. Therefore, this proposal is not likely to be at variance with this Principle.

Methodology

GIS Databases:
- CALM Regional Parks - CALM 12/04/02
- CALM Managed Lands & Waters - CALM 01/07/05
- Proposed National Parks FMP-CALM 19/03/03
- Register of National Estate - EA 28/01/03

(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 falls within the Coastal hydrographic catchment and has an average rainfall of 500 mm per annum. The proposal lies within approximately 60 m from the coastal waterline. Due to the close proximity to the coast it is expected that the underground water is already saline.

Due to the small area under application (0.144 ha) and the low rainfall, the proposal is unlikely to cause deterioration in the quality of surface or underground water.

Methodology

GIS Databases:
- Hydrographic Catchments - Catchments - DOE 23/03/05
- Hydrography, linear - DoE 01/02/04
- Rainfall, Mean Annual - BOM 30/09/01

(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

The area of the proposed clearing is approximately 0.144 ha. The proposal area lies on an undulating dune landscape comprised mainly of sandy soils. The mean annual rainfall in the region is 500 mm.

Due to the porous nature of the sandy soils, the low rainfall and the small area to be cleared, the proposal is not likely to cause or exacerbate flooding.

Methodology

GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Soils, Statewide - DA 11/99
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The City of Geraldton-Greenough has not indicated any planning approvals or requirements that would affect the clearing.

There is no further requirement for a RIWI Act Licence, Works Approval or EP Act Licence for the area under application.

Two Environmental Impact Assessments (EIAs) cover the area under application:

CRN 119444 is the Geraldton Region Plan which identifies proposed areas for infrastructure development and areas for conservation within the Midwest region. This EIA does not affect this application as the proposal area was not identified as an area of interest. (EPA 1998); and

CRN 220580 is the City of Geraldton TPS 3 Amendment 28 scheme text amendment to amend the Zoning Table and heritage provisions [LoA 18. Scheme Amendment Not Assessed (no appeals), 05/10/2006]. This EIA does not affect the proposal area as it has no Heritage Precincts - it is zoned as 'Landscape and Coastal Protection' zone in the TPS 3.

There are three Native Title Claims over the area under application. The advertisement of the application in the

West Australian newspaper by the Department of Environment and Conservation constitutes legal notification of the native title representative body for the purpose of the future act procedures under the Native Title Act 1993. No response was received from the representative body.

The area under application partly falls within Unallocated Crown Land. DPI has advised that 'State Land Services has no objection to the clearing of vegetation over Unallocated Crown Land'.

Methodology DPI Submission
GIS Databases:
- Environmental Impact Assessments - DOE 24/02/06
- Native Title Claims - DLI 17/11/05
EPA 1998

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Miscellaneous	Mechanical Removal	0.144	The assessable criteria have been addressed and the proposal may be at variance to Principle (g). Principal (g): Due to the sandy nature of the soil, the proposal area may be subjected to wind erosion after vegetation clearing has taken place. To minimise the potential of wind erosion, a condition will be placed on the Permit requiring the applicant to maintain a ground cover on the areas not required for vehicle access.

5. References

AGPS (2001) The national objective and targets for biodiversity conservation 2001-2005. Commonwealth of Australia, 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 (1998) Geraldton Region Plan. Environmental Protection Authority Bulletin Number 891 , Government of Western Australia.

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.

FloraBase (1998 -) The Western Australian Flora. Western Australian Herbarium, Department of Conservation and Land Management. http://florabase.calm.wa.gov.au/

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.

Shepherd, D.P. (2006) Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.

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.

Site Visit Report (2005) Department of Environment and Conservation (DEC), Western Australia. DEC TRIM Ref DOC38014.

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)