Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2534/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: **Shire of Dandaragan**

1.3. Property details

Property: LOT 3 ON PLAN 22034 (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:
3.8		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
Vegetation Type 1029: Shrublands; scrub-heath dryandra-calothamnus assocication with Banksia prionotes on limestone in the northern Swan Region.	Vegetation nearby to the proposed clearing area was in excellent condition and contained dense stands of Banksia's and Calothamnus species. Numeorus herb species such as Drosera sp. and Anigozanthos were obvious and the ground cover was diverse with some open areas and areas with more leaf litter.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Vegetation description and condition was taken from a site visit of a property approx 500m to the west of the application area.

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 at variance to this Principle

The area proposed to be cleared displays diverse kwongan vegetation. The regional area is well known for its high levels of biological diversity, with the Leseur area (12km north) identified as having 10% of the states known flora (Burbidge et al, 1990).

Vegetation within the application area is in excellent (Keighery, 1994) condition. The area proposed to be cleared displays a diversity of habitat types and structure with dense areas, open segments, high shrub and low shrub. A site visit (2008) noted a diversity of herb, shrub, heath and banksia species.

It is considered that the proposed clearing is at variance to this principle. A condition to revegetate after sand extraction is completed will minimise this impact. Additionally, a condition to manage weeds and dieback will prevent impact upon surrounding biological diversity.

Methodology

Site Visit, 2008
Keighery, 1994
Burbidge et al, 1990
GIS Databases:
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

(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

Given the 'excellent' (Keighery, 1994) condition of the vegetation it is likely that local native fauna species would utilise the proposed clearing area. The surrounding area forms a large block of continuous vegetation, with the local area (10km radius) retaining approximately 70% of native vegetation. This continuous vegetation connects conservation reserves from north to south. As the proposed clearing is for a small area (3.8ha) it is unlikely that the application area is providing significant habitat for native fauna.

Methodology

Keighery, 1994
Site Visit, 2008
GIS Databases:
- SAC Biodatasets, 2 July 2008
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

(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

Within the local area there is one species of recorded rare flora, Eucalyptus argutifolia. The preferred habitat requirement of this species includes shallow sands over limestone which is not present in the application area. Additionally, DEC Regional advice states that this species is unlikely to occur within the proposed clearing area.

Methodology

Regional Advice, 2008
GIS Databases:
- SAC Biodatasets, 1 July 2008

(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) within the local area (10km radius). The proposed clearing area does not contain any known habitat characteristics of TEC's and is unlikely to support or impact upon a TEC.

Methodology

Site Visit, 2008
GIS Databases:
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02
- SAC Biodatasets - accessed 30 June 2008

(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 extent (ha)	Remaining% (ha)	In reserves (%) DEC Managed Land
IBRA Bioregions			
Swan Coastal Plain	1,501,211	579,227	38.6	24.1
Shire			
Dandaragan	670,216	299,289	44.7	37.4
Beard Vegetation Complex			
1029	71,035	53,212	74.9	33.9

The proposed clearing area is within an area of continuous vegetation, with numerous nearby conservation areas. The local area (10km radius) is relatively undeveloped with approximately 70-80% of vegetation remaining. Clearing 3.8ha of vegetation within this area is unlikely to be at variance to this principle.

Methodology

Site Visit, 2008
Shepherd, 2006
GIS Databases:
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02
- EPA Position Paper No 2 Agriculture Region
- SAC Biodatasets - accessed 23 June 2008

(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

There are no mapped wetlands or watercourses within the proposed clearing area, and vegetation within the application area is not riparian. The proposed clearing is unlikely to be at variance to this principle.

Methodology

Site Visit, 2008
GIS Databases:
Hydrography, linear

(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 proposed to be cleared consists of fine brown sands with a deeper limestone base. This geological substrate is unlikely to be affected by water logging or water erosion.

Salinity levels within the local area are low and clearing of 3.8ha of vegetation is unlikely to alter these levels.

Given the soils, some wind erosion is likely to occur and it is recommended that a condition be placed upon the permit to ensure that clearing proceeds in a staged manner to prevent the area becoming exposed to wind erosion.

Methodology

Site Visit, 2008
GIS Databases
- Groundwater Salinity - statewide
- Hydrography, linear
- Topographic Contours, Statewide
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

(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

There are four terrestrial conservation areas within the local area:
* Hill River Nature Reserve
* Drovers Cave National Park
* Beekeepers Nature Reserve
* Southern Beekeepers Nature Reserve

The proposed clearing area is within an area of continuous vegetation which links all local conservation areas to each other. The area proposed to be cleared is small (3.8 ha) and will not fragment the vegetated corridor. The application area is not providing buffering functions to the conservation areas and is unlikely to contain habitat not represented in the conservation area.

It is considered that the proposed clearing is unlikely to be at variance to this principle.

Methodology

GIS Databases:
- CALM Managed Lands and Waters
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

(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 proposed to be cleared contains fine sands with vegetation of heath, shrub, banksia and some mallee species. It is not near any watercourses and wetlands, and is small (3.8ha) in size. Given these factors it is unlikely that the proposed clearing would be at variance to this principle.

Methodology

Site Visit, 2008
GIS Databases:
- Hydrography, linear
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

(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

As the area proposed to be cleared contains fine sands with a deeper limestone substrate, and is small (3.8ha) in size, it is unlikely that clearing will cause or exacerbate flooding.

Methodology

Site Visit, 2008
GIS Databases:
- Hill River Arrowsmith 1.4m Orthomosaic - DLI00/01/02

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

Comments

The proposed clearing area is within EPA Position Statement No.2 Agricultural Region. The proposed land use is for sand extraction and is not agriculturally based.

No submissions have been received for this application.

Methodology

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the proposed clearing is at variance to principle (a), maybe at variance to principle (g) and is not likely to be at variance to the remaining principles.

5. References

Burbidge, A, Hopper, S and Van Leeuwen, S, 1990, A report to the Environmental Protection Authority from the Department of Conservation and Land Management, EPA Bulletin 424.

DEC, Regional Advice, 2008, TRIM ref DOC 59149

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

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

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.

Site Visit, TRIM ref DOC 59674

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)