



1. Application details

1.1. Permit application details

Permit application No.: 2625/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Verve Energy

1.3. Property details

Property: LOT 7736 ON PLAN 92133 (SANDPATCH 6330)

Local Government Area: City Of Albany

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1		Cutting	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:	The proposal is to clear 1 ha of native vegetation for the purpose of geotechnical surveying.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation condition was determined through aerial mapping and are supported by a Flora and Vegetation Survey conducted by Ecologica in June 2008 (Ecologica, 2008).
49 - Shrublands; mixed heath*	The vegetation under application ranges in condition from good to excellent (Keighery, 1994) with an overall condition of very good (Keighery, 1994)		

* (Shepherd, 2006)

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 proposed clearing is for the purpose of geotechnical surveys to determine the suitability of the area for the Grasmere Wind Farm turbines. This proposal will involve the removal of approximately 1 ha of native vegetation.

The vegetation under application is in good to excellent (Keighery, 1994) condition.

The vegetation under application forms part of an east west ecological linkage which runs parallel to the coastline thus this vegetation under application is part of habitat for fauna indigenous to Western Australia in a local area that is approximately 35% vegetation.

A flora and vegetation survey (Ecologica, 2008) identified 3 priority flora species within the applied area and no rare flora species.

Given that the areas surrounding the applied area are in similar or better condition the area under application is not likely to comprise a significant level of biodiversity in relation to these nearby areas.

Therefore the clearing is not likely to be at variance to this principle.

Methodology

References:
Keighery (1994)
Ecologica (2008)

GIS Database:
Albany Mt Barker 1.4m Orthomosaic - Landgate 02
SAC Biodatasets - accessed 18 September 08
Pre European Vegetation - DA 01/01
NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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 may be at variance to this Principle

The vegetation under application is mapped as Beard vegetation unit 49 (Shrublands of mixed heath) (Shepherd, 2006) which is represented statewide with approximately 46.4% of the pre-European vegetation extent remaining (Hopkins et al., 2001).

The local area has approximately 35% native vegetation cover and the area under application is part of an east west ecological linkage which runs parallel to the coastline.

The vegetation under application is therefore part of significant fauna habitat in a local context.

Four fauna of conservation significance have been recorded 30m from the applied area with a fifth record 200m from the applied area.

The area under application is likely to be providing habitat for all of these fauna as the vegetation under application is consistent with their habitat requirements.

EPA advice (EPA, 2008) identified 3 fauna of conservation significance within the applied area, namely the Main Assassin's Spider, Baudin's Black Cockatoo and Carpet Python.

Given that the area under application is part of significant habitat for fauna indigenous to Western Australia, the clearing as proposed may be at variance to this principle.

Recommend Fauna management conditions are placed on the permit to reduce the impact of clearing on possible fauna habitat.

Methodology References:
EPA (2008)
Hopkins et al (2001)
Shepherd (2006)

GIS Database:
Pre European Vegetation - DA 01/01
Albany Mt Barker 1.4m Orthomosaic Landgate 02
NLWRA, Current Extent of Native Vegetation 20 Jan 2001
SAC Biodatasets - accessed 18 September 08

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

Comments Proposal may be at variance to this Principle

There are 4 records of rare flora species within the local area (10km radius) which occur on the same soil and vegetation as the area under application.

Of these, DEC Albany region identified *Calectasia cyanea* (rare) as possibly occurring within the applied area (DEC, 2008).

There are also 6 records of priority flora within the local area which are known to occur on similar habitats to the area under application (2 x priority 2, 3 and 4 species).

A Flora and Vegetation Survey (conducted in June 2008) of the site, by Ecologica (2008) identified 3 priority flora species within the area under application, namely *Thomasia quercifolia* (P2), *Spyridium spadiceum* (P2) and *Melaluca ringens* (P3). This survey did not identify any rare flora within the applied area.

Given that there are a number of rare floras within the local area which occur on the same soil and vegetation type as the area under application, and taking into account that only priority species were identified (by a flora survey conducted in June 2008) as being within the applied area, the clearing as proposed may be at variance to this principle.

Recommend Flora management conditions be placed on the permit to mitigate possible impacts of clearing on rare flora populations.

Methodology References:
DEC (2008)
Ecologica (2008)

GIS Database:
SAC Biodatasets - accessed 18 September 08
Pre European Vegetation - DA 01/01
Soils, Statewide DA 11/99

(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 recorded occurrences of Threatened Ecological Communities (TEC's) within the local area (10km radius).

Therefore it is not likely that the clearing as proposed is part of, or could be considered necessary for the maintenance of a TEC.

Methodology

(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	Remaining %% in reserves/DEC- area (ha) extent (ha) managed land		
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IBRA Bioregion **

- Warren	833,981	663,141	79.5	13.2
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City of Albany*	427,257	152,274	35.6	21.4
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Beard vegetation associations**

- 49	52,491	24,365	46.4	40.2
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* (Shepherd et al. 2001; Hopkins et al., 2001)

** (Shepherd 2006)

The local area has approximately 35% native vegetation cover remaining.

While the local area has been heavily cleared the vegetation under application is part of a remnant band of vegetation along the coastline.

Given the nature of the clearing (mowing bands of vegetation for geotechnical surveys), and taking into account that the area is small, the clearing as proposed is not likely to be significant as remnant of vegetation in the local area.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology References:
Hopkins et al. (2001)
Shepherd (2006)
Shepherd et al. (2001)

GIS Database:
Albany Mt Barker 1.4m Orthomosaic - Landgate 02
Interim Biogeographic Regionalisation of Australia - EA 18/10/00
Local Government Authorities - DLI 8/07/04
Pre European Vegetation - DA 01/01
NLWRA, Current Extent of Native Vegetation 20 Jan 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 applied area is approximately 220m north east of the Western Australian coastline.

As the area under application is small, taking into account the nature of the clearing (spread over a large area) and the distance between the clearing and the coast, the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
Hydrography linear - DOW 13/7/06

(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

Given that the area under application is small and spread over a large area the clearing as proposed is not likely to cause appreciable land degradation.

Therefore the clearing as proposed is not likely to be at variance with this principle.

Methodology GIS Database:
Soils, Statewide DA 11/99
Topographic contours statewide - DOLA and ARMY 12/09/02

(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

The closest area of conservation significance is Lake Powell Nature Reserve (Department of Environment and Conservation (DEC) managed lands), approximately 2km north west of the applied area.

Given the distance between the applied area and the nature reserve, and taking into account the small (1ha) size of the applied area, the clearing as proposed is not likely to have an impact on the conservation values of this nature reserve.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
CALM Managed Lands and Waters - CALM 01/06/05
Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 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 under application is approximately 220m from the Western Australia coastline.

Taking into account the nature and size (1 ha) of the proposal, it is not likely that the clearing will cause deterioration in the quality of surface or ground water.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology GIS Database:
Hydrography, linear - DOW 13/7/06
Topographic Contours, Statewide - DOLA 12/09/02

(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

Given the size (1ha) and nature of the proposal the clearing as proposed is not likely to cause or exacerbate the incidence or intensity of flooding.

Therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology

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

Comments

The EPA has set the level of assessment for the proposed Grasmere Wind farm project as Not Assessed - Public Advice Given. A copy of this advice has been provided and the relevant issues raised have been addressed under the relevant clearing principles. (Trim Ref DOC 61640)

Access to the land has been granted by the City of Albany through a lease agreement for the Grasmere Wind Farm. (DOC57652)

Planning Approval has not yet been granted for the proposed Grasmere Wind Farm however the City has given support for the clearing of 1 ha of vegetation for the purpose of geotechnical surveys (DOC62855)

Applicant also advised DEC Albany Region that Commonwealth assessment under the EPBC Act had now been completed as 'Not a Controlled Action'. Applicant supplied a copy. (DOC 62945)

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 may be at variance with principles (b) and (c) and is not likely to be at variance to principles (a), (d), (e), (f), (g), (h), (i) and (j).

5. References

- DEC (2008) Advice to Assessing Officer from Department of Environment and Conservation (DEC) Albany Region Trim Ref DOC62887
- Ecologica (2008) Verve Energy, Grasmere Wind Farm Extension Area and Cable Route: Vegetation and Flora Survey, Version 2, June 2008, Trim Ref DOC57652
- 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.
- 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. (2007). 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.

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)

