Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1167/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Ivan Peter Zuvich

1.3. Property details

Property: LOT 5 ON PLAN 22995 (MIMEGARRA 6507)
Local Government Area: Shire Of Dandaragan
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
5.7		Mechanical Removal	Horticulture

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 1030: Low woodland; Banksia attentuata & B. menziesii (Hopkins et al. 2001, Shepherd et al. 2001)	The vegetation under application is best described as Banksia low woodland with scattered Eucalyptus todtiana (Coastal blackbutt) on the sandy dunes. Swamps and depressions contain Melaleucas and Eucalypts (probably E. rudis). (DAFWA, 2006)	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	The description and condition of the vegetation under application was obtained from the Land Degradation and Assessment Report conducted by the Department of Agriculture and Food officer (DEC TRIM No. DOC10788)

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 vegetation under application is best described as Banksia low woodland with scattered Eucalyptus todtiana (Coastal blackbutt) on the sandy dunes with the swamps and depressions containing Melaleucas and Eucalypts (DAFWA, 2006). DAFWA (2006) further advised that 'generally the understorey is in excellent condition and areas that were chained and burnt are now regenerating.'

Due to the previous disturbance of the area under application, the relatively small area under application and the fact that 948.3 hectares of native vegetation will remain on the property it is unlikely that the proposed clearing contains a higher level of biodiversity than that found in the surrounding area and locally in the nearby reserves which are managed for conservation purposes.

This proposal is therefore not likely to be at variance with this Principle.

Methodology

DAFWA (2006)
GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.

(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 is best described as Banksia low woodland with scattered Eucalyptus todtiana (Coastal blackbutt) on the sandy dunes with the swamps and depressions containing Melaleucas and Eucalypts (DAFWA, 2006). DAFWA (2006) further advised that 'generally the understorey is in excellent condition and

areas that were chained and burnt are now regenerating.'

Due to the previous disturbance of the area under application, the relatively small area under application and the fact that 948.3 hectares of native vegetation will remain on the property it is unlikely that the proposed clearing has more significant habitat value than that found in the surrounding area and locally in the nearby reserves.

This proposal is therefore not likely to be at variance to this Principle.

Methodology DAFWA (2006)
GIS Databases:
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00.

(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 three records of Declared Rare Flora and 11 records of Priority Flora species occurring within 15 km of the area under application, with the closest occurring within 10 km. The soil type of the area under application differs from the areas of recorded Rare or Priority Flora species.

Due to the distance and the differing soil types it is unlikely that the area under application includes or is necessary for the continued existence of, rare flora.

Methodology GIS Databases:
- Declared Rare and Priority Flora list - CALM 01/07/05
- Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05
- 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 known records of Threatened Ecological Communities (TEC's) within 10 km from the area under application. The closest recorded occurrence is approximately 41 km away. It is therefore unlikely that the proposed clearing is 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**
The vegetation under application is representative of Beard Vegetation Association 1030 (Hopkins et al. 2001) of which there is 65.5% of the pre-European extent remaining (Shepherd et al. 2001). In addition the application falls within the Swan Coastal Plain IBRA Bioregion and the Shire of Dandaragan, which has 38.1% and 48.8% respectively of the pre-European extent remaining (Shepherd et al. 2001). Beard Vegetation Association 1030 is of 'least concern' and the Swan Coastal Plain IBRA Bioregion and Shire of Dandaragan are therefore both 'depleted' for biodiversity conservation (Department of Natural Resources and Environment 2002).

The area under application falls within the Intensive Landuse Zone and is subject to EPA Position Statement No. 2. However, on the basis that the Pre-European extent of the Beard Vegetation Association 1030, Swan Coastal Plain IBRA Bioregion and the Shire of Dandaragan meets the National Objectives Targets for Biodiversity Conservation 2001-2005, being 30% of that present pre-1750, this proposal is not likely to be at variance to this Principle.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	Reserves/CALM-managed land, %
IBRA Bioregion - Swan Coastal Plain	1,501,456***	571,758***	38.1	Depleted	32.7
Shire - Dandaragan	668,507***	326,283***	48.8	Depleted	Not available
Beard veg type - 1030	139,020	91,058	65.5	Least concern	14.6

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

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
Shepherd et al, 2001.
Department of Natural Resources and Environment, 2002

(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 present within the area under application. Surrounding properties may be subject to inundation during rain events. DAFWA (2006) confirmed that 'There are no defined drainage lines on the property or off site. Any surface water flows would be towards the lower lying country to the west and into swampy areas and depressions.'

Therefore this proposal is not at variance to this Principle.

Methodology

DAFWA (2006).
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 under application consists of sandy plains with occasional pockets of sand dunes, a few small swamps, and stream courses. DAFWA (2006) confirmed that 'The soils where clearing is proposed are predominantly deep, pale grey or white sands.'

DAFWA (2006) further advised that 'The assessment identified the potential for land degradation in the form of wind erosion. However, this is only a small area and could be managed by wind breaks and irrigation. Therefore I conclude that the proposed clearing of 5.7 hectares may be at variance with principle (g) for wind erosion.'

Therefore this proposal may be at variance to this Principle.

Methodology

DAFWA (2006).
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Salinity Risk LM 25m - DOLA 00
- Acid Sulphate Soil risk map, SCP DOE 04/11/04
- 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

The Nilgen Nature Reserve, Bashford Nature Reserve, Eneminga Nature Reserve and Namming Nature Reserve are all located within 10 km from the area under application with the closest occurring within 6.7 km. In addition Lake Guraga and Wanagarren and Nilgen Nature Reserve are also located within the local area and are registered as National Estate.

It is likely that the vegetation provides habitat and wildlife corridors to adjacent native vegetation remnants and indirectly to conservation reserves in the local area. However, due to the relatively small area under application, the distance to any conservation reserves and the large amount of remnant vegetation remaining within the property (approximately 948.3 ha) (DAFWA, 2006), the proposed clearing is not likely to impact on the environmental values of the identified conservation reserves.

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

Methodology

DAFWA (2006)
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
- Clearing Regulations - Environmentally Sensitive Areas - DoE 30/05/05

(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 falls within the Minyulo - Caren Caren catchment and has good rainfall of 700mm per annum. A groundwater monitoring well is situated approximately 2 km northwest of the area under application at a depth of 39.63m below ground level, topography of the monitoring well was 60m AHD. The proposed clearing is on an area that is also at 60m AHD and therefore the approximate depth to groundwater is the same. DAFWA (2006) advised that 'There will be increased rainfall infiltration with the proposed clearing of 5.7 ha. Any resultant increase in subsurface flows will be to the south into Nilgen Swamp, which is located on the neighbouring property. The relatively small clearing is unlikely to cause significant flows.'

Due to the relatively small area under application, depth to groundwater and high rainfall, the proposed clearing is not likely to cause deterioration in the quality of surface or underground water. Therefore this proposal is not likely to be at variance to this Principle.

Methodology

DAFWA (2006)
GIS Databases:
- WIN Goundwater Sites, Monitoring - non DEWCP (Current)
- Public Drinking Water Sources (PDWSAs) - DOE 09/08/05
- 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 under application consists of sandy plains with occasional pockets of sand dunes, a few small swamps, and stream courses. DAFWA (2006) confirmed that 'The soils where clearing is proposed are predominantly deep, pale grey or white sands.' In addition the area under application is located at 60m AHD.

Due to the sandy nature of the soils, the relatively small area under application and the relatively high elevation it is unlikely that the proposed clearing will cause or exacerbate the incidence of flooding. This proposal is therefore unlikely to be at variance to this Principle.

Methodology

DAFWA (2006)
GIS Databases:
- Rainfall, Mean Annual - BOM 30/09/01
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Shire of Dandaragan advised that Council has resolved to support the application for clearing as submitted.

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

The property under application is held in fee simple and therefore Native Title has been extinguished.

The Department of Water advised that a Water Licence was issued on 31/1/2007 for 90,000kL for the property under application (GWL162779).

DAFWA (2006) advised that there is currently a Soil Conservation Notice (SCN) over the area applied to clear and a site visit revealed that clearing of approximately 1.1 hectares has occurred within this area. This is a breach of the SCN and Mr Zuvich was issued with a warning letter.
DAFWA (2007) advised that 'Following review of this matter, I am pleased to discharge the Soil Conservation Notice.'

There are two Environmental Impact Assessments (EIAýs) over the area under application. One EIA refers to an amendment to the Shire of Dandaragan Town Planning Scheme and was not assessed. This EIA was closed on 13 August 1999. The second EIA refers to a natural gas power station located in Looma within the Shire of Derby - West Kimberley. This EIA is still currently being assessed and further information has been requested. This EIA does not affect the area under application as the natural gas power station is located in Looma within the Shire of Derby - West Kimberley.

Methodology

Shire of Dandaragan Submission
DAFWA (2006)
DAFWA (2007)
DOW (2007)
GIS Databases:

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Horticulture	Mechanical Removal	5.7	The assessable criteria have been addressed and the proposal may be at variance to Principle g. Principle (g): DAFWA (2006) advised that 'The assessment identified the potential for land degradation in the form of wind erosion. However, this is only a small area and could be managed by wind breaks and irrigation. Therefore I conclude that the proposed clearing of 5.7 hectares may be at variance with principle (g) for wind erosion.' Conditions will be placed on the permit requiring the proponent to establish groundcover within the area under application in order to minimise the potential for wind erosion.

5. References

DAFWA (2006) Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DEC TRIM Ref DOC10788.

DAFWA (2007) Soil Conservation Notice. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DEC TRIM Ref DOC22864.

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.

Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALM Science 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., 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)