Department of Environment
Government of Western Australia

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1351/1
Permit type: Purpose Permit

1.2. Proponent details

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

1.3. Property details

Property: DOLA_LAND_DESCRIPTION
Local Government Area: LGA
Colloquial name: COLLOQUIAL_NAME

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
10.5		Mechanical Removal	Road construction or maintenance

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 3: (Spencer Road & Barrow Road) - Medium Forest; Jarrah-marri.	The purpose of clearing is for road widening and re-alignment. The vegetation along the road reserve ranges from Completely Degraded to Excellent Condition (DEC Site Visit 13/09/2006).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	
Beard Vegetation Association 968: (Barrow Road) - Medium Woodland; Jarrah-marri & wandoo.			
Beard Vegetation Association 2051: (Spencer Road) - Sedgeland; Sedges with low tree savanna woodland; paperbarks over various sedges. (Hopkins et al. 2001, Shepherd et al. 2001).			
All Mattiske Vegetation Complexes are located on Spencer Road - Mattiske Vegetation Complex (BEy2) Bevan 2; Open forest of Eucalyptus marginata subsp. marginata, Corymbia calophylla and Banksia grandis on undulating uplands in humid and subhumid zones.	The purpose of clearing is for road widening and re-alignment. The vegetation along the road reserve ranges from Completely Degraded to Excellent Condition (DEC Site Visit 13/09/2006).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	
Mattiske Vegetation			

Complex (Bu) Boulongup; Closed heath of Myrtaceae spp. and low woodland of Melaleuca preissiana and Eucalyptus occidentalis on broad depressions with some Eucalyptus marginata subsp. marginata and Allocasuarina fraseriana on the fringes of broad depression in the humid zone. Mattiske Vegetation Complex (CA) Caldyanup; Mosaic of low woodland of Allocasuarina fraseriana, Corymbia ficifolia, Banksia ilicifolia, Banksia attenuata and Banksia occidentalis on slopes in sedgeland of Cyperaceae spp., tall shrubland of Myrtaceae spp. and an open woodland of Melaleuca preissiana with some Eucalyptus marginata subsp. marginata on broad depressions in perhumid and humid zones. Mattiske Vegetation Complex (MI) Mitchell; Open forest of Eucalyptus marginata subsp. marginata, Corymbia calophylla and Allocasuarina fraseriana on broad undulating uplands in perhumid and humid zones.		
Mattiske Vegetation Complex (S2) Granite Valleys; Mixture of woodland of Eucalyptus rudis, woodland of Eucalyptus occidentalis on valley floor and woodland of Eucalyptus decipiens and Eucalyptus marginata subsp. marginata on slopes in humid to semiarid zones. Mattiske Vegetation Complex (S8) Broad Valleys; Woodland of Eucalyptus marginata subsp. marginata-Banksia attenuata-Banksia ilicifolia on mild slopes in perhumid and humid zones. Mattiske Vegetation Complex (Tr2) Trent; Woodland of Eucalyptus marginata subsp. marginata-Banksia grandis with some Corymbia calophylla on low rises and Eucalyptus staeri on slopes of sedimentary rocks in the humid zone.	The purpose of clearing is for road widening and re-alignment. The vegetation along the road reserve ranges from Completely Degraded to Excellent Condition (DEC Site Visit 13/09/2006).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

Mattiske Vegetation Complex (Va2) Granite Valleys;

Open forest of Corymbia calophylla-Eucalyptus marginata subsp. marginata on slopes, low forest of Allocasuarina decussata -Banksia seminuda on valley floors in perhumid to subhumid zones.

(Mattiske Consulting 1998).

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 proposal is to clear up to a total of 10.5ha along Spencer Road and Barrow Road. Widths of clearing within each road reserve varies from 2m to 7m.

Biodiversity values vary along the road reserve with some areas exhibiting substantial groundcover, lower storey and upper storey (with mature Eucalypt tree species and adjoining areas of high biodiversity). Other areas of the road reserve have minimal biodiversity value with no native species remaining.

7m of clearing on either side of a 1.4km section of Spencer Road (2.17ha) is proposed for the purposes of road realignment. The area may provide habitat for various fauna species. However the area proposed to be cleared is considered to be small by comparison with the area of vegetated reserve remaining.

To mitigate loss of surrounding biodiversity, the proposed clearing will be carried out in accordance with fauna management conditions and dieback and weed control conditions.

Methodology DEC Site Visit (13/09/2006).
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 may be at variance to this Principle

The vegetation under application exhibits diverse native vegetation species in some areas of the road reserves, with many mature Eucalypt tree species present.

Fragmented pockets of vegetation including road reserves often represent significant fauna habitat and corridors. The mature Eucalypt trees may be habitat trees for fauna indigenous to Western Australia. Given the above this proposal may be at variance to this Principle.

To ensure any threatened species are identified and managed accordingly, a condition has been imposed on the permit to ensure an inspection is undertaken by a fauna specialist to identify the presence of any threatened species within the areas proposed for clearing.

Methodology DEC Site Visit (13/09/2006).

(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

Spencer Road - Twelve populations of Declared Rare Flora (DRF), 7 of Lambertia orbifolia and 5 of Conostylis misera, are located between 200 metres and 3.8 kms from the eastern area proposed to be cleared (between SLK 17.1 and SLK18.65). These populations have not been recorded within the road reserve, but do occur in the same vegetation type. Due to the close proximity of the proposed area to recorded rare flora, a flora survey between SLK 17.1 and SLK18.65 at the eastern area of the proposal is required prior to the commencement of clearing to determine whether DRF will be impacted by the road works.

Barrow Road - Two populations of Priority Flora are located within close proximity of the road reserve. Synophea preissi (Priority 3) is located 200m north of the road reserve and Caladenia plicata is located 90m east of the road reserve. A flora survey is required prior to the commencement of clearing to determine whether Priority flora will be impacted by the road works.

Conditions have been placed on the permit to ensure surveys are undertaken by a flora specialist to identify the presence of any DRF or Priority species within the areas proposed for clearing. Where DRF or Priority species are identified the Shire will be required to submit the records to the Department of Environment and Conservation ensuring no species are removed unless approved by the CEO.

Methodology

FloraBase - The Western Australian Flora - Website
DEC Site Visit (13/09/2006).
GIS Databse:
Declared Rare and Priority Flora List - CALM - 01/07/2005

(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 Threatened Ecological Communities (TECs) within the road reserves proposed to be cleared. There is however, a TEC located 7km east of Barrow Road. Whilst this TEC occurs on the same vegetation type there are no linkages between the TEC and the proposed road works. The clearing will not significantly affect this TEC.

Therefore it is unlikely that the proposed clearing is at variance to this Principle.

Methodology

DEC Site Visit (13/09/2006).
GIS Databases:
Threatened Ecological Communities - CALM - 12/04/2005.
Threatened Plant Communities - DEP - 06/95.
Environmentally Sensitive Areas - DOE - 30/05/2005.

(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 National Objective and Targets for Biodiversity Conservation 2001-2005 (AGPS 2001) recognises that the retention of 30% or more of the pre-clearing extent of each ecological community is the target.

	Pre-European area (ha)	Current extent (ha)	Remaining %*	Conservation status**	% in reserves
IBRA Bioregion -					
Jarrah Forest	4,544,335	2,665,480	58.7	Least Concern	
Shire - Plantagenet	485,073	231,912	47.8	Depleted	
Beard Veg Type 2051	12,746	9,074	71.2	Least Concern	70.7
Beard Veg Type 968	200,651	78,150	38.9	Depleted	24.3
Beard Veg Type 3	3,046,385	2,197,837	72.1	Least Concern	10.1
Mattiske Complex Bey2	783,045	285,693	36.5	Depleted	
Mattiske Complex S2	211,189	126,439	59.9	Least Concern	
Mattiske Complex S8	77328	64054	82.8	Least Concern	
Mattiske Complex Va2	110074	76581	69.6	Least Concern	
Mattiske Complex Bu	54534	15548	28.5	Vulnerable	
Mattiske Complex MI	148168	115224	77.8	Least Concern	
Mattiske Complex CA	595116	583341	98.0	Least Concern	
Mattiske Complex Tr	236358	21395	58.8	Least Concern	

* (Shepherd et al. 2001)
** (Department of Natural Resources and Environment 2002)

Considering the retention values described above it is not expected that the proposed clearing will contribute to a significant loss of remnant vegetation and is therefore not likely to be at variance to this principle.

Methodology

Mattiske Consulting (1998).
Shepherd et al. (1994).
Hopkins et al. (1994).
GIS Database:
Pre-European Vegetation - DA 01/01.
Inerim Biogeographic Regionalisation of Australia - EA - 18/10/2000.

(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

Spencer Road has two watercourses crossing the area to be cleared, Sleeman Creek and Revett Brook. Lake Barnes is located 3km north of the proposed clearing area, and is a 'National Class ANCA' South Coast Significant Wetland. Lake Eyrie is located 3km south, and is a 'Conservation Class' South Coast Significant Wetland. Lake Mowilyilip is located 5km north of the proposed area.

The proposal inludes the widening of the bridge over Sleeman Creek, 7 metres on each side of the roadway and will require the removal of riparian vegetation. However due to the distance from the proposed clearing, the direction of flows and the opportunity for natural regeneration to occur under and around the bridge following its completion, it is not expected that impacts to the associated lakes and wetlands will occur.

Barrow Road has three watercourses crossing the area to be cleared, Tingellup Gully and two minor perennial watercourses. Kalmerndyip Lake is located 2.5km east of the proposed area, and is a 'Conservation Class' South Coast Significant Wetland. A minor perennial watercourse flows from this lake and crosses the roadway.

As the watercourses located within Barrow Road have previously been diverted through culverts or bridges, and the proposed road works do not include widening of culverts or bridges, the proposal is unlikely to impact these watercourses or associated vegetation. There is also no vegetation link to Kalmerndyip Lake, and due to the small-scale clearing within the road reserve, the proposal is unlikely to impact this South Coast Significant Wetland.

To mitigate the potential for dieback and weed weed contamination via stream flows, the proposed clearing will be carried out in accordance with and dieback and weed control conditions.

The proposed clearing is therefore not likely to be at variance to this principle.

Methodology

GIS Databases:
Lakes 250K - GA.
Rivers 250K - GA.
South Coast Significant Wetlands - DOE - 04/08/2003.

(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

There is no known Salinity Risk or Acid Sulphate Soils in the areas proposed to be cleared.

The proposed clearing on roadsides may cause some short term land degradation issues in terms of localised flooding and soil erosion during works.

However these issues should be minimised as the existing roads have in place roadside infrastructure to prevent land degradation associated with roads i.e. table drains and culverts.

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

Methodology

GIS Databases:
Acid Sulphate Soil Risk Map SCP - DOE - 04/11/2004.
Salinity Risk LM 25m - DOLA 00.

(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

Mt Lindesay National Park is located 3km south-west of Spencer Road. Lake Eyrie Nature Reserve is located 3km south-east of Spencer Road. Lake Barnes Nature Reserve is located 4km north of Spencer Road. Ongerup Nature Reserve is located 9km north-west of Spencer Road.

Porongurup National Park is located 5km south-east of Barrow Road.
An Unnamed Nature Reserve is located 9km south-west of Barrow Road.
Stirling Range National Park is located 12km north of Barrow Road.

Impacts on the environmental values of the identified conservation reserves are unlikely due to the distances from the proposed clearing. Therefore the proposal is not likely to be at variance to this Principle.

Methodology

GIS Databases:
CALM Managed Lands and Waters - CALM - 01/08/2004.

Albany 1.4m Orthomosaic - DLI - March 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

Groundwater Salinity is mapped at 1000-3000mg/L on Spencer Road, and 3000-7000mg/L on Barrow Road. The proposed areas are not located in a Public Drinking Water Source Area.

Methodology

GIS Databases:
Groundwater Salinity - Statewide - 22/02/2000.
Public Drinking Water Source Areas - DOE - 07/02/2006.
RIWI ACT Surface Water Areas - WRC - 18/10/2002.

(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 proposed clearings are located within road reserves. The applicant already has guidelines in place for the relevant infrastructure needed to prevent a flooding incident from occurring, and existing drainage lines will prevent flooding from occurring on the road from high rainfall events.

Therefore the proposal is unlikely to be at variance to this Principle.

Methodology

GIS Databases:
Topographic Contours, Statewide - DOLA - 12/09/2002.
Rivers 250K - GA.

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

Comments

The proposal is not at variance with any planning instruments and no further licences or approvals are required.

There is a Native Title Claim over the area under application. The Department of Environment and Conservation's advertising of the application in the West Australian newspaper 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.

Methodology

4. Assessor's recommendations

Purpose	Method	Applied area (ha)/ trees	Decision	Comment / recommendation
Road construction o maintenance	Mechanical Removal	10.5	**Grant**	The assessable criteria have been addressed with principles b and c considered maybe at variance. The assessing officer therefore recommends that the permit be granted with attached conditions requiring a flora and fauna survey be conducted prior to clearing, and a condition for dieback control and weed management.

5. References

Department of Environment & Conservation Site Visit (13/09/2006).

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.

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

Mattiske Consulting (1998) Mapping of vegetation complexes in the South West forest region of Western Australia, CALM.

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
CALM	Department of Conservation and Land Management

DAWA	Department of Agriculture
DEP	Department of Environmental Protection (now DoE)
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 DoE)