Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1527/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Peter George & Barbara Maud Pratt

1.3. Property details

Property: LOT 12935 ON PLAN 211509 (MEERUP 6262)
Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.3		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
Mattiske vegetation: Broad Swamps (S4): Low woodland of Eucalyptus marginata subsp. marginata-Nuytsia floribunda with some Melaleuca preissiana and closed heaths of Myrtaceae spp. on broad drainage lines in hyperhumid and perhumid zones. Beard Vegetation Association 23: Low woodland; jarrah-banksia	The area under application is an overstorey of open forest consisting primarily of Eucalyptus marginata. The mid-storey layer is closed scrub consisting primarily of dense thickets of Taxandria parviceps. The vegetation has been altered through fires and as a result the overstorey trees have suffered significant crown damage. There is a minor presence of pasture weeds fringing the site. Stock has had access to the site, however is unlikely to graze here due to the dense nature of the vegetation, There is no evidence of grazing by stock at the site.	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)	Vegetation condition determined through a DEC site visit (2007)

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 for the clearing of 1.3 hectares of native vegetation for the extension of a shale pit. The area proposed to be cleared is in an area that has approximately 75% vegetation remaining within a 10km radius. The majority of the remaining vegetation in the local area (10km radius) is within State Forests (Meerup and Gardner) and National Parks (Southcoast, D'Entrecasteaux and Boorara Gardner).

The condition of the vegetation under application is considered to be excellent (Keighery 1994). Due to the unlikely significance of the area to contribute to the maintenance of rare flora and TECs and the low significance of the areas habitat values, it is unlikely that the proposed clearing comprises a high level of biological diversity.

It has been acknowledged that the application area lies within an annual rainfall region of 1300mm where there is an increased risk of the spread of dieback into surrounding areas as a result of clearing activities. To mitigate this risk, conditions have been placed on the permit to ensure that hygiene practices associated with dieback are adhered to during the clearing process.

Methodology Keighery, 1994
GIS databases:
Meerup 50cm Orthomosaic - DLI04
Northcliffe 1.4m Orthomosaic- DLI00

(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 proposal is for the clearing of approximately 1.3 hectares of native vegetation for the extension of a shale pit. The vegetation an open Jarrah forest with a dense understorey and is in excellent condition (Keighery, 1994). Evidence on-site suggests that it is a grazing habitat for Red Tail Black Cockatoos (a declared threatened fauna) in addition to being habitat for Quendas (a Priority 4 species). However it is unlikely to be a breeding or nesting area for Red Tail Black Cockatoos as fires have caused significant crown damage therefore these trees are unlikely to provide nesting hollows for cockatoos that graze in the area (DEC 2007)

Given the proposal is to clear 1.3ha of native vegetation in an area that is heavily vegetated with the majority protected in National Parks and State forests it is unlikely that is a significant habitat for fauna indigenous to Western Australia.

Methodology DEC, 2007
Keighery, 1994
GIS Database:
Fauna - SAC Bio datasets 17/07/07
Meerup 50cm Orthomosaic - DLI04
Northcliffe 1.4m Orthomosaic- DLI00

(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 5 known records of four Declared Rare Flora (DRF) species and 6 records of 6 Priority flora taxa occurring in the local area, (10km radius). Habitat descriptions on the DEC's Florabase indicate that the majority of the species occur in different soil types and habitats to those found in the area under application. Caladenia plicata, a Priority 4 species, is likely to occur in the area under application due to suitable habitat within the Jarrah forest.

The area under application is surrounded by remnant vegetation which is immediately adjacent to areas of nature reserve and state forest which contains vegetation in similar or better condition. The proposed clearing is unlikely to be necessary for the continued existence of rare flora.

Methodology Keighery, 1994
DEC Florabase
GIS Database:
Meerup 50cm Orthomosaic - DLI04
Northcliffe 1.4m Orthomosaic- DLI00
DEFL - SAC Bio datasets 16/07/07

(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**
Records indicate there are no known threatened ecological communities within a ten kilometre radius of the areas under application, therefore the proposed clearing is not at variance to this principle.

Methodology GIS Database:
Meerup 50cm Orthomosaic - DLI04
Northcliffe 1.4m Orthomosaic- DLI00
TEC Points - SAC Bio datasets 17/07/07
PEC Points - SAC Bio datasets 17/07/07

(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 (ha)	Current extent (ha)	Remaining (%)	Conservation ***status	% In reserves/CALM managed land
IBRA Bioregions Warren	834,053*	657,114*	78.8*	Least Concern	46.7*
Shire of Manjimup	705,670**	591,748**	83.9**	Least Concern	
Vegetation type: Beard: Unit 23	37,744*	28,175*	74.6*	Least Concern	49.1*
Mattiske: Broad Swamps (S4)	15,684	9,954	63.5	Least Concern	

* (Shepherd 2006)
** (Shepherd et al., 2001)
*** (Department of Natural Resources and Environment 2002)

The area under application is located in the Warren Bioregion with 78.8% of pre-European vegetation remaining (Shepherd et al., 2006). In addition, the Shire of Manjimup has 83.9% remaining of pre-European vegetation (Shepherd et al., 2001).

The objective for environmental protection and biodiversity conservation, (EPA 2000) is to retain 30% or more of the pre-European clearing extent of each vegetation community. The Beard Vegetation Association of the area under application has 49.1% of remaining pre-European vegetation, and the Mattiske vegetation complex has 63.5% of pre-European vegetation. All vegetation is well above the 30% target for Biodiversity conservation as set out by EPA (2000). Based on this, the vegetation under application is not considered to be significant remnant vegetation in an area that has been extensively cleared.

Methodology

Keighery, 1994
EPA (2000)
Shepherd et al (2001)
Shepherd et al (2006)
Department of Natural Resources and Environment (2002)
GIS Database:
- Pre-European Vegetation - DA 10/01
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- EPA Position Paper No. 2 Agriculture Region - DEP 12/00
- Mattiske Vegetation - CALM 24/3/98

(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 at variance to this Principle

There are a large number of waterbodies within the local area (10km radius) of the proposed clearing, some of these include:
-The Gardner River, located 1.7km east of the area proposed to be cleared,
-The Meerup River, located 4.2km south west of the area proposed to be cleared,
-Doggerup Creek System (an Important Wetland in Australia, ANCA listed), located 4.6-6.7km south of the area proposed to be cleared, and
-there are a number of minor perennial watercourses on the property, the closest being 150m east of the area proposed to be cleared.

Additionally a large network of significant Geomorphic wetlands mapped from Augusta to Walpole exists around the property covered by this application however, none occur on the area under application and the closest wetland is 250m west of the proposed clearing.

There is a riparian zone running adjacent to the western boundary and south western corner of the proposed clearing site, signified by a section of Xanthorrhea preisii (DEC 2007). Based on this the clearing is in an environment associated with wetlands.

Methodology DEC (2007)
GIS Database:
- Hydrography, Linear - DOE 1/2/04
- Rivers 250K - GA
- ANCA, Wetlands - CALM 08/01
- Geomorphic Wetlands, Augusta to Walpole - DOE 18/6/03

(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**
The area proposed to be cleared has not been mapped for Acid Sulphate Soils disturbance risk or salinity risk. The groundwater salinity for the area is 500-1000mg/L. The risk of wind erosion and water erosion causing land degradation are considered to be low based on short slope lengths and low slope gradients.

The proposed clearing is unlikely to cause appreciable land degradation due to its size.

Methodology GIS Database:
-Soils, Statewide - DA 11/99
-Topographic contours, Statewide - DOLA 12/09/02
-Groundwater salinity, Statewide - DOW

(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**
Though the property is adjacent to Boorara Gardner National Park, the area proposed to be cleared is approximately 440m from the Park. Given, that the application site is relatively small and the vegetation remaining on the property, the proposal site is highly unlikely to impact on the environmental values of the nearby conservation areas or function as ecological linkages to nearby National Parks and State Forest.

Methodology GIS Database:
CALM Managed Lands and Waters - CALM 1/07/05
Meerup 50cm Orthomosaic - DLI04
Northcliffe 1.4m Orthomosaic- DLI00

(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 application sites lie within the Gardner River Catchment. This region has an annual rainfall of 1300mm/year while evapotransporation is 900mm/year. Groundwater salinity is low ranging between 500-1000mg/L TDS (total dissolved solids).

Due to the small area proposed to be cleared, it is unlikely that the clearing of native vegetation will cause deterioration in the quality of surface water or groundwater within the local area.

Methodology GIS Database:
- Hydrographic Catchments - Catchments - DOE 23/03/05
- Rainfall, Mean Annual - BOM 30/09/01
- Groundwater Salinity, Statewide - 22/02/00

(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**
Due to the scale and nature of the proposed clearing, it is unlikely to cause or exacerbate flooding within the local area.

Methodology GIS Database:
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

No submissions from the public have been received.

There is one Native Title claim over the area under application, as the property is privately owned the granting of the clearing permit is a secondary approval and does not constitute a future act under the Native Title Act 1993.

Methodology	Planning approval has been granted for the extractive industry from the Shire of Manjimup TRIM ref DOC29249 GIS Database: - Native Title Claims - DLI 07/11/05

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Extractive Industry	Mechanical Removal	1.3	The assessable criteria have been addressed and the proposal is at variance to Principle (f) and not likely to be at variance to Principles (a) to (e) and (g) to (h).

5. References

DEC Florabase. Found on-line at http://florabase.dec.wa.gov.au/

Department of Environment and Conservation (2007) Site Visit Report TRIM ref DOC29150

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. 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.

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

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.

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)