Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2587/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: Philip Roger & Sandra Jean Goldring

1.3. Property details

Property: LOT 8953 ON PLAN 201660 (Lot No. 8953 PARKER YEAGARUP 6260)
LOT 8953 ON PLAN 201660 (Lot No. 8953 PARKER YEAGARUP 6260)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.8		Mechanical Removal	Grazing & Pasture

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 1 :Tall forest, karri (Eucalyptus diversclor) Mattiske PM1 : Tall open forest of Eucalyptus diversicolor with mixtures of Corymbia calophylla on valley slopes and low forest of Agonis juniperina-Banksia seminuda-Callistachys lanceolata on valley floors in the perhumid zone	The vegetation within the application area is described as being a closed community of regrowth forest, dominated by marri and karri trees. The groundcover is comprised of braken fern, blackberry and luecopogon, with some grasses and sedges present. The area shows signs of previous disturbance form past clearing activities and grazing (DEC site visit 2008).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The description and condition of the proposed vegetation to be cleared was obtained via the use of aerial mapping systems and a DEC conducted site inspection.

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 considered to be in good (Keighery 1994) condition. The vegetation is described as being a closed community of regrowth forest, dominated by marri and karri trees. The groundcover is comprised of braken fern, blackberry and leucopogon, with some grasses and sedges present. The area shows signs of previous disturbance from past clearing activities and grazing (DEC site visit 2008).

Due to the presence of the environmental weed (blackberry) and given the large amount of significant vegetation that surrounds the application area, it is considered unlikely that the 0.8 hectares of vegetation under application is representative of an area of high level biodiversity.

While it has been noted that riparian vegetation does exist along the northern boundary of the application area, adjacent to the dam (DEC site visit 2008), the clearing area has been reduced to exclude vegetation bordering the dam. There will be a small access track 3-5 metres wide to enable the stock to reach the dam waters.

Methodology

DEC site visit (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic 2004
- Meerup 50cm Orthomosaic Landgate 2004
-CALM managed lands and waters (1/11/03)

(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 application area is surrounded by conservation areas and aerial mapping suggests that approximately 75% of vegetation within the local area (10km radius) remains. Within the local area the Quokka (Setonix brachyurus) was recorded 5.8km south east, the Carpet python (Morelia spilota imbricata) was recorded 6.6km south west and the Water rat (Hydromys chrysogaster) was recorded 4.1km south east of the application area. The Water rat and Quokka could utilize the application area as habitat, as these species are known to occur near wetlands and watercourses. However, given that the local area has several watercourses, most of which occur within DEC managed lands that surround the application area, it is considered unlikely that the vegetation under application is a significant habitat for these fauna.

Methodology

SacBioDataSets (accessed 1/9/08)
GIS DataSets:
- CALM managed lands and waters (1/11/03)

(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 (10km radius) there are 6 priority flora species, 3 of which are priority one. Rulingia apella (P1) and Austrofestuca littoralis (P1) occur on the same soil type as the application area, while Thomasia Brachystachys (P1) occurs on the same vegetation type as the application area but is generally restricted to organic brown soils (DEC Florabase 2008).

The closest recorded rare flora species was Caladenia harringtoniae, which was recorded 9.4km north west. This species can occur along creek lines in jarrah and karri forest and may inhabit conditions similar to that of the application area (DEC Florabase 2008). However, due to the vast amount of suitable habitat, largely in the form of DEC managed lands, the application area is unlikely to be necessary for the continued existence of rare flora.

Methodology

DEC site visit (2008)
DEC Florabase (2008)
SacBioDataSets (accessed 1/9/08)

(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

The application area has a blackberry infestation and shows signs of disturbance from previous clearing activities and grazing (DEC site visit 2008). Aerial mapping and DEC site visit (2008) revealed that there are no known Threatened Ecological Communities (TECs) present within the application area or within the local area (10km radius). It is therefore considered unlikely that the proposed clearing will impact on any TECs.

Methodology

DEC site visit (2008)
SacBioDataSets (accessed 1/9/08)

(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 at variance to this Principle

As the table below indicates the vegetation under application, which consists of Beard vegetation association 1 and Mattiske PM1, is well represented. Additionally, according to aerial mapping systems, the local area (10km radius) has approximately 75% remaining vegetation, largely in the form of DEC managed lands, therefore the proposed clearing is not at variance to this principle.

Veg Rep	Pre-European	Current Extent	%remaining
Beard Veg 1	72409	57115	78.9
Warren	833981	663141	79.5
Manjimup Shire	696702	589278	84.6
Mattiske (1998) PM1	258061	169317	65.6

(Shepherd et al. 2006)

Methodology Mattiske (1998)
Shepherd et al. (2006)
SacBioDataSets (accessed 01/09/08)
GIS DataSets:
- Donnelly 50cm Orthomosaic 2004 (13/012/04)
- Pre European Vegetation - DA 01/01

(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 may be at variance to this Principle

The application area is adjoining a minor watercourse and a dam. The watercourse runs through the north west section of the application area and into the neighbouring property to the west. The dam is situated on the northern boundary of the application area. There is riparian vegetation present along the boundary of the dam (DEC site Visit 2008). The proponent will not clear the riparian vegetation that runs adjacent to the northern boundary of the application area (except for a 3-5 metre wide access track) and will retain a buffer of at least 50 metres. A vegetated buffer of at least 50 metres will also be required , as a condition of permit, to ensure the integrity of the creek running through the north west section of the application area is maintained, preventing any erosion related concerns. In order for the buffered areas to be effective, they must be fenced off to prevent stock from grazing the vegetation.

The application area is 980 metres west of Treen Brook and 4.1km north of the Warren River. The proposed clearing is unlikely to have any significant impacts on Treen Brook or Warren River

Methodology DEC site visit (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic 2004 (13/012/04)
- Hydrography linear- DoW (13/07/06)
- Hydrography linear (Hierarchy)- DoW (13/07/06)

(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

The soil types present on the application area are described as steep hilly dissected lateritic plateaus, with steep valley side slopes. Chief soils are hard, also sandy, neutral and acidic, yellow and yellow mottled soils (Northcote et al. 1960-1968). The average annual rainfall is 1300mm and the elevation of the application area is between 110 - 115 metres.

The groundwater salinity is 500 to 1000mg/L (Low salinity risk). The mean rainfall is 1300mm per annum and the evapotranspiration rate is 900mm.

While sandy soils may be susceptible to wind erosion, due to the application area being situated in a protected valley, surrounded by well vegetated lands at a higher elevation, it is unlikely that wind erosion will be an issue. To prevent erosion along the dam embankment at the northern boundary of the application area and the creek that runs through the north west of the application area, a vegetated buffer of at least 50 metres will be imposed to prevent such occurrences at both locations. This buffered areas will be adequately fenced to prevent stock from grazing the remaining vegetation as a condition of permit.

The area under application lies within Zone D of the Warren River Water Reserve gazetted under the Country Areas Water Supply Act 1947 (CAWS Act).The CAWS Act controls land clearing within the Warren River Water Reserve in order to protect public drinking water quality and was developed in response to increased dryland salinity and increasing concentrations of salts in drinking water within the catchment.

It is recommended that within CAWSA areas a minimum of at least 10% of native vegetation be retained on the land holdings (DoW advice 2008). At present the amount of vegetation remaining on the land holding is 12.8%. The proposed clearing of 0.8 hectares of native vegetation will reduce this to 10.8%, which is the acceptable limit recommended by CAWSA regulations (Trim Ref: DOC 67152).

Methodology DoW advice (2008)
Northcote et al. (1960-1968)
Trim Ref: DOC 67152
GIS DataSets:
- Donnelly 50cm Orthomosaic 2004 (13/012/04)
- Meerup 50cm Orthomosaic Landgate 2004 (19/12/04)
- Rainfall, mean annual (30/09/01)
- Soils, statewide (30/11/99)
- Topography (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

Donnelly state forest is located 400m to the east and Warren National Park is located 600m south east. Due to the application areas size and its position within a small cleared area of farmed land, it is unlikely to contribute to the connectivity of the surrounding conservation areas, as these areas are well connected and are within an area of high vegetation retention.

Clearing related activities may increase the risk of dieback and weed species being spread through nearby conservation areas and management conditions will be required to ensure the conservation areas are not impacted by invasion.

Methodology

GIS DataSets:
- Donnelly 50cm Orthomosaic 2004 (13/012/04)
- Meerup 50cm Orthomosaic Landgate 2004 (19/12/04)
- CALM managed lands and waters (1/11/03)

(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

The area under application lies within Zone D of the Warren River Water Reserve gazetted under the Country Areas Water Supply Act 1947 (CAWS Act) and the groundwater salinity is 500 to 1000mg/L (low salinity risk). However the proposed clearing has been reduced from 3.3 hectares to 0.8 hectares, which will leave 10.8% of vegetation remaining on the landholding. This is acceptable under CAWSA guidlines and regulations (DoW advice 2008). To further protect the surface and groundwater quality, a fenced vegetated buffer of 50 metres will be imposed to ensure that the remaing vegetation is not grazed by stock accessing the area.

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

Methodology

DoW advice (2008)
GIS DataSets:
- Donnelly 50cm Orthomosaic 2004 (13/01/04)
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrographic catchments, subcatchments - DoW 01/06/07
- Hydrography, linear - DOW 13/7/06
- Salinity Risk LM 25m - DOLA 00
- 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

Although the rainfall within the local area(10km radius) is relatively high (1300mm annually) the clearing of 0.8 hectares of native vegetation that is adjacent to a dam is unlikely to further increase the risk of flooding.

Methodology

GIS DataSets:
- Rainfall, mean annual (30/09/01)
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

A submission was received from the shire of Manjimup (Trim Ref: DOC59388) with no objection to the clearing.

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 not at variance to principles (e)
- may be at variacne to principle (f)
- is not likely to be at variance to all other principles

5. References

DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2587/1, Lot 8953 on Plan 201660, Yeagarup. Site inspection undertaken 30/07/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC60803).

Department of Water (2008) CAWSA advice (Trim Ref: DOC62295)

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, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment 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., 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.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001a) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia (updated 2006).

Western Australian Herbarium (1998?). FloraBase ? The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ Accessed on Thursday, 11 September 2008.

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)