Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1671/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: David Neville Mottram

1.3. Property details

Property: LOT 4 ON DIAGRAM 14233 (UPPER WARREN 6258)
LOT 320 ON PLAN 252116 (UPPER WARREN 6258)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.5		Mechanical Removal	Dam 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: Medium forest of Jarrah Marri Mattiske Vegetation complex WH1: Tall open forest of Eucalyptus diversicolor-Corymbia calophylla on slopes and tall open forest of Eucalyptus patens on valley floor in perhumid and humid zones.	The area proposed to be cleared is on a property bordered upslope and to the south by pine plantations under the Conservator of Forests. The Conservation Commission Tone State Forest lies to the east of the property and extends to the south of these pine plantations, with the Conservation Commission Greater Dardagup National Park immediately to the south of the State Forest. The vegetation proposed to be cleared is positioned on the midslope valley in the landscape and comprises the riparian zone of a stream channel. The area proposed to be cleared is also in the buffer zone of an area subject to an ATR. The native vegetation is unfenced with livestock allowed to freely graze. The area is also being actively logged and thinned. A site visit on 1 May 2007 assessed the vegetation as good to poor with no understorey and a heavy infestation of bulrush and blackberry.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	DEC site report (May 2007); DAFWA Site Report (April 2007); GIS databases: Pemberton 1.4m Orthomosaic (DOLA 1999); Mattiske Vegetation (CALM 1998); Interim Biogeographic Regionalisation of Australia (EA 2000); Shepherd et al (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 area proposed to be cleared is on a property bordered to the south by pine plantations under the

Conservator of Forests. The Conservation Commission Tone State Forest lies to the east of the property and extends to the south of these pine plantations, with the Conservation Commission Greater Dardagup National Park immediately to the south of the State Forest. It is also in the riparian buffer zone of native vegetation subject to an Agreement To Reserve (ATR).

Given that the degraded native vegetation proposed to be cleared has been subject to grazing and is weed infested, it is unlikely to have higher biological diversity than other native vegetation in the local area.

Methodology Site visit (2007); SAC Biodatasets (2007); GIS databases: Manjimup 1.4m Orthomosaic (2000); Manjimup 1.4m Orthomosaic (2004); Clearing Regulations - Environmentally Sensitive Areas (DOE 2005); Interim Biogeographic Regionalisation (EA 2000); Mattiske Vegetation (DEC 1998); DEC Managed Lands & Waters (DEC 2005); Cadastre (DLI 2006)

(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**

There are four records of threatened fauna situated between three and ten km of the area proposed to be cleared. The site visit conducted on 11 May 2007 reported no fauna or evidence of fauna species of biodiversity significance.

Given the degraded nature of the native vegetation proposed to be cleared, it is unlikely that the site would provide significant habitat for fauna species in the local area, nor for native fauna communities or metapopulations.

Methodology Site report (May 2007); SAC Biodatasets 15/060/07; GIS databases: Manjimup 1.4m Orthomosaic (2000); Manjimup 1.4m Orthomosaic (2004); Threatened Fauna (CALM 2005)

(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**

One reporting of Priority (P3) flora, Marianthus sp. Walpole, has been recorded as occurring 4km to the east of the area proposed to be cleared. No Declared Rare Flora is known to occur within a ten km radius of the area proposed to be cleared.

Given the degraded and weed infested condition of the vegetation proposed to be cleared, it is unlikely that the area is necessary for the continued existence of Declared Rare or Priority Flora.

Methodology SAC Bio datasets 18/06/07; GIS Databases: Manjimup 1.4m Orthomosaic (2000); Interim Biogeographic Regionalisation (DA 2000); Declared Rare and Priority Flora (CALM 2005); Clearing Regulations - Environmentally Sensitive Areas (DoE 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**

No listed Threatened Ecological Communities occur within a 10km radius of the area proposed to be cleared. No other significant ecological communities are known to occur within a ten km radius of the area proposed to be cleared.

It is unlikely that the native vegetation proposed to be cleared is necessary for the continued existence of Threatened or Significant Ecological communities.

Methodology SAC Bio datasets 18/06/07; GIS Databases: Threatened Ecological Communities (CALM 2005); Clearing regulations - Environmentally Sensitive Areas (DoE 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 at variance to this Principle**

Pre-European	Current extent (ha)*	Remaining (ha)*	Conservation (%)*
IBRA Bioregion - Warren***	851 529	739 273	86.8
Shire of Manjimup	698 224	599 102	85.8

Vegetation type: Beard: assoc 3 Medium forest Jarrah-marri	2 662 058	1 884 029	70.8
Mattiske: WH1 Wheatley	183 280	142 945	78.0

* (Shepherd et al. 2001)
*** Within the Intensive Landuse Zone

The vegetation to be cleared is well represented in the bioregion, in the local shire area and in nearby DEC managed land and Reserves. The clearing of the 2ha of native vegetation under application is therefore not likely to adversely impact on the vegetation type being cleared

Methodology GIS Databases: Manjimup 1.4m Orthomosaic (2000); Manjimup 1.4m Orthomosaic (2004); NLWRA Current Extent of Native Vegetation (DA 2001); Mattiske Vegetation (CALM 1998); Interim Biogeographic Regionalisation of Australia (EA 2000); Pre-European Vegetation (DA 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 at variance to this Principle

The native vegetation proposed to be cleared is growing in the riparian zone of on a third order stream with links to the Warren River approx 1km to the north. The area proposed to be cleared also forms the buffer area of the adjacent ATR parcel of native vegetation.

The native vegetation proposed to be cleared is therefore growing in an environment associated with a watercourse or wetland.

Methodology GIS Databases: Agreement to Reserve (ATR) DAFWA (2005); Manjimup 1.4m Orthomosaic (2004); Hydrography, Linear (DoE 2004); Hydrographic Catchments (DoE 2003); Clearing Regulations - ESAs (DoE 2005); Topographic Contours, Statewide (DOLA 2002)

(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

A site visit and land degradation assessment has been undertaken by DAFWA. The landform of the area proposed to be cleared is described as shallow minor valleys on colluvium with a weathered mantle over gneiss. Soils are described as loamy gravels, friable red/brown earths, duplex sandy gravels and brown loamy earths.

That assessment reported no known salinity occurring or observed onsite or offsite. Wind erosion was considered unlikely due to the soil types present. The report concluded that the proposed clearing was unlikely to cause appreciable land degradation.

Methodology DAFWA Site Report 24/05/07; GIS Databases: Groundwater Salinity Statewide (DOW 2000); Hydrogeology, Statewide (2002); Soils Statewide (DA 1999)

(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 at variance to this Principle

The area proposed to be cleared is on a property downstream of pine plantations under the Conservator of Forests. The Conservation Commission Tone State Forest lies to the east of the property and extends to the south of these pine plantations, with the Conservation Commission Greater Dardagup National Park immediately to the south of the State Forest.

Between the area proposed to be cleared and the State Forest on the eastern boundary is an area of native vegetation subject to an ATR. The area proposed to be cleared is within the buffer zone of this ATR. The native vegetation proposed to be cleared therefore provides a buffer to this ATR conservation area. This buffer has been amended by the Department of Agriculture and Food not to include the application area.

The site visit undertaken on 11 May 2007 by DEC staff observed no fauna or evidence of fauna, but concluded that the creek amid the vegetation proposed to be cleared is a potential water source for any fauna in the buffer zone or in the ATR. It is therefore likely that the native vegetation proposed to be cleared contributes an ecological linkage to the conservation ATR area. This buffer has been amended by the Department of

Agriculture and Food not to include the application area.

Methodology DAFWA Site Report 24/05/07: GIS Databases: CALM Managed Lands & Waters (DEC 2005); Cadastre (DLI 2006); WRC Estate (DOE 2004)

(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 native vegetation proposed to be cleared lies in the high rainfall Warren River Catchment, has low groundwater salinity (500-1000ppm) and low permeability granitoid hydrogeology.

The DAFWA site assessment reported the proposed removal of 2ha of native vegetation for dam construction was unlikely to increase the risk of eutrophication or salinity.

It is therefore unlikely that the proposed clearing would cause deterioration in the quality of surface or groundwater.

Methodology DAFWA Site Report (April 2007); GIS databases: Evaporation Isopleths (BOM 1998); Mean Annual Rainfall Isohyet (DoE 2005); Hydrographic Catchments (DoE 2003); RIWI Act Groundwater Areas (DOW 2000)

(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 property has a hydrogeography of granitoid rocks with low permeability gneiss and it is in an area of high annual rainfall (100mm) with a relatively low evaporation. Having a topographic 10m decline over the length of the area proposed to be cleared, and a high position in the catchment, it is reasonable to conclude that runoff would be captured in the proposed dam.

It is therefore unlikely that the proposed clearing will cause or exacerbate the incidence or likelihood of flooding.

The DAFWA site assessment similarly concluded that the proposed clearing of 2ha of native vegetation presented a low risk of flooding.

Methodology DAFWA site report (April 2007); GIS Databases: Manjimup Orthomosaic (DLI 2004); Topographical Contours Statewide (DOLA 2002); Rainfall, Mean Annual (BOM 1999); Hydrogeology, Statewide (WRC 2002); Hydrographic Catchments (DOE 2003).

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

Comments

The area proposed to be cleared is in the buffer zone of an Agreement To Reserve (ATR), and is listed as minimum intervention, remnant vegetation cover under the National Land & Water Resources Act (NLWRA). A permit to construct a dam has been issued by the Department of Water. Furthermore, the ATR has been amended by the Department of Agriculture and Food Western Australia not to include the application area.

DOW has also advised that the proponent must apply for a license to modify bed and bank for dams in the riparian zone of the creek line. And, because compensation has already been paid for retention of this native vegetation, a licence to clear will also be required under the CAWS Act. Licence number 2035/1 has been issued by the Department of Water.

One Aboriginal Site of Significance exists 9km to the northwest of the area proposed to be cleared, and one 7.5km to the east of the area proposed to be cleared.

There is also a native title claim - Wagyl Kaip - over the area under application. As the property is privately owned the granting of the clearing permit would be a secondary approval and does not constitute a future act under the Native Title Act 1993.

Methodology GIS Databases: Manjimup orthomosaic (DLI 2000); Manjimup orthomosaic (DLI 2004); CAWSA (DOW 2004); Aboriginal Sites of Significance (DIA 2007); Native Title Claims (DLI 2005); NLWRA Land Use DAFWA 2001); RIWI Act Groundwater & Surface Water Areas (WRC 2002)

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Dam construction or maintenance	Mechanical Removal	1.5	The proposal is for the clearing of 1.5ha of native vegetation along a creek line for the purpose of dam construction. The assessable criteria have been addressed and the proposal is at variance to principles (f) and (h), is not likely to be at variance to principles (a), (b),(c), (d), (g), (i) and (j) and is not a variance to principle

(e).

5. References

DAFWA Land degradation assessment report. Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. DoE TRIM ref 23425.

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
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)