Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 2785/1
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Mr Wally Angel

1.3. Property details

Property: LOT 7 ON DIAGRAM 54280 (MIDDLESEX 6258)
Local Government Area: Shire Of Manjimup
Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
4		Mechanical Removal	Timber Harvesting

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 (1144): Tall forest; karri & marri (Corymbia calophylla) Shepherd et al. (2001) Mattiske Vegetation Association (PM1): Pemberton is described as 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. Mattiske Consulting (1998)	The area under application consists of little under storey, with good quality karri ranging from 40m to 50m. The area has been heavily grazed by stock, paddock grasses and weeds have established (DEC, 2008).	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	The area under application has been described from aerial imagery, the proponents Native Forest Management Plan (DOC64649) and a DEC site visit on 23 October 2008 (DOC69101).

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

It is proposed to selectively thin 4ha of karri forest; the area is described as being in a degraded (Keighery 1994) condition, as the area has been heavily grazed by stock, paddock grasses and weeds have stablished (DEC, 2008). The area under application consists of little under storey, with good quality karri ranging from 40m to 50m.

There is one record of the Epiphytic Cryptogams Priority Ecological Community (PEC, Priority 3), the PEC is 7.5km north of the area under application. Given the dynamic nature of the community it is unlikely that selective clearing will significantly impact up on it. Additionally it is likely that the community lives within creek line areas which are demarcated from clearing in the forest management plan (2008).

There are numerous records of priority flora species recorded within the local area (10km radius), however these species are primarily associated with different soil and vegetation types.

The area under application acts as a linkage to state forests, national parks and nature reserves. A basal area of 18m squared will be retained as a condition of hte permit to maintain this connectivity.

Given that the clearing is to selectively thin karri trees, disturbance to the biodiversity is expected to be minimal and short term. As the proposed clearing area is adjacent to national park and state forest, recruitment post clearing should be healthy and diverse. A condition for weed and dieback management be imposed on the permit.

Methodology DEC (2008)
Keighery (1994)
Northcote et al. (1968)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- DEFL, SAC Biodataset (29/10/08)
- TEC Database, SAC Biodatasets - accessed 29/10/08

(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**
Within the local area (10km radius from the proposed clearing) there are 5 records of threatened fauna and 2 records of priority species.

The area under application is proposed to clear 4ha of native vegetation of which the area is in a degraded (Keighery, 1994) condition. There is 70% remnant vegetation within the local area (10km radius). Therefore the proposed clearing is unlikely to be at variance with this principle. An 18m square basal area will be retained as a condition of the permit to provide habitat in the long term.

Methodology DEC (2008)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- Threatened Fauna, SAC Bio Dataset (29/10/08)

(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) of the site under application there are 2 records of rare flora, however these species are primarily associated with different soil and vegetation types.

No rare or priority flora were observed on site (DEC, 2008). Therefore clearing is not likely to be at variance to this principle.

Methodology DEC (2008)
Keighery (1994)
Northcote et al. (1968)
Shepherd et al. (2001)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- DEFL, SAC Bio Dataset (29/10/08)

(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 at variance to this Principle**
There are no known Threatened Ecological Communities (TEC) within a 10km radius of the proposed clearing site. Therefore is not at variance to this principle.

Methodology GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- DEFL, SAC Biodataset (29/10/08)
- TEC Database, SAC Biodatasets - accessed 29/10/08

(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**

IBRA Bioregion	Pre-European	Current Extent	Remaining

Warren Shire	835,925.47	675,836.26	80.85
Manjimup Beard Vegetation	697,359.72	595,561.57	85.4
1144 Mattiske Vegetation	160,314.85	131,412.09	81.97
Pemberton	258,061	169,317	65.6

The area under application is located in the Warren Bioregion and is in the Shire of Manjimup. The extent of Warren is 80.85%. The extent of the pre-European vegetation (1144) is 81.97% (Shepherd et al. 2001) and within the Shire of Manjimup is 85.4% (Shepherd et al. 2001). The extent of the Mattiske Vegetation Complex, Pemberton (PM1) is 65.6%. Beard and Mattiske vegetation has not been extensively cleared within this region, and is higher than the desirable 30% threshold level target identified by the EPA (2000).The local area (10km radius) is approximately 70% vegetated and 90% of the native vegetation is managed by DEC. Due to the amount of surrounding vegetation present, the proposed clearing is not at variance to this principle.

Methodology

EPA (2000)
Mattiske Consulting (1998)
Shepherd (2006)
Shepherd et al. (2001)
GIS Database:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00
- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation, SAC Bio Dataset (29/10/08)

(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 is a perennial watercourse (first order stream) which runs along the north east boundary of the area in question. Within this watercourse is an earth dam which is 100m east of the area under application.

The area under application lies within Zone C of the Warren River Water Reserve gazetted under the Country Areas Water Supply Act 1987 (CAWS Act). Water and Rivers Commissions Policy indicates that a 30m buffer is required on first, second and third order streams and small swamps (WRC Policy, 1996) in order to protect surface water quality and riparian vegetation in catchments subject to clearing control legislation.

The area under application therefore is growing in association with a watercourse and thus the proposed clearing is at variance to this principle. A 30m buffer will be placed on the permit.

Methodology

GIS Database:
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Hydrography linear (hierarchy) - DoW 13/7/06

(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 topography of the site is between 175 to 205m AHD (Australian Height Datum), with the land sloping north-east. The mean annual rainfall is 1100mm per annum and the evapotranspiration rate is 800mm. Given the high rainfall and high relief in topography, water erosion is likely to occur on the site. However, as the proposal is for thinning a proportion of vegetation will remain after clearing making erosion unlikely to occur.

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

DoW (2008) advice states that there is a moderate risk of salinity within this catchment. There has been no CAWS Act compensation paid to retain native vegetation on the holding. Under the DoW Policy and Guidelines for the 'Granting of Licences to Clear Indigenous Vegetation' provide for the grant to clear native vegetation subject to retaining a 30m buffer around riparian vegetation, the exclusion of any stock grazing within the area for as long as is required for regeneration and sustainable development of regrowth and the rehabilitation of any areas damaged by the silvicultural practises within 12 months of works completion (DoW, 2008).

The proposed clearing may incrementally increase salinity within this moderate risk catchment.

An 18m square basal area is required to be retained as a conditon of the permit. Additionally, the vegetation is required to be managed to allow for regeneration as a condition of the permit. This will mitigate potential salinity impacts in the long term.

Methodology

DEC (2008)
DoW (2008)
Northcote et al. (1968)
GIS Database:
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Evapotransporation Isopleths - WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 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 may be at variance to this Principle

The proposed clearing is surrounded by State Forest and National Parks.

Sir James Mitchell National Park is 830m south of the area under application, Tone State Forest is 1.6km east of the area in question and Smith Brook Nature Reserve (Register of National Estate) is 770m south of the area under application.

The local area (10km radius) is approximately 70% vegetated and 90% of the native vegetation is managed by DEC. Due to the amount of surrounding vegetation present, the proposed clearing is not at variance to this principle.

The area under application is within a dieback risk area and is adjacent large intact remnants. Therefore there is a risk of the phytophthora disease spreading. Additionally, there is a risk of weeds spreading into the large intact remnants via the clearing disturbance. Dieback and weed conditions will be placed on the Permit to mitigate these potential impacts.

Methodology

GIS Databases:
- Manjimup 50cm ORTHOMOSIAC - Landgate04
- CALM Managed Lands and Waters - CALM 01/06/05
- Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

(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 at variance to this Principle

There is a perennial watercourse (first order stream) which runs along the north east boundary of the area in question. Within this watercourse is an earth dam which is 100m east of the area under application. The Department of Water recommends a 30m buffer on each side of the stream be maintained for water quality purposes (WRC 1996; DoW, 2005). The native vegetation buffers provide environmental benefits to the waterways, as they act as a filter to help protect waters from pathogens, turbidity, nutrient-enriched run-off and spreading of waterborne weed species (DoE, 2005).

The area under application lies within Zone C of the Warren River Water Reserve gazetted under the Country Areas Water Supply Act 1987 (CAWS Act). Water and Rivers Commissions Policy indicates that a 30m buffer is required on first, second and third order streams and small swamps (WRC Policy, 1996) in order to protect surface water quality and riparian vegetation in catchments subject to clearing control legislation.

A 30m buffer (WRC, 1996; DoW, 2005) from either side of streams will be placed on the permit to mitigate any potential water quality impacts.

Methodology

GIS Database:
- Country Area Water Supply Act (Part IIA) Clearing Control Catchments 29/06/2006
- Evapotransporation Isopleths - WRC 29/09/98
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05

(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 at variance to this Principle

The proposal is to selectively thin within karri forest, which will result in a proportion of native vegetation remaining within the area under application. Evidence of the area being subject to inundation is little (DEC, 2008).

As such, the clearing as proposed will not cause, or exacerbate, the incidence or intensity of flooding and is therefore not at variance to this principle.

Methodology

DEC (2008)
Northcote et al. (1968)
GIS Database:
- Evapotransporation Isopleths
- WRC 29/09/98
- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments - DoW 01/06/07
- Hydrogeology, statewide DOW 13/07/06
- Mean Annual Rainfall Isohytes (1975 - 2003) DEC 02/08/05
- Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Town Planning Scheme for the area under application is zoned as Rural.

Methodology

GIS Database:
- Town Planning Scheme Zones - MFP 31/08/98

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 at variance to Principles (f) & (i), may be at variance to principles (g) & (h), principle (a), (b) & (c) are not likely to be at variance and the remaining principles are not at variance.

5. References

DEC (2008) Site Inspection Report for Clearing Permit Application CPS 2785/1, Lot 7 on Plan 54280, Manjimup. Site inspection undertaken 23/10/2008. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC69101).

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, Western Australia.

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, 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.

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)