Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 1856/1

Permit type: Area Permit

1.2. Proponent details

Proponent's name: **Kimberley Neil Gandy**

1.3. Property details

Property:
LOT 8860 ON PLAN 140468 (MANJIMUP (S) 0)
LOT 5110 ON PLAN 229254 (MANJIMUP (S) 0)
LOT 11799 ON PLAN 229254 (MANJIMUP (S) 0)
LOT 5109 ON PLAN 229254 (DIAMOND TREE 6258)

Local Government Area: Shire Of Manjimup

Colloquial name:

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
76		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 Associations; Nornalup (3 & 1112): Medium forest; jarrah-marri & Mosaic: Tall forest; karri / Tall forest; jarrah & marri Shepherd et al. (2001). Pemberton Complex (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. Crowea Complexes (CRy & CRb): Tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones; Tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid zones. Mattiske Consulting (1998).	The proposal involves clearing approximately 78 hectares of native vegetation that varies in condition from good to very good (Keighery, 1994) condition. The vegetation under application comprises karri, marri and mixed karri-marri pole forest over an understorey including Trymalium floribundum (DEC Site Visit, 2007). The area under application was heavily logged approximately 50 years previous; the resulting regrowth varies from high quality, even-aged karri to more mixed age, predominantly marri forest. The area is long unburnt and comprises thick leaf covering the forest floor.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The description of the clearing application area is based on a site inspection conducted by DEC officers on 26 July 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 may be at variance to this Principle

The proposed clearing is for 78 hectares for agricultural purposes in the Warren IBRA region. This region is well represented with approximately 86.8% of pre-European vegetation remaining (Shepherd et al. 2001).

The area under application is considered to contain vegetation that varies between good to very good condition (Keighery, 1994; DEC Site Visit, 2007). The area has been historically logged and thinned, with regrowth jarrah, karri and mixed jarrah-karri forest.

The local area (10 km radius) is approximately 70% vegetated, with approximately 95% of that vegetation managed by DEC for conservation purposes (including National Parks, State Forests and Nature Reserves).

Several occurrences of the priority ecological community (PEC) "Epiphytic Cryptogams" are located within close proximity of the proposed clearing; with the closest recorded in the Big Brook State forest. This community type comprises liverworts, mosses and lichens found on the bark of mature Trymalium floribundum in the karri forest of WA, and is dependent on long unburnt stands of the host species with humid and moist conditions. The area under application contains Trymalium floribundum and has a poor fire history, therefore there is the potential for this PEC to be present within the application area.

Based on the above information, the area under application may represent an area of high biological diversity.

Methodology

Keighery (1994);
DEC Site Visit (2007);
Shepherd et al. (2001);
Commonwealth of Australia (1996);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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 area proposed for clearing was heavily logged in the 1950s. Many of the larger (karri) trees were harvested during this time, however, some still remain and may contain nesting hollows suitable for local fauna (DEC Site Visit, 2007).

There are several records of threatened and priority fauna within 10 km of proposed clearing, including the Western Ringtail Possum (VU), Forest Red-tailed Black Cockatoo (P3), Quenda (P5), Western Brush Wallaby (P3) and Southern Brush-tailed Phascogale (P3).

There is a high representation of conservation areas (National Parks, State Forest and Nature Reserves) within the local area, which are likely to offer equal or better habitat than that within the area under application (DEC, 2007).

Based on the above information, it is unlikely the proposed clearing area would provide significant habitat for fauna within the local area.

Methodology

DEC Site Visit (2007);
DEC (2007);
GIS Databases:
- Threatened Fauna Database - DEC;
- Manjimup 50cm ORTHOMOSAIC - DLI04

(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

Caladenia christineae Rare Flora has been recorded in and on the margins of winter-wet flats, swamps and freshwater lakes. The nearest recorded occurrence is 7.5km south east of the proposed clearing area, on the banks of the Eastbrook River. The area under application is located on an upland Karri forest; it is considered unlikely that this species is present in the area (DEC, 2007).

The surrounding area has a high proportion of land managed for conservation including National Parks, State Forests and Nature Reserves. Considering these factors, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology DEC (2007);
GIS databases:
- DEFL SAC Bio Datasets;
- Manjimup 50cm orthomosaic - DLI04

(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 records of threatened ecological communities (TECs) within the local area (10 km radius) of the proposed clearing. Therefore the proposed clearing is not likely to be necessary for or impact on TECs.

Methodology TEC Database (2007);
GIS Databases:
- Threatened Ecological Communities - CALM 12/4/05

(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)*	(%)*	% In reserves/CALM managed land
IBRA Bioregions				
- Warren	851,529	724,014	86.6	
Shire of Manjimup	705,670	591,748	83.9	75
Vegetation type:				
Beard: Unit 3	2,390,534	1,661,219	69.5	16.3
Beard: Unit 1112	13,030	10,296	79.0	
Mattiske:				
Pemberton (PM1)	258,061	169,317	65.6	
Crowea (CRb)	527,433	428,454	81.2	
Crowea (CRy)	337,605	236,268	70.1	

(Shepherd et al. 2001)

The area under application is located within the Shire of Manjimup, in the Warren Bioregion. The extent of pre-European vegetation within these areas is 83.9% and 86.6%, respectively (Shepherd et al., 2001).

Based on the remaining vegetation in the area, the proposed clearing is not considered to be a significant remnant vegetation in an extensively cleared area.

Methodology Shepherd et al. (2001);
Hopkins et al. (2001);
EPA (2000);
Mattiske (1998);
GIS Databases:
- Pre-European Vegetation - DA 10/01;
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00;
- 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 not at variance to this Principle**
Several minor watercourses occur within a close distance to the area under application; however, the vegetation under application is not considered to be growing in or association with any of these watercourses.

Therefore, the proposal is not at variance to this Principle.

Methodology GIS Databases:
- Hydrography, Linear - DOE 1/2/04;
- Geomorphic Wetlands (Mgt Categories), Augusta to Walpole - DEC;

- EPP, Wetlands 2004 (DRAFT) - DOE 21/7/04

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is at variance to this Principle

The soil types within the Pemberton Subsystem, Pimelaia (PM) and Crowea Subsystem, Pimelia, Yellow Duplex (Cry) have high to extreme risk of water erosion, if cleared for grazing, from areas with steep slopes 15% and over (DAFWA 2007). The southern area under application is within an area of steep slopes and therefore the risk of water erosion causing appreciable land degradation is high.

Based on the above information, the proposal is at variance to this Principle.

Methodology

DAWFA advice (2007)
GIS Databases:
- Topography, statewide

(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

The property under application is surrounded by the Donnelly State Forest and the local area (10km radius) contains conservation areas, including several nature reserves. Approximately 50% of the land within the local area is DEC managed for conservation purposes.

The proposed clearing is unlikely to compromise any linkages or environmental values of these conservation areas.

Methodology

GIS databases:
- CALM Managed Lands and Waters - CALM 1/07/05;
- Register of National Estate EA 28/01/03

(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 property is within Zone D of the Warren River Water Reserve, managed by the Department of Water (DoW) under the Country Areas Water Supply Act (CAWS). Zone D is of low salinity risk.

The property is also located within the proclaimed groundwater area for the Warren River area which is classified as a Public Drinking Water Source Area (PDWSA), also managed under the CAWS Act. This area has been identified for future assessment of the catchment.

DoW (2007) advises that all areas (except the southern part of the application area where slopes of greater than 15% persist) have a low salinity risk, given the high rainfall of the area; water erosion is considered low and the risk of runoff into nearby minor watercourses (closest 70 metres west) is also low due to the soils ability to withstand leaching (DAFWA 2007).

Based on the above information, the proposal is not likely be at variance to this Principle.

Methodology

DAFWA advice (2007) Trim Ref: DOC38413
DoW advice (2007);
GIS databases:
- Hydrographic Catchments, Catchments DOW;
- Rainfall, Mean Annual BOM 30/09/01;
- Public Drinking Water Source Areas (PDWSA) DOW

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing, due to the large amount of surrounding vegetation and its location.

The area under application is located approximately 2.5 km from the Lefroy Brook, at an elevation between 10 - 15 metres. It is considered the removal of vegetation at the site would have no impact on peak flood height or duration.

Methodology

GIS databases:

- Hydrography, linear -DOE 01/02/04;
- Topographic Contours, Statewide - DOLA 12/09/02;
- Rainfall, Mean annual - BOM 30/09/01

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

Comments

The area under application lies within Zone D of the Warren River Water Reserve, managed under the CAWS Act by the Department of Water. Under current CAWS Policies and Guidelines 10% retention of native remnant vegetation must remain on the land holdings. An estimated area of the total land holding is 371 hectares. The vegetated area of the holdings is estamated at 118 hectares, therefore the proposed clearing does not violate the CAWS Policies and Guidlines as the vegetation remaining would be 11% of the holding area (DoW advice 2005).

The applicant has obtained a Producer's Nurseryman's licence from DEC for the proposed silviculture

The area under application lies within the Warren River catchment, gazetted for water use rights under the RIWI Act. A water licence has previously been granted for this property and no further water is required.

Methodology

Commonwealth of Australia (1996);
DoW (2007)
DoW (2005)
GIS Databases:
- CAWSA Part IIA Clearing Control Catchments - DOW

4. Assessor's comments

Comment

Assessment of the clearing application revealed the proposal may be at variance to Principles (a)and (i); is at variance to (g); and is not likely to be at variance to the remaining clearing principles.

5. References

DAFWA Land Degradation Assessment Report (2006). Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM Ref: SWO22722.

DAFWA Land Degradation Assessment Report (2007). Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM Ref:DOC38413

DEC (2006) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received DATE. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia.

DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC34130.

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.

DoW advice (2005). Department of Water, Western Australia. TRIM Ref: SWD45685.

DoW advice (2007). Department of Water, Western Australia. TRIM Ref: DOC35950.

Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

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., 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)

Department of Environment
Government of Western Australia

Clearing Permit Assessment Report

1. Application details

1.1. Permit application details

Permit application No.: 1856/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Kimberley Neil Gandy
Postal address: Po Box 13 Bayswater WA 6053
Contacts: Phone: 9307 8632
Fax:
Email:

1.3. Property details

Property: LOT 8860 ON PLAN 140468 (MANJIMUP (S) 0)
LOT 5110 ON PLAN 229254 (MANJIMUP (S) 0)
LOT 11799 ON PLAN 229254 (MANJIMUP (S) 0)
LOT 5109 ON PLAN 229254 (DIAMOND TREE 6258)

Colloquial name:

1.4. Application

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

2. Background

2.1. History (including previous clearing permits, compensation paid, caveats on title deeds etc.)

Date	Comments
05 June 2008	Previous advice of estimated holdings area used in determining if proposed clearing reduces vegetation cover to less than 10% within a Water Reserve (Trim Ref:SWD45685)
14 April 2008	Officer hand over (D Hartnup). Note: DECISION PENDING. Extension granted to address issues by 30-MAY (Trim Ref:DOC 47127)
27 February 2008	Letter sent to proponent approving request for extention on his 30 day letter. (TRIM Ref DOC 47127)
15 February 2008	Email received from Kim Gandy (applicant), requesting a further extension to respond to the 30-day letter. TRIM Ref: DOC46265. NVP notified by email.
05 February 2008	Daniel Hartnup (DEC) contacted Kim Gandy (applicant) with regards to his response to the 30-day letter. Kim advised that he had employed the services of consultant Jack Bradshaw to provide further information on the presence / absence of the Epiphytic Cryptograms, and was of the opinion that he was running with it (sic). Daniel advised Kim to contact Jack for an update, and to advise the SW Region of his intentions, given the extension to the 30-day letter (30 Jan 08) has expired.
25 October 2007	DAFWA Advice received electronically. (TRIM Ref: DOC 38412 and DOC 38413)
11 October 2007	30 Day Letter sent via registered post. (TRIM Ref: DOC36808). Has a response been received?
24 September 2007	Daniel Hartnup contacted Brad Barton to discuss the TEC 'Epiphitic cryophytes'. Brad advised this community has not yet been signed off by the minister as being threatened (priority). Brad agreed that given the fire history of the property and the presence of Trymalium floribundum, this PEC has the potential to exist within the application area.
26 July 2007	Site inspection conducted by Daniel Hartnup and Fiona Bujok (NVC, SWR), Brad Barton (WR Nat Cons Program Leader) and Carl Cicchini (SFM, Donnelly District), accompanied by the applicant, Kim Gandy. DOC34130.
20 June 2007	DAFWA Advice. Have we got it?
20 June 2007	Assessment due NVP Branch 3 July
17 May 2007	Application advertised on 21 May 2007 for 76ha. Application accepted letter sent 21 May 2007 TRIM REF DOC:22685
15 May 2007	Anna called to discuss clearing area, not sure if clearing will take place in the thinning area or not. Anna spoke to Joanne who is going to get Kim to call back and discuss the area for clearing as it looks like it will be more than what was applied for.
15 May 2007	Kim Gandy advised that he is hardly available and the person who submitted the application was Jack Bradshaw and Kim gives us authority to deal with him regarding the application.
15 May 2007	Anna spoke to Jack Bradshaw who said that only areas 4 & 5 on the map are the subject of the clearing application and that he is pretty sure that they add up to 76ha. Jacks email address is jbrad@karriweb.com.au if the area varies from that.
15 May 2007	Application is on same land as CPS 1437 & CPS141. It is also adjacent to CPS 1744.
14 May 2007	$200.00 received from Gandy Timbers Pty Ltd. CALM Manual receipt number: 027087.

2.2. Existing environment and information

2.2.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Associations; Nornalup (3 & 1112): Medium forest; jarrah-marri & Mosaic: Tall	The proposal involves clearing approximately 78 hectares of native vegetation that varies in condition from good	Very Good: Vegetation structure altered; obvious signs of	The description of the clearing application area is based on a site inspection

forest; karri / Tall forest; jarrah & marri Shepherd et al. (2001). Pemberton Complex (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. Crowea Complexes (CRy & CRb): Tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones; Tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid zones. Mattiske Consulting (1998).	to very good (Keighery, 1994) condition. The vegetation under application comprises karri, marri and mixed karri-marri pole forest over an understorey including Trymalium floribundum (DEC Site Visit, 2007). The area under application was heavily logged approximately 50 years previous; the resulting regrowth varies from high quality, even-aged karri to more mixed age, predominantly marri forest. The area is long unburnt and comprises thick leaf covering the forest floor.	disturbance (Keighery 1994)	conducted by DEC officers on 26 July 2007.

2.2.2. Items of interest

Theme	Value	Within meters
CALM Managed Lands and Waters - CALM 1/07/05	Donnelly State Forest	1000
Environmental Impact Assessments	s38 - Formal (not specified)	
Environmental Impact Assessments	s48A - Scheme Not Assessed - Advice Given (no appeals on lev	
Hydrographic Catchments - Catchments - DOW	Warren River	
Interim Biogeographic Regionalisation of Australia - EA 18/10/00	Warren	
Local Government Authorities - DLI	SHIRE OF MANJIMUP	
Mattiske Vegetation - CALM 24/3/98	CRb	
Mattiske Vegetation - CALM 24/3/98	CRy	
Mattiske Vegetation - CALM 24/3/98	PM1	
Native Title Claims - DLI 7/11/05	SOUTH WEST BOOJARAH	
Pre-European Vegetation - DA 01/01	1112	
Pre-European Vegetation - DA 01/01	1144	
Pre-European Vegetation - DA 01/01	3	
Public Drinking Water Source Areas (PDWSAs) - DOW	Warren River Water Reserve	1000

3. Permit assessment activities

Date	Activity	Comment	Trim Ref.
12 April 2007	Application received		
17 May 2007	Accepted for assessment		
18 June 2007	Direct Interest Letter Sent	Letter sent to Manjimup LCDC.	DOC26015
18 June 2007	Direct Interest Letter Sent	Letter sent to Shire of Manjimup.	DOC26014
18 June 2007	Direct Interest Letter Sent	Letter sent to Lower Blackwood LCDC.	DOC26016
26 July 2007	Site Visit	Site inspection conducted by Daniel Hartnup and Fiona Bujok (NVC, SWR), Brad Barton (WR Nat Cons Program Leader) and Carl Cicchini (SFM, Donnelly District), accompanied by the applicant, Kim Gandy.	DOC34130
17 September 2007	Under assessment		
04 October 2007	Dow Advice Received	Advice received from Allan Pastega (Program Manager, Catchment Science and Investigation, Department of Water).	DOC35950
11 October 2007	Decision Pending		
11 October 2007	Decision Pending		

4. Assessment of application against Clearing Principles

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

Comments

Proposal may be at variance to this Principle

The proposed clearing is for 78 hectares for agricultural purposes in the Warren IBRA region. This region is well represented with approximately 86.8% of pre-European vegetation remaining (Shepherd et al. 2001).

The area under application is considered to contain vegetation that varies between good to very good condition (Keighery, 1994; DEC Site Visit, 2007). The area has been historically logged and thinned, with regrowth

jarrah, karri and mixed jarrah-karri forest.

The local area (10 km radius) is approximately 70% vegetated, with approximately 95% of that vegetation managed by DEC for conservation purposes (including National Parks, State Forests and Nature Reserves).

Several occurrences of the priority ecological community (PEC) "Epiphytic Cryptogams" are located within close proximity of the proposed clearing; with the closest recorded in the Big Brook State forest. This community type comprises liverworts, mosses and lichens found on the bark of mature Trymalium floribundum in the karri forest of WA, and is dependent on long unburnt stands of the host species with humid and moist conditions. The area under application contains Trymalium floribundum and has a poor fire history, therefore there is the potential for this PEC to be present within the application area.

Based on the above information, the area under application may represent an area of high biological diversity.

Methodology Keighery (1994);
DEC Site Visit (2007);
Shepherd et al. (2001);
Commonwealth of Australia (1996);
GIS Databases:
- CALM Managed Lands and Waters - CALM 1/6/04;
- Manjimup 50cm ORTHOMOSAIC - DLI04

Officer Belinda Walker

(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 area proposed for clearing was heavily logged in the 1950s. Many of the larger (karri) trees were harvested during this time, however, some still remain and may contain nesting hollows suitable for local fauna (DEC Site Visit, 2007).

There are several records of threatened and priority fauna within 10 km of proposed clearing, including the Western Ringtail Possum (VU), Forest Red-tailed Black Cockatoo (P3), Quenda (P5), Western Brush Wallaby (P3) and Southern Brush-tailed Phascogale (P3).

There is a high representation of conservation areas (National Parks, State Forest and Nature Reserves) within the local area, which are likely to offer equal or better habitat than that within the area under application (DEC, 2007).

Based on the above information, it is unlikely the proposed clearing area would provide significant habitat for fauna within the local area.

Methodology DEC Site Visit (2007);
DEC (2007);
GIS Databases:
- Threatened Fauna Database - DEC;
- Manjimup 50cm ORTHOMOSAIC - DLI04

Officer Daniel Hartnup

(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

Caladenia christineae Rare Flora has been recorded in and on the margins of winter-wet flats, swamps and freshwater lakes. The nearest recorded occurrence is 7.5km south east of the proposed clearing area, on the banks of the Eastbrook River. The area under application is located on an upland Karri forest; it is considered unlikely that this species is present in the area (DEC, 2007).

The surrounding area has a high proportion of land managed for conservation including National Parks, State Forests and Nature Reserves. Considering these factors, it is unlikely that the proposed clearing is at variance to this Principle.

Methodology DEC (2007);
GIS databases:
- DEFL SAC Bio Datasets;
- Manjimup 50cm orthomosaic - DLI04

Officer Daniel Hartnup

(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.

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Proposal is not likely to be at variance to this Principle

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GIS Databases:
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Officer Belinda Walker

(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.

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(Shepherd et al. 2001)

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Methodology Shepherd et al. (2001);
Hopkins et al. (2001);
EPA (2000);
Mattiske (1998);
GIS Databases:
- Pre-European Vegetation - DA 10/01;
- Interim Biogeographic Regionalisation of Australia - EA 18/10/00;
- Mattiske Vegetation - CALM 24/3/98;

Officer Daniel Hartnup

(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 at variance to this Principle

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Officer Daniel Hartnup

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments

Proposal is at variance to this Principle

The soil types within the Pemberton Subsystem, Pimelaia (PM) and Crowea Subsystem, Pimelia, Yellow Duplex (Cry) have high to extreme risk of water erosion, if cleared for grazing, from areas with steep slopes 15% and over (DAFWA 2007). The southern area under application is within an area of steep slopes and therefore the risk of water erosion causing appreciable land degradation is high.

Based on the above information, the proposal is at variance to this Principle.

Methodology DAWFA advice (2007)
GIS Databases:
- Topography, statewide

Officer Daniel Hartnup

(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

The property under application is surrounded by the Donnelly State Forest and the local area (10km radius) contains conservation areas, including several nature reserves. Approximately 50% of the land within the local area is DEC managed for conservation purposes.

The proposed clearing is unlikely to compromise any linkages or environmental values of these conservation areas.

Methodology GIS databases:
- CALM Managed Lands and Waters - CALM 1/07/05;
- Register of National Estate EA 28/01/03

Officer Daniel Hartnup

(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 property is within Zone D of the Warren River Water Reserve, managed by the Department of Water (DoW) under the Country Areas Water Supply Act (CAWS). Zone D is of low salinity risk.

The property is also located within the proclaimed groundwater area for the Warren River area which is classified as a Public Drinking Water Source Area (PDWSA), also managed under the CAWS Act. This area has been identified for future assessment of the catchment.

DoW (2007) advises that all areas (except the southern part of the application area where slopes of greater than 15% persist) have a low salinity risk, given the high rainfall of the area; water erosion is considered low and the risk of runoff into nearby minor watercourses (closest 70 metres west) is also low due to the soils ability to withstand leaching (DAFWA 2007).

Based on the above information, the proposal is not likely be at variance to this Principle.

Methodology DAFWA advice (2007) Trim Ref: DOC38413
DoW advice (2007);
GIS databases:
- Hydrographic Catchments, Catchments DOW;
- Rainfall, Mean Annual BOM 30/09/01;
- Public Drinking Water Source Areas (PDWSA) DOW

Officer Daniel Hartnup

(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

Flooding impacts are unlikely to occur as a result of the proposed clearing, due to the large amount of surrounding vegetation and its location.

The area under application is located approximately 2.5 km from the Lefroy Brook, at an elevation between 10 - 15 metres. It is considered the removal of vegetation at the site would have no impact on peak flood height or duration.

Methodology GIS databases:
- Hydrography, linear -DOE 01/02/04;
- Topographic Contours, Statewide - DOLA 12/09/02;
- Rainfall, Mean annual - BOM 30/09/01

Officer Daniel Hartnup

Planning instrument, Native Title, RIWI Act Licence, EP Act Licence, Works Approval, Previous EPA decision or other matter.

Comments

The area under application lies within Zone D of the Warren River Water Reserve, managed under the CAWS Act by the Department of Water. Under current CAWS Policies and Guidelines 10% retention of native remnant vegetation must remain on the land holdings. An estimated area of the total land holding is 371 hectares. The vegetated area of the holdings is estamated at 118 hectares, therefore the proposed clearing does not violate the CAWS Policies and Guidlines as the vegetation remaining would be 11% of the holding area (DoW advice 2005).

The applicant has obtained a Producer's Nurseryman's licence from DEC for the proposed silviculture

The area under application lies within the Warren River catchment, gazetted for water use rights under the RIWI Act. A water licence has previously been granted for this property and no further water is required.

Methodology Commonwealth of Australia (1996);
DoW (2007)
DoW (2005)
GIS Databases:
- CAWSA Part IIA Clearing Control Catchments - DOW

Officer Daniel Hartnup

5. Assessor's recommendations

Comment / recommendation

Assessment of the clearing application revealed the proposal may be at variance to Principles (a)and (i); is at variance to (g); and is not likely to be at variance to the remaining clearing principles.

6. References

DAFWA Land Degradation Assessment Report (2006). Office of the Commissioner of Soil and Land Conservation, Department of Agriculture and Food Western Australia. TRIM Ref: SWO22722.

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DEC (2006) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received DATE. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia.

DEC Site Visit (2007). Department of Environment and Conservation, Western Australia. TRIM Ref: DOC34130.

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Havel, J.J. and Mattiske Consulting Pty Ltd (2002) Review of management options for poorly represented vegetation complexes, Conservation Commission.

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., 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.