Department of Environment and Conservation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:	1638/1
Permit type:	Area Permit

1.2. Proponent details

Proponent's name:	Wanda & Ray Payne

1.3. Property details

Property:	LOT 1124 ON PLAN 102593 (CAPEL 6271)
Local Government Area:	Shire Of Capel
Colloquial name:	

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Building or Structure
0.5		Mechanical Removal	Building or Structure

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
SOUTHERN RIVER COMPLEX : Open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. rhaphiophylla along creek beds.	The area under application for the house, shed and the surrounding buffer of approximately 50m is mostly Degraded (Keighery, 1994), consisting of almost no vegetative cover, save a thin layer of pasture, with the odd, scattered mix of Melaleuca preissiana (moondah), Nuytsia floribunda (christmas tree), Corymbia calophylla (marri) and Xanthorrhoea preissii (grass tree). The surrounding vegetation is open, comprising clumps of dead and dying marri with few understorey species.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	A condition of degraded - good has been determined from a property site visit. (TRIM ref DOC25293)

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

A DEC Site Visit found that vegetation within the area proposed to be cleared was predominantly in a 'degraded - good' condition (Keighery, 1994). The property has been grazed by stock in the past and has been disturbed and cleared in various areas on the lot.

The area proposed to be cleared lies within a Lot in which there is a Threatened Ecological Community. This TEC is an actual plot mapped 180 m west of the proposed clearing. Site photos show that vegetation type and structure in this area appears different from the degraded vegetation within the proposed clearing area.

There is an abundance of DRF within the local area however the regional Nature conservation officer believes it is unlikely that DRF would occur within the notified area.

The proposed clearing area also lies within the mapped east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage as set out by the Greater Bunbury Region Scheme (GBRS). This ecological linkage was selected based on numerous factors including EPA endorsed information which encompasses flora, vegetation and fauna surveys, floristic community mapping and bird movement patterns.

Although the area lies within a heavily cleared landscape and is mapped as part of an ecological linkage, the degraded and disturbed condition of the vegetation under application is not likely to be of high biological diversity.

Methodology
Keighery, 1994
Greater Bunbury Region Scheme - Bulletin 1108, 2003
DEC Site Visit, 2007
GIS Databases:
- SAC Bio Datasets ý DEC 06/07
- Busselton 50cm Orthomosaic - DLI 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

Within the local area (10km radius) the following species of conservation significance have been recorded:

- Carnaby's Black Cockatoo (Calyptorhynchus latirostris)
- Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso)
- Western Ringtail Possum (Pseudocheirus occidentalis)
- Quenda (Isoodon obesulus fusciventer)
- Western Brush Wallaby (Macropus irma)
- Southern Brush-tailed Phascogale (Phascogale tapoatafa tapoatafa)
- Black Bittern (Ixobrychus flavicollis australis)

Site visit photo's taken from points within the proposed clearing show that much of the vegetation is in a 'degraded - good' (Keighery, 1994) condition. Some of the trees on the property have hollows which may provide habitat for some species. Canopy cover from the trees is not dense. There does not appear to be an abundance of trees. Ground cover is sparse and unlikely to provide habitat for species which prefer denser cover.

The proposed clearing area also lies within the mapped east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage as set out by the Greater Bunbury Region Scheme (GBRS).

Given the sparse cover and degraded condition of vegetation, in addition to the small size of clearing it is unlikely that the area proposed to be cleared represents significant habitat for native fauna.

Methodology
DEC Site Visit Report 2007
Greater Bunbury Region Scheme - Bulletin 1108, 2003
Keighery, 1994
GIS Databases:
- SAC Bio Datasets ý DEC 06/07
- Busselton 50 cm Orthomosaic - DLI 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

There are 205 records of 17 species of Declared Rare Flora (DRF) within the local area (10 km). This diversity and abundance suggests that the local area holds a high habitat value for DRF species.

Advice from the local Nature Conservation Officer stated that due to the degradation and past disturbance within the area he believed it to be unlikely for any rare or priority species to be present. This advice was supported by the Species and Communities Branch of DEC, who stated that the area was too degraded to support known DRF species.

Methodology
Species and Communities Branch, DEC, 2006 TRIM ref DOC25363
GIS Databases:
- SAC Bio Datasets 06/07

(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

Within the local area (10 km) there have been six Threatened Ecological Communities (TEC) identified.

1. SCP 1b - Eucalyptus calopyhlla woodlands on heavy soils of the southern Swan Coastal Plain.
2. SCP 3a - Eucalyptus calophylla-Kingia australis woodlands on heavy soils, Swan Coastal Plain.
3. SCP 02 - Southern wet shrublands, Swan Coastal Plain
4. SCP 07 - Herb rich saline shrublands in clay plans
5. SCP 10b - Shrublands on southern Swan Coastal Plain limestones
6. SCP 10a - Shrublands on dry clay flats

TEC SCP 10a lies within the Lot containing the proposed clearing. The TEC boundary lies 180m to the west of the proposed clearing and the proposed clearing lies within the buffer area of the TEC.

Advice from the Species and Communities Branch within DEC stated that the buffer for the TEC has been imposed to prevent hydrology changes in the surrounding area. As the area proposed to be cleared is small and degraded it is unlikely that clearing within these areas will impact upon hydrology. It is unlikely that the proposed clearing area is necessary for the maintenance of this TEC.

Methodology

GIS Databases:
- SAC Bio Datasets ý DEC 06/07
- Busselton 50cm Orthomosasic - DLI 03

(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

The area proposed to be cleared is mapped within the Heddle 'Southern River' Vegetation Complex and falls within Beard vegetation type 1000. They have approximately 18.5% and 25.7% remaining, respectively (Heddle et al, 1980 and Shepherd et al, 2002).

The IBRA region that the proposed clearing falls within, retains 23.9% of remnant vegetation and the Shire of Capel has 35.9% remaining

A site visit conducted by DEC officers found that the vegetation in proposed clearing areas to be in a 'degraded - good' condition (Keighery, 1994).

The area proposed to be cleared lies in a landscape that is highly cleared and is situated within an ecological linkage identified by the Greater Bunbury Region Scheme (GBRS).

The proposed clearing is within the east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage. ecological linkage, in addition to vegetation percentages that are below recommended levels any remnant vegetation. As the area proposed to be cleared is relatively small and the vegetation is in degraded - good condition (Keighery, 1994) the area proposed to be cleared is unlikely to be significant as a remnant of native vegetation.

Methodology

DEC Site visit 2007
EPA Bulliten 1108 (2003)
Heddle et al, 1980
Shepherd et al, 2002
Keighery, 1994
GIS Databases:
- Heddle Vegetation Complexes - DEP 21/06/95
- Interim Biogeographic Regionalistion of Australia - EM 18/10/00
- Pre European Vegetation - DA 01/01
- Busselton 50cm Orthomosaic

(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

Part of the proposed clearing area lies within a mapped Resource Enhancement (RE) wetland, classified as a sumpland.

Vegetation remaining within the application, which does not lie within the mapped wetland, may be utilised by wetland associated fauna species. In particular, the Quenda (Isoodon obesulus fusciventor) and water-rat (Hydromys chrysogaster) which are known from the local area (10km) may utilise vegetation surrounding the

11 December 2006	Site Visit Required and Report provided to DEC Central Branch by 5 January 2007.
06 December 2006	Application advertised on Mon 11 Dec 2006.
05 December 2006	Wanda called back and is faxing up a copy of the Offer and acceptance and said that Ray Payne and Craig Hutton signed the application form.
05 December 2006	Anna left a message for Wanda Payne (Applicant) to call back. Need evidence that they are likely to become the owner of the land.
05 December 2006	12 trees to be cleared within the .2799Ha area digitised
30 November 2006	Application is near CPS 1498 & CPS 1642 - All three applications are part of the same subdivision.
29 November 2006	$200.00 received from Wanda & Ray Payne. Receipt number DOE-06536
29 November 2006	Cadastre is out of date. Land affected has been subdivided

2.2. Existing environment and information

2.2.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
SOUTHERN RIVER COMPLEX : Open woodland of E. calophylla - E. marginata - Banksia species with fringing woodland of E. rudis - M. rhaphiophylla along creek beds.	The area under application for the house, shed and the surrounding buffer of approximately 50m is mostly Degraded (Keighery, 1994), consisting of almost no vegetative cover, save a thin layer of pasture, with the odd, scattered mix of Melaleuca preissiana (moondah), Nuytsia floribunda (christmas tree), Corymbia calophylla (marri) and Xanthorrhoea preissii (grass tree). The surrounding vegetation is open, comprising clumps of dead and dying marri with few understorey species.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	A condition of degraded - good has been determined from a property site visit. (TRIM ref DOC25293)

2.2.2. Items of interest

Theme	Value	Within meters
Acid Sulfate Soil Risk Map, Swan Coastal Plain - DEC	2	
Clearing Regulations - Environmentally Sensitive Areas - DOE 30/5/05	7588	
Declared Rare and Priority Flora List - CALM 01/07/05	CC	10000
Declared Rare and Priority Flora List - CALM 01/07/05	LFC	10000
Declared Rare and Priority Flora List - CALM 01/07/05	MRD	10000
Declared Rare and Priority Flora List - CALM 01/07/05	NON	10000
Declared Rare and Priority Flora List - CALM 01/07/05	PRI	10000
Declared Rare and Priority Flora List - CALM 01/07/05	RAI	10000
Declared Rare and Priority Flora List - CALM 01/07/05	SHI	10000
Declared Rare and Priority Flora List - CALM 01/07/05	UNK	10000
Declared Rare and Priority Flora List - CALM 01/07/05	WAT	10000
Declared Rare and Priority Flora List - CALM 01/07/05		10000
EPP, Lakes - DEP 1/12/92	1126	5000
EPP, Lakes - DEP 1/12/92	1127	5000
Environmental Impact Assessments	s38 - Not Assessed - Public Advice Given	
Environmental Impact Assessments	s48A - Scheme Assessed - Environmental Review (no appeals on	
Environmental Impact Assessments	s48A - Scheme Not Assessed (no appeals)	
Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC	Basin	1000
Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC	Flat	1000
Heddle Vegetation Complexes - DEP 21/06/95	Southern River Complex	
Hydrographic Catchments - Catchments - DOW	Capel River	
Interim Biogeographic Regionalisation of Australia - EA 18/10/00	Swan Coastal Plain	
Local Government Authorities - DLI	SHIRE OF CAPEL	
Native Title Claims - DLI	SOUTH WEST BOOJARAH 2	
Pre-European Vegetation - DA 01/01	1000	
Threatened Plant Communities - DEP 06/95	136	10000
Threatened Plant Communities - DEP 06/95	148	10000
Threatened Plant Communities - DEP 06/95	170	10000
Threatened Plant Communities - DEP 06/95	174	10000
Threatened Plant Communities - DEP 06/95	198	10000

3. Permit assessment activities

Date	Activity	Comment	Trim Ref.
29 November 2006	Application received		
06 December 2006	Accepted for assessment		
06 December 2006	Accepted for assessment		
20 February 2007	Under assessment		
20 February 2007	Under assessment		
20 February 2007	Under assessment		
20 February 2007	Under assessment		
30 May 2007	Other	Pennie Ginn spoke with Russell Smith (plant ecologist DEC) who went out on site of this application with Daniel Hartnup (Regional Assessing Officer). Russell advised that he felt the likelihood of DRF species	

		occuring within the clearing area was low. He stated that the access track was already existing, therefore degraded. The access track is merely being upgraded. Russell stated that the house site was also in a very degraded site of banksia, jarrah, marri woodland. He conceded that species which are known to occur in distrubed areas could not be ruled out. Russell also advised that the TEC on the property has been grazed and is in a reasonably degraded state. He felt that the proposed clearing would not affect the TEC however enoucraged the idea of fencing the boundaries of the TEC to prevent further degradation.
12 June 2007	Other	Pennie Ginn spoke with Val English (DEC< SAC) asking if the TEC on this lot was likely to occur further east - closer to the proposed driveway. Pennie also checked that the buffer was for hydrology purposes. Val advised that without putting a plot in it was hard to determine the extent, however thought that the small amount of the driveway to be insignificant to impacts or likely occurrences. Val confirmed that the buffer was for hydrology adn that small area of clearing was unlikely to affect hydrology.

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 is not likely to be at variance to this Principle

A DEC Site Visit found that vegetation within the area proposed to be cleared was predominantly in a 'degraded - good' condition (Keighery, 1994). The property has been grazed by stock in the past and has been disturbed and cleared in various areas on the lot.

The area proposed to be cleared lies within a Lot in which there is a Threatened Ecological Community. This TEC is an actual plot mapped 180 m west of the proposed clearing. Site photos show that vegetation type and structure in this area appears different from the degraded vegetation within the proposed clearing area.

There is an abundance of DRF within the local area however the regional Nature conservation officer believes it is unlikely that DRF would occur within the notified area.

The proposed clearing area also lies within the mapped east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage as set out by the Greater Bunbury Region Scheme (GBRS). This ecological linkage was selected based on numerous factors including EPA endorsed information which encompasses flora, vegetation and fauna surveys, floristic community mapping and bird movement patterns.

Although the area lies within a heavily cleared landscape and is mapped as part of an ecological linkage, the degraded and disturbed condition of the vegetation under application is not likely to be of high biological diversity.

Methodology

Keighery, 1994
Greater Bunbury Region Scheme
DEC Site Visit, 2007
GIS Databases:
- SAC Bio Datasets ý DEC 06/07
- Busselton 50cm Orthomosaic - DLI 03

Officer

Pennie Ginn

(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) the following species of conservation significance have been recorded:

- Carnaby's Black Cockatoo (Calyptorhynchus latirostris)
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- Black Bittern (Ixobrychus flavicollis australis)

Site visit photo's taken from points within the proposed clearing show that much of the vegetation is in a 'degraded - good' (Keighery, 1994) condition. Some of the trees on the property have hollows which may provide habitat for some species. Canopy cover from the trees is not dense. There does not appear to be an abundance of trees. Ground cover is sparse and unlikely to provide habitat for species which prefer denser cover.

wetland. It is likely that this vegetation is associated with wetland.

A site visit by regional Nature Conservation officers recommended a revised alignment based on exisiting tracks and the state of vegetation condition within the property. The proponent has agreed to amend the driveway area to minimise impact to the wetland.

Methodology GIS Database
- Geomorphic Wetlands (Classification), Swan Coastal Plain - DEC

(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 been mapped as having a low to moderate risk of acid sulphate soils. Salinity within the area is a low risk.

Soils within the area proposed to be cleared are described as sandy and sand over silt with underlying clay areas.

As the area proposed to be cleared is relatively small in size it is unlikely to cause appreciable land degradation if this application is approved.

Methodology GIS Databases:
- Acid Sulphate Soil Risk Map, Swan Coastal Plain
- Rainfall, Mean Annual BOM 30/09/01
- Groundwater Salinity, Statewide - DOW
- Evaporation Isopleths BOM
- 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 is not likely to be at variance to this Principle**
Part of the area proposed to be cleared lies within a resource enhancement wetland.

Within the local area are the following conservation areas:

Tuart Forest National Park - approx 5km W
Ludlow State Forest - approx 6km W
Coolilup State Forest - approx 3.6km W
Capel Nature Reserve - approx 2.4km NW
Ruaben Townsite Nature Reserve - approx 6.9km SW
Un-named Nature Reserve - approx 7km S
Millbrook State Forest - approx 8km SE
Jarrahwood State Forest - approx 7.5km SE
Boyanup State Forest - approx 8.7km E

There are also 2 covenanted properties within the local area:-

CALM covenant - approx 2km NW
AGWA heritage covenant - approx 3km SW

The proposed clearing area also lies within the mapped east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage as set out by the Greater Bunbury Region Scheme (GBRS). The property that contains the proposed clearing is also part of a continuous vegetated link between the covenanted areas, wetlands and Capel Nature Reserve.

Although the proposed area to be cleared is partly located within a wetland and is part of an ecological link in a highly cleared landscape, the vegetation is in degraded - good condition (Keighery, 1994) and the area is small enough that any impact from clearing is likely to be minimal.

Methodology Greater Bunbury Region Scheme - Bulletin 1108, 2003
GIS Databases:
- CALM Managed lands and waters - 01/07/05
- Geomorphic wetlands (classfication), Swan Coastal Plain
- CALM Covenants
- AGWA Heritage covenants
- Busselton 50cm Orthomosaic - DLI 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 proposed to be cleared lies within the Busselton Coast basin of the Capel River Catchment. This area is also a RIWI Act area.

Desktop mapping indicates that the notified area lies partly within a resource enhancement wetland. A site visit by DEC Regional Nature Conservation Officers resulted in a proposal to amend the proposed clearing to existing tracks. The proponent has accepted the amendment and the impact up on the wetland will be reduced.

As the area proposed to be cleared is relatively small and utilises existing cleared areas it is unlikely that the clearing is at variance to this principle.

Methodology

DEC Site Visit 2007
GIS Databases:
- RIWI Act, Areas - DOW
- Hydrographic Catchments - Basins - DOW
- Hydrographic Catchments - Catchments - DOW
- Busselton 50cm Orthomosaic - DLI 03

(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

Given the small size of the application area and transmissive soils within the lot, the proposed clearing is unlikely to cause, or exacerbate, the incidence of flooding

Methodology

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

Comments

The area proposed to be cleared lies within the Greater Bunbury Region Scheme (GBRS). The notified area is zoned Rural under the GBRS. The proposed clearing area lies within the mapped east-west Wonnerup/ Ludlow river/ Gibson Forest ecological linkage.

The actual lot that the proposed clearing is within was set in 1999 as S38 scheme not assessed -public advice given. An area 2.5km to the south east of the proposed clearing was formally assessed by the EPA, however conditions and recommendations relating to the assessment were quite specific to that lot and the proposed land use.

Methodology

4. Assessor's comments

Purpose	Method	Applied area (ha)/ trees	Comment
Building or Structure	Mechanical Removal	0.5	The area has been assesed and the assesing officer has found that the proposed clearing is at variance to principle (f). The assesing officer recommends the granting of this permit.
Building or Structure	Mechanical Removal	0.5	

5. References

DEC (2007) Biodiversity advice for land clearing application. Advice to Assessing Officer, Native Vegetation Assessment Branch, Department of Industry and Resources (DoIR), received 1 Feb 2007. Biodiversity Coordination Section, Department of Environment and Conservation, Western Australia. TRIM Ref DOC 25363

DEC Site Visit Report, 24 May 2007, TRIM ref DOC25293

Environmental Protection Authority, 2003, Greater Bunbury Region Scheme - Bulletin 1008, Appendix 4, http://www.epa.wa.gov.au/article.asp?ID=1683&area=EIA&CID=16&Category=EPA+Bulletins

Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.

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)