

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 3156/1

File Number:

DEC11529 Duration of Permit: From 9 August 2009 to 9 August 2011

PERMIT HOLDER

Shire of Bridgetown - Greenbushes

LAND ON WHICH CLEARING IS TO BE DONE

Stewart Street Road Reserve (BRIDGETOWN 6255)

Campbell Street Road Reserve (BRIDGETOWN 6255)

Henderson Road Reserve (KANGAROO GULLY 6255)

Railway Terrace Road Reserve (BRIDGETOWN 6255)

Doust Road Reserve (BRIDGETOWN 6255)

Ford Road Reserve (BRIDGETOWN 6255)

Brockman Highway Road Reserve (BRIDGETOWN 6255)

Brockman Highway Road Reserve (WANDILLUP 6255)

Brockman Highway Road Reserve (MARANUP 6255)

AUTHORISED ACTIVITY

Clearing of up to 0.423 hectares of native vegetation within the area solid filled yellow on attached Plan 3156/1a, 3156/1b, 3156/1c, 3156/1d, 3156/1e and 3156/1f.

CONDITIONS

1. Avoid, minimise etc clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

2. Dieback and weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of weeds and dieback:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared:
- (b) shall not move soils in wet conditions;
- (c) ensure that no dieback or weed-affected soil, mulch, fill or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit in relation to the clearing of native vegetation authorised under this Permit:

- (a) the species composition, structure and density of the cleared area;
- (b) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
- (c) the date that the area was cleared; and
- (d) the size of the area cleared (in hectares).

4. Reporting

- (a) The Permit Holder must provide to the CEO, on or before 30 June of each year, a written report of records required under condition 3 of this Permit and activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 9 May 2011, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.

Definitions

The following meanings are given to terms used in this Permit:

dieback means the effect of Phytophthora species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

weed/s means a species listed in Appendix 3 of the "Environmental Weed Strategy" published by the Department of Conservation and Land Management (1999), and plants declared under section 37 of the Agricultural and Related Resources Protection Act 1976.

Kelly Faulkner MANAGER

NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

9 July 2009

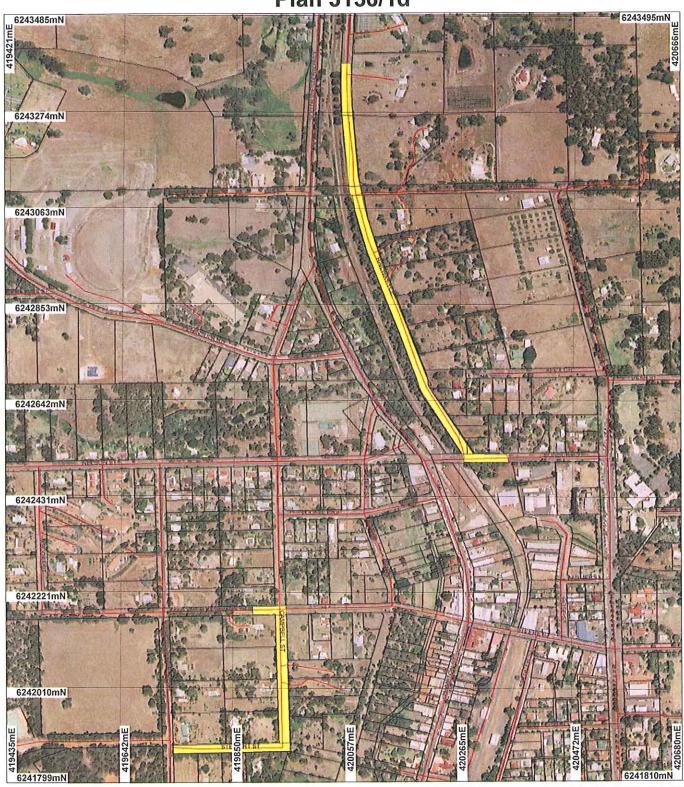
Information derived from this map should be confirmed with the data custodian acknowlegs Geocentric Datum Australia 1994 Scale 1:13900 (Approximate when reproduced at A4) 2 LEGEND 6240044mN 414411mE 414438mE 414082mE 413727mE Plan 3156/1a 3m03e114 6239043mN 6238068mN

6239288mN

6238800mN

Plan 3156/1b

Plan 3156/1d





Clearing Instruments Cadastre



-200 m

Scale 1:7397

Geocentric Datum Australia 1994

Note: the data in this map have not been projected. This may result in geometric distortion of measurement inaccuracies

K Faulkne

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowleged by the agency acronym in the legend



Department of Environment and Conservation

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Plan 3156/1e

LEGEND





421290mE

6242653mN

6243156mN

6242401mN

6242149mN

Geocentric Datum Australia 1994 Scale 1:7180 (Approximate when reproduced at A4)



Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

3156/1

Permit type:

Area Permit

1.2. Proponent details

Proponent's name:

Shire of Bridgetown - Greenbushes

1.3. Property details

Property:

ROAD RESERVE (BRIDGETOWN 6255)

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ROAD RESERVE (BRIDGETOWN 6255)

ROAD RESERVE (BRIDGETOWN 6255) ROAD RESERVE (BRIDGETOWN 6255)

ROAD RESERVE (KANGAROO GULLY 6255)

ROAD RESERVE (BRIDGETOWN 6255) ROAD RESERVE (WANDILLUP 6256)

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ROAD RESERVE (WANDILLUP 6256)

ROAD RESERVE (MARANUP 6256)

ROAD RESERVE (MARANUP 6256)

ROAD RESERVE (WANDILLUP 6256)

ROAD RESERVE (MARANUP 6256)

Shire Of Bridgetown-Greenbushes

Local Government Area: Colloquial name:

Brockman Road Reserve

1.4. Application

Clearing Area (ha)

0.423

No. Trees

For the purpose of:

Mechanical Removal Mechanical Removal

Method of Clearing

Mechanical Removal

Road construction or maintenance Road construction or maintenance

Mechanical Removal Mechanical Removal

Mechanical Removal
Mechanical Removal

Road construction or maintenance Road construction or maintenance Road construction or maintenance

Mechanical Removal Mechanical Removal Mechanical Removal

Road construction or maintenance Road construction or maintenance

Road construction or maintenance

Road 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 (1980) vegetation association:

(Shepherd, 2007)

3 - medium forest; Eucalyptus marginata (Jarrah) Corymbia calophylla (Marri).

Mattiske Vegetation Complexes:

(Mattiske and Havel, 1998)

BE1: Tall open forest of Corymbia calophylla-Eucalyptus marginata subsp. marginata on uplands in perhumid and humid zones.

BL: Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on slopes and woodland of Eucalyptus rudis on the valley floor in the humid zone.

BLf: Woodland of Eucalyptus rudis on valley floors and woodland of Eucalyptus patens-Corymbia calophylla on footslopes with some Eucalyptus marginata subsp. marginata on lower slopes in the humid zone.

BT: Mixture of open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla with some Eucalyptus patens on slopes to low open forest of Eucalyptus rudis-Melaleuca rhaphiophylla on the valley floors in the humid zone.

BTf: Open forest of Corymbia calophylla over Hakea lasianthoides with some Eucalyptus rudis on lower less undulating footslopes in the humid zone.

SP: Tall woodland of Eucalyptus rudis over Hakea lasianthoides-Melaleuca rhaphiophylla on valley floors in the humid zone. The proposal is to clear 0.423ha of native vegetation for the purpose of road construction and maintenance.

The vegetation under application is within Railway Tce (0.10ha), Doust St (0.06ha), Henderson Rd (0.10ha), Stewart and Campbell Sts (0.06ha), Ford Rd (0.002ha) and Brockman Highway (0.10ha).

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) The condition of the vegetation was determined through aerial mapping (Bridgetown 50cm Orthomosaic, Landgate 2004) and from a site inspection (DEC, 2009).

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 proposal is to clear 0.423ha of native vegetation for the purpose of road construction and maintenance.

The local area (10km radius) retains approximately 75% native vegetation. Much of the surrounding vegetated areas are within DEC managed lands.

Given that the application area is small (0.423ha) and in a degraded (Keighery, 1994) condition (DEC, 2009), the vegetation under application is not likely to have a high level of biological diversity in a local context.

Methodology

References: DEC (2009) Keighery (1994)

GIS Database:

CALM Managed Lands & Waters - CALM 01/06/05 Clearing Regulations - Environmentally Sensitive Areas Mattiske Vegetation Complexes

Pre-European vegetation

(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 a number of records of threatened fauna within a 10km radius of the application area:

Baudins Black Cockatoo (Calyptorhynchus baudinii)

- Chuditch (Dasyurus geoffroii)

Brush-tailed Phascogale (Phascogale tapoatafa)

Water Rat (Hydromys chrysogaster)

Forest Red-tailed Black Cockatoo (Calyptorhynchus banksii naso)

Crested Shike-tit (Falcunculus fronatus leucogaster)
Masked Owl (Tyto novaehollandiae novaehollandiae)

- Numbat (Myrmecobius fasciatus)

- Bush Stone Curlew (Burhinus grallarius)

Black Bittern (Ixobrychus flavicollis australis)
Lewins Rail (Rallus pectoralis clelandi) Extinct

- Western Ringtail Possum (Pseduocherius occidentalis)

- Quokka (Setonix brachyurus)

- Western Brush Wallaby (Macropus irma)

- Quenda (Isodon obesulus fusciventer)

The local area retains approximately 75% native vegetation, much of which is held within DEC managed lands.

Given that the application area is small (0.423ha) and linear and that the local area is well vegetated the clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS Database:

CALM Managed Lands & Waters - CALM 01/06/05 Clearing Regulations - Environmentally Sensitive Areas

Hydrology, linear

Mattiske Vegetation Complexes Pre-European vegetation SAC Biodatasets 080609

(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

Four priority flora species and two rare flora species have been recorded in the local area (10km radius).

- Dampiera heteroptera (P3)
- Caladenia arrecta (P4)
- Carex tereticaulis (P1)
- Boronia humifusa (P1)
- Grevillea ripicola (P4)
- Caladenia harringtoniae (Rare)
- Caladenia christineae (Rare)

The application area is in degraded (Keighery, 1994) condition.

Both C. harringtoniae and C. christineae are found within winter wet flats (WA Herbarium, 1998-). The application area includes 14 minor perennial watercourses and runs adjacent to a major perennial watercourse (10m west at closest point).

There is limited mid storey and ground cover within the application area with a number of introduced weeds invading the vegetation (DEC, 2009).

Given the level of disturbance of the vegetation under application and the purpose of clearing being the selective removal of trees, the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

DEC (2009)

Keighery (1994)

WA Herbarium (1998-)

GIS Database:

SAC Bio datasets accessed 8 June 2009

(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 occurrences of threatened ecological communities (TECs) within the local area (10km radius).

Given the above the clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS Database:

SAC Bio datasets accessed 8 June 2009

(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.

that has been extensively cleared.							
Comments	Proposal is not likely to l	be at variance Pre-European (ha)	to this Princip Current extent (ha)	ole Remaining (%)	DEC Manage Land	ed	
	IBRA Bioregions* Jarrah Forest	4,671,007	2,601,026	55.68		71.15	
	Shire* Bridgetown - Greenbushes	133,759	73,835	55.20		83.33	
	Mattiske Vegetation Complex BE1 BL BLf BT BTf	767,844 594,461 29,734 n/a 214,760 24,441 n/a 8,002 n/a	657,120 301,634 143,623	85.6 50.7 8,047 66.9 14,557 5,071		n/a n/a 27.1 n/a 59.6	
	Beard Vegetation Associatio 3	n* 2,803,140	2,002,263	71.43		81.37	
	Beard Vegetation Associatio 3	n with Bioregior 2,530,711	n* 1,793,910	70.89		81.12	

^{* (}Shepherd et al. 2007)

The local area retains approximately 75% native vegetation, much of which is held within DEC managed lands.

Only a small portion of Railway Tce (up to 0.1ha) is mapped as Mattiske vegetation complex BLf which has a vegetation retention below the EPA recommended threshold level (30% of pre-European extent, EPA, 2000). The vegetation is in degraded (Keighery 1994) condition (DEC 2009) and the Shire have advised that they proposed to clear trees the are on the edge of the existing road edge or trees that are in poor health and are leaning over the road.

The clearing as proposed is not likely to be at variance to this principle.

^{** (}Mattiske and Havel, 1998)

Methodology Referenes:

DEC (2009) EPA (2000) Keighery (1994)

Mattiske and Havel (1998)

Shepherd (2007)

GIS Database:

Heddle Vegetation Complexes - DEP 22/06/95

Interim Biogeographic Regionalisation of Australia - EA 18/10/00

Local Government Authorities - DLI 8/07/04 Mattiske Vegetation - CALM 1/03/1998 Pre European Vegetation - DA 01/01 SAC Biodatasets accessed 8 June 2009

NLWRA, Current Extent of Native Vegetation 20 Jan 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 not likely to be at variance to this Principle

The application area includes one earth dam, 14 minor perennial watercourses and one major perennial watercourse located 10m west of the applied area (at its closest point).

The applicant has advised that no vegetation associated with a wetland or watercourse will be impacted as a result of this proposal (DOC89934).

Given the above the clearing as proposed is not likely to impact on vegetation growing in, or in association with a watercourse, therefore the clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS Database:

Hydrography linear - 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 is not likely to be at variance to this Principle

The purpose of the clearing is for road construction and maintenance on existing constructed roads.

Any land degradation issues resulting from the clearing are not likely to be appreciable given the size of the applied area (0.423ha over a number of road reserves) and the degradation control measures currently in place to cope with any increase in water flow as a result of the clearing.

The proposal is not likely to be at variance to this principle.

Methodology

GIS Database:

Acid Sulphate Soil Risk Map, SCP - DoE 01/02/04;

Salinity Risk LM 25m - DOLA 00;

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

Some of the application area is within close proximity to the Yornup State Forest (adjacent to the south of Brockman highway).

Given the degraded (Keighery, 1994) condition and level of weed invasion that has occurred throughout the vegetation under application (DEC, 2009) the clearing as proposed may result in the spread of weeds into areas of conservation significance.

The application area along Brockman highway is mapped as receiving 800-900mm rainfall annually and 700-800mm evapotransporation rate annually. Given this information the vegetation under application may also be at risk of dieback and clearing may result in the spread of dieback into conservation areas.

Given the above the clearing as proposed may be at variance to this principle.

Weed and dieback management conditions will be placed on the permit to mitigate the potential impact of

clearing on nearby conservation areas.

Methodology

References:

DEC (2009) Keighery (1994)

GIS Database:

Average Annual Rainfall Isohyets - WRC 29/09/98 Annual Evaporation Contours (Isopleths) - WRC 29/09/98 CALM Managed Lands and Waters - CALM 01/06/05

Hydrography, linear - DOW 13/7/06

Register of National Estate - Environment Australia, Australian and world heritage division 12 Mar 02

System 1 to 5 and 7 to 12 areas ? DEC 11/7/06

(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 purpose of the clearing is primarily for road maintenance of existing roadways.

Given the small (0.423ha) size and linear nature of the application area and taking into account that the existing roads have infrastructure in place to prevent off site water quality impacts such as table drains and culverts, the clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS Database:

Evapotransporation Isopleths - WRC 29/09/98

Groundwater Salinity Statewide DoW 13/07/06

Hydrographic catchments, catchments - DoW 01/06/07 Hydrographic catchments, subcatchments - DoW 01/06/07

Hydrography, linear - DOW 13/7/06

Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

Salinity Risk LM 25m - DOLA 00

Topographic Contours, Statewide - DOLA 12/09/02

(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

Comments

Proposal is not likely to be at variance to this Principle

The purpose of the clearing is primarily for road maintenance of existing roadways.

Given the small (0.423ha) size and linear nature of the application area and taking into account that the existing roads have infrastructure in place to prevent water pooling along the roadside such as table drains and culverts, the clearing as proposed is not likely to be at variance to this principle.

Methodology

Evapotransporation Isopleths - WRC 29/09/98

Groundwater Salinity Statewide DoW 13/07/06

Hydrographic catchments, catchments - DoW 01/06/07 Hydrographic catchments, subcatchments - DoW 01/06/07

Hydrography, linear - DOW 13/7/06

Mean Annual Rainfall Isohytes (1975 - 2003) - DEC 02/08/05

Salinity Risk LM 25m - DOLA 00

Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

The Bridgetown-Greenbushes local conservation district committee wound up in 2008 thus no direct interest letter was sent to a conservation group regarding this proposal.

Methodology

4. Assessor's comments

Comment

The application has been assessed against the clearing principles, planning instruments and other matters in accordance with s510 of the Environmental Protection Act 1986, and the proposed clearing may be at variance to Principle (h) and is not likely to be at variance to the remaining clearing Principles.

5. References

- DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3156/1, various Roads, Shire of Bridgetown -Greenbushes. Site inspection undertaken 26/06/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC89025).
- 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.
- 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.
- Shepherd, D.P. (2007). Adapted from: Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia, Technical Report 249. Department of Agriculture Western Australia, South Perth. Includes subsequent updates for 2006 from Vegetation Extent dataset ANZWA1050000124.
- Western Australian Herbarium (1998-). FloraBase The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ (Accessed 23/06/2009).

6. Glossary

Term	Meaning

BCS Biodiversity Coordination Section of DEC

Department of Conservation and Land Management (now BCS) CALM

Department of Agriculture and Food DAFWA

DEC Department of Environment and Conservation Department of Environmental Protection (now DEC)

DEP

Department of Environment DoE

DoIR Department of Industry and Resources

Declared Rare Flora DRF

EPP Environmental Protection Policy GIS Geographical Information System Hectare (10,000 square metres) ha TEC Threatened Ecological Community

Water and Rivers Commission (now DEC) WRC