

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:

CPS 3188/1

Permit Holder:

David Wayne Radomiljac Monica Anne Radomiljac

Duration of Permit:

20 September 2009 – 20 September 2017

The permit holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I - CLEARING AUTHORISED

1. Purpose for which clearing may be done

Clearing for the purpose of silvicultural thinning.

2. Land on which clearing is to be done

LOT 4 ON DEPOSITED PLAN 34928 (EASTBROOK 6260)

3. Area of clearing

The Permit Holder must not clear more than 28 hectares of native vegetation within the areas hatched yellow on attached Plan 3188/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation authorised under this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

5. Compliance with Assessment Sequence and Management Procedures

Prior to clearing any native vegetation under conditions 1, 2 and 3 of this Permit, the Permit Holder must comply with the Assessment Sequence and the Management Procedures set out in Part II of this Permit.

PART II - ASSESSMENT SEQUENCE AND MANAGEMENT PROCEDURES

6. Type of clearing authorised

- (a) The Permit Holder may undertake the following activities:
 - (i) clearing of *understorey* within the areas cross-hatched yellow on Plan 3188/1;

- (ii) clearing for the establishment of *log landings* each to be no larger than 0.3 hectares in size;
- (iii) thinning of Karri (Eucalyptus diversicolor) trees;
- (iv) culling of unsaleable trees; and
- (v) burning of cleared understorey and culled trees.
- (a) Clearing authorised under this Permit must be completed by 20 September 2013, being four years from the date from which this Permit becomes valid.

7. 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.

8. Dieback and weed control

- (a) 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*:
 - (i) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
 - (ii) shall not move soils in wet conditions;
 - (iii) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
 - (iv) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.
- (b) At least once in each 12 month period for the *term* of this Permit, the Permit Holder must remove or kill any *weeds* growing within areas cleared under this Permit.

9. Vegetation management

The Permit Holder shall not clear native vegetation within 30 metres of the *riparian* vegetation of any watercourse or wetland.

10. Vegetation management

- (a) Prior to undertaking any clearing authorised under this Permit, an *environmental* specialist must determine the species composition, structure and density of the understorey of areas proposed to be *thinned*.
- (b) The Permit Holder must retain a minimum of 2 habitat trees within the area of clearing authorised under this Permit in each hectare authorised under this Permit.
- (c) A minimum retention rate of 18m²/ha basal area is required within the area of clearing authorised under this Permit.
- (d) Prior to undertaking any clearing authorised under this Permit, the Permit Holder must exclude all *stock* from the areas subject to *thinning* activities.

- (e) Within one month of completing clearing, the Permit Holder must *rehabilitate* any *log landings* established within native vegetation by scarifying the soil surface to reduce compaction and facilitate natural regeneration.
- (f) Within two years of completing clearing of native vegetation authorised under this Permit, the Permit Holder must:
 - (i) determine the species composition, structure and density of the *understorey* of areas subject to *thinning*; and
 - (ii) where, in the opinion of an *environmental specialist*, there is evidence that *understorey* will not recover and develop towards its pre-clearing composition, structure and density determined under condition 10(e)(i), the Permit Holder must undertake *remedial action* at an *optimal time* within the next 12 months to ensure re-establishment of *understorey* prior to expiry of this Permit.

PART III - RECORD KEEPING AND REPORTING

11. Records to be kept

- (a) In relation to the clearing of native vegetation undertaken pursuant to this Permit:
 - (i) the species composition, structure and density of the cleared area;
 - (ii) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).
- (b) In relation to vegetation management pursuant to condition 10 of this Permit:
 - (i) prior to clearing native vegetation authorised under this Permit, the species composition, structure and density of *understorey*;
 - (ii) the species and number per hectare of habitat trees retained;
 - (iii) the location of *habitat trees* retained, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (iv) monitoring undertaken to ensure that the specified minimum basal area is retained;
 - (v) number of log landings established;
 - (vi) the location of *log landings*, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (vii) photographs of the *understorey* taken at one year, two years and three years after completing clearing authorised under this Permit; and
 - (viii) a detailed description of the nature and extent of any remedial actions undertaken.

12. 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 11 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 13 June 2017, the Permit Holder must provide to the CEO a written report of records required under condition 11 of this Permit where these records have not already been provided under condition 12(a) of this Permit.

Definitions

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

basal area is the method of expression of tree cover density in an area where the total area of tree trunk, measured at average adult human breast height, is expressed as square metres per hectares of land area;

culled/ing means the selective removal and/or killing of unsaleable trees for thinning, using methods including notching, felling or machine pushing;

dieback means the effect of Phytophthora species on native vegetation;

direct seeding means a method of re-establishing vegetation through the establishment of a seed bed and the introduction of seeds of the desired plant species;

environmental specialist means a person who is engaged by the Permit Holder for the purpose of providing environmental advice, who holds a tertiary qualification in environmental science or equivalent, and has experience relevant to the type of environmental advice that an environmental specialist is required to provide under this Permit;

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

habitat tree(s) means trees that have a diameter, at average adult human chest height, of greater than 70cm, healthy but with dead limbs and broken crowns that are likely to contain hollows and roosts suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

log landing/s means an area established for the purpose of stockpiling commercially harvested trees, to enable loading for collection;

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;

planting means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

optimal time means the period from April to June for undertaking direct seeding, and the period from May to July for undertaking planting;

rehabilitate/ed/ion means actively managing an area containing native vegetation in order to improve the ecological function of that area;

remedial action/s means for the purpose of this Permit, any activity that is required to ensure successful re-establishment of understorey to its pre-clearing composition, structure and density, and may include a combination of soil treatments and revegetation.

revegetate/ed/ion means the re-establishment of a cover of local provenance native vegetation in an area using methods such as regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

riparian vegetation has the meaning given to it in Regulation 3 of the Environmental Protection (Clearing of Native Vegetation) Regulations 2004;

stock means the horses, cattle, sheep, pigs and other non-indigenous grazing animals kept or bred on a property;

term means the duration of this Permit, including as amended or renewed;

thinned/ing describes a silvicultural activity to promote the growth of selected trees by removing competing trees;

understorey means, for the purpose of this Permit, all native vegetation that does not include trees to be culled or subject to harvest;

watercourse has the meaning given to it in section 3 of the Rights in Water and Irrigation Act 1914;

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 Agriculture and Related Resources Protection Act 1976; and

wetland/s means an area of seasonally, intermittently or permanently waterlogged or inundated land, whether natural or otherwise, and includes a lake, swamp, marsh, spring, dampland, tidal flat or estuary.

Keith Claymore

A/ ASSISTANT DIRECTOR

NATURE CONSERVATION DIVISION

Officer delegated under Section 20 of the Environmental Protection Act 1986

20 August 2009

Plan 3188/1



LEGEND

Clearing Instruments
Cadastre
Manjimup 50cm Orthomosaic Lendgate 2004



Scale 1:8778 (Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

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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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

3188/1

Permit type:

Purpose Permit

1.2. Proponent details

Proponent's name:

David Wayne Radomiljac

1.3. Property details

Property:

LOT 4 ON PLAN 34928 (Lot No. 4 OCKWELL EASTBROOK 6260)

Local Government Area:

Colloquial name:

Shire Of Manjimup

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing

For the purpose of:

28

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

Beard Vegetation Association:

3 - Medium forest; jarrah-marri

1144 - Tall forest; karri & marri (Corymbia calophylla)

Mattiske Vegetation Complex:

Crowea (Cry) - Tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones.

Crowea (CRb) - Tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid zones.

Pemberton (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.

Clearing Description

The application is for the clearing of 28 hectares of native vegetation for the purpose of silviculture. The vegetation is in Very Good condition, with areas of grazing and historical thinning, resulting in disturbance and some weed intrusion in some areas (DEC 2009).

Vegetation Condition

Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)

Comment

The vegetation condition was determined from orthomosaic imagery and 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 application is to clear 28 hectares of native vegetation for the purpose of silviculture. The vegetation under application is in very good condition (Keighery,1994; DEC, 2009). The area under application contains regenerated Eucalyptus diversicolor (Karri) and Corymbia calophylla (Marri) forest, and has a history of grazing and thinning (Bradshaw, 2009). The understorey has been impacted and there are some areas of Rubus fruticosus agg (blackberry) infestation (Bradshaw, 2009).

Four priority flora species have been recorded in the vicinity: Thomasia brachystachys (P1), Asplenium aethiopicum (P4), Caladenia christineae (P1), Xanthoparmelia xanthomelanoides (P2) and Rulingia apella (P1). However, as the area under application is frequently grazed by stock (cattle), it is unlikely the vegetation is supporting priority flora species (DEC, 2009).

Introduction and spread of weeds and dieback has the potential to compromise the biological diversity of the application area, therefore weed and dieback conditions will be imposed on the permit.

The local area (10km radius) has approximately 75% remaining native vegetation, and contains several state and national reserves in the same or better condition than the application area. The 28 ha of vegetation under application is therefore not considered to comprise a locally high level of biological diversity. The clearing as proposed is considered not likely to be at variance to this principle.

Methodology

Bradshaw (2009) Keighery (1994) DEC (2009)

GIS DataSets:

- CALM Managed Lands and Waters CALM 01/06/05
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Mattiske Vegetation (01/03/1998)
- SAC Biodatasets accessed 9 July 09
- Soils, Statewide DA 11/99

(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

Four rare fauna species, Setonix brachyurus (Quokka), Phascogale tapoatafa ssp. (Brush-tailed Phascogale), Pseudocheirus occidentalis (Western Ringtail Possum), Galaxiella munda (Western Mud Minnow) and Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo), have been recorded within the local area. However, as the area under application has been consistently grazed by stock (cattle) and is disturbed; the suitability of the vegetation as habitat for rare fauna species is reduced (DEC 2009).

Additionally, 5 priority fauna species have been recorded within the local area. Galaxiella nigrostriata (Black-Stripe Minnow, P3), Hydromys chrysogaster (Water-rat, P4), Isoodon obesulus fusciventer (Quenda P5) and Macropus irma (Western Brush Wallaby, P4). As a minor perennial watercourse neighbours the application area, riparian vegetation may be included, increasing the likelihood that the Quenda and Water-rat utilise the application area as habitat (DEC, 2009). A 30 metre vegetated buffer will be retained to protect this vegetation.

As the vegetation is regrowth, the number of trees that meet primary habitat specifications are limited, and trees retained after thinning would provide opportunity for trees to reach primary habitat specification in the future (DEC 2009). The local area is well vegetated, with approximately 75% native vegetation remaining including large areas of state forest and national parks. These areas are likely to be providing fauna habitat of greater local significance than the vegetation under application.

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

Methodology

DEC (2009)

GIS database:

- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation DA 01/01
- SAC Biodatasets accessed 9 July 09
- Hydrography linear DOW 13/7/06

(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

No rare flora species have been recorded within the local (10km radius) area. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology

GIS database:

- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation DA 01/01
- SAC Biodatasets accessed 9 July 09
- Soils, Statewide DA 11/99

(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 threatened ecological communities (TECs) recorded within a 10km radius of the application area. Therefore the clearing as proposed is not likely to be at variance to this principle.

- Mattiske Vegetation (01/03/1998)
- Pre European Vegetation DA 01/01
- SAC Biodatasets accessed 9 July 09
- Soils, Statewide DA 11/99

(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

The application lies within the Shire of Manjimup and the Warren IBRA Bioregion, which retain 85.40% and 80.8% native vegetation respectively (Shepherd 2007). Orthomosaic imagery suggests the local area (10km radius) is approximately 75% vegetated.

The vegetation under application is of Beard Vegetation Associations 3 and 1144, which retain 81% and 82.15% of their pre-European extent (Shepherd 2007). The vegetation also consists of Mattiske Vegetation Complexes Crowea (CRy), Crowea (CRb) and Pemberton (PM1) which retain 70%, 81.2% and 65.6% their pre-European extents (Mattiske Consulting 1998).

The area is not considered to be extensively cleared, and therefore the vegetation under application is not a significant remnant in the local area. Additionally, the proposal is to manage the remnant for silvicultural thinning and as such a minimum basal area of 18 m2/ha will be retained (Bradshaw 2009). The clearing as proposed is not considered to be at variance to this principle.

Methodology

Bradshaw (2009)

Mattiske Consulting (1998)

Shepherd (2007)

Shepherd et al (2001)

GIS database:

- 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
- 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 may be at variance to this Principle

A minor perennial watercourse neighbours the area under application, and as such some vegetation may be growing in association with a watercourse. The clearing as proposed may therefore be at variance with this principle. A 30 meter vegetated buffer will be retained as a condition of the permit to ensure adequate protection of riparian vegetation.

Methodology

GIS database:

- Geomorphic Wetlands, Augusta to Walpole
- Hydrography linear DOW 13/7/06
- 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 is not likely to be at variance to this Principle

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 18m2/ha (Bradshaw 2009). Vegetation management conditions will be placed on the permit to minimise land degradation concerns. The proposed clearing is therefore not likely to cause appreciable land degradation.

Methodology

Bradshaw (2009)

GIS database:

- Hydrography, linear DOW 13/7/06
- Salinity Risk LM 25m DOLA 00
- Soils, Statewide DA 11/99
- Topographic contours statewide DOLA and ARMY 12/09/02
- Hygrogeology, Statewide 05 Feb 2002

(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 application area is surrounded by conservation areas, the closest being Big Rock State Forest (850m north), Warren State Forest (1.6km south east), Gloucester National Park (3.7km south east), Whistler Nature Reserve (3km east) and Donnelly State Forest (1.7km north).

The proposed clearing is not likely to be acting as a significant linkage between these conservation areas, as the local area is well vegetated (with approximately 75% native vegetation remaining in a 10km radius).

Additionally, as the vegetation under application is surrounded by cleared agricultural land, the introduction or spread of weeds and dieback into nearby conservation areas is not likely to result from the proposed clearing.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

Methodology

GIS database:

- 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

A minor perennial watercourse neighbours the area under application, and as such some vegetation may be growing in association with a watercourse.

The application area lies within the Warren River Water Reserve, a Public Drinking Water Source area (priority not assigned) and clearing of riperian vegetation may impact future water resources (DOW 2009). The application also falls within Zone D of the Warren River Water Reserve CAWS catchment. The Department of Water does not support the clearing of any riperian vegetation associated with this clearing application (DOW 2009).

A condition to retain a vegetated buffer of 30 metres will be imposed on the permit in order to ensure that no increase in sediment flow into watercourses results.

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 18m2/ha (Bradshaw 2009). Therefore, surface and groundwater quality is unlikely to be adversely impacted by the proposed clearing.

Methodology

Bradshaw (2009)

DOW (2009)

GIS DataSets:

- Groundwater Salinity Statewide DoW 13/07/06
- Hydrography linear DOW 13/7/06
- Hydrography linear (hierarchy) DoW 13/7/06
- (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 application is for silvicultural thinning and a minimum basal area of 18m2 per hectare will be maintained (Bradshaw 2009), the proposal is not likely to cause or exacerbate the incidence or intensity of flooding. The clearing as proposed is therefore not likely to be at variance to this principle.

Methodology

Bradshaw (2009)

GIS database:

- 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

Vegetation management conditions have been added to the permit to restore the understorey disturbed by the silviculture operations, retain mature trees and a set basal area for habitat and exclude stock to ensure the remaining vegetation can continue to function due to the disturbance and will recover in the future. These

conditions are consistent with DEC Sustainable Forest Management (DEC, 2005).

The application lies within Zone D of the Warren River Water Reserve CAWS area. The Department of Water have advised no compensation has been paid to retain native vegetation on the subject holding (DOW 2009a).

Methodology

DEC (2005) DOW (2009a)

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 (f) and is not likely to be at variance to the remaining clearing Principles.

5. References

Bradshaw (2009) Native Forest Management Plan (Trim Ref: DOC88992).

DEC (2009) Site Inspection Report for Clearing Permit Application CPS 3188/1, Lot 4 on Plan 34928, Eastbrook. Site inspection undertaken 26/06/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC91700).

Department of Environment and Conservation (2005) Silvicultural Practice in the Karri Forest. Department of Conservation and Land Management. SFM Guideline No.3

Department of Water (2009). Public Drinking Water Source Advice. DEC TRIM Ref: DOC93293.

Department of Water (2009a). Country Area Water Supply Advice. DEC TRIM Ref: DOC92334.

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.

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

DolR 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)