



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4171/2
Permit Holder:	Bruce Maxwell Hartley
Duration of Permit:	28 March 2011– 28 March 2019

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 9461 on Deposited Plan 203034

3. Area of Clearing

The Permit Holder must not clear more than 20 hectares of native vegetation within the area shaded yellow on attached Plan 4171/2.

4. Application

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

5. Type of clearing authorised

To the extent authorised under condition 3 of this Permit, the Permit Holder may undertake the following activities within the area(s) shaded yellow on Plan 4171/2:

(a) The Permit Holder may undertake the following activities:

- (i) clearing for the establishment of *log landings* each to be no larger than 0.25 hectares in size;
- (ii) clearing and burning of *understorey*;
- (iii) *thinning* of Karri (*Eucalyptus diversicolor*) Marri (*Corymbia calophylla*), Blackbutt (*Eucalyptus patens*) and Jarrah (*Eucalyptus marginata*); and
- (iv) *culling* and burning of unsaleable trees.

(b) The Permit Holder shall not clear any native vegetation after 28 March 2015, being four years from the date from which this permit becomes valid.

6. 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

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 only move soils in *dry 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. Watercourse 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 28 March 2015, the Permit Holder must:

- (i) engage an *environmental specialist* to 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(f) (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 must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under 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 or decimal degrees;
 - (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 or decimal degrees;
 - (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 clearing authorised under this Permit has ceased; 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:
 - (i) of records required under condition 11 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding year.
- (b) Prior to 28 December 2018, 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, whose diameter is measured at 1.5m above the ground, 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;

dry conditions means when soils (not dust) do not freely adhere to rubber tyres, tracks, vehicle chassis or wheel arches;

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;

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

regenerate/ed/ion means re-establishment of vegetation from in situ seed banks and propagating material (such as lignotubers, bulbs, rhizomes) contained either within the topsoil or seed-bearing *mulch*;

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 natural *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;

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*.

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.



Matt Warnock
ACTING MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

*Officer delegated under Section 20
of the Environmental Protection Act 1986*

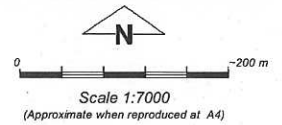
14 April 2011

Plan 4171/2



LEGEND

- | | |
|------------------------------|---|
| Clearing Instruments | Hydrography, linear |
| Areas Approved to Clear | Manjimup 50cm Orthomosaic - Landgate 2007 |
| Road Centrelines | |
| Cadastre | |
| Local Government Authorities | |



Geocentric Datum Australia 1994

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

M Warnock Date *14/4/14*
M Warnock

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 acknowledged by the agency acronym in the legend.



Department of Environment and Conservation

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1. Application details

1.1. Permit application details

Permit application No.: 4171/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Bruce Maxwell Hartley

1.3. Property details

Property: LOT 9461 ON PLAN 203034 (YANMAH 6258)
Local Government Area:
Colloquial name:

1.4. Application

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

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 14 April 2011

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
The vegetation under application is mapped as: Beard vegetation type 3: Medium Forest; jarrah and marri (Hopkins et al 2001; Shepherd 2009).	The proposal is to clear within 20 ha of native forest for the purpose of silvicultural thinning.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition of the native vegetation under application was sourced from the site inspection undertaken on 24 February (DEC 2011).
Mattiske vegetation complexes Bevan 1 (BE1) -Tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> on uplands in perhumid and humid zones.	The area under application can be described as karri-marri-blackbutt (<i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> - <i>Eucalyptus patens</i>) closed forest, with the vegetation being mainly karri regrowth. The vegetation is considered to be in very good (Keighery 1994) condition, with evidence of thinning approximately 60-70 years ago (DEC 2011). The middle storey comprises tea tree in creeks, <i>Trymalium floribundum</i> , <i>Banksia</i> sp and <i>Acacia pentadenia</i> ; the understorey comprises <i>Hovea</i> sp and bracken fern (DEC 2011).		
Wheatley (WH1): Tall open forest of <i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> on slopes and tall open forest of <i>Eucalyptus patens</i> on valley floor in perhumid and humid zones.			
Yanmah (YN1): Mixture of tall open forest of <i>Eucalyptus diversicolor</i> and tall open forest of <i>Corymbia calophylla</i> - <i>Eucalyptus patens</i> - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> over <i>Agonis flexuosa</i> and <i>Agonis juniperina</i> on valleys in perhumid and humid zones. (Mattiske and Havel 1998)			

3. Assessment of application against clearing principles

Comments

Clearing Permit CPS 4171/1 has been amended to change Condition 5 Type of clearing authorised, to include jarrah (*Eucalyptus marginata*) to the list of species to be cleared for the purpose of silvicultural thinning.

The assessment against the clearing principles has not changed and can be found in the Clearing Permit Decision Report CPS 4171/1.

Methodology

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

Comments

Vegetation management conditions would 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).

Department of Water (2011) advised that the area under application falls within a proclaimed surface water area [Donnelly River System] and an unproclaimed groundwater area under the Rights in Water and Irrigation Act 1914.

In addition, the area under application falls within PDWSA 'Donnelly River Water Reserve' which is a priority not assigned area.

The Shire of Manjimup (2011) advised that the applicant is to confer with the Shire with the need to comply as relevant with all Shire requirements.

A DEC Commercial Producers Licence is required for this proposal.

Lot 9461 is freehold land, zoned rural under the local Town Planning Scheme.

Methodology

References:

- DEC (2005)
- Department of Water (2011)
- Shire of Manjimup (2009)

GIS databases:

- Cadastre
- Public Drinking Water Source Areas (PDWSA)
- RIWI Act, Surface Water Areas, Irrigation Districts
- Town Planning Scheme Zones

4. References

- Bradshaw F.J. (2010) Native Forest Management Plan for Donnelly Road, Manjimup. DEC Ref A361891
- DEC (2005) Silvicultural Practice in the Karri Forest. Department of Conservation and Land Management. SFM Guideline No.3
- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4171/1, Lot 9461 Donnelly Road, Yanmah. Site inspection undertaken 24/2/2011. Department of Environment and Conservation, Western Australia. DEC Ref A376100
- Department of Water (2011) Direct Interest Submission for Clearing Permit Application CPS 4171/1. DEC Ref A366691 and A371755
- Hopkins, A.J.M., Beeston, G.R. and Harvey J.M. (2001) A database on the vegetation of Western Australia. Stage 1. CALMScience after J. S. Beard, late 1960's to early 1980's Vegetation Survey of Western Australia, UWA Press.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Shepherd, D.P. (2009) 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.
- Shire of Manjimup (2011) Direct Interest Submission for Clearing Permit Application CPS 4171/1. DEC Ref A368311

5. 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)