

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:

CPS 3326/1

Permit Holder:

Bendotti and Co Pty Ltd

Duration of Permit:

4 December 2009 – 4 December 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 silviculture thinning.

2. Land on which clearing is to be done

LOT 11941 ON PLAN 205570 (EASTBROOK 6260)

3. Area of Clearing

The Permit Holder must not clear more than 11 hectares of native vegetation within the area hatched yellow on attached Plan 3326/1.

4. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation 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

- (a) The Permit Holder may undertake the following activities:
 - (i) clearing of *understorey* within the areas cross-hatched yellow on Plan 3326/1;
 - (ii) clearing for the establishment of a log landing no larger than 0.1 hectares in size;
 - (iii) thinning of Marri (Corymbia calophylla) and Karri (Eucalyptus diversicolor)] trees;
 - (iv) culling of unsaleable trees; and
 - (v) burning of cleared understorey and culled trees.
- (b) Clearing authorised under this Permit must be completed by 4 December 2013 being four years from the date 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. 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 two 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 8(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.

9. 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.

PART III - RECORD KEEPING AND REPORTING

10. 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;
 - (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 8 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.

11. 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 10 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 4 September 2017, the Permit Holder must provide to the CEO a written report of records required under condition 10 of this Permit where these records have not already been provided under condition 11(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;

dieback means the effect of Phytophthora species on native vegetation;

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 CPS 3326/1, 4 November 2009

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suitable for native fauna, or where these are not present then healthy but with the potential to contain hollows and roosts;

local provenance means native vegetation seeds and propagating material from natural sources within 10-40 kilometres of the area cleared.

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 June for undertaking planting;

regenerate/ed/ion means revegetation that can be established from in situ seed banks 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 regeneration, direct seeding and/or planting, so that the species composition, structure and density is similar to pre-clearing vegetation types in that area;

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;

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.

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

Keith Claymore

A/ ASSISTANT DIRECTOR

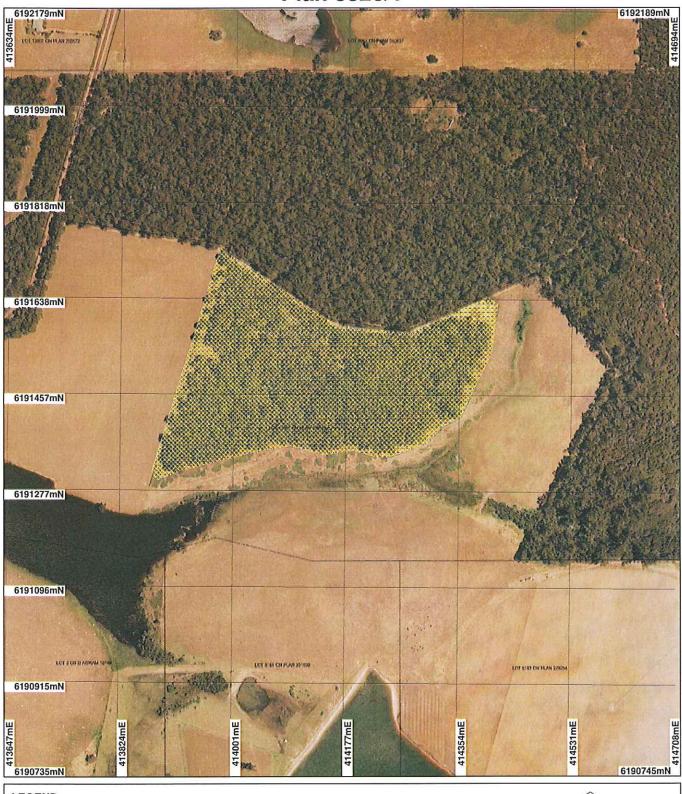
NATURE CONSERVATION DIVISION

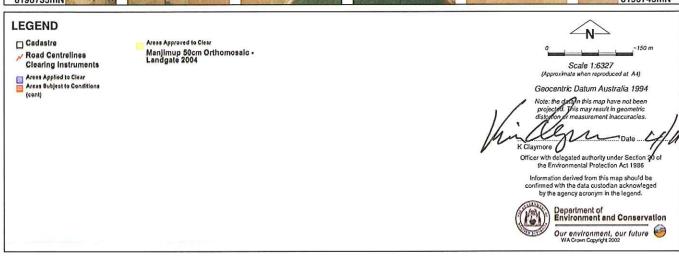
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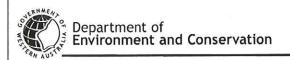
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Plan 3326/1





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Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

3326/1

Permit type:

Purpose Permit

1.2. Proponent details

Proponent's name:

Bendotti and Co Pty Ltd

1.3. Property details

Property:

LOT 11941 ON PLAN 205570 (EASTBROOK 6260) LOT 11941 ON PLAN 205570 (EASTBROOK 6260)

Local Government Area:

Colloquial name:

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing

Mechanical Removal

For the purpose of: 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 is described
as Medium forest; jarrahmarri and Beard
Vegetation Association
1144 is described as Tall
forest; karri & marri
(Corymbia calophylla)
(Shepherd, 2007)

Clearing Description

The areas around the edge adjacent to the cleared paddocks have had more impact from grazing than the middle sections, but overall the vegetation is in very good condition (Keighery, 1994) and the vegetation consists mainly of a closed Karri and Marri forest (DEC, 2009).

Vegetation Condition

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

Comment

Vegetation condition determined by site visit (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 area consists of 11 hectares and the purpose of the clearing is thinning for silviculture. The vegetation mainly consists of Karri and Marri trees and is in very good condition (Keighery, 1994 and DEC, 2009). The application area has been historically grazed and logged in past operations (DEC, 2009).

There are no known Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) within the local area (10km radius) and the vegetation is well represented locally, with approximately 75% of the area remaining vegetated, and regionally with over 80% of the area remaining vegetated.

Given the above the proposed is unlikely to be at variance to this principle.

Methodology

Keighery (1994)

DEC (2007) GIS database:

- SAC Biodatasets accessed 8 Oct 2009
- Pre European Vegetation DA 01/01
- (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 may be at variance to this Principle

There are 21 records of seven declared threatened and four priority fauna species recorded within a 10km radius of the area under application. The closest record is a Setonix Brachyurus (Quokka) 3km east of the area

under application and a Pseudocherius occidentalis (Western Ringtail Possum). There is one record of a Calyptorhynchus banksii naso (Forest Red Tailed Cockatoo) 5.8km north of the area under application.

Given the type of vegetation and that the vegetation is well represented locally, with approximately 75% of the area remaining vegetated, in the same or better condition within the local area it is unlikely to be a significant habitat for the Quokka or Western Ringtail Possum. The Forest Red Tailed Cockatoo potentially may utilise the area for foraging or nesting. A condition to retain potential habitat trees within the area will be placed on the permit.

Methodology

GIS database:

- SAC Biodatasets accessed 8 Oct 2009
- Hydrography linear DOW 13/7/06
- Pre European Vegetation DA 01/01

(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 is one species of rare flora and four species of priority flora within the local area (10km radius). Two of the priority species occur within the same Beard vegetation association (1144) and soil type (Uc1) as the area under application. These are *Rulingia appella* and *Xanthoparmelia xanthomelanoides*. No DRF occur within the same vegetation or soil type as the area under application. The soil type Uc1 consists of mainly hard sands (Northcote et al. 1968).

Rulingia appella are known to occur on loam soils near riverbanks and Xanthoparmelia xanthomelanoides is a lichen and is known to occur on rocks (WA Herbarium, 1998). As the area under application does not consist of rocky areas or loam soil it is not likely that either of the priority species will occur within the applied area and is therefore considered not likely to be at variance to this principle.

Methodology

Keighery (1994)

DEC (2007)

WA Herbarium (1998) Northcote et al. (1968)

GIS database:

- SAC Biodatasets accessed 8 Oct 2009
- Mattiske Vegetation (01/03/1998)
- Declared Rare and Priority Flora List CALM 13/08/03
- Pre European Vegetation DA 01/01
- 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 records of Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) within a 10km radius of the proposed clearing. It is unlikely that the proposed clearing will impact on any known TEC's or PEC's.

Methodology

GIS database:

- SAC Biodatasets accessed 8 Oct 2009
- Mattiske Vegetation (01/03/1998)
- Declared Rare and Priority Flora List CALM 13/08/03
- Pre European Vegetation DA 01/01

(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 Propos

Proposal is not likely to be at variance to this Principle

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed
				Land
IBRA Bioregions*		2000 2 200	\$1.50 P\$ (00)	1212 # 10
Warren	835 925	675 836	80.85	82.37
Shire*				
Manjimup	697 359	595 561	85.4	92.17
Manjimup	097 339	393 301	00.4	92.17

Mattiske Vegetation Complex**

CRb Pm1	52 753 25 801	46 468 17 372	88.09 67.33	82.71 58.99	
Beard Vegetation Association	*				
3	2 803 140	2,002,263	71.43	81.37	
1144	160 314	131 412	81.97	91.08	
Beard Vegetation Association with Bioregion*					
3	252 196	204 295	81.01	84.97	
1144	159 668	131 169	82.15	91.09	

^{* (}Shepherd et al. 2007)

The area under application falls within the South West Regional Ecological Linkage area and has a proximity value of 1a: a patch within an edge touching or <100m from a linkage (Molloy et al, 2009). There may be some short term impacts on the linkage while the thinning operation is occurring but given that the clearing is for thinning and the understorey will be required to be rehabilitated after the thinning is completed, the impacts on the linkage are considered unlikely to be long term or significant.

The vegetation to be cleared is well represented locally with approximately 75% of the area remaining vegetated. Due to the extent of vegetation remaining in the local and bioregional areas and the extent of vegetation complexes remaining, the area under application is not considered to be a significant remnant of native vegetation in an area that has been extensively cleared.

Methodology

Shepherd (2007)

Mattiske Consulting (1998)

Molloy et al. (2009)

GIS Databases:

- 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 11 Feb 08
- 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 at variance to this Principle

There are no mapped wetlands within a 10km radius of the proposed clearing. There are two unnamed minor perennial watercourse within the local area, with the closest being 30m from the area applied to clear. The closest major perennial watercourse is Lefroy Brook which is located 2.5km west of the application area. No vegetation was observed growing in association with a watercourse or wetland (DEC, 2009). Given this the proposed clearing is not at variance to this principle.

Methodology

DEC (2009)

GIS Databases:

- ANCA wetlands Environment Australia 26/3/99
- CALM Managed Lands and Waters CALM 01/06/05
- EPP Lakes Policy Area DEP 14/05/97
- EPP, Wetlands 2004 (DRAFT) EPA 21/7/04
- Clearing Regulations, Environmentally Sensitive Areas 30 May 2005
- Hydrography linear DOW 13/7/06
- Ramsar wetlands DEC 03
- South Coast Significant Wetlands WRC 10/06/2003

(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

Given that the relief of the area is low, the soils are mainly hard sands with low permeability (Northcote et al. 1968), the clearing is for thinning and the understorey will be required to be rehabilitated after the thinning is complete the risk of increased salinity, wind and water erosion are considered to be low. The Department Of Water (DOW) advise that no Country Areas Water Supply Act compensation has been paid and as no riparian vegetation appears to be within the proposed work site DOW requires has no specific management requirements (DOW, 2009).

^{** (}Mattiske Consulting 1998)

Given the above the proposed clearing is considered to be unlikely to be at variance with this principle.

Methodology

DOW (2009)

Northcote et al. (1968)

GIS database:

- Acid Sulfate Soil Risk Map, Swan coastal Plain DEC 07/08/06
- Hydrogeology, statewide? DOW 13/07/06
- 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
- Hydrogeology, 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 may be at variance to this Principle

The area under application is adjacent to the Warren State Forest and the Gloucester Nature Park. There are also 3 nature reserves within a 4km of the proposed area. The area also falls within the South West Regional Ecological Linkage area and has a proximity value of 1a: a patch within an edge touching or <100m from a linkage (Molloy et al, 2009). There may be some short term impacts on the linkage while the thinning operation is occurring but given that the clearing is for thinning and the understorey will be required to be rehabilitated after the thinning is completed, the impacts on the linkage are considered unlikely to be long term or significant.

Given the close proximity of the Warren State Forest the clearing may impact on the environmental values of this area through the increased potential for the intrusion of dieback or weed species and the proposed clearing maybe at variance to this principle. A weed and dieback condition will be placed on the permit.

Methodology

GIS Databases:

- CALM Managed Lands and Waters DEC Sept 08
- 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 proposed area is in the Warren River Public Drinking Water Source Area and the Warren River Catchment area. Topography shows the area under application has low relief and soil mapping indicates mainly hard sands with low permeability (Northcote et al. 1968). The Department Of Water (DOW) advise that no Country Areas Water Supply Act compensation has been paid and as no riparian vegetation appears to be within the proposed work site DOW requires has no specific management requirements (DOW, 2009).

Given the above and that the clearing is for thinning and the understorey will be required to be rehabilitated after the thinning is complete the proposed clearing is considered unlikely to be cause a deterioration in surface or ground water quality.

Methodology

DOW (2009)

Northcote et al. (1968)

GIS database:

- Groundwater Salinity Statewide DoW 13/07/06
- Hydrographic catchments, catchments DoW 01/06/07
- Hydrography, linear DOW 13/7/06
- 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

Given that the area drains into a nearby watercourse and is in the upland area, the clearing is for thinning and the understorey will be required to be rehabilitated after the thinning is complete the proposed clearing is considered unlikely to cause or exacerbate flooding.

Methodology

GIS database:

- Hydrography, linear DOW 13/7/06
- Topographic Contours, Statewide DOLA 12/09/02

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

Comments

The Shire of Manjimup sent a submission advising that the permit holder is still required to comply with all requirements relating to its Town Planning Scheme, local laws and legislation relating to the movement of heavy vehicles and the repair of road damage resultant from the use of those vehicles (Shire of Manjimup, 2009).

The Department Of Water (DOW) advise that no Country Areas Water Supply Act compensation has been paid and as no riparian vegetation appears to be within the proposed work site DOW requires has no specific management requirements (DOW, 2009).

A Native Forest Management Plan has been provided and advises that two habitat trees per hectare and a basal area of 18m squared will be retained (F. J. Bradshaw, 2009). 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)

Methodology

Shire of Manjimup 2009

DOW 2009

F.J. Bradshaw (2009)

DEC (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 Principles (b) and (h) and is not likely to be at variance to the remaining clearing Principles.

5. References

Department of Environment and Conservation (2009) Site Inspection Report for Clearing Permit Application CPS 3326/1, Lot 11941 on Plan 205570, Manjimup. Site inspection undertaken 22/10/2009. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC102926).

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). Country Area Water Supply Advice. DEC TRIM Ref: DOC102629.

F. J. Bradshaw, Forest Consultant (2009). Native Forest Management Plan. DEC TRIM Ref; DOC98203

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.

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) South West Regional Ecological Linkages Technical Report. Western Australian Local Government Association and Department of Environment and Conservation, Perth.

Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68): 'Atlas of Australian Soils, Sheets 1 to 10, with explanatory data'. CSIRO and Melbourne University Press: Melbourne.

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.

Shire of Manjimup (2009). Direct Interest Submission. DEC TRIM Ref: DOC101480.

Western Australian Herbarium (1998). FloraBase - The Western Australian Flora. Department of Environment and Conservation. http://florabase.dec.wa.gov.au/ (Accessed 8/10/2009).

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)