



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 4734/1

File Number: 2011/011046-1

Duration of Permit: From 20 February 2012 to 20 February 2021

PERMIT HOLDER

Jumbuck Nominees Pty Ltd

LAND ON WHICH CLEARING IS TO BE DONE

Lot 2 on Diagram 72165, Channybearup.

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 32.6 hectares of native vegetation and 8 trees within the area hatched yellow on attached Plan 4734/1.

CONDITIONS

1. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 20 February 2016

2. 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.

3. Type of clearing authorised

To the extent authorised under Authorised Activity of this Permit, the Permit Holder may undertake the following activities within the area cross-hatched yellow on Plan 4734/1:

- (i) clearing and burning of *understorey*;
- (ii) *thinning* of dead fallen or dead standing Marri (*Corymbia calophylla*) Jarrah (*Eucalyptus marginate*) or Karri (*Eucalyptus diversicolor*) trees; and
- (iii) *culling* and burning of unsaleable trees.

4. 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.

5. 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.

6. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the areas shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised as habitat by fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- (b) Prior to undertaking any clearing authorised under this Permit, *habitat tree(s)* identified by condition 6(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in the *Wildlife Conservation (Specially Protected Fauna) Notice*.
- (c) Where fauna are identified in relation to conditions 6(b) of this Permit, the Permit Holder shall ensure that no taking of identified fauna occurs unless authorised under Regulation 15 of the *Wildlife Conservation Regulations 1970*.

7. Watercourse management

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

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 2 *habitat trees* in each hectare authorised under this Permit.
- (c) A minimum retention rate of 17m²/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 two years of 20 February 2016, 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 8(a), 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. 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) the species and number per hectare of *habitat trees* retained;
 - (ii) 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;
 - (iii) monitoring undertaken to ensure that the specified minimum *basal area* is retained;
 - (iv) photographs of the *understorey* taken at one year, two years and three years after completing clearing authorised under this Permit;
 - (v) a detailed description of the nature and extent of any *remedial actions* undertaken; and
 - (vi) a copy of the *environmental specialist's* report.

10. 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 9 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 20 November 2020, the Permit Holder must provide to the CEO a written report of records required under condition 9 of this Permit where these records have not already been provided under condition 10(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;

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;

fauna specialist means a person with training and specific work experience in fauna identification or faunal assemblage surveys of Western Australian fauna;

habitat tree(s) means trees that have a diameter, measured at 1.5m above the ground, of 50cm or greater, 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;

Wildlife Conservation (Specially Protected Fauna) Notice means those fauna taxa gazetted as rare fauna pursuant to section 14(4)(a) of the *Wildlife Conservation Act 1950* (as amended).

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*;

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*.

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*.

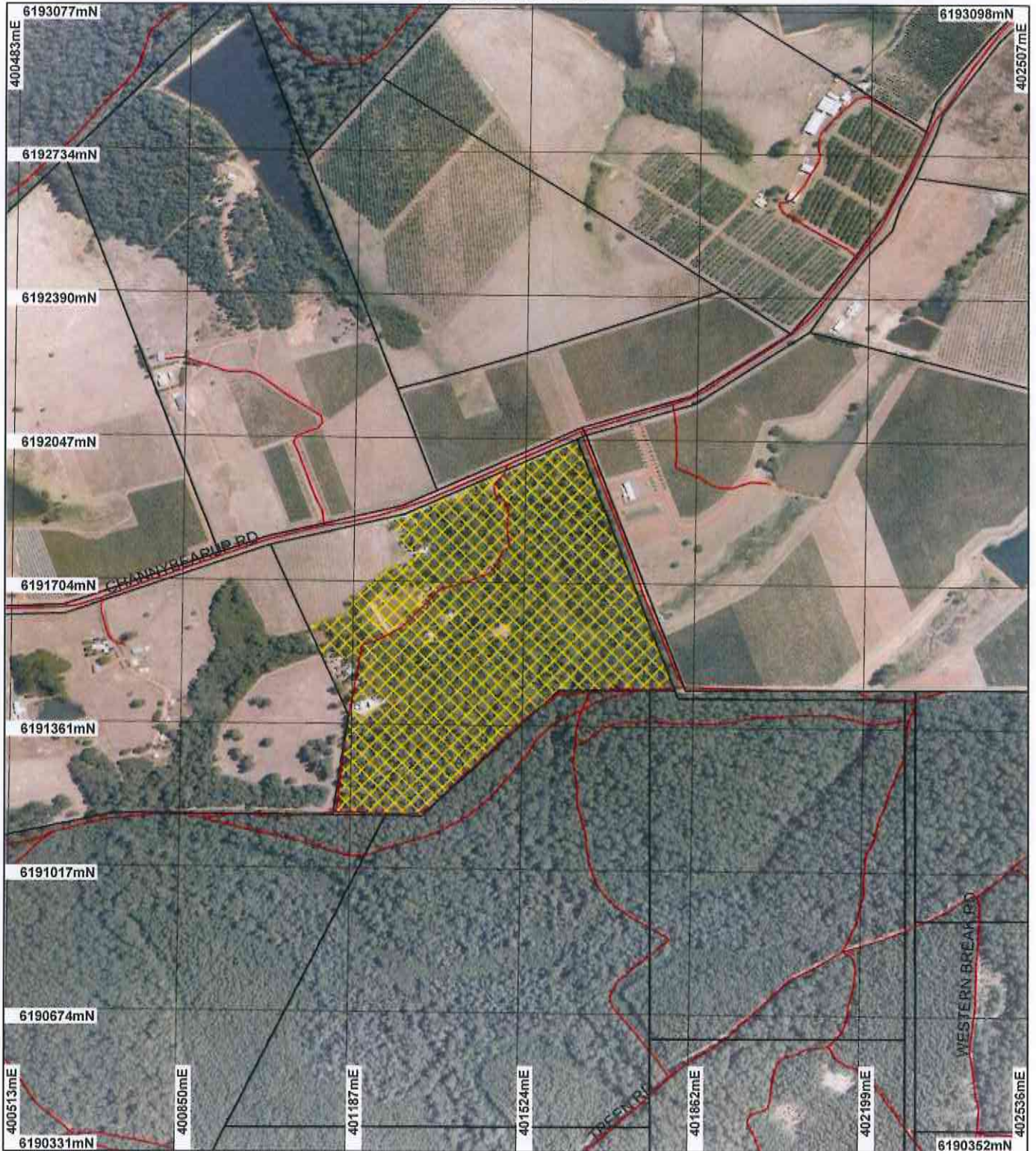


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

25 January 2012

Plan 4734/1



LEGEND

Clearing instruments

-  Areas Approved to Clear
-  Road Centrelines
-  Cadastro
-  Donnelly 50cm Orthomosaic - Landgate 2007

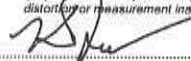


0 300 m

Scale 1:12058
(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 measurement inaccuracies.

 Date 25/1/12
K. Faulkner

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.: 4734/1
Permit type: Area Permit

1.2. Proponent details

Proponent's name: Jumbuck Nominees Pty Ltd

1.3. Property details

Property: LOT 2 ON DIAGRAM 72165 (House No. 2247 CHANNYBEARUP CHANNYBEARUP 6260)
Local Government Area: Shire of Manjimup

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
32.6	8	Mechanical Removal	Timber Harvesting

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 25 January 2012

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 Vegetation Association 1144: Tall forest; karri & marri (Corymbia calophylla) (Shepherd, 2009)	The application is to silvicultural thin 32.6 ha of native vegetation and clear 8 native trees for the purpose of safety and fire hazard reduction	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The condition and the description of the vegetation under application has been established through a site visit conducted by Department of Environment and Conservation officers on the 12 January 2012 (DEC, 2012).
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 (Mattiske and Havel, 1998).	The vegetation under application comprises of a closed forest of Eucalyptus diversicolor (Karri), Eucalyptus marginata (Jarrah), and Corymbia calophylla (Marri). Middle storey of vegetation comprised of Acacia pentadenia, Banksia sp. and Bossiaea aquifolium, with a ground cover Bracken Ferns (DEC, 2012). The vegetation under application is considered to be in a very good (Keighery, 1994) condition (DEC, 2012), with evidence of past logging operations throughout the application area (DEC, 2012).		
Mattiske vegetation complex 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 (Mattiske and Havel, 1998).			

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 silvicultural thin 32.6 ha of native vegetation and clear 8 native trees for the purpose of safety and fire hazard reduction. The application is approximately 12km north west of the Pemberton townsite.

The vegetation under application comprises of a closed forest of Eucalyptus diversicolor (Karri), Eucalyptus marginata (Jarrah), and Corymbia calophylla (Marri). Middle storey of vegetation comprised of Acacia

pentadenia, Banksia sp. and Bossiaea aquifolium, with a ground cover Bracken Ferns (DEC, 2012). There is evidence of past logging operation throughout the application area (DEC, 2012). The vegetation under application considered to be in a very good (Keighery, 1994) condition (DEC, 2012).

Three priority flora species have been recorded within a 10km radius of the application. The closest mapped priority flora species is Rulingia (P1) which has been recorded approximately 6 km east from the proposed clearing. The priority species mapped within 10km of the application area, occur within different vegetation types, but on similar soils as those of the applied area. It is considered unlikely that the area under application will support priority flora species.

A site inspection of the area under application observed tree hollows within some large trees (DEC 2012). As the proposal is for thinning rather than broadscale clearing, it is considered that the trees retained after thinning would provide habitat in the future and tree hollows will be retained at a rate of two per hectare (Evill, 2011).

The local area (10km) surrounding the application is well represented with approximately 85 percent of its pre-European vegetation remaining.

Given that the local area (10km) has a high level of vegetation remaining and that the application is for silvicultural thinning opposed to broadscale clearing. The proposed clearing is not likely to impact upon the biological diversity of the area. Additionally the application is not considered to comprise of a high level of biodiversity. Therefore, the application as proposed is considered not likely to be at variance to this Principle.

Methodology References:
- Evill (2011)
- DEC (2012)
- Keighery (1994)

GIS Database:
- SAC Bio Datasets 16/12/2011

(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**
Three conservation significant fauna species, Baudin's black cockatoo (*Calyptorhynchus baudin's*) Carnaby's black cockatoo (*Calyptorhynchus latirostris*) and the Quokka (*Setonix brachyurus*), have been recorded within the local area (10 km radius).

The area under application can be described as Karri-Marri-Jarrah closed forest, with the vegetation considered to be in a very good (Keighery 1994) condition (DEC 2012). A site inspection of the area under application observed tree hollows within larger trees under application (DEC, 2012).

As the proposal is for thinning rather than broadscale clearing, it is considered that the trees retained after thinning would provide habitat in the future and tree hollows will be retained at a rate of two per hectare (Evill, 2011).

The local area is well vegetated, with approximately 85 percent native vegetation remaining including large areas of state forest. These areas are likely to be providing fauna habitat of greater local significance than the vegetation under application. Therefore, the clearing as proposed is considered not likely to be at variance to this Principle.

Methodology References:
- Evill (2011)
- DEC (2012)
- DEC (2007-)
- Keighery (1994)
GIS Database:
- DEC Tenure

(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**
One declared rare flora (DRF) species has been recorded within a 10km radius of the application area. *Caladenia harringtoniae* has been mapped approximately 3.8 km east of the application area.

The recorded *Caladenia harringtoniae* has been mapped as occurring within a similar soil type to that as the application area. However, has not been mapped within the same Mattiske vegetation complexes or Beard vegetation association 1144 recorded within the application area.

Given the distance from the application area to the mapped record of *Caladenia harringtoniae* and that the application area is considered to comprise of vegetation unsuitable for *Caladenia harringtoniae*. It is unlikely that the vegetation under application would comprise of the mapped DRF species, therefore the application is not likely to be at variance to this principle.

Methodology GIS Database:
- SAC Bio Datasets 16/12/2011

(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 at variance to this Principle

There are no known Threatened Ecological Communities (TECs) within a 10km radius of the area under application. The closest known TEC is mapped approximately 70km from the application area.

Given the above, it is not considered likely that the vegetation under application comprises or is necessary for the maintenance of a TEC. The application is not at variance to this principle.

Methodology GIS Database:
- SAC Bio Datasets 16/12/2011

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

Comments Proposal is not likely to be at variance to this Principle

The vegetation under application is described as Beard vegetation type 1144 of which approximately 80 percent (Shepherd 2009) of its pre-European extent remaining within the Warren bioregion. In addition, the vegetation under application is also described as Mattiske vegetation types Crowea (CRy), and Pemberton (PM1), of which there is approximately 74 and 67 percent (Mattiske and Havel 1998) of their pre-European extent remaining within the State, respectively.

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001). The remaining percentages of vegetation types mapped are above the minimum of 30 percent threshold. Additionally, there is still a large percentage of vegetation remaining in the local area, with approximately 85 percent of its pre-European vegetation remaining within a 10 km radius of the application.

Given the extent of vegetation remaining in the local area and the high representation of the mapped vegetation types, the local area is not considered to be extensively cleared and the vegetation under application is not considered to be significant. Therefore, the clearing as proposed is considered not likely to be at variance to this Principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion Warren	833,982	667,165	80	82
Shire Shire of Manjimup	697,371	589,249	84	92
Beard Vegetation Association in Bioregion 1144	159,668	127,144	80	91
Mattiske Vegetation Complex				
Crowea (CRy)	33,764	25,111	74	67
Pemberton (PM1)	25,801	17,372	67	58

Methodology References:
- Commonwealth of Australia (2001)
- Mattiske and Havel (1998)
- Shepherd (2009)
GIS Databases:
- Pre-European Vegetation
- Mattiske Vegetation Complexes
- NLWRA, Current Extent of Native Vegetation
- Interim Biogeographic Regionalisation of Australia

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

Comments Proposal is at variance to this Principle

Two minor perennial watercourse (tributary of Fly Brook) have been mapped within the area under application. It is considered that the proposed clearing may impact upon vegetation associated with the recorded minor perennial watercourses. Therefore, the clearing as proposed is at variance with this Principle.

A 30 meter vegetated buffer from the water courses would ensure adequate protection of riparian vegetation.

Methodology GIS Databases:
- Hydrography, linear

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

Comments Proposal is not likely to be at variance to this Principle

The area under application and the surrounding area is mapped as soil type is Uc1, which is described as 'Soils Steep hilly to hilly dissected lateritic plateau with steep valley side slopes: chief soils are hard, and also sandy, neutral, and also acidic, yellow and yellow mottled soils, with conspicuous but relatively smaller areas of red earths' (Northcote et al, 1960 - 1968).

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 17 to 19 m²/ha (Evill, 2011). Given the proposed clearing is for thinning and not broad scale clearing, the proposal is not considered likely to cause appreciable land degradation.

The application is not likely to be at variance to this principle

Methodology References:
- Evill (2011)
- Northcote et al (1960-8)
GIS Database:
- Soils, statewide

(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 Donnelly State Forrest borders the southern boundary of the application area. The proposed clearing may indirectly impact on the environmental values of the adjoining conservation reserves through the spread or introduction of weed species or dieback by machinery.

Given the possible indirect impact through the spread of weeds and dieback, it is considered likely that the clearing as proposed may impact on the environmental values of nearby conservation areas. Therefore, the clearing as proposed may be at variance to this Principle.

Weed control and dieback management practices will assist in mitigating impacts from the proposed clearing.

Methodology GIS Database:
- DEC, tenure

(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

Two minor perennial watercourses (tributary of Fly Brook) have been mapped within the area under application. A recent site inspection undertaken by DEC recorded no signs of surface water within the application area (DEC, 2012).

Given the above, it is considered unlikely the proposed clearing will cause the deterioration in surface or groundwater in the local area.

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

Methodology Reference:
- DEC (2012)
GIS Database:
- Hydrography, linear

(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 17 to 19 m²/ha will be maintained (Evill, 2011), the proposal is not likely to cause or exacerbate the incidence or intensity of flooding. Therefore, the clearing as proposed is not likely to be at variance to this Principle.

Methodology Reference:
- Evill (2011)

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

Comments
In relation to the application for clearance of native vegetation, the Shire of Manjimup (2011) advises that there is no planning or other matters required for the proposal.

The applicant has advised that commercial produces license is not required as he will be only removing dead trees (Evill, 2011a).

Methodology Reference:
- Evill (2011a)
- Shire of Manjimup (2011)

4. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 16/12/2011
DEC (2012) Site Inspection Report for Clearing Permit Application CPS 4734/1, Lot 2 Channybearup Road, Pemberton. Site inspection undertaken 12/1/2012. Department of Environment and Conservation, Western Australia. DEC Ref A466993
Evill, Brian J. C. (2011) Native Forest Management Plan for Channybearup Road, Pemberton. DEC Ref A452622
Evill, Brian J. C. (2011a) Information received for Clearing Permit Application CPS 4734/1 Channybearup Road, Pemberton. DEC Ref A467590
Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
Matiske, 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.
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. (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 4734/1. DEC Ref A459388

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)