



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 3618/2
Permit Holder:	Michael James Melsom John Muir
Duration of Permit:	8 May 2010 – 8 May 2018

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 and vineyard development.

2. Land on which clearing is to be done

LOT 8774 ON PLAN 201700 (CROWEA 6258)

3. Area of Clearing

- The Permit Holder must not clear more than 17 hectares of native vegetation for the purpose of silvicultural thinning within the areas hatched yellow on attached Plan 3618/2.
- The Permit Holder must not clear more than 1 hectares of native vegetation for the purpose of vineyard development within the areas hatched yellow on attached Plan 3618/2.

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

- The Permit Holder may undertake the following activities:
 - clearing of *understorey* within the areas cross-hatched yellow on Plan 3618/2;
 - clearing for the establishment of a *log landing* no larger than 0.3 hectares in size;
 - thinning* of Marri (*Corymbia calophylla*) and Karri (*Eucalyptus diversicolor*) trees;
 - culling* of unsaleable trees; and
 - burning of cleared *understorey* and *culled* trees.
- The Permit Holder shall not clear any native vegetation after 8 May 2015.

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 pursuant to 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) ensure that no *dieback* or *weed*-affected soil or other material is brought into the area to be cleared; and
 - (iii) 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*, dam or *wetland* within the area cross-hatched yellow on Plan 3618/2.

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) 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;
 - (iii) the date that the area was cleared; and
 - (iv) the size of the area cleared (in hectares).

- (b) In relation to the retention of a buffer of areas pursuant to condition 9 of this Permit:
 - (i) the commencement date of buffer retention;
 - (ii) the location of any area buffered recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
 - (iii) a description of the buffering activities undertaken; and
 - (iv) the size of the area buffered (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 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 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 8 February 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;

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;

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;

local provenance means native vegetation seeds and propagating material from natural sources within 20 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;

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;

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 same meaning as it has in 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 *Agricultural and Related Resources Protection Act 1976*; and

wetland 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.

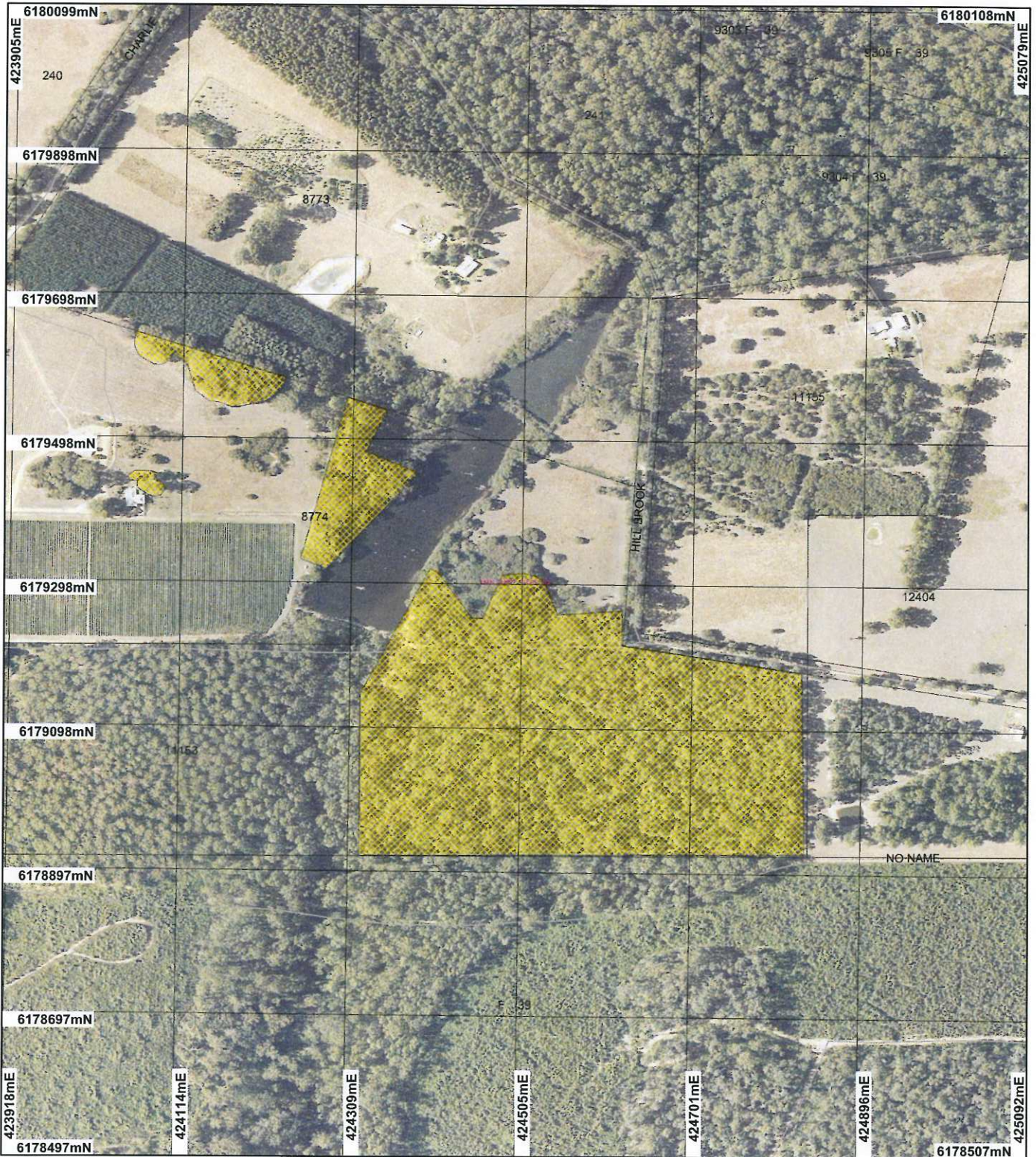


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

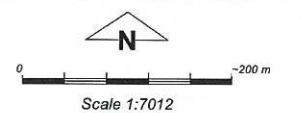
1 June 2010

Plan 3618/2



LEGEND

- | | | |
|------------------------|-------------------------|---|
| Cadastre for labelling | MR | Local Government Authorities |
| Road Centrelines | N | Northcliffe 50cm Orthomosaic - Landgate 2007 |
| FW | TR | |
| HY | Areas Approved to Clear | |
| LRO | | |
| LRS (cont) | | |



Geocentric Datum Australia 1994
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.
 K. Faulkner Date 1/6/10

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.



* Project Data is denoted by asterisk. This data has not been quality assured. Please contact map author for details.



1. Application details

1.1. Permit application details

Permit application No.: 3618/2
Permit type: Purpose Permit

1.2. Proponent details

Proponent's name: Michael James Melsom

1.3. Property details

Property: LOT 8774 ON PLAN 201700 (CROWEA 6258)
Local Government Area:
Colloquial name:

1.4. Application

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

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: Association 1144 - Tall forest; karri & marri.	The application is to clear 17 hectares of native vegetation for silvicultural thinning and 1 hectare for clear felling to reduce shade competition for adjacent vineyards.	Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)	The vegetation description and condition was determined from a site visit (DEC 2010)
Association 3 - Medium forest; jarrah-marri			
Mattiske: 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.	The vegetation consists of Karri and Marri Tall Closed Forest over <i>Trymalium floribundum</i> , <i>Agonis flexuosa</i> , <i>Acacia pentadenia</i> over <i>Pteridium esculentum</i> , <i>Hovea</i> sp. and <i>Hibbertia</i> sp. in Very Good condition. There is evidence of past thinning and the area has been grazed.		
Granite Valleys (Vh2) - Tall open forest of Eucalyptus diversicolor-Eucalyptus patens on slopes with <i>Agonis flexuosa</i> - <i>Allocasuarina decussata</i> - <i>Callistachys lanceolata</i> on valley floors in hyperhumid and perhumid zones.			

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 proposed clearing is for 17 hectares of silvicultural thinning and 1 hectare of clear felling to reduce shade competition for adjacent vineyards. The vegetation consists of Karri and Marri Tall Closed Forest over *Trymalium floribundum*, *Agonis flexuosa*, *Acacia pentadenia* over *Pteridium esculentum*, *Hovea* sp. and *Hibbertia* sp. in Very Good (Keighery, 1994) condition.

No priority or rare flora was identified during the site visit and it is not considered likely for the proposed clearing to including the clearing of a Threatened Ecological Community (TEC) (DEC 2010).

The local area (10 km radius) is highly vegetated with approximately 80% of vegetation remaining and the vegetation complexes are well represented in nearby DEC estate (this 80% largely lies within State forest). Therefore, it is considered unlikely for the vegetation under application to contain significant fauna habitat in a

local context.

The proposed thinning is unlikely to affect biological diversity within the local area.

- Methodology** References
- Keighery (1994)
 - DEC (2010)
 - GIS database:
 - NorthCliffe 50cm Orthomosaic - Landgate 2004
 - CALM Managed Lands and Waters - CALM 01/06/05
 - SAC Biodatasets - accessed 12 March 2010
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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**

The following conservation significant fauna have been recorded within the local area (10 km radius):

- Chuditch (*Dasyurus geoffroii*) (threatened under Wildlife Conservation Act and vulnerable under EPBC Act)
- Quokka (*Setonix brachyurus*) (threatened, vulnerable)
- Water-rat, Rakali (*Hydromys chrysogaster*) (P4)
- Black-stripe Minnow (*Galaxiella nigrostriata*) (P3)
- Muir's Corella (*Cacatua pastinator pastinator*) (threatened, vulnerable)

A few habitat trees occur within the application area and it is proposed within the Native Forest Management Plan for the property, for these trees to be maintained (Bradshaw 2010).

There is a large amount of native vegetation remaining (approximately 80%) within the local area. Aerial photography indicates that adequate vegetation and associated corridors within the area under application (and adjoining land parcels) will remain post thinning. Therefore, the proposed thinning is unlikely to affect fauna habitat within the local area.

To further limit/mitigate any impacts thinning activities may have on the remaining habitat, a vegetation management condition will be placed on the permit.

- Methodology** Reference
- Bradshaw (2010)
 - DEC (2010)
 - GIS database:
 - NorthCliffe 50cm Orthomosaic - Landgate 2004
 - CALM Managed Lands and Waters - CALM 01/06/05
 - SAC Biodatasets - accessed 12 March 2010
 - NLWRA, Current Extent of Native Vegetation 20 Jan 2001

(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**

Three rare flora species have been recorded within a 10 km radius of the applied area which includes *Meziella trifida*, *Caladenia christineae* and *Kennedia glabrata*.

The area under application consists of a tall closed forest of Marri and Karri on sandy yellow soils (DEC 2010). The rare flora species identified within the local area occur within different habitat and soils as identified within the proposed clearing area (Brown et al. 1998). In addition, no rare flora was identified during the site visit (DEC 2010).

Therefore, the proposed clearing is considered unlikely to be at variance to this Principle.

- Methodology** References
- Brown et al (1998)
 - DEC (2010)
 - GIS Databases
 - SAC Biodatasets - accessed 12 March 2010
 - Soils, statewide

(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 Threatened Ecological Communities (TEC's) within the local area (10 km radius). In addition, no TECs were identified during the site visit (DEC 2010).

Therefore, it is unlikely that the proposed clearing is at variance to this principle.

Methodology References

- DEC (2010)
- GIS database:
- SAC Biodatasets - accessed 12 March 2010

(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 association 1144 and 3, of which there is 82% and 81%, of pre-European extent remaining within the Warren bioregion respectively (Shepherd 2007). The Mattiske Vegetation complex for the area under application is CRv and Vh2 of which there is 74% and 88% of pre-European vegetation extent remaining respectively (Mattiske 1998).

In addition, there is approximately 80% of pre-European vegetation remaining in the local area (~10km radius).

The Beard and Mattiske vegetation associations of the vegetation under application retain more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation within the Swan Coastal Plain bioregion; below which species loss appears to accelerate exponentially at an ecosystem level (EPA, 2000).

In addition, much of the clearing is for the purpose of silviculture and will not remove all vegetation. The numerous State Forests within the local area (10 km radius) result in an approximate 80% cover of vegetation in DEC tenure.

Given the type of clearing and surrounding vegetation the clearing as proposed is unlikely to be at variance to this principle.

	Pre-European	Extent remaining	% remaining
Warren IBRA*	835 925	675 836	80
Shire of Manjimup*	697 359	595 561	85
Beard Vegetation type within bioregion*			
1144	159 668	131 169	82
3	252 196	204 295	81
Mattiske Vegetation type**			
CRy (Crowea)	33 764	25 111	74
Vh2 (Granite Valleys)	9 968	8 780	88

* (Shepherd 2007)

** (Mattiske 1998)

Methodology References

- EPA (2000)
- Mattiske (1998)
- Shepherd (2007)
- GIS Databases:
- DEC Managed Lands and Waters
- Mattiske Vegetation - CALM 1/03/1998
- Manjimup 50cm Orthomosaic - Landgate 2004
- Northcliffe 1.4m Orthomosaic - Landgate 2000
- SAC Biodatasets, accessed 12 March 2010

(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 occurs within the south-eastern corner of the application area. In addition a large dam is adjacent to parts of the application area in the north.

Direct vegetation links exist between the area under application and this minor watercourse and large dam (DEC 2010).

The watercourse and dam, and associated buffering vegetation, occurs within Zone D of the Warren River Water Reserve which is subject to Country Areas Water Supply Act 1947 (CAWS Act). Zone D represents low salinity risk within the catchment. The Department of Water Policy for granting of licences to clear native vegetation within this catchment is subject to exclusion of any clearing within riparian vegetation and associated buffers. To ensure that the area of riparian vegetation is not impacted by the thinning activities, a watercourse management condition will be imposed on the permit.

Methodology References

- DEC (2010)
- Department of Water (2010)
- GIS Databases
 - Geomorphic Wetlands Database
 - 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 soil type on site is mapped as Uc1 which is described as 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 (Northcote et al. 1968). These soils have a high risk of wind and water erosion.

Topographical contours show some steep slopes, however, the majority of the application is for silvicultural thinning (17ha) therefore it is unlikely that erosion will increase as the vegetation is proposed to be selectively cleared (i.e. not clear felled). A watercourses buffer condition will be placed on the permit to ensure any potential erosion within steeper slopes does not impact the watercourse.

The area proposed to be cleared lies within Zone D of the Country Areas Water Supply Act 1947. DoW (2010) advises that this is a low salinity risk area where no salinisation of the water resources will result subject to the retention of at least 10% on the holding area to native vegetation. The retention rate on the property will be above this threshold.

Therefore, the proposal is unlikely to be at variance to this principle.

Methodology References

- DoW (2010)
- Northcote et al. (1968)
- GIS database:
 - Hydrography, linear
 - Soils, Statewide
 - Topographic contours 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 vegetation under application adjoins Warren state forest. Additionally, State Forest and National Park occupies approximately 80% of land tenure within the local area (10km radius) and include, Greater Hawke National Park, Jane National Park, Greater Dordagup National Park, Gloucester National Park, Warren State Forest and Tone State Forest.

The application area is likely to be habitat for native fauna species found within the adjoining state forest, however as the proposal is for selective thinning it is unlikely that clearing will result in increased competition for fauna within the state forest.

There is a likelihood of weed and dieback spreading from the clearing activities and given the close proximity to the conservation areas, Weed management and dieback conditions will be placed upon the permit to reduce the risk of weed and dieback spreading into nearby conservation areas.

Therefore, the proposed clearing may be at variance to this principle.

Methodology GIS Databases:
- DEC Managed Lands and Waters
- Northcliffe 50cm Orthomosaic - Landgate 2007
- SAC biodatasets accessed - 12 March 2010

(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 may be at variance to this Principle

A minor perennial watercourse occurs within the south-eastern corner of the application area. In addition a large dam is adjacent to parts of the application area in the north.

There is potential for deterioration in surface water quality given the proximity of the watercourse and dam within the application area and steep slopes, especially associated with the watercourse.

However, the majority of the application is for silvicultural thinning (17ha) so it is unlikely that erosion will increase as the vegetation is proposed to be selectively cleared (i.e. not clear felled). A watercourse buffer condition will be placed on the permit around the watercourse and dam to ensure any potential erosion within steeper slopes does not occur and impact on the surface water quality of the watercourse.

Therefore, the proposed clearing may be at variance to this Principle.

Methodology GIS Databases
- Hydrography, linear
- Soils, Statewide
- Topographic contours statewide

(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

Clearing within the application area is primarily for the purpose of silviculture which does not result in removal of all vegetation.

As some vegetation will be remaining and due to the sandy soils mapped on site (Northcote et al. 1968), it is not likely that there will be a significant increase in surface water runoff, therefore flooding levels are unlikely to be impacted.

Methodology References
- Northcote et al. (1968)
GIS Databases
- Soils, Statewide

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

Comments

The area under application is zoned Rural in the Town Planning Scheme.

CPS 2880/1 adjacent to application area was granted for silviculture on the 15 February 2009 until the 15 February 2017. Conditions on the permit include avoid and minimise, dieback and weed, watercourse management and vegetation management conditions.

CPS 2935/1 nearby to application was granted for a dam in the 5 March 2009 until the 5 March 2014. A revegetation condition was placed on the permit.

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 applicant requires a Commercial Producer's Licence to undertake silviculture on the property.

Direct interest submission received from Shire of Manjimup stating that they have no objection to the proposed clearing application.

Methodology References
- DEC (2005)
GIS Databases

- Town planning Scheme Zones
- Clearing Instruments

4. Assessor's comments

Comment

The clearing application has been assessed against the clearing principles, planning instruments and other matters in accordance with s51O of the Environmental Protection Act 1986, and the assessment recommendation is that the clearing may be at variance to Principle (f), (i) and (h).

5. References

- Bradshaw (2010) Native Forest Management Plan - Michael Melsom - Charlie Rd, Northcliffe.
- Brown A., Thomson-Dans C. and Marchant N.(1998). Western Australia's Threatened Flora, Department of Conservation and Land Management, Western Australia.
- DEC (2010) Site Inspection Report for Clearing Permit Application CPS 3618/1, Lot 8774 Charlie Rd, Northcliffe. Site inspection undertaken 26/3/2010. Department of Environment and Conservation, Western Australia (TRIM Ref. DOC124540)
- 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 (2010) Advice on impacts of Clearing within Lot 8774 Charlie Rd, Northcliffe on the Waren River Water Reserve Country Areas Water Supply Act 1947 (CAWS Act). Department fo Water, Wesetrn Australia.
- EPA (2000) Environmental protection of native vegetation in Western Australia. Clearing of native vegetation, with particular reference to the agricultural area. Position Statement No. 2. December 2000. Environmental Protection Authority, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- 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.

6. Glossary

Term	Meaning
CALM	Department of Conservation and Land Management (now DEC)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment (now DEC)
DoW	Department of Water
DMP	Department of Mines and Petroleum (ex DoIR)
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)