



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 4252/1
Permit Holder:	Alexander Thomas Ailakis
Duration of Permit:	16 May 2011 – 16 May 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 Timber Harvesting.

2. Land on which clearing is to be done

LOT 8892 ON PLAN 201641 (MEERUP 6262)

LOT 8893 ON PLAN 201641 (MEERUP 6262)

3. Area of Clearing

The Permit Holder must not clear more than 32 hectares of native vegetation within the area hatched yellow on attached Plan 4252/1.

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

To the extent authorised under condition 3 of this Permit, the Permit Holder may undertake the following activities within the area cross-hatched yellow on Plan 4252/1:

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

- (i) clearing and burning of *understorey*;
- (ii) *thinning* of Karri (*Eucalyptus diversicolor*) trees; and
- (iii) *culling* and burning of unsaleable trees.

(b) The Permit Holder shall not clear any native vegetation after 16 May 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. 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 18-20m²/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 16 April 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 8(e) (i), the Permit Holder must undertake *remedial action* at an *optimal time* within the next 12 months to ensure re-establishment of *understorey* prior to expiry of this Permit.

PART III - RECORD KEEPING AND REPORTING

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) 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.

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 16 February 2019, 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;

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;

local provenance means native vegetation seeds and propagating material from natural sources within 50 kilometres of the area cleared.

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*;

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

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;

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.

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*.

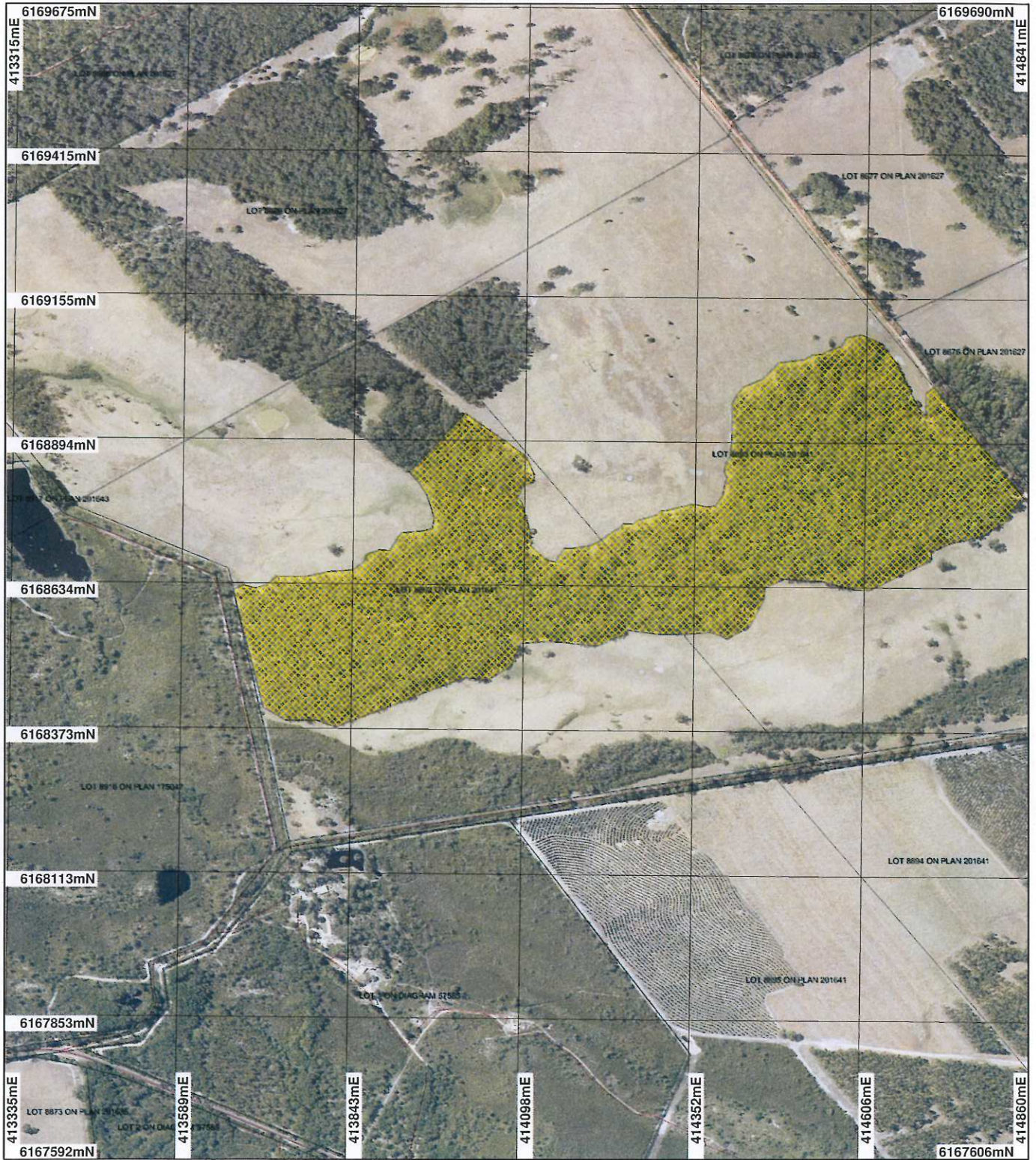


Kelly Faulkner
MANAGER
NATIVE VEGETATION CONSERVATION BRANCH

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

21 April 2011

Plan 4252/1



LEGEND

-  Cadastre for labelling
Road Centrelines
-  Clearing Instruments
-  Areas Approved to Clear
-  Northcliffe 50cm Orthomosaic
- Landgate 2007



0  250 m

Scale 1:9117

(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 21/1/10
K Patukner

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.:	4252/1
Permit type:	Purpose Permit

1.2. Proponent details

Proponent's name:	Alexander Thomas Ailakis
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1.3. Property details

Property:	LOT 8892 ON PLAN 201641 (MEERUP 6262)
	LOT 8892 ON PLAN 201641 (MEERUP 6262)
Local Government Area:	
Colloquial name:	

1.4. Application

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

1.5. Decision on application

Decision on Permit Application:	Grant
Decision Date:	21 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
Shepherd (2009) describes Beard vegetation 1144 as Tall forest; karri & marri (<i>Corymbia calophylla</i>).	The proposal is to clear 32 hectares for timber harvesting. The area under application is a predominately young Karri stand with some Jarrah, Marri and Blackbutt also present. The mid storey is comprised of <i>Allocasuarina</i> and <i>Acacia floribundum</i> and the ground storey is mainly introduced weeds, grasses and <i>Hibbertia cuneiformis</i> , there are also signs of disturbance from grazing (DEC, 2011).	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)	The condition rating of the application area was established through a site visit conducted by DEC officers on 7 April 2011 (DEC, 2011).
Association 23 described as Low woodland; jarrah-banksia.			
Mattiske Veg association – COB: Tall open forest of <i>Eucalyptus diversicolor</i> - <i>Corymbia calophylla</i> on crests of hills arising above the southern coastal plain in the hyperhumid zone.			
Mattiske Veg association – S4: Low woodland of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Nuytsia floribunda</i> with some <i>Melaleuca preissiana</i> and closed heaths of <i>Myrtaceae</i> spp. on broad drainage lines in hyperhumid and perhumid zones.			

(Mattiske Consulting, 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 proposed clearing of 32 hectares of native vegetation is for timber harvesting. The vegetation consists of a predominately young Karri stand with some Jarrah, Marri and Blackbutt also present. The mid storey is comprised of *Allocasuarina* and *Acacia floribundum* and the ground storey is mainly introduced weeds, grasses and *Hibbertia cuneiformis* and is considered to be in 'good' (Keighery, 1994) condition (DEC, 2011).

Within the local area (10km radius) there are no priority or rare flora species that occur in the same vegetation and soil complexes as the area under application and no priority or rare flora was identified during the site visit (DEC, 2011). There are no known threatened ecological communities within the local area. The local area is highly vegetated with approximately 80% of vegetation remaining.

Therefore, it is considered unlikely for the vegetation under application to contain a high level of biological

diversity and the proposed thinning is not likely to be at variance to this Principle.

Methodology References
-DEC (2011)
-Keighery (1994)
GIS Databases
-SAC Bio Datasets - accessed March 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**

Ten conservation significant species were recorded within the local area (10km radius) including *Calyptorhynchus baudinii* (Baudin's black cockatoo) *Isoodon obesulus* (Quenda), *Nannatherina balstoni* (Balston's Pygmy Perch), *Ixobrychus minutus* (Little Bittern), *Galaxiella munda* (Western Mud Minnow) and *Galaxiella nigrostriata* (Black-stripe Minnow).

The vegetation under application is considered to be in 'good' (Keighery, 1994) condition consisting of predominately Karri tress and there are some older trees present in the application area that contain hollows (DEC, 2011). Given that Baudin's black cockatoo breeds primarily in Marri trees and that the Forest Management Plan advises that potential habitat trees will be retained at the rate of two per hectare, the proposed clearing is unlikely to be considered significant habitat for Baudin's black cockatoo.

The area under application's mid and under storey has been affected by grazing and weed infestation and as a result is unlikely to be significant habitat for ground dwelling fauna, such as the quenda. The area under application does not contain suitable habitat for Balston's Pygmy Perch, Western Mud Minnow and Black-stripe Minnow, as they are fish species. The Little Bittern prefers habitat that consists of dense reeds and rushes bordering swamps, lakes and watercourses.

Given the above the proposed clearing is not likely to be at variance to this Principle.

Methodology References
-DEC (2011)
-Keighery (1994)
GIS Databases
-SAC Bio Datasets - accessed March 2011

(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 was only one record of a rare flora species (*Meziella trifida*) recorded in the local area (10 km radius). *Meziella trifida* does not occur in either the same vegetation complex or soil types as that under application and is unlikely to be impacted by the proposed clearing.

Given this the proposal is not likely to be at variance to this principle.

Methodology GIS Databases
-SAC Bio Datasets - accessed March 2011
-Soils, Statewide DA 11/99
-Matiske Vegetation (1998)
-Pre European Vegetation (DA 2001)

(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 were no records of threatened ecological communities recorded within the local area (10km radius) of the area under application.

Given this the proposal is not likely to be at variance to this principle.

Methodology GIS Databases
-SAC Bio Datasets - accessed March 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 local area (10 km radius) is highly vegetated with approximately 80% of vegetation remaining. Clearing of

selective Karri trees within a 32 hectare area is unlikely to be at variance to this principle.

	Pre-European (ha)	Current extent (ha)	Remaining (%)	% In reserves DEC Managed Land
IBRA Bioregions*				
Warren	833 981	667 164	80.0	82.5
Shire*				
Manjimup	697 370	589 248	84.5	92.3
Mattiske Vegetation Complex**				
S4	1568	1002	63.9	23.5
COB	21 839	19 611	89.8	81.8
Beard Vegetation Association*				
23	41 062	30 827	75.1	74.7
1144	160 314	127 380	79.5	90.8
Beard Vegetation Association with Bioregion*				
23	37 735	27 966	74.1	72.9
1144	159 668	127 144	79.6	90.8

* (Shepherd, D.P. 2009)

** (Mattiske Consulting 1998)

Methodology References:
 Mattiske Consulting (1998)
 Shepherd (2009)
 GIS Databases:
 - Pre European Vegetation
 - Mattiske Vegetation (01/03/1998)
 - NLWRA, Current Extent of Native Vegetation

(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 likely to be at variance to this Principle**
 There are numerous minor perennial watercourses within the local area (10km radius) with the closest being 50m to the south west of the application area. Given that there is a 50m buffer from the application area to the nearest watercourse it is considered that the proposed clearing is not likely to be at variance to this Principle.

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**
 Mapped soil type WD8 is described as gently undulating drainage divides developed on quartzite: chief soils are sandy acidic yellow mottled soils with leached sands often associated with deep deposits of water-worn quartz sand and grit (Northcote, 1960-68).

Topography ranges from AHD 120 to 75 over the application area indicating a low relief and it is unlikely that erosion will increase due to the proposed clearing as the 32 hectares is to be selectively cleared (i.e. not clear felled).

Given the proposed clearing is for thinning, the proposal is not considered likely to cause appreciable land degradation and therefore is not likely to be at variance to this clearing principle.

Methodology References:
 Northcote et al. (1960-68)
 DEC (2011)
 GIS Databases
 -Topographic Contours, Statewide - DOLA 12/09/02
 -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 is not likely to be at variance to this Principle**
The local area (10km radius) is largely comprised of state forest (Warren and D'entrecasteaux, 2.4km NW and 6km SW respectively). Boorara-Gardner and Greater Hawke Nation Park are located 2.9km SW and 1.6km N, respectively. The selective thinning of 32 hectares is unlikely to impact on local ecological linkages.

Given the above and the distance to the nearby conservation areas the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS Databases
-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**
The application area falls within the Warren River hydrographic catchment and the groundwater salinity is mapped at 500-100 mg/L (medium). The area under application has a low relief and the local area (10 km radius) is highly vegetated. Vegetation management conditions will be placed on the permit to minimise impacts to ground and surface water quality from sedimentation, increased runoff or salinity.

Given the above the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database:
-Hydrography linear,
-Topographic Contours, Statewide - DOLA 12/09/02
-Hydrographic catchments, catchments - DoW 01/06/07
-Groundwater Salinity

(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**
Flooding is unlikely to be an issue given topography on site and clearing within the application area is for the purpose of silviculture which does not result in removal of all vegetation (ie will not be clear felled). Given this the proposed clearing is not likely to be at variance to this Principle.

Methodology GIS database:
-Topographic Contours, Statewide - DOLA 12/09/02

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

Comments

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

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)

A Commercial Producers Licence has been applied for but not yet granted for this proposal.

No public submissions were received regarding this application.

There is an Agreement To Reserve that covers part of the property, but this does not fall within the application area.

The Shire of Manjimup (2011) requested that, in any approval granted by DEC, the following footnote be included: "The applicant is advised to confer with the Shire of Manjimup with respect to the need to comply as relevant with all requirements 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".

Methodology References:
DEC (2005)
Shire of Manjimup (2011)
GIS Databases
-Town Planning Schemes

4. References

- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4252/1, Lots 8892 and 8893 on Plan 201641, Meerup. Site Inspection undertaken 7/04/2011. Department of Environment and Conservation, Western Australia. (DEC Ref: A386699)
- Department of Environment and Conservation (2005) Silvicultural Practice in the Karri Forest. Department of Conservation and Land Management. SFM Guideline No.3
- 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. (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 CPS 4252/1. Received 24/03/2011. DEC Ref: A382272

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)