

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 5124/1

File Number:

2012/004378-1

Duration of Permit: From 14 September 2012 – 14 September 2020

PERMIT HOLDER

Michele Giovanni Bendotti

Jack Bendotti

LAND ON WHICH CLEARING IS TO BE DONE

Lot 5189 on Plan 229254 (EASTBROOK 6260)

Lot 5190 on Plan 229254 (EASTBROOK 6260)

Lot 5108 on Plan 229256 (DIAMOND TREE 6258)

Lot 2 on Diagram 18623 (EASTBROOK 6260)

Lot 1 on Diagram 52829 (EASTBROOK 6260)

Lot 2 on Diagram 52859 (EASTBROOK 6260)

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 36.8 hectares of native vegetation within the combined areas hatched yellow on attached Plan 5124/1.

CONDITIONS

1. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 14 September 2015.

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 5124/1:

- (a) clearing and burning of understorey;
- (b) thinning of Marri (Corymbia calophylla), Karri (Eucalyptus diversicolor), and Jarrah (eucalyptus marginata) trees; and
- (c) 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

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 only move soils in dry 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.

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 condition 6(b) of this Permit, the Permit Holder shall ensure that no taking of identified fauna occurs unless approved by the CEO.

7. 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 14m²/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) The permit holder shall not clear native vegetation within 30 metres of the riparian vegetation of any watercourse or wetland within and/or adjacent to the area crosshatched yellow on Plan 5124/1.
- (f) Within two years of 14 September 2014, 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 7(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.

8. Records must be kept

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

- (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 fauna management pursuant to condition 6 of this Permit:
 - the location of each habitat tree identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the species name of fauna reasonably likely to utilise, or that have been observed utilising, the habitat/habitat tree(s);
 - (iii) the location and date where relocated fauna was released, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees; and report.
- (c) In relation to vegetation management pursuant to condition 7 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

9. 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 8 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 14 June 2019, the Permit Holder must provide to the CEO a written report of record required under condition 8 of this Permit where these records have not already been provided under condition 9(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;

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*.

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.

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).

M Warnock

A/MANAGER

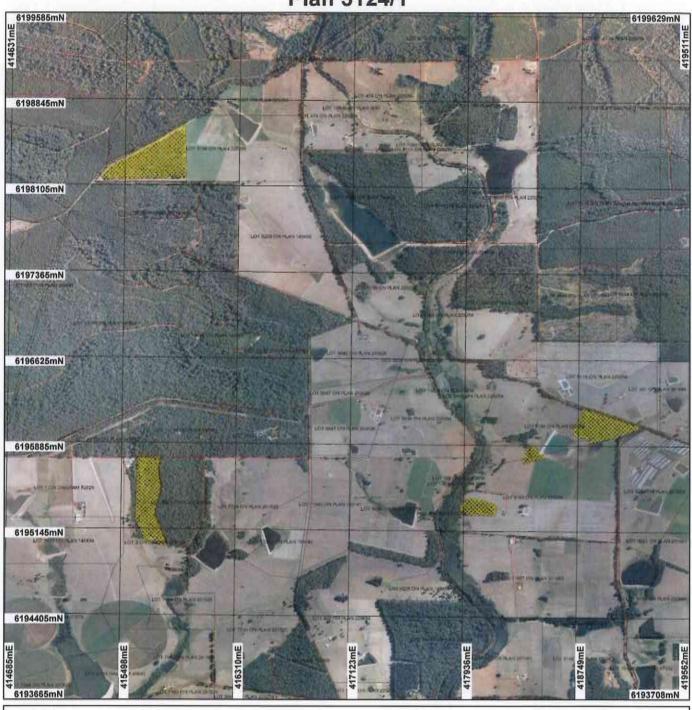
NATIVE VEGETATION CONSERVATION BRANCH

Officer delegated under Section 20 of the Environmental Protection Act 1986

annel

23 August 2012

Plan 5124/1









Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.:

5124/1

Permit type:

type: Area Permit

Proponent details

Proponent's name:

Michele Giovanni Bendotti and Jack Bendotti

1.3. Property details

Property:

LOT 5189 ON PLAN 229254 (Lot No. 5189 LITTLEFAIR EASTBROOK 6260)

LOT 5190 ON PLAN 229254 (EASTBROOK 6260) LOT 5108 ON PLAN 229256 (DIAMOND TREE 6258) LOT 2 ON DIAGRAM 18623 (EASTBROOK 6260)

LOT 1 ON DIAGRAM 52829 (House No. 691 DIAMOND TREE EASTBROOK 6260)

LOT 2 ON DIAGRAM 52859 (House No. 26 DECAMPO EASTBROOK 6260)

Local Government Area:

Colloquial name:

Shire of Manjimup

1.4. Application

Clearing Area (ha)

No. Trees

Method of Clearing Mechanical Removal For the purpose of: Timber Harvesting

1.5. Decision on application

Decision on Permit Application:

Decision Date:

36.8

23 August 2012

2. Site Information

2.1. Existing environment and information

2.1.1. Description of the native vegetation under application

Vegetation Description Mapped Beard vegetation association 3 is described as medium forest; jarrahmarri. (Shepherd 2001 et

Mapped Beard vegetation association 1144 is described as tall forest; karri & marri (Corymbus calophylla)(Shepherd et al 2001).

Mattiske vegetation complex 'Cry' described as tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones (Mattiske 1998).

Mattiske vegetation complex classes 'Crb' described as tall open forest of Corymbia calophylla-Eucalyptus diversicolor on upper slopes with Allocasuarina decussata-Banksia grandis on upper slopes in hyperhumid and perhumid zones (Mattiske 1998).

Clearing Description

Grant

The application is clear native vegetation within a 36.8 hectare area for the purpose of silvicultural thinning.

The proposed clearing area is predominately Karri (E. diversicolor) regrowth forest with Marri (C. Corymbia). Also some mixed Jarrah (eucalyptus marginate) (Bendotti 2012).

Vegetation Condition

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

Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)

Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994) Comment

The condition and the description of the vegetation under application has been determined by aerial imagery (Manjimup 50cm – Orthomosaic Landgate 2007), supporting information supplied by the applicant (Bendotti 2012) and a DEC site visit conducted in August 2012 (DEC 2012).

Mattiske vegetation complex classes 'PM1' described as tall open forest of Eucalyptus diversicolor with mixtures of Corymbia calophylla on valley slopes and low forest of Agonis iuniperina-Banksia seminuda-Callistachys lanceolata on valley floors in the perhumid zone (Mattiske 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 selectively thin within seven areas totalling 36.8 hectares of native vegetation for the purpose of silvicultural thinning.

The proposed clearing area is predominately Karri (Eucalyptus diversicolor) regrowth forest with Marri (Corymbia calophylla) and Jarrah (Eucalyptus marginata) (Bendotti, 2012, DEC 2012). Three of the seven areas have a native understorey with Karri forest species including one area containing a mid-storey of Agonis flexuosa (DEC 2012).

Four priority flora species have been recorded within the local area (10km). The closest record being Xanthoparmelia xanthomelanoides (P2) located approximately 1 km north east of the application on the same soil and vegetation type. The proposed clearing is for selective thinning of Karri, Marri and Jarrah species however ground cover may be damaged as a result of the proposed works. The proposed clearing will not directly remove priority flora from the application area and therefore it is unlikely the conservation status of priority flora recorded within the local area (10km) will be impacted.

Numerous fauna species have been recorded within a 20 km radius. As the proposal is for thinning rather than broad scale clearing, the trees retained after thinning will provide habitat in the future. In addition. The vegetation within the local area (10km) surrounding the application is well represented with approximately 70 percent of its pre-European vegetation remaining. It s considered for the local area to contain similar habitat as the area under application. The applicant has also advised habitat trees will be retained at a rate of two per hectare (Bendotti, 2012).

Given that the local area (10km) has a high level of vegetation remaining and that the application is for silvicultural thinning opposed to broad scale clearing, the proposed clearing is not likely to comprise of a high level of biodiversity, nor is it likely to impact upon the biological diversity of the area. Therefore, the application as proposed is not likely to be at variance to this Principle.

Methodology

References:

- Bendotti (2012)
- Keighery (1994)
- DEC (2012)

GIS Database:

- Manjimup 50cm Orthomosaic Landgate 2007
- SAC Bio Datasets accessed 20 July 2012

(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

Numerous fauna species which are rare or likely to become extinct under the Wildlife Conservation Act 1950 including; Calyptorhynchus banksii subsp. naso (Forest Red-tailed Black-Cockatoo), Calyptorhynchus baudinii (Baudin's Cockatoo), Calyptorhynchus latirostris (Carnaby's Cockatoo), Galaxiella munda (Western Mud Minnow), Pseudocheirus occidentalis (Western Ringtail Possum) and Setonix brachyurus (Quokka) have been recorded within the local area (10km radius) (DEC 2007-).

Given the some areas of the vegetation under application area in a very good (Keighery 1994) condition it is likely the application area will contain a number of habitat trees. During a site inspection undertaken by DEC (2012) a number of habitat trees were identified in some of the clearing areas, however some areas contained no mature trees. Native Forest Management Plan states that approximately 2 habitat trees per hectare will be retained (Bendotti 2012). Fauna management practices will ensure that habitat trees will be identified and inspected for fauna species where located and that a minimum of 2 habitat trees are retained per hectare.

There is a large amount of native vegetation remaining (approximately 70%) 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 area under application is not likely to contain significant habitat or be necessary for the maintenance of native fauna.

The proposed clearing is not likely to be at variance to this principle.

Methodology

References:

- Bendotti (2012)
- DEC (2007-)
- DEC (2012)

GIS Database:

- Manjimup 50cm Orthomosaic - Landgate 2007

(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 record of rare flora Caladenia christineae, has been recorded within the local area (10 km). The closest record being approximately 5.6 km south from the proposed clearing area on different vegetation type but the same soil type.

Caladenia christineae is described as a tuberous, perennial herb found within margins of winter-wet flats, swamps, & freshwater lakes (Western Australian Herbarium 1998-).

The application area consists of Marri and Karri regrowth in very good to degraded (Keighery 1994) condition (DEC 2012) and the Native Forest Management Plan states that no harvesting will occur within 30 metres of creek lines and swamps (Bendotti 2012). Therefore, the proposed clearing is not considered likely to have a significant impact on this species.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

Methodology

References:

- -Bendotti 2012
- -DEC (2012)
- -Keieghry (1994)
- -Western Australian Herbarium 1998-
- -Northcote et al (1960-68)

GIS Database:

- -SAC Bio Datasets accessed 20 July 2012
- -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 at variance to this Principle

There are no Threatened Ecological Communities located within the local area (10 km). The closest TEC is the 'Scott Ironstone Associations' located approximately 53km west of the application area.

Given the distance to the known TEC, it is not considered for the proposed clearing to be at variance to this principle.

Methodology

GIS Database:

-SAC Bio Datasets - accessed 20 July 2012

(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 area under application is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 80 per cent of its Pre European vegetation extent remaining (Government of Western Australia 2011). The application occurs within the Shire of Manjimup which has approximately 84 per cent of its pre- European vegetation extent remaining (Government of Western Australia 2011).

The vegetation under application is mapped as Beard Vegetation Associations 3 and 1144 both of which have approximately 80 per cent of their Pre European extent remaining in the Warren bioregion (Government of Western Australia 2011). The vegetation under application is also mapped as Mattiske Vegetation Complexes CRb, Cry and

PM1 which have approximately 88, 74 and 67 per cent of their Pre European extent remaining respectively (Mattiske and Havel 1980).

Digital imagery (Manjimup 50cm Orthomosaic – Landgate 2007) indicates that the local area (10 km radius) surrounding the area under application retains approximately 70 per cent vegetation cover.

The Beard vegetation association retains more than the threshold level (30%) recommended in the National Objectives Targets for Biodiversity Conservation, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).

Given the above, the vegetation under application is not regarded as significant as a remnant in an extensively cleared landscape.

Therefore, the clearing as proposed is not likely to be at variance to this principle.

	Pre- European (ha)	Current Extent (ha)	Remaining (%)	Extent DEC Managed Lands (%)	in
IBRA Bioregion*					
Warren Region	833,982	664123	80	83	
Shire*					
Shire of Manjimup	287,390	242,922	85	93	
Beard Vegetation Associati	on in Bioregion*				
3	250,262	198,873	80	85	
1144	159,668	126,978	80	91	
Mattiske Vegetation Comp	olex				
Cry	33,764	25,111	74	67	
Crb	52,753	46,468	88	83	
PM1	25,801	17,372	67	59	

^{*}Government of Western Australia (2011)

Methodology

Reference:

- -Government of Western Australia (2011)
- -Commonweath of Australia (2001)
- Mattiske and Havel (1998)

GIS Databases:

- IBRA Australia
- Local Government Authority
- Manjimup 50cm Orthomosaic Landgate 2007
- Pre-European vegetation
- 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 at variance to this Principle

There are numerous minor perennial watercourses intersect the proposed clearing areas.

The Forest Management Plan (Bendotti 2012) advises no harvesting of native vegetation will occur within 30 metres of creek lines and swamps.

However, as the application area contains vegetation growing in association with a watercourse, the proposed clearing is at variance to this Principle.

Watercourse management practices will help mitigate the impact on watercourses within the application area.

^{**}Mattiske and Havel (1998)

Methodology

Reference:

- Bendotti (2012)

GIS Databases:

- Hydrology, 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 is mapped as soil type 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, with conspicuous but relatively smaller areas of red earths. Associated are areas of block laterite, gravelly and bouldery soils on tops of rises and their colluvial slopes; some areas of leached sands (Northcote et al 1960-8)

The application is for silvicultural thinning and the proponent has committed to retaining a minimum basal area of 14 to 16 meters squared per hectare (Bendotti, 2012). 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:

- Northcote et al (1960-8)
- Bendotti (2012)

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

Four of the proposed clearing areas are located adjacent to Donnelly State Forest.

As the clearing proposed is for silvicultural thinning it is unlikely that it will sever any ecological linkages to this conservation area.

Given the close proximity of the application area to the conservation area there is a likelihood of weed and dieback spreading into these areas from the clearing activities. Weed and dieback management practices will help mitigate this risk.

Therefore, the proposed clearing may 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 unassigned Public Drinking Water Source area of 'Warren River Water Reserve' and zone D of the 'Warren River Water Reserve' catchment area covered by the Country Areas Water Supply Act, 1947.

The Department of Water advised that Zone D is a low risk part of the catchment and the timber harvest works be subject to a Forest Management Plan, retention of a basal area of at least 10 metres squared over the area, exclusion of riparian areas and associated buffers and exclusion of grazing by livestock from the area (DOW, 2012). The proponent has submitted a Forest Management Plan (Bendotti, 2012) which meets much of the above criteria, except to that relating to grazing. Vegetation management practices will help mitigate this impact..

A minor watercourse is located within the northern section of the application. The retention of a 30 meter buffer should be sufficient to protect the surface water of this watercourse.

Given the above, the clearing as proposed is not likely to be at variance to this principle.

Methodology

Reference:

Dow (2012)

GIS Databases:

- Hydrology, 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 14 to 16 meters squared per hectare will be maintained (Bendotti, 2012), 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:

-Bendotti (2012)

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

Comments

The Shire of Manjimup has advised that there is no planning or other matters which would affect the proposal (Shire of Manjimup, 2012).

A Commercial Producer's licence under the Wildlife Conservation Act 1950 from DEC is required for the purpose of selling harvested logs.

Application area falls within the Warren River and Tributaries Surface Water Area under the Rights in Water Irrigation Act 1914.

The proposed clearing site lies within Warren River Water Reserve gazetted under the Country Areas Water Supply Act 1947 (CAWS Act) (DoW, 2012). The lot is not currently located in a Public Drink Water Source Area hence no priority source protection has been assigned or is proposed. The application area is located in Zone D a low salinity risk part of the catchment, where DoW (2012) advise timber harvest works be subject to a Forest Management Plan, retention of a basal area of at least 10 metres squared over the area, exclusion of riparian areas and associated buffers and exclusion of grazing by livestock from the area (DOW, 2012).

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, 2004; DEC, 2005).

Methodology

Reference:

DEC (2004)

DEC (2005)

DoW (2012)

Shire of Manjimup (2012)

4. References

Bendotti (2012) Native Forest Management Plan. Western Australia. (DEC Ref;A516362)

DEC (2004) Silvicultural Practice in the Jarrah Forest, Department of Environment and Conservation. SFM Guideline No.1

DEC (2005) Silvicultural Practice in the Karri Forest. Department of Environment and Conservation. SFM Guideline No.3

DEC (2012) Regional Advice Report – Clearing Permit Application CPS 5124/1. Department of Environment and Conservation. Warren Region. Western Australia. (DEC Ref: A536398)

DEC (2007 -) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: http://naturemap.dec.wa.gov.au/. Accessed 20/7/2012

DoW (2012) Advice for Clearing Permit CPS 5124/1 –J & M.G. Bendotti, Lots, 1, 2, 5189 and 5190 Eastbrook and Lot 5108 Diamond Tree. Department of Water. Western Australia. (DEC Ref: A531288)

Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.

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., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

5. Glossary

Term Meaning

BCS Biodiversity Coordination Section of DEC

Department of Conservation and Land Management (now BCS) Department of Agriculture and Food CALM

DAFWA

DEC Department of Environment and Conservation DEP Department of Environmental Protection (now DEC)

DoE Department of Environment

Department of Industry and Resources DoIR

DRF

Declared Rare Flora Environmental Protection Policy **EPP** Geographical Information System GIS Hectare (10,000 square metres) ha Threatened Ecological Community
Water and Rivers Commission (now DEC) TEC WRC