



GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 7146/1
File Number: 2013/001352-1
Duration of Permit: 1 October 2016 to 1 October 2018

PERMIT HOLDER

Shire of Augusta-Margaret River

LAND ON WHICH CLEARING IS TO BE DONE

Lot 5011 on Deposited Plan 192309, Forest Grove

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 2.833 hectares of native vegetation within the area cross hatched yellow on attached Plan 7146/1.

CONDITIONS

1. 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) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

Definitions

The following meanings are given to terms used in this Permit:

dieback means the effect of *Phytophthora* species on native vegetation;

fill means material used to increase the ground level, or fill a hollow;

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;

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Parks and Wildlife Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

James Widenbar
MANAGER
CLEARING REGULATION

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

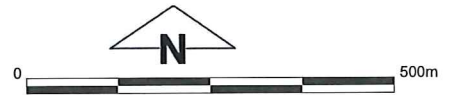
1 September 2016

Plan 7146/1



Legend

-  Localities
-  Roads
-  Imagery
-  Clearing Instruments Activities
-  Local Government Authority



1:9,842
 (Approximate when reproduced at A4)
 GDA 94 (Lat/Long)
 Geocentric Datum of Australia 1994

James Wisniewski
 Date: 1/19/2016

JAMES WISNIEWSKI
 Officer with delegated authority under Section 20 of the Environmental Protection Act 1986



1. Application details

1.1. Permit application details

Permit application No.: 7146/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: Shire of Augusta Margaret River

1.3. Property details

Property: LOT 5011 ON DEPOSITED PLAN 192309, FOREST GROVE
Colloquial name:
Local Government Authority: AUGUSTA-MARGARET RIVER, SHIRE OF
DER Region: Greater Swan
DPaW District: BLACKWOOD
LCDC:
Localities: FOREST GROVE

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
2.833		Mechanical Removal	Waste disposal/management

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 01 September 2016
Reasons for Decision: 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 it has been concluded that the proposed clearing is not likely to be at variance to any of the clearing principles.

The disturbance caused by the proposed clearing will increase the risk of weeds and dieback being introduced into adjacent areas of remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

Through assessment the Delegated Officer has been determined that the clearing is unlikely to have any significant environmental impacts. State policies and other relevant policies have been taken into consideration in the decision to grant a clearing permit.

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
Bead vegetation association 3: Medium forest; jarrah-marri (Shepherd et al., 2001).	The clearing permit application is to clear 2.833 hectares of native vegetation within Lot 5011 on Deposited Plan 192309, Forest Grove, for the purpose of waste facility management.	Good; Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994).	The vegetation description and condition was determined through a Flora and Vegetation Assessment 2016 undertaken within the application area (Siemon, 2016).
Mattiske vegetation complex W1: Tall open forest of <i>Eucalyptus diversicolor-Corymbia calophylla-Allocasuarina decussata-Agonis flexuosa</i> on deeply incised valleys in the hyperhumid zone (Mattiske and Havel, 1998).		To Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994)	The vegetation within the application area is described as jarrah (<i>Eucalyptus marginate</i>), marri (<i>Corymbia calophylla</i>) open forest over a midstorey of <i>bossiaea sp.</i> , <i>acacia sp.</i> and a ground cover predominately of <i>hibbertia sp.</i> and <i>lepidosperma sp.</i> (Siemon, 2016).

Mattiske vegetation complex C1: Open to tall open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*-*Banksia grandis* on lateritic uplands in the hyperhumid 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

Proposed clearing is not likely to be at variance to this Principle

The clearing permit application is to clear 2.833 hectares of native vegetation within Lot 5011 on Deposited Plan 192309, Forest Grove, for the purpose of waste facility management. The vegetation within the application area is in a completely degraded to good (Keighery, 1994) condition (Siemon, 2016).

A total of 24 priority flora species have been recorded in the local area (10 kilometre radius). The closest record is a priority 1 species (*Synaphea* sp. Redgate Road (J. Scott 16)) that has been mapped approximately 700 metres north west from the application area on the same soil and vegetation type. A flora and vegetation assessment over the application area did not identify the presence of priority flora within the application area (Siemon, 2016). Department of Parks and Wildlife (Parks and Wildlife), at an officer level, also consider that the application area is not likely to support any threatened flora or vegetation community (Parks and Wildlife, 2016).

Eight fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area (10 kilometre radius). This includes but not limited to Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) and Baudin's cockatoo (*Calyptorhynchus baudinii*). A flora and vegetation assessment over the application area identified a total of four jarrah and nine marri trees to be suitable for black cockatoo breeding (Siemon, 2016). Two of the trees have conspicuous breeding hollows or marked bark indicating a fauna presence, however the trees are no longer viable as they are currently occupied by feral bees (Siemon, 2016).

No threatened or priority ecological communities have been mapped within the application area.

The disturbance caused by the proposed clearing will increase the risk of weeds and dieback being introduced into adjacent areas of remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

Based on the above, it is considered that the application area is unlikely to comprise a high level of biological diversity.

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

Methodology

References:

Keighery (1994)
Parks and Wildlife (2016)
Siemon (2016)

GIS Datasets:

SAC Bio Datasets - accessed August 2016

(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

Proposed clearing is not likely to be at variance to this Principle

Eight fauna species listed as rare or likely to become extinct under the *Wildlife Conservation Act 1950* have been recorded within the local area (10 kilometre radius). They are Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), numbat (*Myrmecobius fasciatus*), southern brush-tailed phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*), noisy scrub-bird (*Atrichornis clamosus*), chuditch (*Dasyurus geoffroii*) and carter's freshwater mussel (*Westralunio carteri*) (Parks and Wildlife, 2007-).

Carnaby's cockatoo, Baudin's cockatoo and forest red-tailed black breeding habitat is described as trees of species known to support breeding within the range of black cockatoos, which either have a suitable nest hollow or are of a suitable diameter at breast height (DBH) to develop a nest hollow. For most tree species, suitable DBH is 500 millimetres (Commonwealth of Australia, 2012).

A flora and vegetation assessment over the application area identified a total of four jarrah and nine marri trees to have a DBH of 500 millimetres or greater (Siemon, 2016). Department of Parks and Wildlife, at an officer level, noted that the assessment identified two of the trees had conspicuous breeding hollows or marked bark indicating a fauna presence. However, the trees are no longer viable as they are currently occupied by feral bees (Siemon, 2016). Noting this and the highly vegetated local area (10 kilometre radius) it is not considered significant nesting habitat.

The flora and vegetation assessment also noted a splendid wren, red-winged wren, Australian raven, rabbits and feral cats were observed within the application area (Siemon, 2016). No signs or observations of other conservation significant fauna species were present within the application area (Siemon, 2016).

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

Methodology References:
Commonwealth of Australia (2012)
Department of Parks and Wildlife (2007-)
Siemon (2016)

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.

Comments **Proposed clearing To be assessed to this Principle**
One rare flora species has been within the local area (10 kilometre radius). The species was recorded within a different soil and vegetation type as the application area approximately 8.1 kilometres from the application area. A flora and vegetation assessment of the application area did not identify any rare flora species (Siemon, 2016).

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

Methodology References:
Siemon (2016)

GIS Datasets:
SAC Bio Datasets - accessed August 2016

(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 **Proposed clearing is not likely to be at variance to this Principle**
Two threatened ecological communities (TEC's) have been recorded within 10 kilometres of the application area, with the closest TEC mapped approximately 4.2 kilometres away. This TEC is referred to as aquatic root mat community number two of caves of the Leeuwin Naturaliste ridge. A flora and vegetation assessment identified the vegetation within the application area is not a representation of this TEC (Siemon, 2016).

Given the distance of the mapped TECs, it's not likely that the proposed clearing will impact on these communities.

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

Methodology References:
Siemon (2016)

GIS Datasets:
SAC Bio Datasets - accessed August 2016

(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 **Proposed clearing is not likely to be at variance to this Principle**
The application area is located within the Warren Interim Biogeographic Regionalisation of Australia (IBRA) bioregion. This IBRA bioregion has approximately 39 per cent of its pre-European vegetation extent remaining (Government of Western Australia, 2015).

The application area is mapped as Beard vegetation association 3. This vegetation association has approximately 78 per cent of its pre-European extent remaining in the Warren bioregion (Government of Western Australia, 2015). Approximately 87 per cent of this vegetation association is held within conservation estate.

The application area has also been mapped as Matiske vegetation complex 'W1' and 'C1' which retain approximately 54 and 34 per cent respectively of their pre-European extent (Department of Parks and Wildlife, 2015).

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 mapped vegetation types are above this level.

Aerial imagery indicates that the local area (10 kilometre radius) retains approximately 75 per cent vegetation.

The application area does not contain significant habitat for flora and fauna of conservation significance and is not within an extensively cleared landscape, therefore is unlikely to be considered a significant remnant.

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in Parks and Wildlife Managed Lands (%)
IBRA Bioregion*				
Warren	833985	660310	79	86
Shire*				
Augusta-Margaret River, Shire of	211680	131716	62	75
Beard Vegetation Association in Bioregion*				
3	250262	195368	78	87
Mattiske Vegetation Complex **				
W1: 90% Application Area	7296	3914	54	26
C1: 10% Application Area	18981	6540	34	12

Methodology References:
Commonwealth of Australia (2001)
Department of Parks and Wildlife (2015)**
Government of Western Australia (2015)*

GIS Databases:
- Mattiske vegetation complexes
- Pre-European vegetation
- Virtual mosaic

(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 **Proposed clearing is not likely to be at variance to this Principle**
No watercourses are located within the application area. A geomorphic wetland (seasonally inundates) is mapped approximately 280 metres from the application area. The closest major watercourse is 'Chapmean Brook' which is located approximately 750 metres from the application area.

The vegetation within the application area is described as jarrah, marri open forest (Siemon, 2016). This type of vegetation is not indicative of riparian vegetation and considering this the proposed clearing is not likely to be at variance to this principle.

Methodology References:
Siemon (2016)

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 **Proposed clearing is not likely to be at variance to this Principle**
Mapped soil type Tc5 is described as: Dissected plateau at low elevation of gently undulating to low hilly relief and characterized by extensive block laterite and lateritic gravels; some swamps: chief soils on slopes and undulating areas generally are hard acidic yellow mottled soils containing small to very large amounts of ironstone gravels (Northcote et al., 1960-68).

A geomorphic wetland (seasonally inundates) is mapped approximately 280 metres from the application area. The closest major watercourse is 'Chapmean Brook' which is located approximately 750 metres from the application area. Given the lateritic gravels, ironstone gravels and relatively flat topography of the application area the proposed clearing is not likely to cause land degradation in the form of water erosion.

Given the lateritic gravels and ironstone gravels within the application area, it is unlikely the proposed clearing will cause land degradation in the form of wind erosion.

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

Methodology References:
Northcote et al., (1960-68)

GIS Datasets:
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 **Proposed clearing is not at variance to this Principle**
A number of conservation areas have been recorded within the local area (10 kilometre radius), the closest being Forest Grove National Park located approximately 4.4 kilometres south of the application area.

No ecological linkages are expected to be disrupted as a result of the proposed clearing.

Given the distance between the application area and National Park, it is unlikely the proposed clearing will impact on the conservation values of the National Park.

The proposed clearing is not at variance to this principle.

Methodology GIS Datasets:
Parks and Wildlife, 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 **Proposed clearing is not likely to be at variance to this Principle**
No watercourses are located within the application area. A geomorphic wetland (seasonally inundates) is mapped approximately 280 metres from the application area. The closest major watercourse is 'Chapmean Brook' which is located approximately 750 metres from the application area.

Groundwater salinity is mapped between 1000-3000 total dissolved solids (milligrams per litres). Given that the clearing occurs over four different areas, is in a completely degraded to good (Keighery 1994) condition (Siemon, 2016) along with the current land use for the property (waste facility), the proposed clearing is not likely to contribute to the rise of groundwater causing land degradation due to increased salinity at the surface.

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

Methodology References:
Keighery (1994)
Siemon (2016)

GIS Databases:
Hydrology, linear
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 **Proposed clearing is not likely to be at variance to this Principle**
Given the absence of watercourses, the relatively flat profile of the local landscape and the predominance of well drained gravel soils, the proposed clearing 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 GIS Datasets:
Soils, statewide

Planning instruments and other relevant matters.

Comments The application is to enable the closure of a portion of the Davis Road waste disposal facility which is required in order for the applicant to comply with the waste facilities management licenses.

There have been no public submissions received for the application.

There are no Aboriginal Sites of Significance recorded in the application area.

Methodology GIS Database:
Aboriginal Sites of Significance

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2012) EPBC Act referral guidelines for three threatened black cockatoo species. Commonwealth of Australia, Canberra.
- Department of Parks and Wildlife (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed August 2016
- Department of Parks and Wildlife (2016) Advice received for Clearing Permit Application CPS 7146/1. Received on 29 August 2016 (DER Ref: A1157265).
- Department of Parks and Wildlife (2015) 2015 South West Forest and Swan Coastal Plain Vegetation Complex Statistics: a report prepared for the Department of Environment Regulation. Current as of March 2015. Department of Parks and Wildlife, Perth, Western Australia.
- Government of Western Australia (2015). 2015 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of June 2015. WA Department of Parks and Wildlife, 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, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.
- Siemon (2016) Flora and Vegetation Assessment Sussex Location 5011, Reserve 43808. Shire of Augusta-Margaret River Davis Road Waste Management Facility Closure Management Plan. Information within Clearing Permit Application CPS 7146/1 – Shire of Augusta-Margaret River (DER Ref:A1121178).