



## CLEARING PERMIT

*Granted under section 51E of the Environmental Protection Act 1986*

### PERMIT DETAILS

Area Permit Number: 6054/1  
File Number: DER2014/002448-1  
Duration of Permit: 7 March 2015 to 7 March 2017

### PERMIT HOLDER

City of Busselton

### LAND ON WHICH CLEARING IS TO BE DONE

Vasse-Yallingup Siding Road reserve (PIN 11467131 and PIN 11467130), Quindalup

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.17 hectares of native vegetation within the area shaded yellow on attached Plan 6054/1.

### 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;
- (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.

A handwritten signature in black ink, appearing to read "M Warnock", written over a horizontal line.

M Warnock  
SENIOR MANAGER  
CLEARING REGULATION

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

5 February 2015

# Plan 6054/1



## LEGEND

- Road Centrelines
- Cadastre for labelling
- Local Government Authorities
- Clearing Instruments\_1**
- Areas Approved to Clear

Busselton Townsite 20cm  
Orthomosaic - Landgate  
2008



Scale 1:7000  
(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.

*M Warnock* Date 5/2/15

M Warnock  
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



Government of Western Australia  
Department of Environment Regulation

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



# Clearing Permit Decision Report

Government of Western Australia  
Department of Environment Regulation

## 1. Application details

### 1.1. Permit application details

Permit application No.: 6054/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: City of Busselton

### 1.3. Property details

Property: ROAD RESERVE (QUINDALUP 6281)

Local Government Area: City of Busselton

Colloquial name: Vasse-Yallingup Siding Road reserve

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.17		Mechanical Removal	Railway construction or maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 5 February 2015

## 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
Mapped Beard Vegetation Association 1136 is described as Medium woodland; marri with some jarrah, wandoo, river gum and casuarina (Shepherd et al, 2001).	The clearing of 0.17 hectares of native vegetation within Vasse-Yallingup Siding Road reserve is for the purpose of improving sightlines.	Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994)	The condition and description of the vegetation was determined by a Level 2 Flora/Vegetation Assessment undertaken by Ecosystem Solutions Pty Ltd (2014).
Mapped Mattiske Vegetation Association AB is described as Woodland and open forest of <i>Corymbia calophylla</i> on flats and low rises in the humid zone (Mattiske and Havel, 1998).		To	
Mapped Mattiske Vegetation Association Aw is described as a mosaic of tall shrubland of <i>Melaleuca viminea</i> and woodland of <i>Eucalyptus rudis</i> - <i>Melaleuca raphiophylla</i> with occasional <i>Corymbia calophylla</i> on broad depression (Mattiske and Havel, 1998).		Completely Degraded: No longer intact; completely/almost completely without native species (Keighery, 1994)	

### 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 not likely to be at variance to this Principle**

The proposed clearing consists of 0.17 hectares of native vegetation within the Vasse-Yallingup Siding Road reserve, Quindalup and Anniebrook, for the purpose of improving sightlines.

A Level 2 Flora/Vegetation Assessment undertaken by Ecosystem Solutions Pty Ltd (2014) has identified the vegetation under application ranges from completely degraded to good (Keighery, 1994) condition. The western portion of the proposed clearing is predominately narrow roadside vegetation in a degraded condition, and the eastern portion is intact vegetation in a good (Keighery, 1994) condition.

The closest priority ecological community (PEC) is located approximately 1.5 kilometres south west of the application area and is described as 'Swan Coastal Plain Paluscope' (Priority 1). The vegetation under application is not likely to be a representative of this ecological community given that these wetlands are wet all year round, and the area under application is only seasonally subject to inundation due to a non-perennial watercourse (DEC, 2013).

No priority or rare flora taxa were observed during a Level 2 Flora/Vegetation Assessment undertaken by Ecosystem Solutions Pty Ltd (2014).

Two threatened ecological communities (TEC) have been recorded within the rail reserve vegetation, namely the 'Southern *Corymbia calophylla* woodlands on heavy soils (FCT01b)' and the 'Dense shrublands on clay flats (FCT09)'. A Level 2 Flora/Vegetation Assessment conducted by Ecosystem Solutions Pty Ltd (2014) determined that the vegetation under application is not consistent with the taxa or habitat elements of these TECs.

A number of fauna species listed as rare or likely to become extinct under the Wildlife Conservation Act 1950 have been recorded within a 10 kilometre radius including: Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), Chuditch (*Dasyurus geoffroii*), Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) and Western Ringtail Possum (*Pseudocheirus occidentalis*). The vegetation under application may provide suitable foraging habitat for black cockatoo's and habitat for Western Ringtail Possums. The results from a Level 1 Fauna Assessment undertaken by Ecosystem Solutions Pty Ltd (2014) confirm that the application area provides suitable habitat for Western Ringtail Possums. However, no dreys, scats or possums were identified within the application area, therefore the vegetation proposed for clearing is not likely to provide significant habitat for this species.

The disturbance caused by the proposed clearing, will increase the risk of weeds and dieback spreading into adjoining remnant vegetation. Weed and dieback management practices will assist in mitigating this risk.

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

##### Methodology

##### References:

DEC (2013)  
Parks and Wildlife (2014)

##### GIS Databases:

- SAC Bio Datasets (Accessed January 2015)  
- DPaW Tenure

#### (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 may be at variance to this Principle**

Several 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) including: Baudin's cockatoo (*Calyptorhynchus baudinii*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), Chuditch (*Dasyurus geoffroii*), Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) and Western Ringtail Possum (*Pseudocheirus occidentalis*).

Baudin's cockatoo and Carnaby's cockatoo have a preference for foraging that includes Jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia* sp. *Hakea* sp. and *Grevillea* sp (Commonwealth of Australia, 2012). The western portion of the application area consists of woodland and open forest of *Corymbia calophylla* on flats and low rises in the humid zone, therefore providing preferable foraging habitat for this species (Mattiske and Havel, 1998).

A Level 1 Fauna Assessment undertaken by Ecosystem Solutions Pty Ltd (2014) observed three areas with extensive signs of Baudin's cockatoo feeding activity, indicating that the area is used as a food source through part of its home range. However, given the small size of the application area, it is unlikely that the area under application would provide significant foraging habitat for these species. An assessment of habitat for these

species undertaken by Ecosystem Solutions Pty Ltd (2014) observed two trees within the application area that may have the potential to develop hollows for black cockatoos. However, no hollows were identified during the survey, therefore the proposed clearing area does not provide significant breeding habitat for these species.

The Southern Brush-tailed Phascogale's (Phascogale tapoatafa subsp. Tapoatafa) preferred habitat is dry sclerophyll forests and open woodlands that contain hollow-bearing trees. Given the vegetation association of the application area, the vegetation proposed to be cleared may provide suitable habitat for this species (Parks and Wildlife, 2012). However, no hollows suitable for breeding were identified during the Level 1 Fauna Assessment conducted by Ecosystem Solutions Pty Ltd (2014), therefore the application area does not provide significant breeding habitat for this species.

The proposed clearing is mapped within a confirmed Western Ringtail Possum habitat area (Parks and Wildlife, 2014b). The Western Ringtail Possum is usually associated with stands of myrtaceous trees growing near swamps, water courses or floodplains (Parks and Wildlife, 2014a). Four dreys and one possum were observed within close proximity to the western portion of the application area during the Level 1 Fauna Assessment undertaken by Ecosystem Solutions Pty Ltd (2014). The applicant has modified the application area to ensure that the dreys identified during the survey will not be impacted during the proposed works.

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

- Methodology**    References:
- Commonwealth of Australia (2012)
  - Matiske and Havel (1998)
  - Parks and Wildlife (2012)
  - Parks and Wildlife (2014a)
  - Ecosystem Solutions Pty Ltd (2014)

**(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 is mapped 150 metres east of the proposed clearing area. This species is known from eight populations and 44 mature individuals and has a range of approximately 12 kilometres north-south and six kilometres east-west (Parks and Wildlife, 2014b). This species is likely to have become rare due to habitat clearance. Given the restricted range and threats to this species, the conservation of all known populations of this species is considered to be significant (Parks and Wildlife, 2014b).

The eastern portion of the application area may provide suitable habitat for this species as the vegetation is consistent to where this species was recorded. However, a flora survey undertaken by Ecosystem Solutions Pty Ltd (2014) did not observe any rare flora species within the application area. Therefore, it is not likely this rare flora species would occur within the area under application.

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

- Methodology**    References:
- Parks and Wildlife (2014b)
  - Ecosystem Solutions Pty Ltd (2014)

- GIS Databases:
- SAC Bio Datasets (Accessed January 2015)

**(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**

Floristic surveys have recorded the presence of two threatened communities (TEC) within the rail reserve, namely the 'Southern Corymbia calophylla woodlands on heavy soils' and the 'Dense shrublands on clay flats'. The Department of Parks and Wildlife (2014a) has advised that although the extent of these TECs have not yet been mapped outside of these surveyed areas, it is highly likely that the eastern portion of the application area may contain vegetation consistent with the 'Southern Corymbia calophylla woodlands on heavy soils' community.

A Level 2 Flora/Vegetation Assessment conducted by Ecosystem Solutions Pty Ltd (2014) determined that the vegetation under application is not consistent with the taxa or habitat elements of these TECs.

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

- Methodology**    References:
- Parks and Wildlife (2014a)
  - Ecosystem Solutions Pty Ltd (2014)

GIS Databases:  
 -SAC Bio Datasets (Accessed January 2015)

**(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 may be at variance to this Principle**

The area under application is located within the Swan Coastal Plain 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 2013).

The vegetation under application is mapped as Beard Vegetation Association 1136, Mattiske Vegetation Complexes 'Abba (AB)' and 'Abba (Aw)' which have approximately 7, 8, and 5 per cent of their Pre-European extent remaining in the Swan Coastal Plain bioregion respectively (Government of Western Australia 2013).

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).

Digital imagery indicates that the local area (10 kilometre radius) surrounding the area under application retains approximately 20 per cent vegetation cover.

Additional information provided by the applicant in the form of a flora survey conducted by Ecosystem Solutions Pty Ltd (2014), has identified that the vegetation under application provides suitable habitat for Western Ringtail Possums. However, it is not considered to be a significant habitat given the small size of the proposal and that no dreys will be impacted during the proposed clearing. Therefore, the vegetation proposed to be cleared is not considered to be a significant remnant of native vegetation. The local area has, however, been extensively cleared and therefore the proposed clearing may be at variance to this principle.

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

	Pre-European (ha)	Current Extent Remaining (ha)	Remaining (%)	Extent in DPaW Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1,501,221	586,975	39	36
Shire*				
City of Busselton	146,478	60,766	41	68
Beard Vegetation Association in Bioregion*				
1136	48,118	3,555	7	3
Mattiske Vegetation Complex ***				
AB	8,007	657	8	0
Aw	9,094	478	5	0

**Methodology** References:  
 - Commonwealth of Australia, 2001  
 - Government of Western Australia, 2013

GIS Databases:  
 - NLWRA, Current Extent of Native Vegetation  
 - Pre-European 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**

A minor perennial watercourse runs through the eastern portion of the application area. A Multiple Use Wetland is mapped within the area under application.

The eastern portion of the application area is mapped as Mattiske vegetation complex 'Abba Aw' and is described as a mosaic of tall shrubland of Melaleuca viminea and woodland of Eucalyptus rudis-Melaleuca raphiophylla with occasional Corymbia calophylla on broad depression. Eucalyptus rudis and Melaleuca raphiophylla are common wetland plant species that typically grow in association with watercourses and

wetlands (Water and Rivers Commission, 2000).

As the application will impact on riparian vegetation the proposed clearing is at variance to this principle. However, given the small and linear nature of the proposed clearing, impacts upon the environmental values of the watercourse area expected to be minimal.

**Methodology** References:  
- Water and Rivers Commission, 2000

GIS Databases:  
- Geomorphic Wetlands, (Mgt Categories), Swan Coastal Plain  
- 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 application area is mapped within soil type MT7 which is described as strongly undulating lands often with granite or outcrop on higher slopes: a range of loamy mottled yellow or grey earths occur. Moderately deep loamy duplex soils occur on lower slopes, with shallow sands common on higher slopes and adjacent to rock outcrop. Minor associated soils include friable yellow earths and loamy red earths which occur on small lateritic mesa remnants (Northcote et al. 1960 - 1968).

Wind and water erosion is unlikely given the small and linear nature of the application area (0.17 hectares), soil type and flat topography of the land at 10 metres above sea level.

Ground water salinity levels in the local area have been mapped as marginal (Water and River Commission, 2000) at 500 - 1000 milligrams per litre total dissolved solids.

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

**Methodology** References:  
- Northcote et al. 1960 - 1968

GIS Databases:  
- Soils, statewide  
- Topographic contours

**(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**

There are four conservation reserves mapped within the local area (10 kilometre radius), the closest being the Haag C Class Nature Reserve located approximately 5.4 kilometres south west of the application area. Given the distance from the application area, it is unlikely the clearing will impact upon the conservation values of this reserve.

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

**Methodology** GIS Databases:  
- 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** **Proposal is not likely to be at variance to this Principle**

A minor perennial watercourse runs through the eastern portion of the application area. A Multiple Use Wetland is mapped within the area under application.

The proposed clearing may cause short-term sedimentation of surface water to the watercourse, however this impact is likely to be minimal.

Groundwater salinity mapped within the application area is between 500 and 1000 milligrams per litre (marginal). Given this low salinity level it is not likely that the proposed clearing will lead to a perceptible rise in the water table or an increase in groundwater salinity levels.

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

**Methodology** GIS Databases:

- Hydrology, linear
- Salinity 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**

The removal of remnant vegetation is not expected to contribute to flooding given the small size of the proposed clearing.

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

**Methodology** GIS Datasets:  
- Hydrography linear

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

**Comments**

The application is to clear 0.17 hectares of native vegetation for the purpose of improving sightlines within a road reserve.

No Aboriginal Sites of Significance have been mapped over the application area.

No submissions from the public have been received for the proposed clearing.

**Methodology** GIS Databases:  
- 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, Canberra.
- DEC (2012) Brush-tailed Phascogale *Phascogale tapoatafa* (Meyer, 1793). Department of Environment and Conservation, Perth, Western Australia.
- DEC (2013) Priority Ecological Communities for Western Australia Version 18. Species and Communities Branch. Department of Environment and Conservation, Perth, Western Australia.
- DPaW (2014) Regional advice for Clearing Permit CPS 6054/1. Department of Parks and Wildlife. Western Australia. DER Ref: A754063
- DPaW (2014a). Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan. Department of Parks and Wildlife, Perth, Western Australia.
- DPaW (2014b) Species and Communities Advice for Clearing Permit CPS 6054/1. Department of Parks and Wildlife. Western Australia. DER Ref: A754077
- Ecosystem Solutions Pty Ltd (2014) City of Busselton Road Widening. Level 1 Fauna and Level 2 Flora/Vegetation Assessment. Dunsborough, Western Australia.
- Government of Western Australia (2013) 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. 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.
- Waters and Rivers Commission (2000). Wetland vegetation. Waters and Rivers Commission, Perth