



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 5381/1
<b>Permit Holder:</b>	Kay Fry
<b>Duration of Permit:</b>	22 February 2013 – 22 February 2018

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

### PART I – CLEARING AUTHORISED

**1. Purpose for which clearing may be done**

Clearing for the purpose of constructing an access road, firebreak and sightlines.

**2. Land on which clearing is to be done**

Lot 4 on Plan 9661, Brunswick.

Sandalwood Road reserve, Brunswick (PIN 1379184 and 1379182).

**3. Area of Clearing**

The Permit Holder must not clear more than 1.85 hectares of native vegetation within the area shaded yellow on attached Plan 5381/1.

**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. 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:

- avoid the clearing of native vegetation;
- minimise the amount of native vegetation to be cleared; and
- reduce the impact of clearing on any environmental value.

M Warnock  
A/MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

31 January 2013


# Plan 5381/1

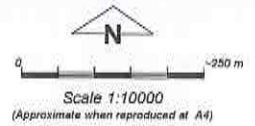


## LEGEND

Local Government Authorities  
 Cadastre  
 Road Centrelines  
 Bunbury 50cm Orthomosaic - Landgate 2008

### Clearing Instruments

 Areas Approved to Clear



*M Warnock* Date 31/1/13  
 M Warnock

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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## 1. Application details

### 1.1. Permit application details

Permit application No.: 5381/1  
Permit type: Purpose Permit

### 1.2. Proponent details

Proponent's name: Kay Fry

### 1.3. Property details

Property: LOT 4 ON PLAN 9661 (BRUNSWICK 6224)  
ROAD RESERVE (BRUNSWICK 6224)

Local Government Area: Shire of Harvey

Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
1.85		Mechanical Removal	Hazard reduction or fire control Road construction or maintenance

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 31 January 2013

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association: 3 - Medium forest; Jarrah - Marri (Shepherd et al. 2001).	The application is to clear up to 1.85 hectares of native vegetation within Lot 4 on Plan 9661 and Sandalwood Road reserve, Brunswick for the purpose of constructing an access road, firebreak and sightlines.	Degraded: Structure severely disturbed; regeneration to good condition requires intensive management (Keighery 1994)	Vegetation description and condition were determined through aerial imagery and site inspection (DEC 2013).
Mattiske Vegetation Complex: Dwellingup (D1) - Open forest of Eucalyptus marginata subsp. marginata-Corymbia calophylla on lateritic uplands in mainly humid and subhumid zones (Mattiske and Havel 1998).	The vegetation under application consists of an overstorey of Eucalyptus marginata and Corymbia calophylla, with very sparse understorey of Banksia grandis, Xanthorrhoea preissii and Gastrolobium sp. (DEC 2013).		

## 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 clear up to 1.85 hectares of native vegetation within Lot 4 on Plan 9661 and Sandalwood Road reserve, Brunswick for the purpose of constructing an access road, firebreak and sightlines.

The vegetation under application is in degraded (Keighery 1994) condition. The vegetation under application consists of an overstorey of Eucalyptus marginata and Corymbia calophylla, with very sparse understorey of Banksia grandis, Xanthorrhoea preissii and Gastrolobium sp. (DEC 2013).

There are several records of priority flora within the local area (10 kilometre radius). The closest record occurring on the same soil and vegetation type as the application area is a priority one species, which is located approximately 2.7 kilometres from the application area. Given the condition of the vegetation, this species is unlikely to occur within the application area.

The application area is located within a South West Regional Ecological Linkage (SWREL) running south-west to north-east (Molly et al. 2009). This linkage provides an important corridor for the dispersal of native fauna as well as consisting of significant breeding and foraging habitat for local fauna. Given the application area is narrow in shape, the proposed clearing is unlikely to prevent fauna from moving between areas of remaining vegetation.

One potential habitat tree was identified within the application area during a Department of Environment and Conservation site inspection (DEC 2013). Forest Red-tailed Black-Cockatoos were seen adjacent to the application area (DEC 2013).

There are no priority ecological communities within the local area (10 kilometre radius).

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

**Methodology** References:  
DEC 2013  
Keighery 1994  
Molly et al. 2009  
GIS Databases:  
- Pre European Vegetation  
- SAC Biodatabases  
- Soils, Statewide

**(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**

There are numerous fauna species of conservation significance mapped within the local area (10 kilometre radius). These include the Carnaby's Cockatoo (*Calyptorhynchus latirostris*; rare or likely to become extinct, Wildlife Conservation Act 1950; endangered, Environment Protection and Biodiversity Conservation Act 1999), Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii* subsp. *Naso*; rare or likely to become extinct, Wildlife Conservation Act 1950; vulnerable, Environment Protection and Biodiversity Conservation Act 1999) and Baudin's Cockatoo (*Calyptorhynchus baudinii*; rare or likely to become extinct, Wildlife Conservation Act 1950; vulnerable, Environment Protection and Biodiversity Conservation Act 1999).

One potential habitat tree was identified within the application area during a Department of Environment and Conservation site inspection (DEC 2013). Black cockatoos nest in hollows of large eucalyptus trees with a minimum diameter, measured at 1.5 metres from the base of the tree, of 500 millimetres (Commonwealth of Australia 2012). Forest Red-tailed Black-Cockatoos were seen adjacent to the application area (DEC 2013).

The vegetation under application may provide habitat for the Southern Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *tapoatafa*) as this species has a preference for dry sclerophyll forests and open woodlands containing hollow bearing trees with sparse groundcover (DEC 2006).

Given the degraded condition of the vegetation and lack of understorey, it is unlikely that the application area contains suitable habitat for Quokka (*Setonix brachyurus*), Numbat (*Myrmecobius fasciatus*) or Woylie (*Bettongia penicillata* subsp. *ogilbyi*). There is no vegetation under application suitable for the Western Ringtail Possum (*Pseudocheirus occidentalis*).

The application area is located within a South West Regional Ecological Linkage (SWREL) running south-west to north-east (Molly et al. 2009). This linkage provides an important corridor for the dispersal of native fauna as well as consisting of significant breeding and foraging habitat for local fauna. Given the application area is narrow in shape, the proposed clearing is unlikely to prevent fauna from moving between areas of remaining vegetation.

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

**Methodology** References:  
Commonwealth of Australia 2012  
DEC 2006  
DEC 2007-  
DEC 2013  
Molly et al. 2009

**(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 are no rare flora species recorded within the local area (10 kilometre radius). Therefore, the application area is unlikely to be at variance to this principle.

**Methodology** GIS Databases:  
- SAC Biodatasets

**(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.**

**Comments Proposal is not likely to be at variance to this Principle**

There are no threatened ecological communities recorded within the local area (10 kilometre radius). Therefore, the application area is unlikely to be at variance to this principle.

**Methodology** GIS Databases:  
- SAC Biodatasets

**(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**

Aerial photography indicates the local area (10 kilometre radius) is approximately 40 per cent vegetated.

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 vegetation associations mapped over the application area retain over 30 per cent of their pre-European extents within the Jarrah Forest IBRA Bioregion (Government of Western Australia 2011).

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

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Jarrah Forest	4 506 657	2 473 560	55	68
Shire*				
Shire of Harvey	170 788	89 075	52	75
Beard Vegetation Association in Bioregion*				
3	2 390 592	1 641 272	69	80

Mattiske Vegetation Complex \*\*

D1	208 273	186 732	90	85
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\* Government of Western Australia 2011

\*\* Mattiske and Havel 1998

**Methodology** References:  
Commonwealth of Australia 2001  
Government of Western Australia 2011  
Mattiske and Havel 1998  
GIS Databases:  
- Bunbury 50cm Orthomosaic - Landgate 2008  
- Mattiske Vegetation Complexes  
- NLWRA, Current extent of Native Vegetation  
- Pre-European Vegetation  
- SAC Biodatasets

**(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 watercourses and wetlands within the local area (10 kilometre radius). The closest of these is a minor, perennial watercourse which is located approximately 100 metres from the application area.

A DEC site inspection (2013) did not identify any vegetation growing in, or in association with, a watercourse or wetland.

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

**Methodology** References:  
DEC 2013  
GIS Databases:  
- ANCA wetlands  
- Geomorphic wetlands  
- Hydrography, Linear  
- RAMSAR wetlands

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments Proposal is not likely to be at variance to this Principle**

The soil within the application area is mapped as JZ1, which Northcote et al. (1960 - 1968) describes as dissected plateau having a strongly undulating relief, and with some moderately incised valleys. It is characterized by lateritic gravels and block laterite. The chief soils are ironstone gravels with sandy and earthy matrices.

Given the small, linear area under application it is unlikely that the proposed clearing will cause appreciable land degradation and the proposed clearing is therefore unlikely to be at variance to this principle.

**Methodology** References:  
Northcote et al. 1960-1968  
GIS Databases:  
- Soils, Statewide  
- Topographic Contours, Statewide  
- Mean Annual Rainfall

**(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 closest Department of Environment and Conservation managed land is the Harris River State Forest, which is located approximately 2.7 kilometres from the application area. Given the distance to this State Forest, the proposed clearing is not likely to impact on its environmental values.

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

**Methodology** GIS Databases:  
- DEC Tenure  
- Bunbury 50cm Orthomosaic - Landgate 2008

**(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**

There are no watercourses or wetlands within the application area and therefore the proposed clearing is unlikely to cause deterioration in the quality of surface water.

The groundwater salinity within the application area is 500-1000 milligrams per litre of Total Dissolved Solids. This level of groundwater salinity is considered to be marginal.

The application area does not occur within a Country Area Water Supply Act 1914. The application area occurs approximately 75 metres north of a Public Drinking Water Source Area, the Brunswick Catchment Area.

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

**Methodology** GIS Databases:  
- CAWSA Areas  
- Geomorphic Wetlands, Swan Coastal Plain  
- Groundwater Salinity, Statewide  
- Hydrography, Linear  
- PDWSA

**(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 small, linear area under application and the existing road infrastructure to manage drainage the proposed clearing is unlikely to cause or exacerbate flooding. Therefore is not likely to be at variance to this principle.

**Methodology** GIS Databases:  
- Bunbury 50cm Orthomosaic - Landgate 2008  
- Soils, Statewide

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

### Comments

The proposed works under this application is to service an approved subdivision on Lot 4 on Plan 9661, Brunswick. The clearing is to construct a battleaxe driveway and adjacent firebreak and to improve sightlines when exiting the proposed driveway, to meet the Shire of Harvey subdivision requirements (Kay Fry 2012).

The application area is located within the Collie River Irrigation District, a surface water area covered by the Rights in Water and Irrigation Act 1914.

No public submissions have been received in response to this application.

### Methodology

References:  
Kay Fry 2012  
GIS Databases:  
- RIWI Act area

## 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 (2006) Fauna Notes: Phascogale tapoatafa, Southern Brush-tailed Phascogale. Department of Environment and Conservation, Western Australia.
- DEC (2007 - ) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment and Conservation. URL: <http://naturemap.dec.wa.gov.au/>. Accessed 18/12/2012.
- DEC (2013) Site Inspection Report for Clearing Permit Application CPS 5381/1, Lot 4 on Plan 9661 and Sandalwood Road reserve, Brunswick. Site inspection undertaken 11/01/2013. Department of Environment and Conservation, Western Australia (DEC REF: A588722).
- Government of Western Australia (2011); 2011 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). WA Department of Environment and Conservation, Perth.
- Kay Fry (2012) Clearing Permit Application CPS 5381/1 - Lot 4 on Plan 9661 and Sandalwood Road reserve, Brunswick. DEC REF: A577948.
- 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.
- Molly, S, Wood, J, Hall, S, Wallrodt, S and Whisson G (2009) South Western Regional Ecological Linkages Technical report, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- 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
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)