



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: 8096/1

File Number: 2018/000938

Duration of Permit: From 29 November 2018 to 29 November 2020

PERMIT HOLDER

Shire of Serpentine-Jarrahdale

LAND ON WHICH CLEARING IS TO BE DONE

Kingsbury Drive Road Reserve (PIN: 1217000), Keysbrook

Kingsbury Drive Road Reserve (PIN: 11549375), Serpentine

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.21 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8096/1.

CONDITIONS

1. Avoid, minimise and reduce the impacts and extent of 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.

2. 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.

3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit, in relation to the clearing of native vegetation authorised under this Permit:

- (a) 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 or decimal degrees;
- (b) the date that the area was cleared;
- (c) the size of the area cleared (in hectares);
- (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 2 of this Permit.

4. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 3 of this Permit, when requested by the *CEO*.

DEFINITIONS

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

CEO: means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

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 Biodiversity, Conservation and Attractions Regional Weed Rankings Summary, regardless of ranking; or
- (c) not indigenous to the area concerned.



Samara Rogers
MANAGER
NATIVE VEGETATION REGULATION

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

31 October 2018

Plan 8096/1

116°1'12"

116°1'48"

116°2'24"

736 ON PLAN 143588 LOT 500 ON PLAN 53498 LOT 737 ON PLAN 255372
 LOT 2273 ON PLAN 405518

LOT 1166 ON PLAN 253770

Scarp Rd

LOT 3 ON PLAN 411024

Kingsbury Dr

SHIRE OF SERPENTINE-JARRAHDALE

Kingsbury Dr

Kingsbury Dr

Scarp Rd

Scarp Rd

Scarp Rd

LOT 66 ON DIAGRAM 55099

LOT 1 ON DIAGRAM 55099

-32°24'36"

-32°24'36"

-32°25'12"

-32°25'12"

116°1'12"

116°1'48"

116°2'24"

Legend

-  CPS areas approved to clear
-  Cadastre
-  Local Government Authorities
-  Road Centrelines

Image



MGA 94
 Geocentric Datum of Australia 1994

Samara Rogers

2018.10.31 10:04:07

+08'00'

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



**GOVERNMENT OF
 WESTERN AUSTRALIA**



1. Application details

1.1. Permit application details

Permit application No.: 8096/1
Permit type: Area Permit

1.2. Proponent details

Applicant's name: SHIRE OF SERPENTINE JARRAHDALÉ
Application received: 8 June 2018

1.3. Property details

Property: ROAD RESERVE - 1217000, KEYSBROOK
ROAD RESERVE - 11549375, SERPENTINE
Local Government Authority: SHIRE OF SERPENTINE-JARRAHDALÉ
Localities: SERPENTINE, KEYSBROOK

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.21	0	Mechanical Removal	Road construction or upgrades

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 31 October 2018
Reasons for Decision: The clearing permit application has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986* (EP Act). It has been concluded that the proposed clearing is at variance to principle (f), may be at variance to principle (h) and is not likely to be at variance to the remaining clearing principles.

It has been determined that the proposed clearing may impact on environmental values in nearby conservation areas. A weed control and dieback condition will help mitigate these impacts.

In granting a clearing permit subject to avoid and minimise and weed and dieback conditions, the Delegated Officer determined that the proposed clearing is unlikely to have any significant environmental impacts.

2. Background

Clearing Description The application is to clear 0.21 hectares of native vegetation within Kingsbury Drive road reserve (PINs 1217000 and 11549375), Keysbrook and Serpentine for the purpose of upgrading and widening of Kingsbury Drive (Figure 1).

Vegetation Description: The application area is mapped as the following South west Forests vegetation complexes:
Yg1: Yarragil 1 - Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* on slopes with mixtures of *Eucalyptus patens* and *Eucalyptus megacarpa* on the valley floors in humid and subhumid zones;

My1: Myrray 1 - Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla*-*Eucalyptus patens* on valley slopes to woodland of *Eucalyptus rudis*-*Melaleuca raphiophylla* on the valley floors in humid and subhumid zones; and

D1: Dwellingup 1 - Open forest of *Eucalyptus marginata* subsp. *marginata*-*Corymbia calophylla* on lateritic uplands in mainly humid and subhumid zones (Government of Western Australia, 2018).

A site inspection by Department of Water and Environmental Regulation (DWER) officers found that the application area contains one vegetation community - *Eucalyptus marginata* and *Corymbia calophylla* forest with emergent *Allocasuarina fraseriana* over mixed shrubs and herbs (DWER, 2018)

Vegetation Condition: Very good; Vegetation structure altered, obvious signs of disturbance (Keighery, 1994) to Excellent; Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species (Keighery, 1994).

The vegetation condition of the application area was determined through a site inspection undertaken by DWER officers (DWER, 2018a).

Soil and Landform Type:

Soils within the application area are mapped as: Yarragil Subsystem (Mapping unit: 255DpYG) - Shallow, narrow, upper valleys of the deeply dissected Murray, Bindoon and Helena units. Alluvial, clay and loam soils, moderately well drained, often gravelly, with some sands and loams. Salt prone. Woodland of *E. wandoo*, *E. accedens*; and

Dwellingup 2 Phase (Mapping unit: 255DpDW2) - Very gently to gently undulating terrain (<10%) with well drained, shallow to moderately deep gravelly brownish sands, pale brown sands and earthy sands overlying lateritic duricrust (DPIRD, 2017).

Comments:

The local area referred to in the assessment of this application is defined as a 10 kilometre radius measured from the perimeter of the application area. The local area contains approximately 60 per cent native vegetation cover.

Figure 1: Application area

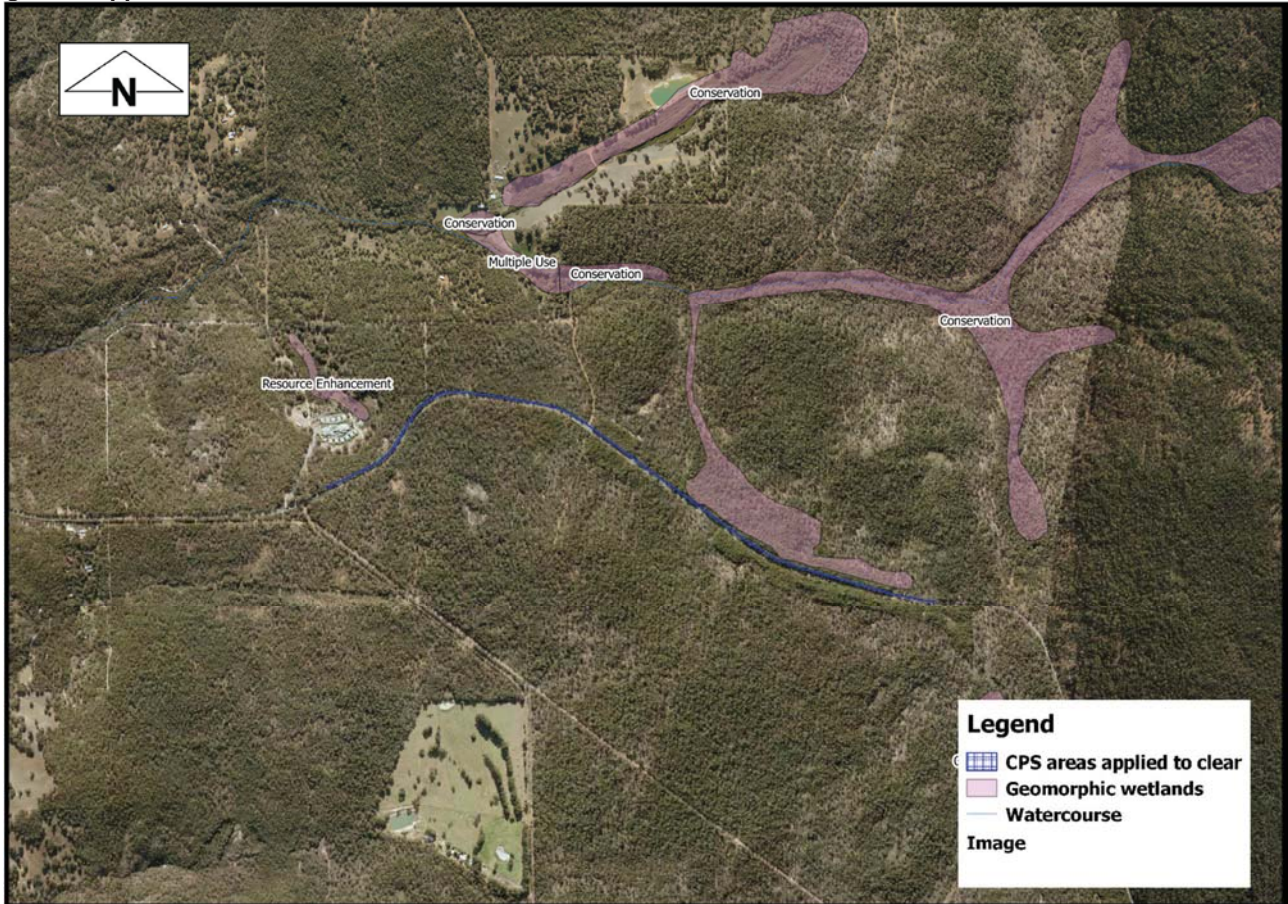


Figure 2: Photographs of vegetation within the application area



Photo 1: Typical vegetation within the application area showing immature trees with understorey in very good to excellent condition



Photos 2: One hollow bearing tree within the application area

3. Assessment of application against clearing principles

According to available databases, eight rare flora species and 26 priority flora species have been recorded within the local area. Based on the mapped soil and vegetation types within application area, one rare flora species, one Priority 1 flora species, and one Priority 2 flora species, could potentially occur within the application area. The Department of Biodiversity, Conservation and Attractions (DBCA) advised that these species are usually associated with granite and are unlikely to occur within the application area, with one species also known to be associated with laterite in the Great Southern District (DBCA, 2018). DBCA advised that there is the potential for some Priority 3 and 4 flora species to occur within the application area, however, given the small linear nature of the clearing it is unlikely that impacts will be significant to the conservation of the Priority 3 and 4 flora species (DBCA, 2018).

According to available databases, nine Threatened fauna species, one other specially protected fauna species, one Priority 1 fauna species, three Priority 3 fauna species and three Priority 4 fauna species have been recorded within the local area (DBCA, 2007-). Noting the type and condition of the vegetation within the application area, and the habitat requirements and current known range extents of these species, the application area may comprise suitable habitat for threatened fauna species Carnaby's cockatoo (*Calyptorhynchus latirostris*), Baudin's cockatoo (*Calyptorhynchus baudinii*) and forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp. *naso*). The application area is mapped within the buffer of a confirmed roosting area for Carnaby's cockatoo (*Calyptorhynchus latirostris*). The application area mainly contains shrubs and very few large trees and only one tree was observed to contain a hollow (DWER, 2018). Noting the orientation and size of the hollow, it is not likely to be suitable for nesting black cockatoos (Photo 2, Figure 2). Black cockatoo calls were heard during the site inspection by DWER officers (DWER, 2018) and foraging habitat was observed within the application area. Noting the size and linear nature of the application area, and the proximity and extent of remnant vegetation in the local area (Figure 1), the application area is unlikely to comprise significant habitat for threatened black cockatoos. On this basis, the application area is not likely to comprise significant habitat for indigenous fauna, including species of conservation significance.

According to available databases, six threatened ecological communities (TEC) and one priority ecological community (PEC) have been recorded in the local area. The Commonwealth-listed TEC 'Banksia Dominated Woodlands of the Swan Coastal Plain' (Banksia Woodlands) (listed as endangered) occurs approximately 1800 metres northwest of the application area, and the other TECs and PEC occur more than 4 kilometres from the application area. Noting the species composition of these TECs and PEC, the mapped vegetation type within the application area, and the extent of the proposed clearing, the application area is not likely to comprise these TECs or PEC. The application area is not likely to comprise the whole or part of, or be necessary for the maintenance of, a TEC.

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 Jarrah Forest Interim Biogeographic Regionalisation of Australia bioregion retains approximately 4,506,660 hectares (53 per cent) of its pre-European extent of native vegetation, and the mapped South West Forests Vegetation Complexes, Yarragil 1 complex retains approximately 80,203 hectares (81 per cent), Dwellingup complex retains approximately 298,491 hectares (87 per cent) and Murray 1 complex retains approximately 68,695 (76 per cent) of its pre-European extent respectively, within the Swan Coastal Plain IBRA Bioregion (Government of Western Australia, 2018). On this basis, and noting the extent of native vegetation within the local area, and that the application area is not likely to include flora or ecological communities of conservation significance or comprise significant habitat for indigenous fauna, the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

No watercourses or wetlands intersect the application area. However, a conservation category wetland has been mapped 3 metres north of the application area (Figure 1). A DWER site inspection did not identify the presence of riparian vegetation within the application area (DWER, 2018), however given the mapped wetland in close proximity the vegetation within the application is growing in association with an environment associated with a wetland or watercourse. The proposed clearing is at variance to principle (f). Given the small scale of clearing, the impacts are not likely to be significant.

The application area has an average rainfall between 1100 to 1200 millimetres per annum, and groundwater salinity mapped between 500 to 1000 total dissolved solids (milligrams per litre). Noting this and the linear nature of the application area, the proposed clearing is unlikely to cause appreciable land degradation, or cause deterioration in the quality of surface or underground water, or cause or exacerbate the incidence or intensity of flooding.

According to available databases, the nearest conservation areas include Jarrahdale state forest, Serpentine national park, Karnet nature reserve, all mapped within 650 metres of the application area. Several Bush Forever sites have been mapped within the local area, with Bushforever Site 76 mapped approximately 1900 metres east of the application area. The application area is bordered by the Jarrahdale state forest, both from the north and the south and the area is mapped as high-low confidence for *Phytophthora cinnamomi* infestation (Project Dieback, 2014). The proposed clearing may indirectly impact on the environmental values of the adjoining conservation reserves through the spread or introduction of weed species or dieback by machinery. Therefore, the proposed clearing may be at variance to this principle. To mitigate any impacts from the proposed clearing a weed control and dieback condition will be imposed on this permit.

Given the above, the proposed clearing is at variance to principle (f), may be at variance to principle (h) and is not likely to be at variance to the remaining clearing principles.

Planning instruments and other relevant matters.

No Aboriginal sites of significance have been mapped within the application area.

The clearing permit application was advertised on 4 July 2018 with a 14 day submission period. No public submissions have been received in relation to this application.

4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: <http://naturemap.dpaw.wa.gov.au/>. Accessed June 2018.
- Department of Primary Industries and Regional Development (DPIRD) (2017). NRInfo Digital Mapping. Accessed at <https://maps.agric.wa.gov.au/nrm-info/> Accessed September 2018. Department of Primary Industries and Regional Development. Government of Western Australia.
- Department of Water and Environment Regulation (DWER) (2018) Site Inspection Report for Clearing Permit Application CPS 8096/1. Site inspection undertaken 20 August 2018. Department of Water and Environment Regulation, Western Australia (DWER Ref. A1725994).
- Government of Western Australia (2018). 2017 SouthWest Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. Department of Biodiversity, Conservation and Attractions, Western Australia.
- Jones, A. (2015) Threatened and Priority Flora List, 11 November 2015. Department of Parks and Wildlife: Kensington, WA.
- Keighery, B.J. (1994). Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Project Dieback (2014). Dieback Public Map. Available for viewing at <http://www.dieback.net.au/about/dieback-map.html> Accessed October 2018.

5. GIS Datasets

- Aboriginal Sites of Significance
- Clearing Regulations - Environmentally Sensitive Areas
- Carnaby's cockatoo: breeding, roosting, feeding
- Department of Biodiversity Conservation and Attractions, Tenure
- Geomorphic Wetlands, Swan Coastal Plain
- Groundwater salinity, statewide
- South West Forests Vegetation complexes
- Hydrology, linear
- IBRA Australia
- Land for Wildlife
- PDWSA, CAWSA, RIWI Act Areas
- Remnant vegetation
- SAC Biodatasets (accessed October 2018)
- Soils, statewide