



## CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

<b>Purpose Permit number:</b>	CPS 8212/1
<b>Permit Holder:</b>	Shire of Murray
<b>Duration of Permit:</b>	17 May 2019 – 17 May 2024

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**

Dual use pathway

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

Pinjarra Road reserve (PINs 1387031 and 1387032)

**3. Area of Clearing**

The Permit Holder shall not clear more than 0.2 hectares of native vegetation within the area hatched yellow on attached Plan 8212/1.

**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. Type of clearing authorised**

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

### PART II – MANAGEMENT CONDITIONS

**6. 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:

- 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.

**7. Dieback and weed control**

When undertaking any clearing authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *dieback* and *weeds*:

- clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;

- (b) ensure that no known *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.

**8. Records to 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 6 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread of *dieback* and *weeds* in accordance with condition 7 of this Permit.

**9. Reporting**

The Permit Holder must provide to the *CEO* the records required under condition 8 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; and

**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.



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Mathew Gannaway  
MANAGER  
NATIVE VEGETATION REGULATION

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

17 April 2019

# Plan 8212/1

32.587393°S

32.587393°S

115.821438°E

115.830254°E







115.821438°E

115.830254°E

32.59128°S

32.59128°S

## Legend

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



1:4,384

(Approximate when reproduced at A4)

GDA 94 (Lat/Long)

Geocentric Datum of Australia 1994

Date 17/04/2019

Mathew Gannaway

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



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## 1. Application details

### 1.1. Permit application details

Permit application No.: CPS 8212/1  
Permit type: Purpose Permit

### 1.2. Applicant details

Applicant's name: Shire of Murray  
Application received date: 1 October 2018

### 1.3. Property details

Property: Pinjarra Road reserve (PINs 1387031 and 1387032)  
Local Government Authority: Murray, Shire of  
Localities: Ravenswood

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.2		Mechanical Removal	Road construction or Upgrades

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 17 April 2019

Reasons for Decision: The clearing permit application was received on 1 October 2018 and has been assessed against the clearing principles, planning instruments and other matters in accordance with section 51O of the *Environmental Protection Act 1986*, and it has been concluded that the proposed clearing is at variance to principle (f) but is not likely to be at variance to any of the remaining clearing principles.

The Delegated Officer determined that the proposed clearing may increase the risk of weeds and dieback spreading into adjacent native vegetation. Weed and dieback management measures will mitigate this risk.

In determining to grant a clearing permit subject to conditions, the Delegated Officer determined that the proposed clearing is not likely to have any unacceptable impacts to environmental values.

## 2. Site Information

**Clearing Description:** The application is for the proposed clearing of 0.2 hectares of native vegetation within a footprint of 0.529 hectares within Pinjarra Road reserve (PINs 1387031 and 1387032), Ravenswood, for the purpose of creating a dual purpose pathway.

**Vegetation Description:** The application area is mapped as Swan Coastal Plain vegetation complex Vasse: 57, described as a mixture of closed scrub of *Melaleuca* species fringing woodland of *Eucalyptus rudis* (Flooded Gum) - *Melaleuca* species and open forest of *Eucalyptus gomphocephala* (Tuart) - *Eucalyptus marginata* (Jarrah) - *Corymbia calophylla* (Marri). Will include areas dominated by *Tecticornia* and *Sarcocornia* species (Samphire) near Mandurah and south of the Capel River (Hedde et al., 1980).

A survey of the application area described the vegetation as consisting of one vegetation type; Open woodland of *Eucalyptus rudis* subsp. *rudis*, *Eucalyptus cornuta* and *Agonis flexuosa* var. *flexuosa* over Closed Tall Scrub dominated by *Melaleuca nesophila* and *Calothamnus rupestris* over Open Shrubland of *Acacia iteaphylla*, *Acacia cochlearis* and *Calothamnus quadrifidus* over Very Open Grassland of *Eragrostis curvula*, *Avena barbata* and *Bromus diandrus* to Grassland of *Cynodon dactylon* or *Cenchrus clandestinus* (Bennett, E., 2019).

**Vegetation Condition:** Based on photographs and survey provided by the applicant (Shire of Murray, 2018 and Bennett, E., 2019), the vegetation within that application area is considered to be in good to degraded (Keighery, 1994) condition as described below:

- Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery, 1994); to
- Degraded: Basic vegetation structure severely impacted by disturbance; scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994).

**Soil Description:**

The application area occurs within the Pinjarra P2 Phase soil complex which is described as flat to very gently undulating plain with deep alkaline mottled yellow duplex soils which generally consist of shallow pale sand to sandy loam over clay (Schoknecht et al., 2004).

**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 retains approximately 15 per cent native vegetation cover.

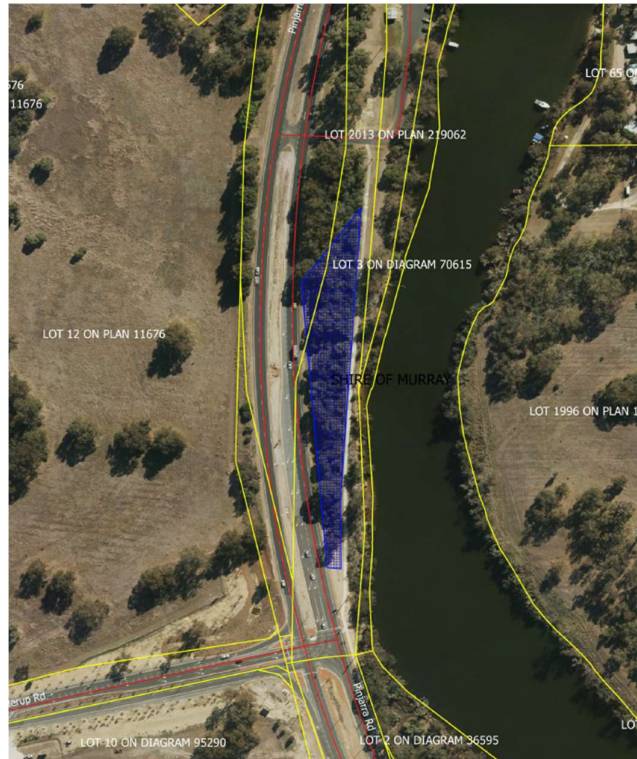


Figure 1- Application area cross-hatched in blue.



Figure 2- Representative photograph of the vegetation within the application area (Shire of Murray, 2018).



Figure 3- Representative photograph of the vegetation within the application area (Shire of Murray, 2018).

### 3. Minimisation and mitigation

The Shire of Murray noted that the design of the path has been undertaken to avoid the removal of any large trees and have minimal impact on vegetation (Shire of Murray, 2018; 2019).

### 4. Assessment of application against clearing principles

As noted in Section 2 above, the vegetation within the application area contains a mixture of native and non-native species including; *Eucalyptus rudis* subsp. *rudis*, *Eucalyptus cornuta* and *Agonis flexuosa* var. *flexuosa* over closed tall scrub dominated by *Melaleuca nesophila* and *Calothamnus rupestris* over open shrubland of *Acacia iteaphylla*, *Acacia cochlearis* and *Calothamnus quadrifidus* over introduced grasses (Bennett, E., 2019).

According to available datasets, 13 Threatened fauna species, 28 fauna species protected under international agreement, one Priority 1 (P1), one P3 and five P4 fauna species have been recorded within the local area (Department of Biodiversity Conservation and Attractions (DBCA), 2007-). It is noted that many of the threatened fauna species and those protected under international agreement are migratory shorebird species and are found in association with the Peel Inlet which is not represented within the application area.

Three threatened black cockatoo species have been recorded within the local area, including *Calyptorhynchus banksii* subsp. *naso* (forest red-tailed black cockatoo), *Calyptorhynchus baudinii* (Baudin's cockatoo) and *Calyptorhynchus latirostris* (Carnaby's Cockatoo). Suitable breeding habitat for these species includes trees 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, including tuart and marri trees a suitable DBH is 500 millimetres. (Commonwealth of Australia, 2012). A survey of the application area recorded five trees which had a diameter at breast height (DBH) of 500 millimetres or greater. Two of the trees were identified as *Eucalyptus rudis* and three as *Eucalyptus cornuta*. The survey noted that none of the five trees recorded contained visible hollows (Bennett, E., 2019). Noting the results of the fauna survey, the proposed clearing will not impact on suitable breeding habitat for the three threatened black cockatoo species.

The vegetation within the application area is known to contain a middle and lower storey and has been described as 'dense' (Bennett, E., 2019) and having an amount of litter material on the ground consisting of mainly dead branches (Bennett, E., 2019). Given the presence of dense vegetation throughout the application area, it may provide habitat for ground-dwelling species such as the water-rat (*Hydromys chrysogaster*), however given that the application is for clearing of 0.2 hectares of native vegetation and similar habitat remains within the road reserve and adjacent areas, it is not likely that the proposed clearing will impact on this species.

Suitable habitat for the remainder of the conservation significant fauna species recorded within the local area is not likely to be located within the application area.

The application area is located adjacent to a mapped South West Regional Ecological Linkage (SWREL) (SWREL-4 - The Murray River) (Molloy et al., 2009). These linkages are recognised for their significance in facilitating indigenous fauna movement across the landscape (Molloy et al., 2009). The proposed clearing may impact this linkage. However, noting the minimal extent of the proposed clearing and that vegetation will remain within the road reserve, the proposed clearing is not likely to reduce the effectiveness of the road reserve acting as a wildlife corridor. Given the above, no significant habitat for conservation significant fauna species is likely to occur within the application area.

According to available datasets, three Priority 1 listed flora species, five Priority 2, 14 Priority 3, 14 Priority 4 and 11 threatened flora species have been recorded within the local area. None of these records occur within the application area. Although some recorded species in the local area have been recorded on similar mapped soil and vegetation types to the application area, a flora survey completed on behalf of the applicant found no threatened or priority flora within the application area (Bennett, E., 2019). Noting this, the application area is not likely to impact on priority flora, or include, or be necessary for the continued existence of, threatened flora.

According to available datasets, no Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) have been mapped within the application area. The closest mapped conservation significant ecological community is a PEC located approximately 130 meters north of the application area, known as Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region categorised as Priority 3 by DBCA. The application area is not considered to be representative of this PEC and noting the distance to this PEC, the proposed clearing is not likely to impact on this PEC or on any known TECs.

Given the application area is not likely to contain any threatened or priority flora, TEC'S, PEC's or significant fauna habitat, the vegetation within the application area is not likely to comprise a high level of biodiversity.

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 application area is located within the Swan Coastal Plain Interim Biogeographic Regionalisation of Australia bioregion, which retains approximately 38 per cent of the pre-European vegetation extent, and mapped Swan Coastal Plain vegetation complex 57- Vasse retains approximately 30 per cent of its pre-European vegetation extent within the bioregion (Government of Western Australia, 2018). The local area retains approximately 15 per cent native vegetation cover. Noting the local area retains less than 30 per cent pre-European vegetation extent, the application area is considered to be within an extensively cleared landscape. However, noting the size of the proposed clearing, vegetation in a degraded condition, does not contain a high level of biodiversity, impact on a wildlife corridor or contains conservation significant flora, fauna or communities, the application area is not considered to be significant as a remnant of native vegetation in an extensively cleared landscape.

According to available datasets, no watercourses intersect the application area, with the closest watercourse located approximately 15 meters to the east associated with the Murray River. The application area is located within a multiple use wetland with the wetland covering an area of 32,501 hectares. Multiple use category wetlands are wetlands with few important ecological attributes and functions remaining. Use, development and management should be considered in the context of ecologically sustainable development and best management practice catchment planning through landcare (Water and Rivers Commission, 2001). Given the above, the application area contains riparian vegetation and is at variance to principle (f). Given the scope of works, the size of the application area and the existing land use, it is unlikely that the proposed clearing will cause any unacceptable environmental impacts to this watercourse and wetland with potential impacts, if any, being localised and short term.

The closest conservation areas to the application area are two unnamed nature reserves which are both located more than three kilometers from the application area. Considering the distance from the application area, it is not likely that the proposed clearing would have an impact on the environmental values of these conservation areas.

The chief soils mapped within the application area are flat to very gently undulating plain with deep alkaline mottled yellow duplex soils which generally consist of shallow pale sand to sandy loam over clay (Department of Primary Industries and Regional Development, 2018). These soils are not prone to wind erosion, or water erosion, but may be at risk of water logging. Given the good to degraded (Keighery, 1994) condition of the vegetation within the application area, it is considered that the removal of 0.2 hectares of native vegetation adjacent to a road reserve is not likely to lead to appreciable land degradation, impact on the quality of groundwater, or result in the exacerbation of flooding on or off site.

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

### **Planning instruments and other relevant matters.**

The application area is within a registered Aboriginal site of significance – Registered: site ID S02228 – Waugal Cave (mythological), and registered: site ID S02228 Murray River (mythological). It is the applicant's responsibility to comply with the requirements of the *Aboriginal Heritage Act 1972* and to ensure that no Aboriginal sites of significance are disturbed as a result of any activities.

The clearing permit application was advertised on the Department of Water Environmental Regulation's website on 18 October 2018 with a 14 day submission period. No public submission were received in relation to this application.

## **5. Applicants Submissions**

On 8 February 2019, DWER wrote to the applicant inviting them to address the impacts identified during the desktop assessment including avoidance and minimisation measures, targeted threatened and priority flora survey and a black cockatoo habitat tree assessment. On 6 March 2019, the applicant submitted a response to DWER, which included the requested surveys, and avoidance and minimisation measures.

## **6. References**

- Bennett, E (2019), Vegetation and Flora of Pinjarra Road Reserve (PINs 1387031 and 1387032), Ravenswood. Western Australia. DWER ref: A1769932
- 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
- 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/>.
- Department of Biodiversity, Conservation and Attractions (DBCA) (2019) Advice received CPS 8212/1 DWER ref: A1756188 and A1756195
- Department of Primary Industries and Regional Development (DPIRD) (2018) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <https://maps.agric.wa.gov.au/nrm-info/> (Accessed November 2018).
- Government of Western Australia (2018) 2017 State-wide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of December 2017. WA Department of Biodiversity, Conservation and Attractions.
- HeddlE., E. M., Loneragan, O. W., and Havel, J. J. (1980) Vegetation Complexes of the Darling System, Western Australia. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia

Schoknecht, N., TillE., P. and PurdiE., B. (2004) Soil-landscape mapping in South-Western Australia – Overview of Methodology and outputs' Resource Management Technical Report No. 280. Department of Agriculture.  
Shire of Murray (2018) Clearing Permit Application CPS 8212/1. DWER ref: A1724686  
Shire of Murray (2019) Supporting Information – Flora and Vegetation Survey and Black Cockatoo Habitat tree assessment CPS 8212/1. DWER ref: A1769932  
Western Australian Herbarium (1998-) FloraBase-the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. <https://florabase.dpaw.wa.gov.au/> (accessed November 2018).  
Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth.

**GIS Databases:**

- Aboriginal Sites of Significance
- DAFWA Heritage
- DBCA Estate
- DEC Covenant
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed November 2018)
- Soils, Statewide
- Topographic contours
- Wetlands