



## CLEARING PERMIT

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

<b>Purpose Permit number:</b>	CPS 8307/1
<b>Permit Holder:</b>	Shire of Serpentine Jarrahdale
<b>Duration of Permit:</b>	From 21 August 2019 to 21 August 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**

Clearing for the purpose of road construction and realignment.

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

Mundijong Road Reserve (PINS 11610712, 11610713 and 11610714)

Kargotich Road Reserve (PINS 11609981 and 11608178)

Lot 11 on Diagram 70398, MUNDIJONG

Lot 1724 on Plan 558, MARDELLA

**3. Area of Clearing**

The Permit Holder must not clear more than 0.45 hectares of native vegetation within the area hatched yellow on attached Plan 8307/1.

**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**

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:

- (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.

## **7. 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) shall only move soils in *dry* conditions;
- (c) ensure that no *dieback* or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
- (d) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

## **PART III - RECORD KEEPING AND REPORTING**

### **8. 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 6 of this Permit; and
- (e) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* 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;

**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.

R. Mincham

Ryan Mincham

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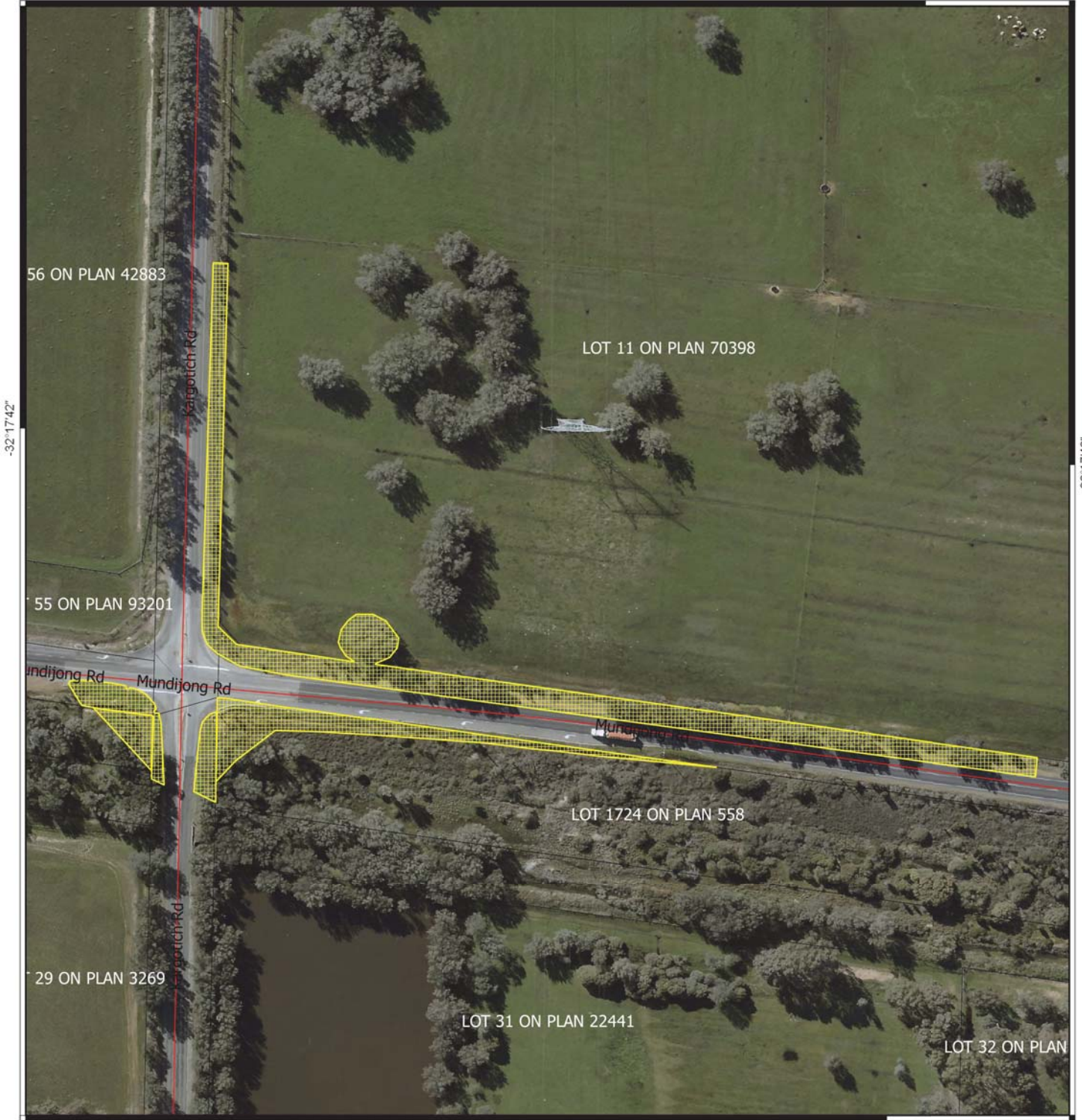
Ryan Mincham  
MANAGER  
NATIVE VEGETATION REGULATION

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

22 July 2019


# Plan 8307/1

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115°57'18"

## Legend

 CPS areas approved to clear base layers

 Cadastre

 Road Centrelines

 Local Government Authorities

Image



MGA 94  
Geocentric Datum of Australia 1994

Ryan Mincham

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*R. Mincham*

Officer delegated under Section 20 of the Environmental Protection Act 1986



GOVERNMENT OF  
WESTERN AUSTRALIA





## 1. Application details

### 1.1. Permit application details

Permit application No.: 8307/1  
Permit type: Purpose

### 1.2. Applicant details

Applicant's name: Shire of Serpentine Jarrahdale  
Application received date: 21 December 2018

### 1.3. Property details

Property: ROAD RESERVE - 11609981, OLDBURY  
ROAD RESERVE - 11610712, MUNDIJONG  
LOT 11 ON DIAGRAM 70398, MUNDIJONG  
ROAD RESERVE - 11610714, MARDELLA  
ROAD RESERVE - 11610713, OLDBURY  
ROAD RESERVE - 11608178, MARDELLA  
LOT 1724 ON PLAN 558, MARDELLA  
Local Government Authority: Shire of Serpentine Jarrahdale  
Localities: MARDELLA, MUNDIJONG AND OLDBURY

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.45	0	Mechanical	Road construction or upgrades

### 1.5. Decision on application

Decision on Permit Application: Granted  
Decision Date: 22 July 2019

Reasons for Decision: The clearing permit application was received on 21 December 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*. It has been concluded that the proposed clearing is at variance to clearing principles (a), (d), (f) and (h) and is not likely to be at variance to the remaining clearing principles.

In determining to grant a clearing permit subject to conditions, the Delegated Officer considered that the proposed clearing is not likely to lead to an unacceptable risk to the environment and that no significant residual environmental impacts will result from the clearing. Based on this assessment, it has been determined that offset conditions are not required, however, standard conditions relating to avoiding and minimising native vegetation clearing, and managing the spread of weeds and dieback have been imposed on the permit.

Figure 1 below identifies four areas applied to be cleared under CPS 8307/1. Of these areas, 1, 3 and 4 have previously been assessed and clearing permits granted under CPS 726/1, CPS 3287/1, CPS 4752/1 and CPS 5618/1. A summary of these decisions is provided under the planning and other matters section of this report. Area 2 has similar environmental values as Area 1 and 3 and therefore the assessment of the environmental impacts of clearing Area 2 are also not likely to lead to an unacceptable risk to the environment.

## 2. Site Information

Clearing Description: The application is for the proposed clearing of 0.45 hectares of native vegetation within Mundijong and Kargotich Road Reserves, Lot 11 on Diagram 70398, Mundijong and Lot 1724 on Plan 558, Mardella, for the purpose of road construction and realignment, including the installation of a round-a-bout.

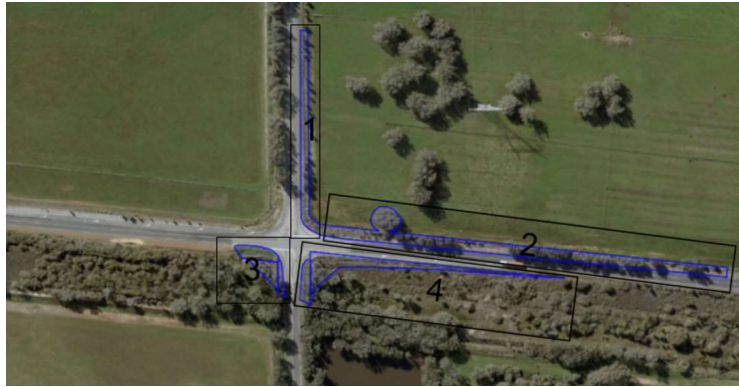


Figure 1: CPS 8307/1 application areas

**Vegetation Description**

The vegetation within the application area is mapped as Guildford Complex, which is described as a mixture of open forest to tall open forest of *Corymbia calophylla* (Marri) - *Eucalyptus wandoo* (Wandoo) - *Eucalyptus marginata* (Jarrah) and woodland of *Eucalyptus wandoo* (Wandoo) (with rare occurrences of *Eucalyptus lane-poolei* (Salmon White Gum)). Minor components include *Eucalyptus rudis* (Flooded Gum) - *Melaleuca raphiophylla* (Swamp Paperbark) (Heddle et al, 1980).

**Vegetation Condition**

Areas 1-3:  
Degraded (Keighery, 1994) condition; structure severely disturbed; regeneration to good condition requires intensive management (Keighery,1994).

Area 4:  
Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)  
To  
Very Good: Vegetation structure altered; obvious signs of disturbance (Keighery 1994)  
To  
Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)

**Soil Type**

The soil type within the application area is mapped as;

Pinjarra P4 Phase: Poorly drained flats, sometimes with gilgai microrelief and with moderately deep to deep black, olive grey and some yellowish brown cracking clays and less commonly non-cracking friable clays with generally acidic subsoils (Mapping unit: 213Pj\_\_P4); and

Pinjarra P1d Phase: Flat to very gently undulating plain with deep acidic mottled yellow duplex (or effective duplex) soils. Shallow pale sand to sandy loam over clay; imperfect to poorly drained and moderately susceptible to salinity. (Mapping unit: 213Pj\_\_P1d).

**Comments**

The proposed clearing occurs within and adjacent to an existing road reserve that has been highly modified. Several areas under application have previously been assessed and approved to be cleared under clearing permits CPS 726/1, CPS 3287/1, CPS 4752/1 and CPS 5618/1.

The local area is defined as 10 kilometre radius from the application area. A review of available databases has determined that the local area retains approximately 21.29 per cent of its pre-European clearing extent and that this extent will reduce to 21.22 per cent should the clearing be permitted.

### **3. Assessment of application against clearing principles and planning instruments and other matters**

#### **Area 1 and 3 – assessment against the 10 clearing principles**

Current environmental data is consistent with the original assessments for Areas 1 (CPS 5618/1) and 3 (CPS 726/1). As such there is no change to the variance determinations from these environmental impact assessments. The significance of the impact, based on vegetation size and condition is low and therefore standard permit conditions to avoid and minimise clearing and to manage the spread of weeds and dieback are recommended.

#### **Area 2 – assessment against the 10 clearing principles**

Area 2 has not been previously assessed. The species composition and structure is similar to Area 1, however, the density of vegetation is higher. The vegetation within Area 2 does not comprise a high level of biological diversity, does not include conservation significant flora, is not significant as habitat for fauna and is not representative of an under represented vegetation association or threatened ecological community. The hydrology of the area is significantly altered due to roadside infrastructure, therefore, removal of the vegetation is unlikely to modify the existing hydrology of the area. Clearing of native vegetation within Area 2 is unlikely to have any significant environmental impact and is not likely to be at variance to any of the clearing principles.

#### **Area 4 – previous assessment against the 10 clearing principles**

Area 4 was previously assessed under CPS 4752/1 and found to be at variance to clearing principles (a), (d), (e), (f) and (h) and not likely to be at variance with the remaining clearing principles. Clearing permit CPS 4752/1 was granted with weed, dieback and offset conditions. The offset conditions applied to CPS 4752/1 were not implemented, however, approximately 0.027 hectares of the application area was cleared by the permit holder. Area 4 was determined to have vegetation ranging from Good to Excellent (Keighery, 1994) condition in 2011 (DEC, 2011).

#### **Area 4 – current assessment against the 10 clearing principles**

Clearing of native vegetation within Area 4 is at variance to clearing principles (a), (d), (f) and (h) as it includes approximately 0.085 hectares of native vegetation with high biodiversity, vegetation currently managed for conservation within Bush Forever Site 360, includes vegetation that is representative of the 'Herb Rich Shrublands in Claypans' community State listed threatened ecological community (TEC) (DBCA, 2015) and includes riparian vegetation growing in association with a conservation category palusplain wetland. The applicant has avoided and minimised impacts to the environmental values noted above through a variation of an existing road design. This design change results in an increase in clearing on the northern side and a decrease in clearing on the southern side of Mundijong Road. Given the quantum of the impact, the proposed clearing is not likely to have any significant residual environmental impacts, therefore no offset measures are recommended. Reasoning for this conclusion is included below.

A flora survey of the application area for CPS 4752/1 was conducted in December 2011 which identified one priority 4 flora species occurring within the survey area. This survey recorded a total of 65 flora taxa within the application area of which 29 species were introduced to the area. Of the identified flora taxa there were no species recorded as threatened and one priority 4 flora species, *Stylidium longitubum* was identified. This species was confirmed within the current application area (Shire of Serpentine Jarrahdale, 2019). *S. longitubum* is an erect annual (ephemeral), herb growing to 0.05-0.12 m high with pink flowers emerging from October to December. This priority 4 species grows in sandy clay and clay soils in seasonal wetlands (WA Herb 1998-). There are 44 records of this species within Western Australia. The population within the application area is not considered to be a significant population necessary for the maintenance of this species as it does not represent a new range extent, is not in secure tenure and intensive management would be required for this population to persist.

Supporting information provided by the applicant includes a species list consistent with the diagnostic criteria for 'Herb Rich Shrublands in Claypans' community (SCP08) a state listed threatened ecological community. This list includes dominant species *Melaleuca viminea*, *M. lateritia* and *Kunzea recurva* and several associated species including *Hypocalymma sp.*, *Stylidium sp.* and *Centrolepis sp.* (Shire of Serpentine Jarrahdale, 2019; Gibson et al., 2005). Listing advice for this TEC notes that "This vegetation community type has a high percentage of weeds and appears to be the clay pan vegetation community type that has the greatest disturbance." (TSSC, 2011). Advice from the Department of Biodiversity, Conservation and Attractions (DBCA) states that:

*"The action is limited in extent, and although it will directly impact a small proportion (~0.7%) of the TEC occurrence, and will likely result in hydrological changes, with the drain being moved further into the TEC, it is not expected to result in Modification of the TEC, as defined under the BC Act. The acquisition of the land to the north of the road as a means of minimising the extent and impacts of the clearing and road works will assist in limiting the impacts to the TEC. It has therefore been determined by the Minister's delegate that an Authorisation to Modify the TEC is not required."* (DBCA, 2019)

Based on the reasoning above, the proposed clearing is at variance to clearing principle (d) as it includes native vegetation which comprises a part of a threatened ecological community. Area 4 covers approximately 0.085 hectares of the current extent of this occurrence of the SCP08 TEC. The DBCA advise that this is approximately 0.7 per cent of the TEC occurrence. Listing advice for this TEC states that

*"The smallest patch of the ecological community that has been assessed by DEC is 0.013 ha, and 16% of patches are smaller than 0.5 ha. Given that the ecological community occurs in very localised locations that can be very small, no minimum patch size is recommended."* (TSSC, 2011).

The applicant has avoided and minimised impacts to this TEC by widening the existing road to the north which minimises clearing of native vegetation associated with the TEC to the south. Advice from DBCA that the applicant has avoided and minimised impacts to this TEC and that the proposed clearing is not expected to modify the TEC occurrence leads to the conclusion that there will be no significant residual impact as a result of the clearing. Given the above, no management or offsetting is required for the proposed clearing.

The local area (10 km radius) retains approximately 21 per cent of its pre-European vegetation extent. Assessment of Area 4 under CPS 4752/1 identified that the proposal was at variance with clearing principle (e), however, a modified target to have clearing controls in place that prevent clearance of ecological communities with an extent below 10 per cent of the pre-clearing extent of vegetation complexes for defined constrained areas (intensely developed) (EPA, 2015; EPA, 2003) is relevant in this instance. As the application area is located within a constrained area and does not include vegetation complexes which retain less than 10 per cent of the pre-clearing extent, this proposal is not considered to be in an extensively cleared landscape and is therefore is not likely to be at variance to clearing principle (e).

Existing roadside infrastructure is in place, and will be upgraded to manage hydrological flows in the localised area surrounding the application area. Clearing of 0.45 hectares is not likely to contribute to, or cause land degradation, deteriorate the quality of groundwater, or cause or exacerbate flooding.

#### **Summary of assessment against the 10 clearing principles**

Based on the evidence above, the proposed clearing is at variance to clearing principles (a), (d), (f) and (h) and is not likely to be at variance to the remaining clearing principles. This assessment is consistent with the assessment for CPS 4752/1 with the exception of a reduction in the variance level for clearing principle (e), resulting from a change in the way this principle is assessed rather than a significant change in vegetation retention.

The quantum of the impact is limited to 0.085 hectares of native vegetation within Area 4 and no significant residual environmental impacts are likely to result from the proposed clearing. As such, no offset measures are recommended, however, standard conditions to avoid and minimise clearing and to manage the spread of weeds and dieback from the area are recommended.






#### **4. Planning and Other matters**

The clearing permit application was advertised on the Department of Water and Environmental Regulation's (DWER) website on 4 February 2019, inviting submissions from the public within a 14 day period. No submissions were received in relation to this application.

No Aboriginal Sites of Significance have been identified during the desktop assessment. It is the applicant's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

This application is associated with several previous applications from the Shire of Serpentine-Jarrahdale with a summary of these decisions provided in the table below:



<p>CPS 8307/1 – Current application</p>	
<p>CPS 5618/1 – Granted 24 October 2013 for clearing of 0.6 hectares of native vegetation for the purpose of road widening.</p> <p>The application was assessed to be at variance to clearing principle (f), may be at variance to clearing principles (d), (e), (h) and (i) and is not likely to be at variance to the remaining clearing principles.</p> <p>The permit was granted with dieback and weed control conditions.</p>	
<p>CPS 4752/1 – Granted 20 December 2011 for clearing of 0.17 hectares of native vegetation for the purpose of road construction and upgrades.</p> <p>The application was assessed as at variance to clearing principles (a), (d), (e), (f) and (h) and not likely to be at variance with the remaining clearing principles.</p> <p>The permit was granted with weed and dieback and offset conditions.</p> <p>On 29 January 2015, DWER wrote to the permit holder identifying that clearing was being undertaken without an offset being approved. Subsequent correspondence from the permit holder identified that they wished for revegetation works to be approved as an offset retrospectively. The permit holder proposed that for a total of 0.027 hectares of native vegetation having been cleared by the Shire within the permit area they would offset 0.5 hectares of revegetation within the Mundijong Road reserve approximately 1.7 kilometres west of the permit area. DWER informed the permit holder this was not possible but that revegetation could still go ahead. No further information was provided regarding whether the revegetation went ahead after the fact. No further action has been taken by DWER.</p>	
<p>CPS 3287/1 – Granted 24 September 2009 for clearing of 26 <i>Casuarina obesa</i> within the application area.</p> <p>The application was assessed as not likely to be at variance with any of the clearing principles.</p> <p>The permit was granted with no conditions.</p>	
<p>CPS 726/1 – Granted on 31 October 2005 to selectively remove <i>Casuarina obesa</i> within the application area.</p> <p>The application was assessed as maybe at variance with clearing principles (a), (c), (d) and (h) and not likely to be at variance with the remaining clearing principles.</p> <p>The permit was granted with weed and dieback conditions (early format) and conditions preventing the removal of vegetative material within the soil (stumps/roots etc).</p>	

## 5. References

- DBCA (2015) Interim Recovery Plan No. 354 Clay pans of the Swan Coastal Plain (Community types 7, 8, 9 and 10a - Gibson et al. 1994 and Clay pans with mid dense shrublands of Melaleuca lateritia over herbs) 2015-2020 formerly Department of Parks and Wildlife. October 2015
- DBCA (2019) Advice regarding impacts to threatened ecological community for CPS 8307/1. DWERDT154024.
- DEC (2011) Site Inspection Report for Clearing Permit Application CPS 4752/1 Crown Reserve 23793, Mardella. Site inspection undertaken 21/09/2011. Department of Environment and Conservation, Western Australia (DEC REF A459494).
- EPA (2003) Greater Bunbury Region Scheme. Bulletin 1108. Environmental Protection Authority, Western Australia.
- EPA (2015) Perth and Peel @ 3.5 million Environmental impacts, risks and remedies, Interim strategic advice of the Environmental Protection Authority to the Minister for Environment under section 16(e) of the Environmental Protection Act 1986. Environmental Protection Authority, Western Australia July 2015.
- Gibson N, Keighery GJ, Lyons MN and Keighery BJ (2005). Threatened plant communities of Western Australia. 2 The seasonal clay-based wetland communities of the South West. *Pacific Conservation Biology* 11: 287–301.
- Government of Western Australia (2018) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Biodiversity, Conservation and Attractions, Perth.
- Hedde, 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.
- Shire of Serpentine Jarrahdale (2019) Clearing permit application form CPS 8307/1 and supporting information. A1751222.
- Threatened Species Scientific Committee (TSSC) (2012). Commonwealth Listing Advice on Claypans of the Swan Coastal Plain. Department of Sustainability, Environment, Water, Population and Communities. Canberra, ACT: Department of Sustainability, Environment, Water, Population and Communities. Available from: <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/121-listing-advice.pdf>. In effect under the EPBC Act from 27-Mar-2012.
- Western Australian Herbarium (1998- ) FloraBase - The Western Australian Flora. Department of Parks and Wildlife. <http://florabase.dpaw.wa.gov.au/> (Accessed November 2018).

### GIS Databases:

- Aboriginal Sites of Significance
- DAFWA Subsystems
- Groundwater salinity
- Hydrography, linear
- National Trust WA Covenant
- Remnant vegetation
- SAC bio datasets (accessed February 2019)
- Topographic contours
- Wetlands