GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 7929/1
File Number: DER2015/002564
Duration of Permit: From 19 July 2018 to 19 July 2020

PERMIT HOLDER

City of Armadale

LAND ON WHICH CLEARING IS TO BE DONE

The intersection of Carradine Road and Carrawatha Avenue (Road Reserve PIN 11862014).

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 7 *Corymbia calophylla* trees within the area cross-hatched yellow on attached Plan 7929/1.

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. **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 number of *Corymbia calophylla* trees removed; and
   (d) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of this Permit.

3. **Reporting**
   The Permit Holder must provide to the *CEO* the records required under condition 2 of this Permit, when requested by the *CEO*.

Mathew Gannaway
MANAGER
CLEARING REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

19 June 2018

Plan 7929/1

Legend

- Areas approved to clear
- Roads

WANow_Imagery

N

0 5 10 15 20 m

MGA 94
Geocentric Datum of Australia 1994

.....Date: 19/06/2018

Mathew Greenaway

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

GOVERNMENT OF
WESTERN AUSTRALIA

Government of Western Australia
Department of Water and Environmental Regulation

Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 7929/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: City of Armadale

1.3. Property details

Property: The intersection of Carradine Road and Carrawatha Avenue (Road Reserve PIN 11862014).
Local Government Authority: City of Armadale
Localities: Bedfordale

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
N/A	7	Mechanical Removal	Landscaping

1.5. Decision on application

Decision on Permit Application: Grant
Decision Date: 19 June 2018
Reasons for Decision: The clearing permit application was received on 21 December 2017 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 not likely to be at variance to any of the clearing principles.

The Delegated Officer determined that the proposed clearing is unlikely to have any significant environmental impacts.

2. Site Information

2.1. Existing environment and information

2.1.1. *Description of the native vegetation under application*

Clearing Description

The proposed clearing comprises the removal of 7 Marri (*Corymbia calophylla*) saplings to facilitate the construction of a median island. The applicant advises that five of the targeted trees are alive and two are deceased (City of Armadale 2017).

Vegetation Description

The application area has been mapped as Heddle vegetation complex 104, comprising a mosaic of open forest of *Eucalyptus marginata* subsp. *marginata-Corymbia calophylla*, with some admixtures with *Eucalyptus laeliae* in the north (subhumid zone), with occasional *Eucalyptus marginata* subsp. *elegantella* (mainly in subhumid zone) and *Corymbia haematoxylon* in the south (humid zone) on deeper soils adjacent to outcrops, woodland of *Eucalyptus wandoo* (subhumid and semiarid zones), low woodland of *Allocasuarina huegeliana* on shallow soils over granite outcrops, closed heath of *Myrtaceae-Proteaceae* species and lithic complex on or near granite outcrops in all climate zones (Heddle et al 1980).

Vegetation Condition

A review of the application area using photographs provided by the applicant (City of Armadale 2017), and aerial photography, has determined the application area is in degraded (Keighery 1994) condition, defined as:

- Degraded: Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching Good (Keighery 1994) condition without intensive management.

Soil Type

The application area is mapped as occurring within the Murray Valley Land System, which comprises deeply incised valleys with red loamy earths, shallow duplexes and rock outcrop and Jarrah-marri-wandoo forest and woodland with mixed shrubland (Department of Primary Industry and Regional Development 2017).

Comment

The local area referred to in this assessment is defined as the area within a five kilometre radius of the application area.

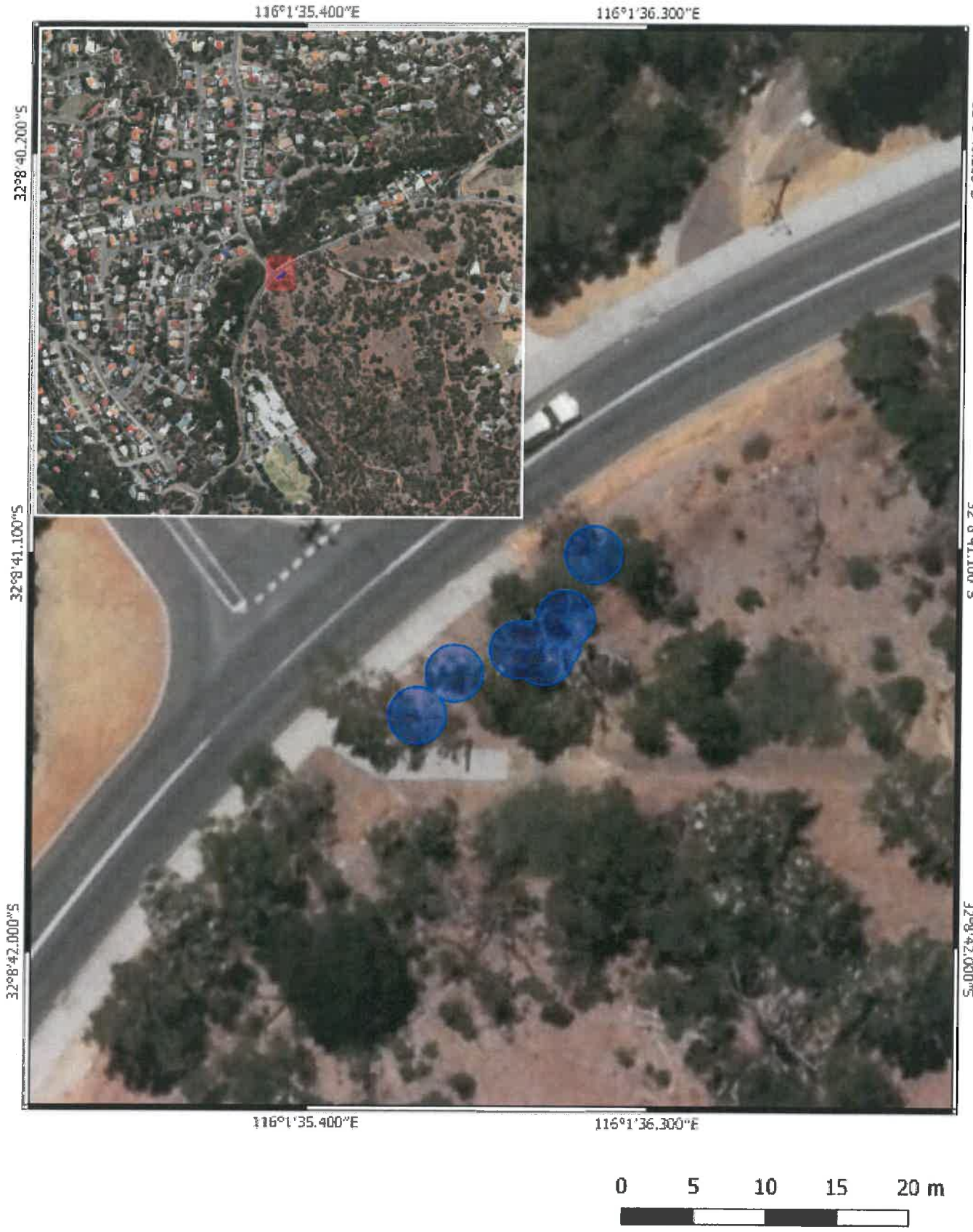

Figure 1: Overview of the application area (the area cross-hatched blue in the main image). An overview of the application areas surrounds is contained in the map insert (framed in white).

3. Assessment of the application against the clearing principles

Comments

This application proposes to clear seven Marri (*Corymbia calophylla*) trees for the purpose of facilitating the construction of a median island. As discussed in Section 2, the vegetation in the application area has been determined to be in a degraded (Keighery 1994) condition, owing to this vegetation's sparse canopy and minimal understorey.

A review of available databases has determined that three Priority 1, one Priority 2, three Priority 3 and one Priority 4 flora species and four Threated flora species have been recorded within the local area (Western Australian Herbarium 1998-). Noting the habitat preferences of these species, the application area could include suitable habitat for seven of the Priority flora species and two of the Threatened flora species (Western Australian Herbarium 1998-). One Priority 1 flora species preferred habitat is poorly documented and two threatened flora species are not considered likely to occur within the habitats found in the application area (Western Australian Herbarium 1998-). Given the condition of the vegetation found within the application area, including the minimal understorey present within the application area, no flora species of conservation significance are expected to occur within the application area.

Eighteen fauna species of conservation significance have been recorded within the local area (Department of Biodiversity, Conservation and Attractions, 2007-). A review of the information provided by the applicant in support of this application found the *Corymbia calophylla* trees targeted by the proposed clearing activities are juvenile's (City of Armadale 2017). These trees, due to their immature growth form and the absence of hollows, do not comprise nesting habitat for any fauna species of conservation significance and are not expected to comprise significant foraging habitat for any fauna species. When the above is considered alongside the extent of the application area and the degraded (Keighery 1994) condition of the vegetation in the application area, the application area is not likely to provide significant habitat for fauna species, including species of conservation significance.

According to available databases, the closest recorded occurrence of a priority ecological community (PEC) to the application area is an occurrence of the Priority 3 '*Banksia* Dominated Woodlands of the Swan Coastal Plain IBRA Region' PEC, situated approximately one kilometre west-northwest from the application area. This PEC is also listed as an 'Endangered' threatened ecological community (TEC) under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The application area is also situated approximately 1.6 kilometres southeast of a recorded occurrence of the '*Banksia attenuata* and/or *Eucalyptus marginata* woodlands of the eastern side of the Swan Coastal Plain' TEC, listed as 'Endangered' by both the Western Australian Minister for Environment and under the EPBC Act. In addition, the application area is situated 3.7 kilometres north-northeast from the '*Eucalyptus calophylla* - *Kingia australis* woodlands on heavy soils, Swan Coastal Plain' TEC, which is listed as 'Critically Endangered' by the Western Australian Minister for Environment and 'Endangered' under the EPBC Act. Given the separation distances between the application area and the above communities, alongside the extent of the proposed clearing, no adverse impacts to any TEC's or PEC's are expected to result from the proposed clearing.

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 forms part of the South West Forrests 'Darling Plateau' subregion. This complex currently retains over 62 per cent of its pre-European clearing extent (Government of Western Australia 2017). The mapped Heddle vegetation complex currently retains over 41 per cent of its pre-European clearing extent (Government of Western Australia 2017). Based on the above, the application area is not likely to be significant as a remnant of native vegetation in an area that has been extensively cleared.

A review of available databases has determined that the application area is situated 51 metres from the nearest mapped surface water feature. Given the extent of the proposed clearing and the distances between the application area and mapped surface water features, no vegetation growing in association with surface water features are expected to be adversely impacted by the proposed clearing activities.

Given the condition of the native vegetation in the application area and the extent of the proposed clearing, the proposed clearing is not likely to cause appreciable land degradation, deterioration in the quality of local surface water or groundwater resources, or cause or exacerbate the incidence or intensity of flooding.

The local area contains several conservation areas, the nearest of which is situated approximately 1.7 kilometres north of the application area. When the distance between the mapped conservation area's and the application area are considered alongside the extent of the proposed clearing, the proposed clearing activities are unlikely to adversely impact any conservation areas, or ecological linkage's promoting species diversity and recruitment within conservation area's.

Given the above, the proposed clearing is not likely to be at variance to any of the clearing principles.

Planning instruments and other relevant matters.

Comments

There are no registered Aboriginal Sites of Significance mapped within the application area.

The clearing permit application was advertised on DWER's website on 23 February 2018, with a 14 day submission period. No public submissions have been received in relation to this application.

4. References

City of Armadale (2017) City of Armadale application form and supporting documents. Prepared by the City of Armadale. Internal DWER records reference number (A1583840).

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.

Department of Biodiversity, Conservation and Attractions (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Parks and Wildlife. URL: http://naturemap.dpaw.wa.gov.au/.

Department of Primary Industry and Regional Development (2017). NRInfo Digital Mapping. Department of Primary industry and Regional Development. Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/.

Government of Western Australia (2017) 2017 Statewide Vegetation Statistics (formerly the CAR Reserve Analysis) - Full Report. Current as of December 2017 (based on most recent date of input datasets). Prepared by the Department of Biodiversity, Conservation and Attractions (DBCA), Perth. Published February 2018.

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.

Western Australian Herbarium (1998-) FloraBase - The Western Australian Flora. Department of Biodiversity, Conservation and Attractions. http://florabase.dpaw.wa.gov.au/ (accessed May 2018).

GIS Databases:

- Aboriginal Sites of Significance
- Department of Biodiversity, Conservation and Attractions, Tenure
- Hydrography, COG Hydro
- Hydrography, General Hydro
- Hydrography, SLIP Hydro
- Hydrography, Swan Drainage Lines
- Hydrography, Swan Waterbodies
- Hydrography, Wetlands
- SAC bio datasets
- TPFL Data April 2018
- Vegetation Complexes – South West Forrests
- WAHerb Data April 2018
- WA TEC PEC Boundaries