GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS
Area Permit Number: 8625/1
File Number: DWERVT3209
Duration of Permit: From 22 January 2020 to 22 January 2022

PERMIT HOLDER
City of Albany

LAND ON WHICH CLEARING IS TO BE DONE
Riverside Road reserve (PIN 11440764), Kalgan

AUTHORISED ACTIVITY
The Permit Holder shall not clear more than 0.19 hectares of native vegetation within the area cross-hatched yellow on attached Plan 8625/1.

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. **Fauna Management - Clearing not authorised**
   This Permit does not authorise the Permit Holder to clear trees identified at the following locations, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings.

Species Name	Easting	Northing
Corymbia calophylla	591104	6136995
Eucalyptus sp.	591103	6136988

3. **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 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.

4. **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 3 of this Permit.

5. Reporting

The Permit Holder must provide to the *CEO* the records required under condition 4 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.

Mathew Gannaway
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20
of the Environmental Protection Act 1986

23 December 2019

Plan8625/1

Legend

- CPS areas approved to clear
- Road Centrelines
- Cadastre - LGATE 218

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Officer delegated 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.: 8625/1
Permit type: Area Permit

1.2. Applicant details

Applicant's name: City of Albany
Application received date: 23 July 2019

1.3. Property details

Property: Riverside Road reserve (PIN 11440764)
Local Government Authority: City of Albany
Localities: Kalgan

1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	Purpose category:
0.1906		Mechanical Removal	Road construction or upgrades

1.5. Decision on application

Decision on Permit Application: Granted
Decision Date: 23 December 2019

Reasons for Decision:

The clearing permit application was received on 23 July 2019 and 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 may be at variance with principle (b) and is not likely to be at variance to the remaining principles.

Based on the assessment of the application, the Delegated Officer determined that the proposed clearing may result in the removal of suitable nesting habitat for arboreal fauna including South-western Brush-tailed Phascogale (*Phascogale tapoatafa* subsp. *wambenger*). Removal of the habitat trees may also result in a reduction in the size and function of an ecological linkage. To minimise the impact of habitat removal, the applicant will be prohibited from clearing trees that contain hollows suitable for the South-western Brush-tailed Phascogale.

After consideration of the above, the Delegated Officer determined that the proposed clearing is not likely to lead to an unacceptable risk to the environment.

2. Site Information

Clearing Description

The application is for the proposed clearing of 0.1906 hectares of native vegetation within Riverside Road reserve (PIN 11440764), for the purpose of accommodating road widening and realignment.

Vegetation Description

The vegetation within the application area is mapped as Beard vegetation association 3: Narrikup which is described as a medium forest Jarrah-marri (Shepherd et al., 2001).

A site inspection undertaken by Department of Water and Environmental Regulation (DWER) officers identified the vegetation within the application area comprises of Jarrah and Marri woodland over non-native introduced grasses and herbs with scattered remnant shrubs (DWER, 2019).

Vegetation Condition

The condition of the vegetation within the application area was determined by a site inspection (DWER, 2019), and was considered to be in degraded (Keighery, 1994) condition. Degraded condition is described as basic vegetation structure severely impacted by disturbance, scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994).

Soil type

The soil type within the application area is mapped as Major Valleys 7h Phase subsystem which is described as broad valleys in sedimentary rocks; 30 m relief; smooth slopes. Deep sands and iron podzols on slopes; Albany Blackbutt-Jarrah-Sheoak woodland. Podzols and yellow duplex soils on floors; Paperbark woodland, Teatree heath (Schoknecht et al., 2004).

Comments

The local area considered in the assessment of this application is a 10 kilometre radius measured from the perimeter of the application area. The local area retains approximately 28 per cent native vegetation cover.

Figure 1 Green dots and numbers indicate trees to be removed within the application area, (City of Albany, 2019a).

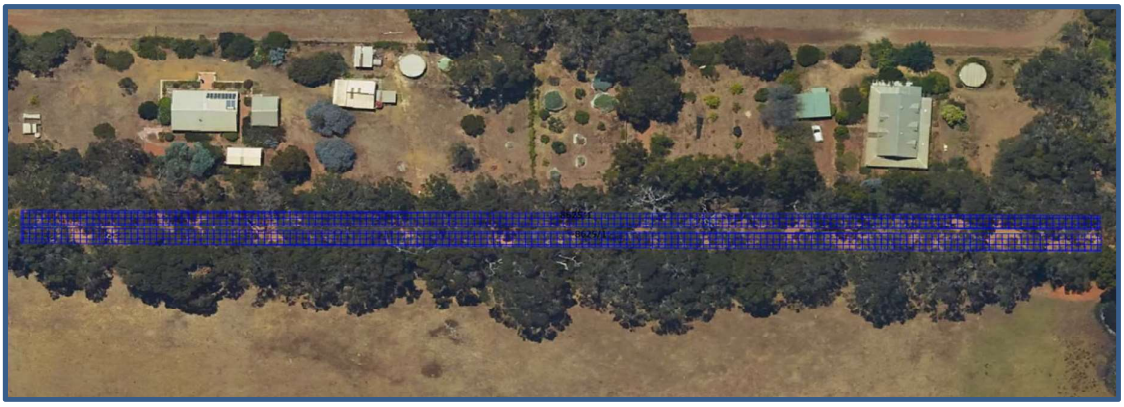

Figure 2. Application area in crosshatched blue (DWER, 2019).

Figure 3. Photograph of tree hollow occurring in tree number 476, within the application area (DWER, 2019).

Figure 4 Photograph of tree hollow occurring in tree number 480, within the application area (DWER, 2019).

Figure 5: Photographs a-d (DWER, 2019) are representative of the understory vegetation along the road reserve, within the application area and show vegetation within the application area is in degraded (Keighery 1994) condition. Photographs start at (a) at the west end on the application and represent examples of a degraded (Keighery 1994) understory vegetation, along the road from west to east (DWER, 2019).

3. Minimisation and mitigation measures

Alternative alignment considered but found to be cost prohibitive due to the need to purchase private land, and some clearing would still be required (City of Albany, 2019a).

4. Assessment of application against clearing principles

According to available databases, six threatened flora species and 24 priority flora species have been recorded within the local area ((Western Australian Herbarium 1998-). Of the 30 conservation significant flora species known to occur within the local area, seven species are associated with winter wet areas or swamps, 14 species are associated with deep sands, and two species with granite outcrops (Western Australian Herbarium 1998-). Considering the habitat preferences of the conservation significant flora within the local area, it is unlikely that the above species occur within the application area as suitable habitat and/or suitable soil types for those species were not observed in the photographs (City of Albany, 2019b) or the site inspection (DWER, 2019). The remaining seven conservation significant species were associated with a range of soils from sandy loam to clay (Western Australian Herbarium 1998-). These soils are similar to the soil mapped within the application area. However, given the minimal extent of the proposed clearing and degraded understory as observed during the site inspection (Figures 4 a-d), populations of threatened and priority flora mapped within the local area are not likely to occur.

Four priority ecological communities (PECs) were identified within the local area (DBCA 2019), being:

- *Astartea scoparia* Swamp Thicket (P1);
- *Banksia coccinea* Shrubland /*Melaleuca striata* / *Leucopogon flavescens* Heath (a component of the Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia Threatened

Ecological Community (TEC) listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)) (P1);
- Kwongkan community (P1), and
- Subtropical and Temperate Coastal Saltmarsh (P3).

According to photographic evidence (City of Albany, 2019b) and a site inspection (DWER, 2019), the vegetation within the application area does not resemble any of the abovementioned TEC and PEC's.

According to available datasets, 19 threatened fauna species, 19 fauna species protected under international agreement, five Priority 4 and two specially protected fauna species have been recorded within the local area (DBCA, 2007). The application area is mapped as possible breeding and foraging habitat for threatened black cockatoo species, including forest red-tailed black cockatoo (*Calyptorhynchus banksii* subsp*. naso*), listed as vulnerable under the EPBC Act; Baudin's Cockatoo *(Calyptorhynchus baudinii),* and Carnaby's cockatoo (*Calyptorhynchus latirostris*), both listed as endangered under the EPBC Act (DBCA, 2007). Black Cockatoos breed in large hollow-bearing, alive or dead trees, generally within woodlands or forests or in isolated trees of, Karri, Marri, Wandoo, Tuart, Salmon gum, Jarrah, Flooded gum, York gum, Powder bark, Bullich and Blackbutt (Commonwealth of Australia, 2012).

The City of Albany provided photographs and a plan identifying and numbering trees within the application area (Figure 1, City of Albany, 2019b) that may need to be removed to facilitate the realignment of the road. A site inspection of the application area, including the trees noted by the applicant determined that none of the trees contained any hollows suitable for the threatened black cockatoo species. Two of the numbered trees did have smaller hollows (Figures 3-4) suitable for the specially protected fauna species, *Phascogale tapoatafa* subsp. *wambenger* (South-western Brush-tailed Phascogale). Avoiding the two trees that contained hollows suitable for the South-western Brush-tailed Phascogale will mitigate any impacts to this species.

The proposed clearing forms a direct link to a South Coast linkage axis line, with Riverside Road connecting the riparian vegetation of the Kalgan River with an approximately 11 hectare patch of woodland mapped as Jarrah/Marri/Sheoak Laterite Forest, directly to the east. The South West Regional Ecological Linkage (SWREL) report (Molloy et al.,2009) defines an ecological linkage as "A series of (both contiguous and non-contiguous) patches which, by virtue of their proximity to each other, act as stepping stones of habitat facilitating the maintenance of ecological processes and the movement of organisms within, and across, a landscape". Axis lines are used to identify patches of remnant vegetation with high connectivity or linkage value; the emphasis for biodiversity planning and conservation becomes the protection and management of the patches identified using the linkage axis lines, rather than within the area defined by the line itself.

Whilst the application area is a part of an ecological linkage, the City of Albany has stated that up to 12 trees may be removed within the application area to facilitate the realignment of Riverside Road and associated swale drain (City of Albany 2019a). The removal of these trees will not completely sever the linkage, with a number of trees remaining within the road reserve that will still facilitate fauna movement. Furthermore, it is determined the structure in the lower story of the application area is not likely to provide suitable habitat for ground dwelling species as it is lacking an understory shrub layer, with the ground layer consisting of mostly introduced species (DWER, 2019).

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 Jarrah Forest Interim Biogeographic Regionalisation of Australia bioregion, which retains approximately 37 per cent of the pre-European extent, (Government of Western Australia, 2019). The local area retains approximately 28 per cent vegetation cover. Whilst the local area is below the recommended 30 per cent threshold, noting the proposed clearing will not impact on any conservation significant flora, fauna or communities, the proposed clearing is not considered a significant remnant within an extensively cleared landscape.

According to available databases, no wetlands or water courses are recorded within or in proximity to the application area and no riparian vegetation was identified within the application area during the site inspection (DWER, 2019). In addition, the application area is not within or adjacent to any conservation areas. Noting there is remnant native vegetation forming an ecological linkage with the application area, the proposed clearing may impact on adjacent vegetation through spread of weeds and dieback. The implementation of weed and dieback management measures will assist in reducing this risk.

Soil mapped within the application area is mapped as deep sands and iron podzols on slopes (Schoknecht et al., 2004). According to mapped land degradation risks, this soil type is not prone to wind or water erosion. It is determined that the proposed clearing is not likely to contribute to or cause land degradation, deteriorate the quality of ground water, cause or exacerbate flooding.

Given the above, the proposed clearing may be at variance with clearing principle (b) due to potential impacts to the South-western Brush-tailed Phascogale, and is not likely to be at variance to the remaining principles. To reduce this impact, the applicant will be prohibited from clearing trees that contain hollows suitable for the South-western Brush-tailed Phascogale.

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 the DWER website on 26 August 2019 with a 14 day submission period. No public submissions have been received in relation to this application.

5. References

City of Albany 2019a Application for clearing permit (CPS8625/1). DWER reference: A1809456.

City of Albany 2019b Photographs supplied with application for clearing permit (CPS 8625/1). DWER reference: A1820129.

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

DBCA 2019 Department of Biodiversity Conservation and Attractions. URL: https://www.dpaw.wa.gov.au/plants-and animals/threatened species-and-communities Accessed November 2019.

Department of Water and Environmental Regulation (DWER) (2019) CPS 8625/1 Site Inspection. DWER ref: A1840001

Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA

Department of Biodiversity, Conservation and Attractions (DBCA) (2007-) NatureMap: Mapping Western Australia's Biodiversity. URL: http://naturemap.dpaw.wa.gov.au/. Accessed November 2019

Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc.). Nedlands, Western Australia

Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whission, G. (2009). South West Reginal Ecological Linkage Technical report Western Australian local Government association and Department of Conservation.

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.

Shepherd, D.P., Beeston, G.R. and Hopkins, A.J.M. (2001) Native Vegetation in Western Australia, Extent, Type and Status. Resource Management Technical Report 249. Department of Agriculture, Western Australia.

Western Australian Herbarium (1998-) FloraBase-the Western Australian Flora. Department of Biodiversity, Conservation and Attractions. https://florabase.dpaw.wa.gov.au/. Accessed November 2019.

GIS Databases:

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