

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number: CPS 8174/1 File Number: DWERVT1216

Duration of Permit: From 11 January 2019 to 11 January 2021

PERMIT HOLDER

Shire of Kojonup

LAND ON WHICH CLEARING IS TO BE DONE

Woodenup Road reserve, (PIN 1382526), Jingalup and Orchid Valley

AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 22 native trees within the area cross hatched yellow on attached Plan 8174/1.

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. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the area(s) shall be inspected by a *fauna specialist* who shall identify *habitat tree(s)* suitable to be utilised for nesting by:
 - (i) Calyptorhynchus latirostris (Carnaby's cockatoo);
 - (ii) Calyptorhynchus baudinii (Baudin's cockatoo); or
 - (iii) Calyptorhynchus banksii naso (forest red-tailed black cockatoo).
- (b) Prior to clearing, any *habitat tree(s)* identified under condition 3(a) shall be inspected by a *fauna specialist* for the presence of fauna listed in condition 3(a); and
- (c) Where fauna are identified under condition 3(b) of this Permit, the Permit Holder shall ensure that no clearing of, or within 10 metres of, the identified *habitat tree(s)* occurs.

4. Records must be kept

The Permit Holder must maintain the following records for activities done in pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - (i) 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;
 - (ii) the date that the area was cleared; and
 - (iii) the size of the area cleared (in trees).
- (b) Actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 1 of the Permit.
- (c) Actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 2 of the Permit.
- (d) In relation to fauna management pursuant to condition 3 of this Permit:
 - (i) the location of each black cockatoo habitat tree 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; and
 - (ii) the species name of each black cockatoo identified.

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

black cockatoo habitat tree/s: means trees that have a diameter, measured at 1.5 metres from the base of the tree, of 30 centimetres or greater that contain hollows suitable for nesting by Carnaby's cockatoo, Baudin's cockatoo or forest red-tailed black cockatoo;

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

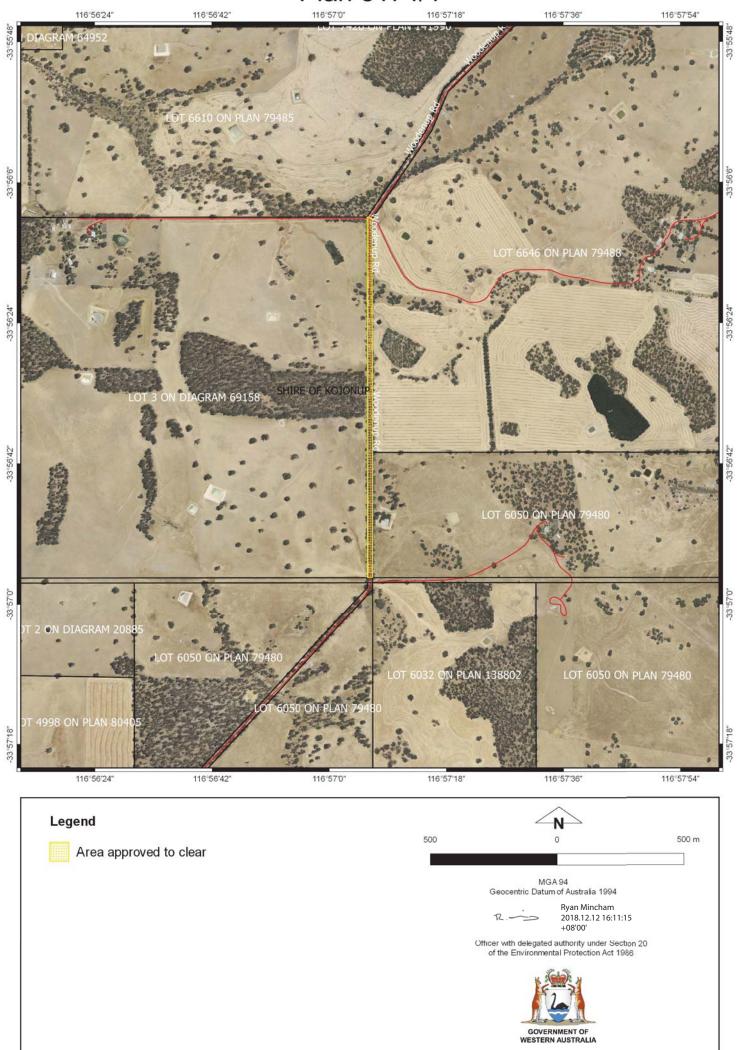
Ryan Mincham
2018.12.12
16:18:56
+08'00'

Ryan Mincham MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

12 December 2018

Plan 8174/1





Clearing Permit Decision Report

1. Application details

1.1. Permit application details

Permit application No.: 8174/1 Permit type: Area Permit

1.2. Applicant details

Shire of Kojonup Applicant's name:

Application received date: 1.3. Property details

WOODENUP ROAD RESERVE (PIN 1382526), JINGALUP and ORCHID VALLEY

Local Government Authority: SHIRE OF KOJONUP

Localities: ORCHID VALLEY and JINGALUP

1.4. Application

Clearing Area (ha) No. Trees **Method of Clearing** Purpose category:

> 22 Mechanical Removal Road construction or upgrades

1.5. Decision on application

Decision on Permit Application:

Reasons for Decision:

Decision Date:

12 December 2018

20 August 2018

The clearing permit application was received on 20 August 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 may be at variance to Principle (b), is not at variance to Principle (d) and (h) and is not likely to be at variance to the remaining clearing Principles.

The Delegated Officer noted the completely degarded to degraded (Keighery, 1994) condition of the application area (a road corridor). The applicant has avoided and minimised impacts through limiting tree removal to those individuals critical to the road works. Other trees exist outside the road formation and will not be removed (Shire of Kojonup, 2018).

In determining to grant a clearing permit subject to avoid and minimise, weed and dieback, fauna management and reporting conditions, the Delegated Officer determined that the proposed clearing is unlikely to lead to any unacceptable impact to the environment.

2. Site Information

Clearing Description

The application from the Shire of Kojonup (the Shire) is to clear 22 native trees distributed along 1.5 kilometres of Woodenup Road reserve (over a 2.8 hectare footprint), to allow unimpeded movement of farming equipment between farming properties along this road. The works will not require the widening of the road, or re-formation of the existing table drains or gravel shoulders (Shire of Kojonup, 2018).

Vegetation Description

The application area is mapped as Beard's vegetation complexes (Shepherd et al, 2001; Government of Western Australia, 2018):

- Jingalup 4: comprises a medium woodland of marri (Corymbia calophylla) and wandoo (Eucalyptus wandoo); and
- Jingalup 992: comprises a medium forest of jarrah (Eucalyptus marginata) and wandoo (Eucalyptus wandoo).

From photographs provided by the Shire (Shire of Kojonup, 2018) the application area comprises either scattered eucalyptus trees (either as individuals or in clumps), either no mid-storey or only limited mid-storey and a weedy groundcover; some areas are devoid of vegetation.

The vegetation structure and condition in the application area appears to be typical of many road verges influenced by adjacent agricultural practices, weed incursion and/or road maintenance activities.

Vegetation Condition

Based on photographs (refer Figures 1 to 5 below) and information provided by the Shire, it is noted that the vegetation within the application area is in the following condition (Shire of Kojonup, 2018):

- Completely Degraded: The structure of the vegetation is no longer intact and the area is completely or almost without native species; 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 type

The application area occurs within the following mapped soil units (DPIRD, 2017):

- Farrar 3 Subsystem (northern application area)
 Grey deep sandy duplex and granite, dolerite and quartz outcrops with red duplex and gritty brown deep sands with low relief;
- Jingalup 1 Subsystem (central application area)
 Duplex and deep sandy gravels with shallow gravels and minor deep sands, loamy gravels and duplexes with low relief; and
- Jingalup 3 Subsystem (southern application area)
 Grey sandy duplex and red shallow loamy duplex associated with outcrops with colluvial duplex sandy gravel with low relief.

Comments:

The local area considered in the assessment of the application is described as a 10 kilometre radius measured from the application area. The local area retains approximately 23.8 per cent native vegetation cover.

Below photographs taken from within the application area and supplied by Shire of Kojonup (Shire of Kojonup, 2018).





Figure 3: Woodenup Road, SLK 4.16 (facing south)



Figure 2: Woodenup Road, SLK 3.75 (facing south)



Figure 4: Woodenup Road, SLK 4.55 (facing south)



Figure 5: Woodenup Road, SLK 4.55+ (facing south)

3. Assessment of application against clearing principles

The Shire of Kojonup's (the Shire) application is to clear 22 native trees distributed along 1.5 kilometres of Woodenup Road reserve to allow unimpeded movement of farming equipment along this road. The works will not require widening or sealing of the existing road formation and will not require re-formation of the existing table drains or gravel shoulders (Shire of Kojonup, 2018).

From photographs and information provided by the Shire, the application area comprises an upper-storey of either scattered eucalyptus trees (either as individuals or in clumps), either no mid-storey or only limited mid-storey and a weedy groundcover; some areas are devoid of vegetation. It is noted that other trees and vegetation will remain in the application area and only trees critical to the proposed activities will be demarcated for removal. Based on these photographs, the vegetation structure and condition in the application area appears to be typical of many road verges influenced by adjacent agricultural practices, weed incursion and/or road maintenance activities (Shire of Kojonup, 2018). Based on this, the application area is in a completely degraded to degraded (Keighery, 1994) condition. It is unlikely the vegetation associated with proposed road works will comprise a high level of biological diversity due to increased disturbance and weed invasion.

According to available datasets, one Priority One (P1) listed flora species and three P3 species are mapped within the local area (WAH, 1998-), whist none are recorded from within the application area. As noted above, the application area is in a completely degraded to degraded (Keighery, 1994) condition. Although the soil and/or vegetation habitat requirements of some of these species may be similar to that of the application area, given the areas vegetation condition and description, it is unlikely these species could exist as viable populations. It is further considered that the loss of any individuals, should they occur, would not impact the conservation status of these species

Five threatened fauna species, *Calyptorhynchus banksii* subsp. *naso* (Forest red-tailed black cockatoo), *Calyptorhynchus baudinii* (Baudin's cockatoo) and *Calyptorhynchus latirostris* (Carnaby's cockatoo), *Dasyurus geoffroii* (chuditch) and *Myrmecobius fasciatus* (numbat) have been recorded within the local area (DBCA, 2007-). It is noted that Carnaby's cockatoo breeding records are mapped 13 kilometres southeast of the application area and that these records occur within close proximity to vegetation in a good to very good (Keighery, 1994) condition including conservation estate (nature reserve and national park) Therefore, the proposed clearing is considered unlikely to have significant impacts on black cockatoo habitat (and other fauna habitat) in the local area.

Black cockatoos breed in large hollow-bearing trees, generally within woodlands or forests or in isolated trees (Commonwealth of Australia, 2012). 'Breeding habitat' for black cockatoos is defined as trees of species (for example marri, jarrah, wandoo) known to support breeding within the range of the species 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, suitable DBH is 500 millimetres (Commonwealth of Australia, 2012). From photographs supplied by the Shire (Shire of Kojonup, 2018) it is noted some of the trees could meet the minimum definition of 'breeding habitat tree'. Any impacts to potential habitat trees can be managed through permit conditions requiring pre-clearing inspections and avoidance of trees actively being utilised.

It is unlikely there is any significant or suitable habitat for ground dwelling mammals, such as the chuditch and numbat, to utilise, should they exist in the immediate area. The chuditch is more prevalent in large remnants especially in conservation areas, whilst the numbat's range and habitat has been historically impacted as a result of extensive land clearing, loss of suitable habitat and incursion of the fox and cat.

According to available datasets, no priority or threatened ecological communities, geomorphic wetlands or other conservation significant wetlands are mapped in the local or application area. Three minor, non-perennial watercourse bisect the application area. However, given the proposed road works involves selective tree removal and not widening of the road formation or reformation of the table drains and shoulders, these watercourses will not be impacted by the proposed road works.

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 53 per cent of the pre-European vegetation extent, and the mapped Beard vegetation associations (BVA) Jingalup 4 and Jingalup 992 which retain approximately 27 and 23 per cent respectively of their pre-European vegetation extent within the bioregion (Government of Western Australia, 2018). The local area retains approximately 23.8 per cent native vegetation cover. It is noted that the proposed clearing involving BVA's Jingalup 4 and 992 have a representation less than the threshold. However, given the

application to clear is for 22 trees (equates to approximately 0.22 hectares and less than 0.0008 per cent of the extent of the BVA's present) and the completely degraded to degraded (Keighery, 1994) condition of the application area, the reduction in vegetation representation is unlikely to lead to any unacceptable impact to the environment. This potential loss is also not considered significant as the vegetation does not comprise significant environmental values (for example, ecological communities or significant flora habitat).

Given the small size and occurrence along an existing road corridor, it is not likely the proposed clearing will cause appreciable land degradation in the form of wind or water erosion, cause or exacerbate the intensity of flooding or cause any unacceptable environmental harm to surface or underground water quality.

Given the above, the proposed clearing maybe at variance to Principle (b), is not at variance to Principle (d) and (h) and is not likely to be at variance to the remaining clearing Principles.

Planning instruments and other relevant matters.

The clearing permit application was advertised on the Department of Water and Environmental Regulation's website on 6 September 2018 with a 21 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. Commonwealth of Australia (CoA)(2012). EPBC Act referral guidelines for three threatened black cockatoo species. Department of Sustainability, Environment, Water, Populations and Communities, 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 Primary Industries and Regional Development (DPIRD) (2017) NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/(accessed December 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.

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

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.

Shire of Kojonup (2018) Application for clearing permit and supporting documentation and photographs for CPS 8174/1 (DWER Ref: A1712850, A1722488 and A1743051)

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

GIS Databases:

- Department of Biodiversity, Conservation and Attractions, Tenure
- Groundwater salinity
- · Hydrography, General Hydro
- Hydrography, Wetlands
- SAC bio datasets
- TPFL Data
- WAHerb Data
- WA TEC PEC Boundaries
- Virtual Mosaic WA Now / Aerial imagery (accessed December 2018)