

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:CPS 8225/1Permit Holder:Shire of MurrayDuration of Permit:21 January 2019 to 21 January 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 constructing a dual pathway
- 2. Land on which clearing is to be done Lot 360 on Plan 193307, Pinjarra Pinjarra Road Reserve (PIN 1211364), Pinjarra

3. Area of Clearing

The Permit Holder must not clear more than 0.37 hectares of native vegetation within the area shaded yellow on attached Plan 8225/1.

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:

- (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. 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*:

- (a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
- (b) ensure that no *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. Wind erosion management

The Permit Holder shall not clear native vegetation unless development commences within three months of the authorised clearing being undertaken.

PART III - RECORD KEEPING AND REPORTING

9. 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* in accordance with condition 7 of this Permit

10. Reporting

The Permit Holder must provide to the CEO the records required under condition 9 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*;

fill means material used to increase the ground level, or fill a hollow;

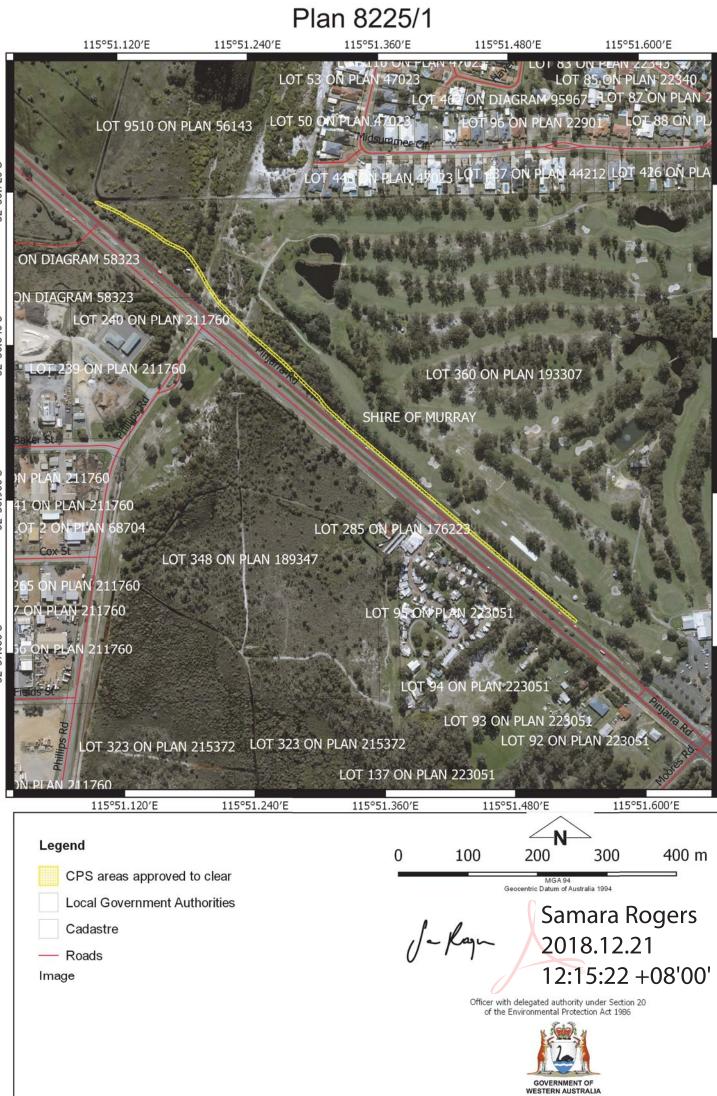
mulch means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation;

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.

Samara Rogers MANAGER CLEARING REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986



32°36.720'S

32°36.840'S

32°36.960'S

32°37.080'S

WA Crown Copyright 2018

32°36.840'S

32°36.960'S

32°37.080'S



| I. Application details | | | | | |
|---|-----------|---|---|----------|--|
| 1.1. Permit application details | | | | | |
| Permit application No.: | | 8225/1 | | | |
| Permit type: | Purpo | se Permit | | | |
| 1.2. Applicant details | | | | | |
| | | Shire of Murray | | | |
| Applicant's name: Application received dat | | 23 October 2018 | | | |
| Application received dat | 2000 | | | | |
| 1.3. Property detail | | | | | |
| Property: | | 60 ON PLAN 193307, PINJAR | | | |
| Least Covernment Author | | RESERVE - 1211364, PINJA | RRA | | |
| Local Government Author Localities: | | MURRAY, SHIRE OF PINJARRA | | | |
| | 1 11 107 | | | | |
| 1.4. Application | | | | | |
| Clearing Area (ha) | No. Trees | Method of Clearing | Purpose category: | | |
| 0.37 | | Mechanical Removal | Recreation | | |
| | | | | | |
| 1.5. Decision on ap | | | | | |
| Decision on Permit Appl | | Granted | | | |
| Decision Date: | - | 21 December 2018 | | | |
| Reasons for Decision: | | The clearing permit application has been assessed against the clearing principles, planning | | | |
| | | instruments and other matters in accordance with section 510 of the <i>Environmental Protection Act 1986</i> (EP Act). It has been concluded that the proposed clearing is at variance | | | |
| | | to principle (f) and is not likely to be at variance to the remaining principles. | | | |
| | (0 p | | | | |
| | Throu | Through the assessment it was determined that the application area comprised of | | | |
| | | conservation significant wetland and vegetation associated with a watercourse. The Delegated Officer noted the small amount of clearing proposed, the linear nature of the | | | |
| | | | | | |
| | | clearing, and substantial amount of wetland in similar condition located south of the | | | |
| | | application area. The Delegated Officer determined that the proposed clearing will not significantly impact this wetland and associated vegetation. | | | |
| | Signin | significantly impact this worland and associated vegetation. | | | |
| | The p | The proposed clearing may increase the risk of weeds spreading into adjacent vegetated areas. A weed management condition has been placed on the permit to mitigate the impact | | | |
| | | | | | |
| | | of spreading weeds into adjacent vegetation. | | | |
| | | | | | |
| | | Through assessment it was determined that the proposed clearing may cause wind erosion. A wind erosion management requiring the Permit Holder to construct the pathway within three menths of undertaking clearing will minimize notability. | | | |
| | | | | | |
| | three | three months of undertaking clearing will minimise potential impacts. | | | |
| | In de | In determining to grant a clearing permit subject to conditions, the Delegated Officer | | | |
| | | determined that the proposed clearing is unlikley to lead to any unnacceptable risk to the | | | |
| | | environment. | | | |
| | | | | | |
| 2. Site Information | | | | | |
| Clearing Description | The a | polication is to clear 0.37 bec | ctares of native vegetation within Lot 360 on Plar | . | |
| Cleaning Description | | | Reserve (PIN 1211364), Pinjarra, for the purpose o | | |
| | | ucting a dual path. | | • | |
| | | c . | | | |
| Vegetation Description | | | pped as Swan Coastal Plain (previously Heddle | | |
| | | | South vegetation complex, which is described as | | |
| | | | sedgelands. Vegetation ranges from woodland o casuarina fraseriana (Sheoak) - Banksia species to | | |
| | | | s, and sedgelands on the moister sites. This area | | |
| | | | marginata (Jarrah)" (Heddle et al., 1998). | - | |
| | | | | | |
| | | | dominately of Melaleuca sp. and sedges and some | | |
| | | | of vegetation was determined through photographs | 3 | |
| | provid | ed by the applicant (Shire of M | urray, 2018a; Shire of Murray, 2018b) | | |
| | | | | | |

Vegetation Condition Degraded: Basic vegetation structure severely impacted by disturbance, scope for regeneration but not to a state approaching good condition without intensive management (Keighery, 1994). То Good: Vegetation structure significantly altered with obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate (Keighery, 1994). The application area has been mapped as the following two categories; Soil Type Bassendean B4 Phase which is described as "Broad poorly drained sandplain with deep grey siliceous sands or bleached sands, underlain at depths generally greater than 1.5 m by clay or less frequently a strong iron-organic hardpan" (Schoknecht et al., 2004). And Bassendean B2 Phase which is described as "Flat to very gently undulating sandplain with well to moderately well drained deep bleached grey sands with a pale yellow B horizon or a weak iron-organic hardpan 1-2 m" (Schoknecht et al., 2004). Comments The local area considered in the assessment of this application is defined as a 10 kilometre radius measured from the centre of the application area.

3. Minimisation and mitigation measures

The design of the path has been undertaken to have minimal requirement for the removal of native vegetation. As such, the path predominately overlaps areas of cleared land and vegetation not native to the area (Shire of Murray, 2018a).

4. Assessment of application against clearing principles

According to available databases, 12 rare flora species and 35 priority flora species have been recorded within the local area. *Microtis quadrata* (Priority 4), *Stylidium longitubum* (Priority 4), *Tripterococcus sp. Brachylobus (A.S. George 14234)* (Priority 4), *Schoenus benthamii* (Priority 3), *Grevillea manglesii subsp. Ornithopoda* (Priority 2) and *Diuris purdiei* (Threatened), have been mapped within similar soil and vegetation types as the application area. The remaining rare and priority flora have been mapped with different soil and vegetation types than that mapped within the application area. Noting the structure and condition of the vegetation, the size and the linear nature of proposed clearing, as well as similar habitat in a better condition located to the south of the application area, the application area is not likely to impact on the conservation status of the rare and priority flora species mentioned above.

According to available databases, 12 threatened fauna species, 26 fauna species protected under international agreement, two fauna species classified as other specially protected fauna, one Priority 3, and four Priority 4 fauna species have been recorded within the local area (Department of Biodiversity, Conservation and Attractions, 2007). Of the threatened and priority fauna identified, the application area may comprise habitat for the Australasian bittern (*Botaurus poiciloptilus*), Carnaby's cockatoo (*Calyptorhynchus latirostris*), forest red-tailed black cockatoo (*Calyptorhynchus banksii subsp. Naso*), Baudin's cockatoo (*Calyptorhynchus baudinii*), and chuditch (*Dasyurus geoffroii*).

Carnaby's cockatoo and Baudin's cockatoo are listed as endangered and forest red-tailed black cockatoo listed as vulnerable under the *Environmental Protection Biodiversity Act 1999* (EPBC Act). These species nest in hollows in live or dead trees of karri, marri, wandoo, tuart, salmon gum, jarrah, flooded gum, York gum, powder bark, bullich and blackbutt (Commonwealth of Australia, 2012). Noting the application does comprise of Jarrah trees, no suitable habitat trees were observed within the application area. Black cockatoos have a preference for foraging habitat that includes jarrah and marri woodlands and forest heathland and woodland dominated by proteaceous plant species such as *Banksia sp., Hakea sp.*, and *Grevillea sp.* (Commonwealth of Australia, 2012). Noting that the application area comprises predominately of *Melaleuca sp.* and sedges and some jarrah (Shire of Murray, 2018b) and there is vegetation within better condition adjacent in close proximity, the application area is unlikely to comprise significant foraging habitat for black cockatoo species.

Australasian bittern is listed as endangered under the EPBC Act. This species prefers shallow, vegetated freshwater or brackish swamp and dense tall sedges for breeding. Chuditch is listed as vulnerable under the EPBC Act. This species occupies a wide range of habitat such as woodlands, dry leafy forests, riparian vegetation, beaches and deserts. Noting the linear nature of the application area, size, as well as suitable habitat to the south of the application area, the proposed clearing is not likely to contain significant habitat for this species.

According to the available databases, seven threatened ecological communities (TEC) and two priority ecological communities (PEC) occur within the local area. The Commonwealth-listed TEC "Banksia Dominated Woodlands of the Swan Coastal Plain IBRA region" (Banksia Woodlands TEC) (listed as endangered) has been mapped within the application area. Noting the species composition of this TEC, the mapped vegetation type within the application area and photos provided by the applicant (Shire of Murray, 2018b), the application area is not likely to be representative of this TEC. The Commonwealth-listed TEC "Dense shrublands on clay flats" (listed as critically endangered), occurs approximately 405 metres southwest of the application area. The remaining TECs occur more than 495 metres from the application area. The State-listed PEC "Corymbia calophylla - Eucalyptus marginata woodlands on sandy clay soils of the southern Swan Coastal Plain" and "Forests and woodlands of deep seasonal wetlands of the Swan Coastal Plain" occur approximately 583 metres southwest and 5260 metres northwest of the application area, respectively. Noting the species composition of these TECs and PECs, the vegetation structure and composition within the application area and the extent of the proposed clearing, the application area is not likely to represent any PEC or TEC. The application area is not likely to comprise the whole of a part of, or is necessary for the maintenance of a TEC.

The National Objectives and Targets for Biodiversity Conservation include a target to prevent the clearance of ecological communities with an extent below 30 per cent of that present pre-European settlement (Commonwealth of Australia, 2001). The application area falls within the Swan Coastal Plain interim Biogeographic Regionalisation of Australia (IBRA) bioregion and is mapped as Swan Coastal Plain (previously Heddle) Bassendean Complex-Central and South vegetation complex, retaining 38.57 per cent and 26.90 percent of their pre-European vegetation extents respectively (Government of Western Australia, 2018a; Government of Western Australia, 2018b). Noting the mapped vegetation complex is below the 30 per cent threshold, given the structure and composition of the vegetation within the application area, it is not likely to be a significant remnant of the Bassendean Complex-Central and South vegetation remnant of the Bassendean Complex. The application area is not considered a significant remnant in an area that has been extensively cleared.

According to available databases, five wetlands have been recorded within the application area. Of these, two conservation category wetlands (CCW); Dampland and Palusplain, are mapped within the application area. The remaining three wetlands are classified as resource enhancement and multiple use wetlands. The CCW's are of the highest priority wetlands for protection and conservation as they support a high level of ecological functions and attributes (Water and Rivers Commission, 2001). These two wetlands comprise of 0.038 hectares or 10% of the application area. Therefore, a majority of the vegetation within the application area is growing in an environment associated with a wetland or watercourse. Photos provided by the applicant (Shire of Murray, 2018b) identified riparian vegetation including *Melaleuca* sp. and sedges, as dominant vegetation within the application area. Noting only 0.038 hectares of the 0.37 hectares applied to be cleared falls within a CCW, the linear nature of the clearing and that the wetlands have already been extensively cleared for the adjacent Pinjarra Road and golf course. The proposed clearing is not considered significant.

According to the available databases, the closest conservation area occurs approximately 40 metres south of the application area. The application area and the conservation area are separated by Pinjarra road. Given the separation, the proposed clearing is not likely to have an impact on the environmental values of any adjacent or nearby conservation areas. A weed management condition will minimise and mitigate any potential impacts to adjacent vegetation and the conservation area.

Soils mapped within the application area may be prone to wind erosion and waterlogging (>70% of map unit has a high to extreme wind erosion risk and >70% of map unit has a moderate to very high waterlogging risk, respectively). However the proposed clearing of 0.37 hectares, the linear nature of the application area and almost half of the application area falling within degraded (Keighery, 1994) condition, the proposed clearing is not likely to cause appreciable land degradation. A wind erosion management condition, requiring the applicant o undertake construction within three months of clearing will mitigate any potential impacts.

According to the available databases, no watercourses have been mapped within the application area. As mentioned above, 0.038 hectares of the application area falls within a CCW. Groundwater salinity is mapped within 1000-3000 milligrams per litre total dissolved solids which is considered to be brackish to moderately saline. Due to the small size and linear nature of the proposed clearing, the application area is unlikely to increase sedimentation and runoff into the wetlands. Therefore, the application area is not likely to cause deterioration in the quality of surface or underground water or cause or exacerbate the incidence or intensity of flooding.

Given the above, the application area is at variance to principle (f) and unlikely to be at variance to the remaining clearing principles.

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 28 November 2018 with a 14 day submission period. One public submissions was received in relation to this application. The Submission raised concerns regarding the adequacy of the information provided with the application form. It is noted that DWER requested additional photos of the application area during the assessment of the application. The photos provided by the applicant indicate that the application area predominately contains *Melaleuca sp.* and sedges with the occasional *Eucalyptus sp.* (Shire of Murray, 2018b).

5. References

Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2006, Canberra. Commonwealth of Australia (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: <u>http://naturemap.dpaw.wa.gov.au/</u>. Accessed November 2018

Department of Biodiversity, Conservation and Attractions (DBCA) (2018) Regional advice submission, Government of Western Australia (DWER A1751141).

Government of Western Australia (2018a) 2017 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of February 2018. WA Department of Parks and Wildlife, Perth.

Government of Western Australia (2018b) 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Parks and Wildlife, Perth.

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 et al. (2004) Soil-landscape mapping in south-Western Australia: an overview of methodology and outputs, Department of Agriculture and Food, Perth.

Shire of Murray (2018a) Application Form Excerpt, Shire of Murray, Western Australia. (DWER A1734244).

Shire of Murray (2018b) Site photos of the northern end, Shire of Murray, Western Australia. (DWER A1748991).

Smith M.G. & Jones A. (2018) Threatened and Priority Flora List, 16 January 2018. Department of Biodiversity, Conservation and Attractions, Kensington, Western Australia.

Water and Rivers Commission (2001) Position Statement: Wetlands, Water and Rivers Commission, Perth

6. GIS databases

- Aboriginal sites of significance
- Department of Biodiversity, Conservation and Attractions
- Sac bio datasets accessed November 2018
- Geomorphic Wetlands
- Hydrography, linear
- Hydrography, hierarchy