

## **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

#### PERMIT DETAILS

Area Permit Number: CPS 9090/1

File Number: DWERVT6797

Duration of Permit: From 28 March 2021 to 28 March 2023

#### PERMIT HOLDER

Mr John Reeve

### LAND ON WHICH CLEARING IS TO BE DONE

Lot 2375 on Deposited Plan 125837, Middlesex

### **AUTHORISED ACTIVITY**

The permit holder must not clear more than 2.9 hectares of native vegetation within the area cross-hatched yellow in Figure 9090/1 of Schedule 1.

### **CONDITIONS**

## 1. Avoid, minimise, and reduce impacts and extent of clearing

In determining the native vegetation authorised to be cleared under this permit, the permit holder must apply the following principles, set out in descending 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. Weed and dieback management

When undertaking any clearing authorised under this permit, the permit holder must take the following measures to minimise the risk of 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.

# 3. Records that must be kept

The permit holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

**Table 1: Records that must be kept** 

No.	Relevant matter	Specifications	
1. In relation to the authorised clearing	authorised clearing	(a)	the species composition, structure, and density of the cleared area;
	activities generally	(b)	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;
		(c)	the date that the area was cleared;
		(d)	the size of the area cleared (in hectares); and
	(e)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 1; and	
		(f)	actions taken to minimise the risk of the introduction and spread of weeds and dieback in accordance with condition 2.

## 4. Reporting

The permit holder must provide to the *CEO* the records required under condition 3 of this permit when requested by the *CEO*.

## **DEFINITIONS**

In this permit, the terms in Table have the meanings defined.

**Table 2: Definitions** 

Term	Definition		
CEO	Chief Executive Officer of the department responsible for the administration of the clearing provisions under the <i>Environmental Protection Act 1986</i> .		
clearing	has the meaning given under section 3(1) of the EP Act.		
condition	a condition to which this clearing permit is subject under section 51H of the EP Act.		
fill	means material used to increase the ground level, or to fill a depression.		
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.		
department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.		
EP Act	Environmental Protection Act 1986 (WA)		
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.		
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.		
weeds	means any plant —  (a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i> ; or  (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or  (c) not indigenous to the area concerned.		

## **END OF CONDITIONS**

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Ryan Mincham
MANAGER
NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

5 March 2021

# **SCHEDULE 1**

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).

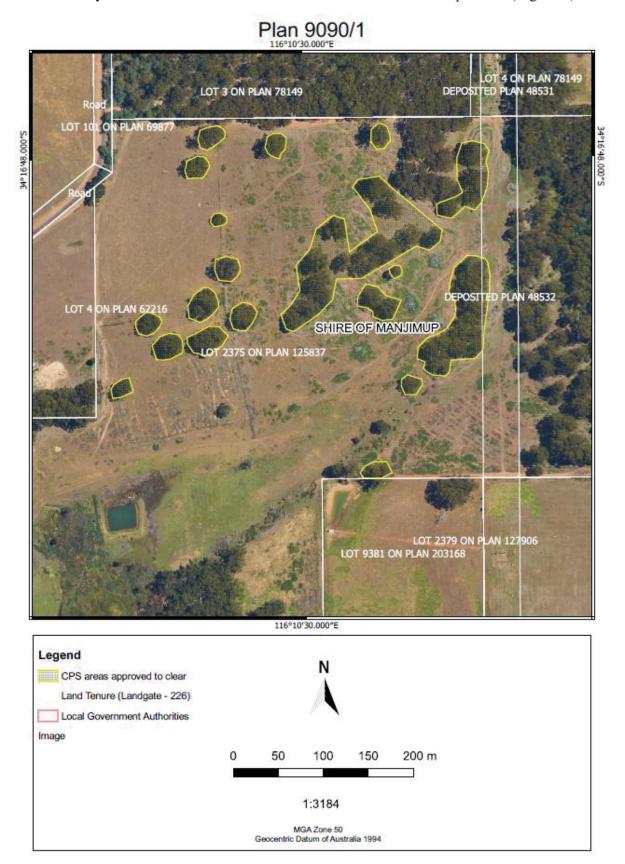


Figure 1: Map of the boundary of the area within which clearing may occur.

CPS 9090/1, 5 March 2021



# **Clearing Permit Decision Report**

## Application details and outcome

#### Permit application details

Permit number: CPS 9090/1

Permit type: Area permit

Applicant name: Mr John Reeve

Application received: 23 October 2020

**Application area:** 2.9 hectares

Purpose of clearing: Cropping

Method of clearing: Mechanical

**Property:** Lot 2375 on Deposited Plan 125837

Location (LGA area/s): Shire of Manjimup

Localities (suburb/s): Middlesex

### **Description of clearing activities**

The vegetation proposed to be cleared is distributed across 19 separate areas (see Figure 1, Section 1.5). The proposed clearing is for the purpose of cropping and to selectively remove trees that are in close proximity to a powerline that that has already been impacted upon by a falling a branch.

#### **Decision on application**

**Decision:** Granted

Decision date: 5 March 2021

**Decision area:** 2.9 hectares of native vegetation

#### Reasons for decision

This clearing permit application was submitted, accepted, assessed and determined in accordance with sections 51E and 51O of the *Environmental Protection Act 1986* (EP Act). The Department of Water and Environmental Regulation (DWER) advertised the application for 14 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see 0A), relevant datasets (see Appendix E), photographs of the vegetation proposed to be cleared and surrounding vegetation provided by the applicant (see Appendix DD), the clearing principles set out in Schedule 5 of the EP Act (see 0 B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that some of the proposed clearing is to selectively clear trees for the purpose of protecting powerlines which have previously had branches fall on them from nearby trees.

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds and dieback into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- impacts to vegetation which is suitable for foraging and roosting by threatened black cockatoo species.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing is unlikely to lead to long-term adverse impacts on environmental values. The Delegated Officer decided to grant a clearing permit subject to conditions to: • avoid, minimise and reduce the impacts and extent of clearing; and • implement hygiene measures to minimise the risk of the introduction and spread of weeds and dieback. CPS 9090/1, 5 March 2021 Page 2 of 15



Figure 1 Map of the application area.

The areas cross-hatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

### Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the *Environmental Protection* (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 510 of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:

- · the precautionary principle
- · the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:

- Biodiversity Conservation Act 2016 (WA) (BC Act)
- Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act)
- Country Areas Water Supply Act 1947 (WA) (CAWS Act)

The key guidance documents which inform this assessment are:

- A guide to the assessment of applications to clear native vegetation (DER, December 2013)
- Procedure: Native vegetation clearing permits (DWER, October 2019)

## **Detailed assessment of application**

## **Avoidance and mitigation measures**

The applicant, demonstrated that avoidance and mitigation measures were adequately considered in the planning of the proposed clearing by selecting areas of Degraded to Completely Degraded vegetation and partially cleared areas, avoiding vegetation were possible and limiting the areas to be cleared to the minimum necessary for the purpose of cultivation and infrastructure (powerline) protection.

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

## Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics, photographs provided by the applicant (see 0D) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

The application area is within the range distribution for threatened species of black cockatoo, however, the trees proposed for clearing do not appear to be suitable for black cockatoo breeding due to mostly small trunk diameter, a lack of observable suitable breeding hollows and a lack of broken branches of suitable diameter to form breeding hollows. The nearest confirmed breeding location for black cockatoos is located 23 kilometres south of the application area. The vegetation proposed to be cleared does have potential value for foraging and potentially roosting by black cockatoos, however, large areas of native vegetation in better condition and comprising more optimal habitat values occur in close proximity to the application area, including Tone State Forest which is located 675 metres to the north. The area of native vegetation that is protected within conservation areas within the local area is approximately 12,000 hectares, therefore the removal of the vegetation proposed to be cleared will not have a significant impact on the availability of suitable habitat within the local area.

Given the above and considering the site characteristics of the application area within the local context, the assessment against the clearing principles (see 0B) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimise and hygiene management conditions.

#### Conclusion

It is considered that the impacts of the proposed clearing will not significantly impact upon habitat for threatened species of black cockatoo. Impacts of clearing on the potential spread of weeds and dieback can be managed by imposing standard hygiene conditions. The proposed clearing does not constitute a significant impact to environmental values.

#### **Conditions**

No fauna management conditions are required.

## Relevant planning instruments and other matters

The Shire of Manjimup advised DWER that local government approvals are not required, and that the proposed clearing is consistent with the Shire's Local Planning Scheme. The Shire did not have any objections to the proposed clearing.

Although the proposed clearing is within the *Country Areas Water Supply Act 1947* (CAWS Act) gazetted Warren River Water Reserve, advice from the Salinity and Land Use Impacts branch of DWER raised no objections to the proposed clearing (A1977778).

It is the permit holder's responsibility to comply with the *Aboriginal Heritage Act 1972* (WA) and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

**End** 

# Appendix A - Site characteristics

# A.1. - Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is comprised of 2.9 hectares of vegetation over nineteen separate parcels within a paddock which is already predominantly cleared for agricultural purposes. The application area is within the Shire of Manjimup and is located approximately 675 metres south of the Tone State Forest.
	Aerial imagery and spatial data indicates that the local area (10-kilometre radius from the centre of the application areas) retains approximately 39 per cent of the original native vegetation cover with approximately 12,000 hectares (38 per cent) occurring within conservation estates. The extent of the mapped vegetation type in the local area is consistent with national objective to prevent the clearing of ecological communities with an extent below 30 per cent of that present prior to European settlement (DEH, 2001).
Ecological linkage	The closest mapped ecological linkages are:
	<ul> <li>South west regional ecological linkage (1.7 kilometres from application area).</li> <li>Roadside conservation ecological linkage (0.77 kilometres from application area).</li> </ul>
	The vegetation proposed for clearing is not necessary for sustaining an ecological linkage between areas of remnant vegetation or other habitats.
Conservation areas	There are numerous mapped conservation areas within the local area:
	<ul> <li>Tone State Forrest (0.675 kilometres away)</li> <li>Sir James Mitchell National Park (5.78 kilometres away)</li> <li>Donnelly State Forest (6.02 kilometres away)</li> <li>Smith Brook Nature Reserve (7.04 kilometres away)</li> </ul>
	<ul> <li>Faunadale Nature Reserve (7.17 kilometres away)</li> <li>Jarnadup State Forest (7.95 kilometres away)</li> <li>Warren State Forest (8.36 kilometres away)</li> <li>Palgarup State Forest (8.95 kilometres away)</li> </ul>
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed
	clearing area consists of eucalyptus trees with invasive weed groundcover and limited native vegetation groundcover. Representative photos are available in Appendix D.
	On the basis of the information provided, this is marginally consistent with the mapped vegetation types:
	Pemberton, PM1 - which is described as Tall open forest of <i>Eucalyptus diversicolor</i> with mixtures of <i>Corymbia calophylla</i> on valley slopes and low forest of <i>Agonis juniperina-Banksia seminuda-Callistachys lanceolata</i> on valley floors in the perhumid zone. (Shepherd et al, 2001)
	and;
	<ul> <li>Crowea, Cry - which is described as Tall open forest of Corymbia calophylla with mixture of Eucalyptus marginata subsp. marginata and Eucalyptus diversicolor on uplands in hyperhumid and perhumid zones.</li> </ul>
	Both the mapped vegetation types retain over sixty per cent of the original extent (Government of Western Australia, 2019).

Characteristic	Details		
Vegetation condition	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in Degraded to Completely Degraded (Keighery, 1994) condition, described as:  • Degraded – Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.  and;  • Completely Degraded – The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.  The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.		
Climate and landform	Rainfall: 1000 to 1100 mm per year.		
Cilinate and landienin	Evapotranspiration: 800 mm per year.		
	Landform: moderate slope.		
Soil description	Crowea (Pimelia), yellow duplex Phase described as:      Loamy gravels and Duplex sandy gravels. The dominant profiles are duplex yellow soils which have a pale grey-brown loamy sand to sandy loam A horizon that is 20 to 40 cm thick and sometimes bleached slightly. The clay B horizon has a general hue of 10 YR that is usually mottled yellow, yellow-brown and grey. It is mildly acidic. There are low to moderate amounts of ferruginous		
	gravels in the A horizon (Dy 3.61, Dy 3.62) but boulders of this material are rare.  Pemberton Subsystem (Pimelaia) described as:		
	<ul> <li>Loamy gravels, Friable Red/brown loamy earths, Brown loamy earths and Red deep loamy duplexes soil notes: Red, and some yellow earths with a gravely sandy loam to sandy clay loam surface horizon, are most extensive. There are areas of red duplex profiles which also have a light brown, gravely sandy loam A horizon. Some of these profiles have an A2 horizon. Humus podzols and orange and grey-brown earths occur on the valley floor.</li> </ul>		
Land degradation risk	According to available mapping data and related databases, land degradation risk ratings are considered to be nil to high. The soil types within the application area have a low risk of waterlogging and erosion. The proposed clearing will not increase the risk of appreciable land degradation.		
Waterbodies	The desktop assessment and aerial imagery indicated that no mapped wetlands or waterbodies occur within the application area, however, a minor non-perennial watercourse transects two clearing areas.		
Hydrogeography	The application area is within the Warren River Water Reserve, gazetted under the Country Area Water Supply Act 1947 (CAWS Act). The application area is not within a Public Drinking Water Source Area.		
Flora	There are six flora species of conservation significance recorded within the local area; two Threatened, one Priority 1, one Priority 2 and two Priority 3. The nearest record of conservation significant flora is 1.4 kilometres to the north within Tone State Forest.		

Characteristic	Details
Ecological communities	No conservation significant ecological communities have been mapped within the local area and the vegetation within the application area does not contain species that would indicate an ecological community of conservation significance.
Fauna	There are 21 records of conservation significant fauna of within the local area, none of which have been previously recorded within the application area. These species include, two Critical, five Endangered, one P3, five P4 and four Vulnerable species. Two species of conservation interest, one migratory species and one specially protected species. The application area comprises suitable habitat features for potential use by threatened species of black cockatoos, however, the clearing is not assessed as significantly impacting the availability of suitable habitat within the local area.

# A.2. - Fauna analysis table

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
Calyptorhynchus baudinii	EN	Υ	Υ	1.61	N/A
(Baudin's cockatoo)					
Calyptorhynchus latirostris	EN	Υ	Υ	2.68	N/A
(Carnaby's cockatoo)					
Calyptorhynchus sp.	EN	Υ	Υ	3.37	N/A
(white-tailed black cockatoo)					
Calyptorhynchus banksii naso	VU	Υ	Υ	2.95	N/A
(Forest red-tailed black cockatoo)					

# Appendix B - Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): "Native vegetation should not be cleared if it comprises a high level of biodiversity."  Assessment:  The area proposed to be cleared is unlikely to contain locally or regionally significant flora, fauna, habitats, assemblages of plants. No conservation significant ecological communities are mapped within the local area, while no records of conservation significant flora or fauna species occur within the application area. The Degraded to Completely Degraded condition of the vegetation makes it unlikely that the application area comprises a high level of biodiversity.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (b): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."	May be at variance	Yes
Assessment:		
The area proposed to be cleared does contain potential foraging and roosting, habitat for threatened black cockatoo species, however, photographic evidence of the trees proposed for clearing (Appendix D) shows that they are unlikely to be suitable breeding trees due to mostly small trunk diameter, a lack of observable suitable breeding hollows and a lack of broken branches of suitable diameter to form breeding hollows. The proximity of suitable habitat in large areas of protected remnant vegetation, such as Tone State Forest provides alternative habitat which is suitable for black cockatoos. Aerial imagery indicates that this habitat is in better condition than the vegetation found within the application area. Poor ground cover and weed invasion makes it unlikely that the vegetation provides significant habitat for other conservation significant fauna recorded within the local area. The vegetation proposed to be cleared does not provide any significant function as an ecological linkage.		
<u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."	Not likely to be at variance	No
Assessment:  The soil types, vegetation condition (especially the lack of groundcover) and landform topography do not correspond with the habitat requirements for threatened flora species previously recorded within the local area, therefore, the proposed clearing area is unlikely to contain suitable habitat for threatened flora species listed under the BC Act.		
Principle (d): "Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."	Not likely to be at variance	No
Assessment:		
There are no state listed threatened ecological communities mapped within the local area and the application area does not contain species that can indicate a threatened ecological community.		
Environmental value: significant remnant vegetation and conservation are	eas	
<u>Principle (e):</u> "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	Not likely to be at	No
Assessment:	variance	
Aerial imagery and spatial data indicates that the local area (10-kilometre radius from the centre of the application areas) retains approximately 39 per cent of the original native vegetation cover. The extent of the mapped vegetation type and native vegetation in the local area is consistent with the national objective to prevent the clearing of ecological communities with an extent below 30 per cent of that present prior to European settlement (DEH, 2001). Given the Degraded to Completely Degraded condition of the vegetation, and that the application area is not considered to be part of a significant ecological linkage in the local area, the vegetation is not likely to represent a significant remnant of native vegetation.		

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (h): "Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."	Not likely to be at variance	No
Assessment:		
Given the distance to the nearest conservation area (Tone State Forest, 675 metres to the north and upgradient from the application area) and that there is no direct topographical connectivity between the clearing area and any conservation area, the proposed clearing <i>is</i> not likely to have an impact on the environmental values of or nearby conservation areas.		
Environmental value: land and water resources		
Principle (f): "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."	Not likely to be at	No
Assessment:	variance	
There are no significant watercourses or wetlands within the application area, although a minor non-perennial drainage line is intersected in the eastern portion of the application area. The area proposed for clearing comprises very little groundcover and has limited value as a buffer to the minor watercourse within the application area.		
Principle (g): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."	Not likely to be at	No
Assessment:	variance	
The soil types within the application area have a nil to high land degradation risk across all risk types. Noting the extent and location of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.		
<u>Principle (i):</u> "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."	Not likely to be at variance	No
Assessment:		
Given no mapped watercourses or wetlands are within the application area and the area proposed for clearing already has very little groundcover, the proposed clearing is unlikely to significantly exacerbate impacts to on or offsite hydrology and water quality. The moderate topographic contours and soil with good infiltration characteristics also reduces the likelihood that this clearing will exacerbate erosion and sedimentation issues on nearby watercourses.		
Principle (j): "Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."	Not likely to be at variance	No
Assessment:		
The mapped soils have a low waterlogging risk and low water repellence risk. The topographic contours within the application area and surrounding areas are moderate, hence, it is considered unlikely that the proposed clearing will contribute to an increased incidence or intensity of flooding.		

# Appendix C - Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from

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

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description		
Pristine	Pristine or nearly so, no obvious signs of disturbance.		
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.		
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.		
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.		
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or grazing.		
Completely degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.		

# Appendix D. Photographs of the vegetation provided by applicant



Tree showing some roosting potential. Completely Degraded surrounding vegetation.



Tree showing roosting potential and Completely Degraded surrounding vegetation.



Tree showing limited roosting potential and Completely Degraded surrounding vegetation.



Tree showing limited roosting potential and degraded surround vegetation.



Tree showing roosting potential and Completely Degraded surrounding vegetation condition.



Trees next to power lines.



Tree showing limited roosting potential surrounded by Completely Degraded vegetation.



Looking North East, area of trees that are to be retained



Looking South East, area of trees that are to be retained.



Looking south, shows the trees leaning towards the powerline as well as the tree that fell and hit the powerline.

## Appendix E - Sources of information

#### E.1. - GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- 10 Metre Contours (DPIRD-073)
- Aboriginal Heritage Places (DPLH-001)
- Aboriginal Heritage Places (DPLH-001)
- Cadastre (LGATE-218)
- Cadastre Address (LGATE-002)
- Contours (DPIRD-073)
- DBCA Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Directory of Important Wetlands in Australia Western Australia (DBCA-045)
- Environmentally Sensitive Areas (DWER-046)
- Flood Risk (DPIRD-007)
- Groundwater Salinity Statewide (DWER-026)
- Hydrography Inland Waters Waterlines
- Hydrological Zones of Western Australia (DPIRD-069)
- IBRA Vegetation Statistics
- Imagery
- Local Planning Scheme Zones and Reserves (DPLH-071)
- Native Title (ILUA) (LGATE-067)
- Offsets Register Offsets (DWER-078)
- Pre-European Vegetation Statistics
- Public Drinking Water Source Areas (DWER-033)
- Ramsar Sites (DBCA-010)
- Regional Parks (DBCA-026)
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality Flood Risk (DPIRD-007)
- Soil Landscape Land Quality Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality Water Repellence Risk (DPIRD-014)
- Soil Landscape Land Quality Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping Best Available
- Soil Landscape Mapping Systems
- Wheatbelt Wetlands Stage 1 (DBCA-021)

#### Restricted GIS Databases used:

- ICMS (Incident Complaints Management System) Points and Polygons
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)

#### E.2. - References

Applicant (2020) Clearing permit application CPS 9090/1, received 23 October 2020 (DWER Ref: A1946507).

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

Department of Agriculture Water and Environment (DAWE) (2015). Submitting a referral under the EPBC Act, https://www.environment.gov.au/epbc/publications/factsheet-submitting-referral-under-epbc-act

- Department of Environment Regulation (DER) (2013). A guide to the assessment of applications to clear native vegetation. Perth. Available from: https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2 assessment native veg.pdf.
- Department of Primary Industries and Regional Development (DPIRD) (2019). NRInfo Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: https://maps.agric.wa.gov.au/nrm-info/ (accessed 29 January 2021).
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: https://dwer.wa.gov.au/sites/default/files/Procedure\_Native\_vegetation\_clearing\_permits\_v1.PDF.
- Department of Water and Environmental Regulation (DWER) Country Areas Water Supply Act 1947 (CAWS Act)
  Advice for CPS 9090/1, received 11 December 2020 (DWER Ref: A1977778).
- Government of Western Australia (2019) 2018 South West Vegetation Complex Statistics. Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth, https://catalogue.data.wa.gov.au/dataset/dbca
- Government of Western Australia. (2019) 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions. <a href="https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics">https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics</a>
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, Western Australia.
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