



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 10873/1
Permit Holder:	Roger Raymond
Duration of Permit:	From 29 March 2025 to 29 March 2030

The permit holder is authorised to clear *native vegetation* subject to the following conditions of this permit.

PART I – CLEARING AUTHORISED

1. Clearing authorised (purpose)

The permit holder is authorised to clear *native vegetation* for the purpose of power pole and powerline installation.

2. Land on which clearing is to be done

Lot 2 on Diagram 54900, Wilyabrup Carter Road reserve (PIN 11476575), Wilyabrup

3. Clearing authorised

The permit holder must not clear more than 0.015 hectares of *native vegetation* within the area cross-hatched yellow in Figure 1 and Figure 2 of Schedule 1.

PART II – MANAGEMENT CONDITIONS

4. 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.

5. 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.

6. Fauna management – western ringtail possum and south-western brush tailed phascogale

- (a) In relation to the area cross-hatched yellow in Figure and Figure 2 of Schedule 1, the permit holder must engage a *fauna specialist* to inspect that area immediately prior to, and for the duration of clearing activities, for the presence of western ringtail possum(s) (*Pseudocheirus occidentalis*) and south-western brush tailed phascogale(s) (*Phascogale tapoatafa wambenger*).
- (b) Clearing activities must cease in any area where fauna referred to in condition 6(a) are identified until either:
 - (i) the western ringtail possum / south-western brush tailed phascogale individual(s) has moved on from that area to adjoining *suitable habitat*; or
 - (ii) the western ringtail possum individual(s) has been removed by a *western ringtail possum specialist* and/or the south-western brush tailed phascogale(s) has been removed by a *fauna specialist*.
- (c) Any western ringtail possum(s) individual removed in accordance with condition 6(b)(ii) must be relocated by a *western ringtail possum specialist* to adjacent *suitable habitat*.
- (d) Any south-western brush-tailed phascogale individual(s) removed in accordance with condition 6(b)(ii) must be relocated by a *fauna specialist* to adjacent *suitable habitat*.
- (e) Where fauna is identified under condition 6(a), the permit holder must within 14 calendar days provide the following records to the *CEO*:
 - (i) the number of individuals identified;
 - (ii) the date each individual was identified;
 - (iii) the location where each individual was identified recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (iv) the number of individuals removed and relocated;
 - (v) the relevant qualifications of the *western ringtail possum specialist* undertaking removal and relocation;
 - (vi) the date each individual was removed;
 - (vii) the method of removal;
 - (viii) the date each individual was relocated;
 - (ix) the location where each individual was relocated to, recorded using a GPS unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings or decimal degrees; and
 - (x) details pertaining to the circumstances of any death of, or injury sustained by, an individual.

PART III - RECORD KEEPING AND REPORTING

7. **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	Table	1:	Records	that	must	be	kept
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No.	Relevant matter	Specifications				
No.	Relevant matter In relation to the authorised clearing activities generally	(a) (b)	ifications the species composition, structure, and density of the cleared area; the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to GDA2020, expressing the geographical coordinates in Eastings and Northings; the date that the area was cleared:			
		(d)	the size of the area cleared (in hectares);			
		(e)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 4; and			
		(f)	actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 5; and			
		(g)	actions taken to manage and mitigate impacts to western ringtail possums and south-western brush tailed phascogale in accordance with condition 6.			

8. Reporting

The permit holder must provide to the *CEO* the records required under condition 7 of this permit when requested by the *CEO*.

DEFINITIONS

In this permit, the terms in Table 2 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.
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</i> <i>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)
fauna specialist	means a person who holds a tertiary qualification specialising in environmental science or equivalent, and has a minimum of 2 years work experience in fauna identification and surveys of fauna native to the region being inspected or surveyed, or who is approved by the <i>CEO</i> as a suitable fauna specialist for the bioregion, and who holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .
fill	means material used to increase the ground level, or to fill a depression.
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.
suitable habitat (south- western brush-tailed phascogale)	Means habitat for southwestern brush-tailed phascogale (<i>Phascogale tapoatafa</i>) characterised by dry sclerophyll forests and open woodlands that contain hollow bearing trees but a sparse ground cover
suitable habitat (western ringtail possum)	means habitat known to support western ringtail possums (<i>Pseudocheirus occidentalis</i>) within the known current distribution of the species, typically characterised by abundant foliage, presence of suitable nesting structures such as tree hollows, as well as high canopy cover and continuity. Known habitat includes peppermint (<i>Agonis flexuosa</i>) dominated woodlands, jarrah (<i>Eucalyptus marginata</i>) and marri (<i>Corymbia calophylla</i>) forests, riparian vegetation with a canopy of Bullich (<i>Eucalyptus megacarpa</i>) or flooded gum (<i>Eucalyptus rudis</i>), karri (<i>Eucalyptus diversicolor</i>) forests, sheoak (<i>Allocasuarina fraseriana</i>) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains.
	means any plant –
	(a) that is a declared pest under section 22 of the <i>Biosecurity and</i>
	Agriculture Management Act 2007; or
weeds	(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.
western ringtail	means a <i>fauna specialist</i> who holds a tertiary qualification specialising in
possum specialist	environmental science or equivalent, has a minimum of two years of work

Term	Definition
	experience in western ringtail possum (Pseudocheirus occidentalis)
	identification, surveys of western ringtail possums and capture and
	handling of western ringtail possums, and holds a valid fauna licence
	issued under the Biodiversity Conservation Act 2016.

END OF CONDITIONS

Ryan Mincham MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

6 March 2025

Schedule 1



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



Figure 2: Map of the boundary of the area within which clearing may occur



Clearing Permit Decision Report

1 Application details and outcome					
1.1. Permit application	1.1. Permit application details				
Permit number:	CPS 10873/1				
Permit type:	Purpose permit				
Applicant name:	Roger Raymond				
Application received:	4 December 2024				
Application area:	0.015 hectares of native vegetation				
Purpose of clearing:	Power pole and powerline installation				
Method of clearing:	Mechanical				
Property:	Lot 2 on Diagram 54900 Carter Road reserve (PIN 11476575)				
Location (LGA area/s):	City of Busselton				
Localities (suburb/s):	Wilyabrup				

1.2. Description of clearing activities

The vegetation proposed to be cleared is contained within three areas:

- Carter Road west two trees (0.003 ha)
- Carter Road east two trees (0.006 ha)
- Metricup Road two trees (0.006 ha)

The purpose of the clearing is to run a new overhead powerline from the eastern side of Carter Road to the western side of Carter Road to facilitate a new residence. A new power pole is also required to be constructed on Lot 2 on Diagram 54900 (adjacent to Metricup Road) to facilitate this connection.

1.3. Decision on app	lication
Decision:	Granted
Decision date:	6 March 2025
Decision area:	0.015 hectares of native vegetation as depicted in Section 1.5 below

1.4. 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 21 days and no submissions were received.

In making this decision, the Delegated Officer had regard for the site characteristics (see Appendix C), relevant datasets (see Appendix I.1), the clearing principles set out in Schedule 5 of the EP Act (see Appendix D), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3).

The assessment identified that the application area contains suitable habitat for western ringtail possum, black cockatoos, south-western brush-tailed phascogale, quenda and peregrine falcon, however, it is not considered to be significant habitat for these 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 impacts of the proposed clearing can be minimised and managed to unlikely lead to an unacceptable risk to environmental values. The applicant has suitably demonstrated avoidance and minimisation measures.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing
- take hygiene steps to minimise the risk of the introduction and spread of weeds and dieback
- take steps to monitor and manage any western ringtail possum and south-western brush-tailed phascogale individuals present within the application area.

1.5. Site maps



Figure 1a. Map of the Metricup Road portion of the application area. The area cross-hatched yellow indicates the area authorised to be cleared under the granted clearing permit.



Figure 1b. Map of the Carter Road portions of the application area. The areas cross-hatched yellow indicate the areas authorised to be cleared under the granted clearing permit.

2 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)

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)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant submitted the following evidence to demonstrate consideration of avoidance and mitigation measures (Raymond, 2024):

- vegetation has been inspected by a consultant and only trees within the nominated Western Power footprint that require clearing will be subject to removal.
- other trees will be retained and may only require minor pruning.
- the clearing footprint has avoided any impacts to black cockatoo habitat.
- During clearing activities, a fauna spotter will undertake a pre-clearance inspection of the vegetation

While the applicant has stated that they have avoided any impacts to black cockatoo, it is noted that the application area still includes black cockatoo foraging and roosting habitat. However, the proposed clearing will not impact habitat that is significant roosting and foraging habitat for black cockatoos (refer to Section 3.2.1 for further details).

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

3.2. Assessment of impacts on environmental values

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

The assessment against the clearing principles (see Appendix A) identified that the risk of impacts of the proposed clearing to biological values (fauna) and significant remnant vegetation required further consideration. The consideration of these impacts, and the extent to which they can be managed through conditions applied in line with sections 51H and 51I of the EP Act, is set out below.

3.2.1. Biological values (fauna) - Clearing Principles (a) and b)

<u>Assessment</u>

Based on the suitability of habitat, distance to closest mapped records and number of known records in the local area, the following conservation significant fauna species could possibly occur within the application area:

- Pseudocheirus occidentalis (western ringtail possum, ngwayir) (Critically endangered)
- Zanda baudinii (Baudin's cockatoo) (Endangered)
- Zanda latirostris (Carnaby's cockatoo) (Endangered)
- Calyptorhynchus banksii naso (forest red-tailed black cockatoo) (Vulnerable)

- Isoodon fusciventer (quenda, southwestern brown bandicoot) (Priority 4)
- Phascogale tapoatafa wambenger (south-western brush-tailed phascogale) (Conservation Dependent)
- Falco peregrinus (peregrine falcon) (other specially protected)

Western ringtail possum

Western ringtail possums (WRP) in the Swan Coastal Plain management zone inhabit stands of myrtaceous trees (usually peppermint trees (*Agonis flexuosa*)) growing near swamps, water courses or floodplains, and at topographic low points which provide cooler and often more fertile conditions (Jones 2001, de Tores et al. 2004). Habitat critical to WRP survival includes habitat connecting patches of forest remnants (Jones et al. 1994, Jones et al. 2004, Wayne et al. 2006). Noting the extent of clearing is relatively small in the context of the vegetation within the local area, the clearing is not considered likely to have a significant impact on WRP. However, the peppermint and marri trees in the application area are within corridors of vegetation associated with the road verges that may be utilised by WRP moving through the landscape. As such, a condition to inspect trees for WRP prior to clearing and to cease clearing if any WRP individuals are present will mitigate impacts to any individuals that may be using this vegetation.

Black cockatoos

The application area is within the known range of Baudin's cockatoo, Carnaby's cockatoo *and* forest red-tailed black cockatoo (hereafter referred to as black cockatoo species) (Department of Agriculture, Water and Environment (DAWE), 2022). Black cockatoo species have been known to nest in hollows of live or dead *Eucalyptus* and *Corymbia calophylla* trees (DAWE, 2022). For most species of trees, suitable nest hollows are only found in live trees with a diameter at breast height (DBH) of at least 50 centimetres (DAWE, 2022). While there is one marri tree within the application area, this has a DBH of less than 50 centimetres (Raymond, 2024) and therefore it is very unlikely that this tree would provide suitable breeding habitat for black cockatoo species.

Black cockatoos may also roost in and forage upon marri trees, and forage within *Xanthorrhoea preissii* (DAWE, 2022, Groom, 2011 and Bancroft and Bamford, 2023) present within the application area. *Xanthorrhoea preissii* seeds provide a relatively low source of calories for Carnaby's cockatoo when compared to Banskia, marri or pine seeds (Stock et. al., 2013) and the EPBC *Referral guideline for 3 WA black cockatoos* (DAWE, 2022) does not include *Xanthorrhoea* grass trees as foraging habitat for black cockatoo species. Noting the above, as well as the extent of the clearing in the context of the local area, which contains large areas of native vegetation that are likely to provide better quality roosting and foraging habitat, it is considered that the loss of one marri tree and a couple of *Xanthorrhoea preissii* plants will not significantly impact black cockatoo roosting and foraging habitat.

Brush tailed phascogale

The south-western brush-tailed phascogale is found in dry sclerophyll forests and open woodlands that contain hollow-bearing trees, characterised by high canopy cover and connectivity (DEC, 2012). Based on the above, while suitable vegetation may be present to support individuals moving between remnant patches of native vegetation within the area, the application area is not considered to be significant habitat for south-western brush-tailed phascogale given the lack of trees large enough to contain hollows and the extent of the clearing in the context of the vegetation present in the local area. Fauna management conditions on the permit will prevent impacts to south-western brush-tailed phascogale individuals that may be moving through the area.

Other conservation significant fauna

While the proposed clearing area may contain habitat for the quenda and peregrine falcon, it is considered unlikely to provide significant habitat given its extent and the degraded nature of the vegetation.

Conclusion

Based on the above assessment, while the application area contains suitable habitat for western ringtail possum, black cockatoos, south-western brush-tailed phascogale, quenda and peregrine falcon it is not considered to be significant habitat for these species. For the reasons set out above, it is considered that the impacts of the proposed clearing on these values can be managed through fauna management conditions.

Conditions

To address the above impacts, the following management measures will be required as conditions on the permit:

• Take steps to monitor and manage any western ringtail possum and south-western brush-tailed phascogale individuals present within the application area.

3.3. Relevant planning instruments and other matters

DWER contacted the City of Busselton asking for advice regarding this application, and no comment was received. However, the City of Busselton has provided the applicant authority to access Carter Road reserve to undertake the proposed clearing, providing that:

- trees of greater than 50cm DBH are retained/avoided (note that no such trees are present); and
- care is taken during the removal of any vegetation to prevent harm to any WRP present (Raymond, 2024)

End

Appendix A. Site characteristics

A.1. Site characteristics

Characteristic	Details
Local context	The areas proposed to be cleared are part of isolated linear patches of native vegetation associated with road reserves in the intensive land use zone of Western Australia.
	spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 33.5 per cent of the original native vegetation cover.
Ecological linkage	The Carter Road portions of the application area are approximately 1.1 km west of an axis line of the South West Ecological Linkages. All portions of the application area are connected to vegetation within this linkage through narrow bands of vegetation along Carter Road and Metricup Road. The bands of vegetation along Carter Road and Metricup Road reserves could be considered local ecological linkages, although they are patchy and intersected by multiple roads and crossovers.
Conservation areas	The closest conservation area is Yelverton reserve located approximately 1.3 km northeast of the Metricup Road portion of the application area.
Vegetation description	Photographs and information supplied by the applicant (Raymond, 2024) indicate the vegetation within the proposed clearing area consists of:
	 Carter Road west – two Agonis flexuosa (peppermint) trees, understorey of <i>Xanthorrhoea preisseii</i> and exotic grasses (0.003 ha) Carter Road east – one peppermint tree and one <i>Corymbia calophylla</i> (marri) tree, understorey of <i>Xanthorrhoea preisseii</i> and exotic grasses (0.006 ha) Metricup Road – two peppermint trees, understorey of exotic and possibly native grasses (0.006 ha)
	Representative photos are available in Appendix D.
	This is consistent with the Mattiske and Havel (1998) mapped vegetation type: Cowaramup, C2, described as open forest of <i>Eucalyptus marginata</i> subsp. <i>marginata</i> - <i>Corymbia calophylla-Banksia grandis</i> on lateritic uplands in perhumid and humid zones.
	The mapped vegetation type retains approximately 32 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant indicates 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 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.
	The full Keighery (1994) condition rating scale is provided in Appendix C. Representative photos are available in Appendix D.
Climate	I ne application area experiences a Mediterranean climate with an annual mean maximum temperature of 21.4°C and an annual mean minimum temperature of 12.7°C. The mean annual rainfall is approximately 1100 millimetres, and the annual evapotranspiration rate is 800 millimetres.

Characteristic	Details
Elevation	120 m AHD to 125 m AHD
Soil description	The soil is mapped as Cowaramup flats Phase, described as Flats (0-2% gradient) with gravelly duplex (Forest Grove) and pale grey mottled (Mungite) soils.
Land degradation risk	The mapped soil type has a high wind erosion risk, a moderate waterlogging risk and a low risk of flooding, salinity, phosphorus export and water erosion.
Waterbodies	The desktop assessment and aerial imagery indicated that the closest surface waterbodies to the Metricup Road portion of the application area are two dams along minor perennial watercourses, approximately 250 m to the northwest and southwest, and the closest surface waterbody to the Carter Road portions of the application area is a dam along a man-made watercourse approximately 150 m to the east.
Hydrogeography	The Metricup Road portion of the application area is within the Cape to Cape North Surface Water area proclaimed under the <i>RIWI Act</i> and the Carter Road portions of the application area are within the Geographe Bay Rivers Surface Water Area proclaimed under the <i>RIWI Act</i> .
	The application area is within the Busselton-Capel Groundwater Area proclaimed under the <i>RIWI Act</i> .
	Hydrogeology: Rocks of Low Permeability, Fractured and Weathered Rocks - Local Aquifers (Gneiss, migmatite lithology)
	Groundwater salinity: 1000-3000 mg/L TDS
Flora	There are records of four threatened and 32 priority flora species within the local area, 17 of which are found on the same mapped soil and/or vegetation type as the application area.
Ecological communities	There are records of two threatened and five priority ecological communities within the local area, none of which in the local area are found on the same mapped soil and/or vegetation type as the application area.
Fauna	There are records of 16 threatened, five priority, one conservation dependent, eight migratory and one other specially protected fauna species within the local area. Of these, the 17 fauna species associated with terrestrial environments are considered in Appendix C.3 below.

A.2. Vegetation extent

	Pre- European extent (ha)	Current extent (ha)	Extent remaining (%)	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre- European extent in all DBCA managed land
IBRA bioregion*					
Jarrah Forest	4,506,660.25	2,399,838.15	53.25	1,673,614.25	37.14
Vegetation complex					
Mattiske vegetation complex Cowaramup, C2 (41)**	13,692.45	4,442.60	32.45	863.08	6.30
Local area (calculation)					
10km radius	31,669.86	10,609.4	33.5	-	-

*Government of Western Australia (2019a)

**Government of Western Australia (2019b)

A.3. Fauna analysis table

With consideration for the site characteristics set out above and relevant datasets (see Appendix E.1), impacts to the following conservation significant fauna required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Number of known records in local area	Distance of closest record to application area (km)	Are surveys adequate to identify? [Y, N, N/A]
Calyptorhynchus banksii naso (forest red-tailed black cockatoo)	VU	Y	17	0.9	N/A
Falco peregrinus (peregrine falcon)	OS	Y	3	3.7	N/A
<i>Isoodon fusciventer</i> (quenda, southwestern brown bandicoot)	P4	Y	35	0.9	N/A
Phascogale tapoatafa wambenger (south-western brush-tailed phascogale, wambenger)	CD	Y	30	1.2	N/A
<i>Pseudocheirus occidentalis</i> (western ringtail possum, ngwayir)	CR	Y	354	0.3	N/A
Zanda baudinii (Baudin's cockatoo)	EN	Y	37*	1.7	N/A
Zanda latirostris (Carnaby's cockatoo)	EN	Y	32*	0.9	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

* An additional 36 records of Zanda sp. 'white-tailed black cockatoo' (white-tailed black cockatoo) were recorded within the local area which may comprise either of these species

Appendix B. Assessment against the clearing principles							
Assessment against the clearing principles	Variance level	Is further consideration required?					
Environmental value: biological values	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 contains habitat for conservation significant fauna species, however, does not otherwise comprise a high level of biodiversity. Noting the extent and Degraded to Completely Degraded condition of the application area, and that conservation significant flora species within the local area are not notably found within disturbed environments, it is considered unlikely that conservation significant flora species would be present within the application area.	Not likely to be at variance	Yes Refer to Section 3.2.1 above.					
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."Assessment: The area proposed to be cleared contains habitat for western ringtail possum, south-western brush tailed phascogale, black cockatoo species, quenda and peregrine falcon, however, it is not considered to be significant habitat for these species.	At variance	Yes Refer to Section 3.2.1 above.					
<u>Principle (c):</u> "Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora." <u>Assessment:</u> Noting the extent and Degraded to Completely Degraded condition of the application area, and that conservation significant flora	Not likely to be at variance	No					

Assessment against the clearing principles	Variance level	Is further consideration required?
species within the local area are not notably found within disturbed environments, it is considered unlikely that flora species listed under the BC Act would be present within the application area.		
<u>Principle (d):</u> "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: The area proposed to be cleared does not contain species indicative of a threatened ecological community.		
Environmental value: significant remnant vegetation and conservation ar	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 Yes be at Refer to	Yes Refer to Section
<u>Assessment:</u> The extents of the mapped vegetation type and native vegetation in the local area are consistent with the national objectives and targets for biodiversity conservation in Australia.	vanance	3.2.2, above.
The application areas are part of local ecological linkages along Carter Road and Metricup Road reserves that may be used by fauna moving between larger patches of remnant vegetation. Clearing of the Carter Road west portion of the application area will not sever the linkage associated with vegetation along this side of the road. The Carter Road east portion and Metricup Road portion of the application area are within segments of these linkages where canopy connectivity is already severed, and as such the proposed clearing is unlikely to significantly degrade the quality of these linkages for arboreal fauna, including western ringtail possum and south- western brush-tailed phascogale.		
<u>Principle (h):</u> "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
<u>Assessment:</u> Given the distance to the nearest conservation area, the proposed clearing is not likely to have an impact on the environmental values of conservation areas.		
Environmental value: land and water resources		
<u>Principle (f):</u> "Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland." <u>Assessment:</u> No watercourses or wetlands are recorded within the application area and vegetation within the application area is not riparian	Not likely to be at variance	No
<u>Principle (g):</u> "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
<u>Assessment:</u> The mapped soils are highly susceptible to wind erosion and moderately susceptible to waterlogging. Noting the extent of the application area, the proposed clearing is not likely to have an appreciable impact on land degradation.	variance	
<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
<u>Assessment:</u> Given the distance to the nearest surface waterbodies and the extent of the clearing, the proposed clearing is unlikely to impact surface or groundwater quality.		

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Assessment against the clearing principles	Variance level	Is further consideration required?
<u>Principle (j):</u> "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
<u>Assessment:</u> The mapped soils, topographic contours and distance to waterbodies indicate the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding or waterlogging.		

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 (1994).

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



Figure D-1. Carter Road east portion of the application area, looking east. one peppermint tree and one *Corymbia calophylla* (marri) tree, understorey of *Xanthorrhoea preisseii* and exotic grasses.



Figure D-2. Carter Road west portion of the application area, looking west. Two *Agonis flexuosa* (peppermint) trees, understorey of *Xanthorrhoea preisseii* and exotic grasses.



Figure D-3. Metricup Road portion of the application area, looking north. Two peppermint trees, understorey of exotic and possibly native grasses.

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)

- Geomorphic Wetlands South West Unreviewed (DBCA-040)
- 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

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)

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