



CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

PERMIT DETAILS

Area Permit Number:	CPS 10592/1
File Number:	DWERVT14140
Duration of Permit:	From 11 January 2025 to 11 January 2035

PERMIT HOLDER

City of Busselton

LAND ON WHICH CLEARING IS TO BE DONE

Lot 5303 on Deposited Plan 220583 (Crown Reserve 22674), Siesta Park

AUTHORISED ACTIVITY

The permit holder must not clear more than 0.0028 hectares of *native vegetation* and one (1) native tree within the area cross-hatched yellow in Figure 1 of Schedule 1.

CONDITIONS

1. Period during which clearing is authorised

The permit holder must not clear any native vegetation after 11 January 2027.

2. 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.

3. 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.

4. Fauna management – western ringtail possums

- (a) In relation to the area cross-hatched yellow in Figure 1 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*).
- (b) Clearing activities must cease in any area where fauna referred to in condition 4(a) are identified until either:
 - (i) the western ringtail possum(s) individual has moved on from that area to adjoining *suitable habitat*; or
 - (ii) the western ringtail possum(s) individual has been removed by a *western ringtail possum specialist*.
- (c) Any western ringtail possum(s) individual removed in accordance with condition 4(b)(ii) must be relocated by a *western ringtail possum specialist* to a *suitable habitat* as approved by the *CEO*.
- (d) Where fauna is identified under condition 4(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.

5. **Revegetation - planting**

- (a) The permit holder must within 12 months of undertaking clearing authorised under this permit:
 - (i) undertake deliberate planting of four (4) peppermint (*Agonis flexuosa*) trees within the area hatched red of Figure 1 of Schedule 1;
 - (ii) ensure only local provenance propagating material of plants are used;
 - (iii) ensure planting is undertaken at the optimal time
 - (iv) ensure plantings are of a suitable size of at least one (1) metre in height;
- (b) The permit holder must undertake *weed* control and watering of *plantings* for at least three years following *planting* of the trees undertaken in accordance with condition 5(a) of this permit;
- (c) The permit holder must, within 24 months of planting the trees in accordance with condition 5(a) of this permit:
 - (i) engage an *environmental specialist* to make a determination that the four trees will survive;
 - (ii) if the determination made by the *environmental specialist* under condition 5(c)(i) is that four trees will not survive, the permit holder must *plant* additional trees that will result in four trees persisting within the area cross-hatched red on Figure 1 of Schedule 1;
 - (iii) where additional *planting* of trees is undertaken in accordance with condition 5(c)(ii), the permit holder must repeat the activities required by condition 5(a), 5(b) and 5(c) of this permit.

6. **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.

No.	Relevant matter	Specifications			
1.	In relation to the authorised clearing activities generally	 (a) the species composition, structure, and density of the cleared area; (b) 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; 			

Table 1: Records that must be kept

No.	Relevant matter	Specifications			
		(c)	the date that the area was cleared;		
		(d)	the size of the area cleared (in trees and hectares);		
		(e)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2;		
		(f)	actions taken to minimise the risk of the introduction and spread of <i>weeds</i> and <i>dieback</i> in accordance with condition 3; and		
		(g)	actions taken to manage and mitigate impacts to western ringtail possums in accordance with condition 4.		
2.	In relation to <i>planting</i> pursuant to condition 5	(a)	the date(s) on which the <i>planting</i> was undertaken;		
		(b)	the number of trees planted;		
		(c)	a description of the <i>planting</i> activities undertaken pursuant to condition 5(a), including actions taken to implement watering; and		
		(d)	a description of any additional <i>planting</i> undertaken in accordance with condition $5(c)(ii)$, including dates of additional planting, number of additional trees planted and any remedial actions undertaken.		

7. Reporting

The permit holder must provide to the *CEO* the records required under condition 6 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.			
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.			
dieback	means the effect of <i>Phytophthora</i> species on native vegetation.			
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 CEO 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 (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</i> <i>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</i> <i>fraseriana</i>) dominated woodlands, and other stands of myrtaceous trees growing near swamps, watercourses or floodplains.			
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. 			
western ringtail possum specialist	means a <i>fauna specialist</i> who holds a tertiary qualification specialising in environmental science or equivalent, has a minimum of two years of work experience in western ringtail possum (<i>Pseudocheirus</i>			

CPS 10592/1, 19 December 2024

Term	Definition
	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

7

Ryan Mincham MANAGER NATIVE VEGETATION REGULATION

Officer delegated under Section 20 of the Environmental Protection Act 1986

19 December 2024

SCHEDULE 1

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

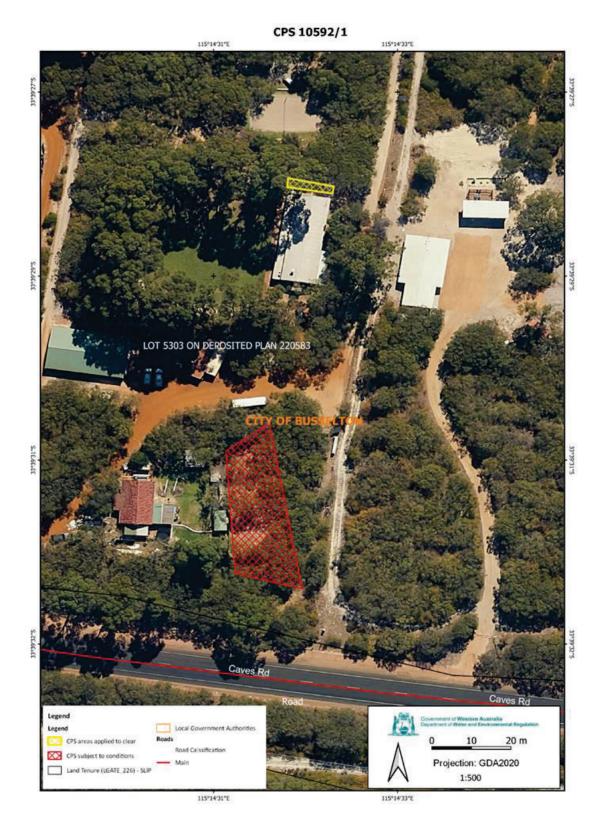


Figure 1: Map of the boundary of the area within which clearing may occur and specific conditions apply



Clearing Permit Decision Report

1 Application details	1 Application details and outcome				
1.1. Permit application	1.1. Permit application details				
Permit number:	CPS 10592/1				
Permit type:	Area permit				
Applicant name:	City of Busselton				
Application received:	15 April 2024				
Application area:	0.0028 hectares (ha) of native vegetation and one (1) native tree				
Purpose of clearing:	Construct a shed				
Method of clearing:	Mechanical				
Property:	Lot 5303 on Deposited Plan 220583 (Crown Reserve 22674)				
Location (LGA area/s):	City of Busselton				
Localities (suburb/s):	Siesta Park				

1.2. Description of clearing activities

The vegetation proposed to be cleared comprises a single tree and 0.0028 ha of understorey vegetation within the Crown Reserve 22674 (see Figure 1, Section 1.5) and will be removed to construct a shed.

1.3. Decision on application

Decision:	Granted
Decision date:	19 December 2024
Decision area:	0.0028 ha of native vegetation and one native tree, 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 14 days and no submissions were received.

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

The assessment identified that the proposed clearing would result in:

- the loss of one native tree that is suitable habitat for Western Ringtail Possum (WRP) and is significant as a remnant of native vegetation in an area that has been extensively cleared
- 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.

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 appreciable long-term adverse impacts on environmental values. The applicant has suitably demonstrated avoidance and minimisation measures and committed to mitigate the environmental impacts (see section 3).

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
- undertake planting and ensure long-term survival of four peppermint trees (*Agonis flexuosa*) within the Crown Reserve 22674.

1.5. Site map

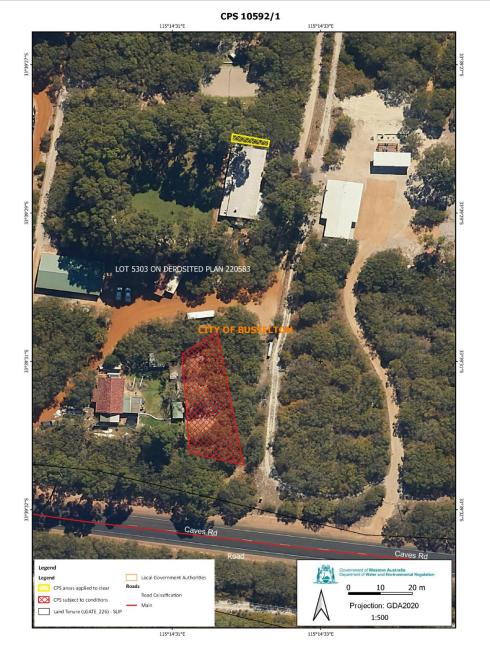


Figure 1Map of the application area

The area crosshatched yellow indicates the area authorised to be cleared under the granted clearing permit. The area cross-hatched red indicates area within which specific conditions apply.

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 polluter pays principle
- 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)

Relevant policies considered during the assessment include:

Environmental Offsets Policy (2011)

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)
- Environmental Offsets Guidelines (August 2014)

3 Detailed assessment of application

3.1. Avoidance and mitigation measures

The applicant has provided avoidance and minimisation measures demonstrating that the proposed clearing is planned within an already cleared area. The clearing is limited to the outer edges within an already cleared area which will limit clearing to the least amount necessary.

During the assessment it was identified that the multi-stemmed tree proposed to be cleared may provide foraging habitat for the threatened WRP. Given that the application is located in an extensively cleared area, which also comprises very high-quality habitat for the WRP, the department recommended that revegetation be undertaken to account for the loss of suitable foraging habitat. Based on a calculation conducted using the WA environmental offset metric calculator, it was determined that the City of Busselton will be required to plant at least four peppermint trees within Crown reserve 22674.

The Delegated Officer was satisfied that the applicant has undertaken reasonable measures to avoid, minimise and mitigate the 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 D) identified that the impacts of the proposed clearing present a risk to biological values (fauna) and significant remnant vegetation. 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 (Biodiversity and Fauna) - Clearing Principles (a and b)

Assessment

The initial assessment determined that the proposed clearing contains suitable foraging habitat for WRP and may comprise suitable habitat for the Carnaby cockatoo and quenda (see Appendix B.3). According to available database searches, 47 records of quenda have been recorded within 10-kilometre radius of the local area, with the closest record being approximately 430 metres from the application area.

Quenda

Quenda (*Isoodon fusciventer* – Priority 4) are ground-dwelling marsupials, typically associated with forest or woodlands near watercourses, where understorey consists of dense scrub and leaf litter is abundant. It is understood that a large adult male has a home range of 2-7 ha compared to 1-3 ha for females. Quenda are found in the southwest of Western Australia and are commonly seen in urban and suburban areas (DBCA, 2017a). Quendas are likely to be transient visitors to the application area while moving through adjacent vegetation. Given that the quenda is highly reliant on remnant vegetation consisting of dense native vegetation and the application area is small in size and located in an already disturbed area, it is unlikely to represent significant habitat for this species.

Western ringtail possum

The western ringtail possum (WRP) is a medium sized, nocturnal species that roams through the trees at night, feeding on leaves of eucalypt, marri and peppermint trees and other fruits and flowers. It has a long, thin tail with a white tip that helps it to move through the trees and carry nesting material (DCCEEW, 2023). WRP are only found in the south-west of Western Australia and their current distribution is patchy and largely restricted to near coastal areas of Peppermint woodland and Peppermint/Tuart associations from the Australind/Eaton area to east of Albany at Waychinicup National Park, and in the southern forest near Manjimup (DBCA, 2017b).

There are three main areas known to, or previously known to, support large numbers of WRP. These three management areas are Swan Coastal Plain Zone, Southern Forest Zone and South Coast Zone. The Swan Coastal Plain zone, principally around Busselton where the application area located, is one of the above mentioned three key zones for management of the WRP. This species' habitat in this zone is associated with the near-coastal limestone heath, riparian, jarrah-marri thicket woodland and forest, peppermint woodland and karri forest vegetation (DBCA, 2017b). There are 6,710 records of the WRP within the local area with the closest 160 metres from the application area within the same reserve. While the application area is not mapped within the WRP habitat suitability layer, it is surrounded by very high-quality habitat. Give that the proposed clearing is within a key management zone of the critically endangered WRP and has connectivity to adjacent vegetation, the peppermint tree is considered primary habitat for the WRP.

Carnaby's cockatoo

The Carnaby's cockatoo is listed as Endangered under the BC Act and there are15 records of this species in the local area, with the closest 3.52 km from the application area. There are three key components of black cockatoo habitat; foraging; roosting and breeding habitat. The quality of black cockatoo foraging habitat to support populations at breeding sites or night roosting sites varies depending upon how black cockatoos utilise the habitat in that particular location. Any tall trees, generally close to riparian environment, can be potential roosting habitat of black cockatoos (DAFF,2024). For a black cockatoo breeding site to be viable, there must be sufficient foraging habitat available within 6 to 12 kilometres of a nesting site (DAFF,2024). Three roosts have been recorded in the local area, with the closest 6.61 km from the application area but no breeding habitat has been recorded.

The peppermint tree is a potential food resource for Carnaby's black cockatoos but not a preferred foraging source (Groom, 2011). The application area is not mapped within a black cockatoo feeding area and there is likely to be more suitable foraging habitat in the local area. Given the nearby DBCA land which contains mapped black cockatoo feeding habitat and other surrounding vegetation within the reserve, it is not likely that habitat for the Carnaby's black cockatoo will be significantly impacted by the proposed clearing.

Conclusion

Based on the above assessment, the proposed clearing will result in the loss of suitable habitat for the WRP.

For the reasons set out above, it is considered that the impacts of the proposed clearing on the WRP can be managed through a pre-clearance survey and revegetation of four (4) peppermint trees within the same reserve.

Conditions

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

- a pre-clearance inspection by a fauna specialist to inspect the area prior to, and for the duration of clearing activities. Where required, WRP are to be appropriately removed/relocated to suitable habitat
- undertake deliberate planting of four (4) Agonis flexuosa (peppermint) trees within the same reserve

3.2.2. Significant remnant vegetation - Clearing Principles (e)

Assessment

The national objectives and targets for biodiversity conservation in Australia has a target to prevent clearance of ecological communities with an extent below 30 percent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). The local area (10-kilometre radius from the centre of the area proposed to be cleared) has been extensively cleared with 12.90% native vegetation remaining and the multi stemmed peppermint tree is considered as a suitable habitat for critically endangered WRP.

The mapped vegetation community over the application area is the Quindalup Complex, which is described as Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of *Melaleuca lanceolata* (Rottnest Teatree) - *Callitris preissii* (Rottnest Island Pine), the closed scrub of *Acacia rostellifera* (Summer-scented Wattle) and the low closed *Agonis flexuosa* (Peppermint) forest of Geographe Bay (Government of Western Australia, 2019). This community represents 60.49 per cent within the local area (Table B.2.).

Conclusion

The peppermint tree proposed to be cleared is considered suitable habitat for WRP and will result in the loss of native vegetation within an extensively cleared area.

For the reasons set out above, it is considered that the impacts of the proposed clearing can be managed by revegetation of four (4) peppermint trees within the reserve.

Conditions

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

• revegetation of four (4) Agonis flexuosa (peppermint) trees within the same reserve.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on DWER's website on 24 June 2024, inviting submissions from the public within a 14-day period. No submission was received in relation to this application.

No Aboriginal sites of significance have been mapped within the application area. 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. Additional information provided by applicant

Summary of comments	Consideration of comment
City of Busselton (2024b)	Commitment to mitigation measures by planting four peppermint trees within Crown reserve 22674.

Appendix B. Site characteristics

B.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of a 0.0128-hectare patch of native vegetation within a Crown Reserve in the intensive land use zone of Western Australia. It is surrounded by two conservation areas called the Locke Nature Reserve and the Ngari Capes Marine Park.
	The proposed clearing area is within an area mapped as very high-quality habitat for the WRP and has connectivity to adjacent vegetation.
	Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 12.90 per cent of the original native vegetation cover.
Ecological linkage	The application area is 610 metres away from the south-west regional ecological linkage. The removal of the one tree will not have a significant impact on linkage function at a landscape level.
Conservation areas	The application area is within close proximity to the Locke Nature Reserve, approximately 171.37 metres south from the proposed clearing area and the Ngari Capes Marine Park, approximately 211 metres to the north. Both conservation areas are considered as DBCA lands of interest.
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of a Peppermint tree and some understory vegetation. Representative photos are available in Appendix E.
	 This is consistent with the mapped vegetation type: Quindalup Complex, which is described as Coastal dune complex consisting mainly of two alliances - the strand and fore-dune alliance and the mobile and stable dune alliance. Local variations include the low closed forest of <i>Melaleuca lanceolata</i> (Rottnest Teatree) - <i>Callitris preissii</i> (Rottnest Island Pine), the closed scrub of <i>Acacia rostellifera</i> (Summer-scented Wattle) and the low closed <i>Agonis flexuosa</i> (Peppermint) forest of Geographe Bay.
	The mapped vegetation type retains approximately 60.49 per cent of the original extent (Government of Western Australia, 2019).
Vegetation condition	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area is in a degraded (Keighery, 1994) condition.
	The full Keighery (1994) condition rating scale is provided in Appendix D.
	Representative photos are available in Appendix E.
Climate and landform	The highest mean maximum temperature is in February at 32.3°C, the lowest is in June at 14.4°C. The average annual rainfall is 794.8mm
Soil description and Land degradation risk	The soil is mapped as Quindalup South Qf2 Phase which is described as relict foredunes and gently undulating beach ridge plain with deep uniform calcareous sands.

Characteristic	Details
	The mapped soil type has a low risk of land degradation resulting from water erosion, wind erosion, salinity, flooding, water logging and phosphorus export, but has a moderate to high risk of water repellence risk (DPIRD, 2019).
Waterbodies	The desktop assessment and aerial imagery indicated that the application area is within a consanguineous wetlands suite, approximately 347 metres away from a dampland.
Hydrogeography	The application area is within the Busselton-Capel groundwater area.
Flora	The desktop assessment recorded 49 conservation significant flora species in the local area (10 km radius), with the closest 2.47 km from the application area. Only six species were recorded in the same soil type and six species in the same vegetation type. However, given the degraded vegetation condition of the application area and considering the extent of clearing of understory vegetation, none of the conservation significant flora species are considered likely to occur within the application area.
Ecological communities	 The desktop assessment identified that the closest state-listed threatened ecological community (TEC) is an occurrence of <i>Corymbia calophylla</i> woodlands on heavy soils of the southern Swan Coastal Plain (floristic community type 1b as originally described in Gibson et al. 1994) TEC, approximately 6.85 kilometres south to the application area. The closest priority ecological community (PEC) is an occurrence of the Subtropical and Temperate Coastal Saltmarsh, approximately 662 metres south of the application
	area, separated by the road infrastructure and Locke Nature Reserve.
Fauna	The desktop assessment identified that a total of 49 threatened or priority fauna species have been recorded within the local area, including 21 threatened fauna species, 7 priority fauna species, 19 fauna species protected under international agreement, one other specially protected fauna species and one Specially protected – conservation dependant (DBCA, 2007-). None of these records occur within the application area, with the closest record being a western ringtail possum (<i>Pseudocheirus occidentalis</i>) approximately 160 metres from the application area.
	With consideration for the site characteristics set out above and relevant datasets (see Appendix E.1), the application area may provide suitable habitat for three of the aforementioned conservation significant fauna species and impacts to these species required further consideration (see Appendix B.3).

B.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*					
Swan Coastal Plain	1,501,221.93	579,813.47	38.62	222916.97	14.85
Vegetation complex					
Quindalup Complex	54,573.87	33,011.64	60.49	5,994.64	10.98
Local area					
10km radius	17,444.01	2250.62	12.90	-	-

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
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*Government of Western Australia (2019a)

B.3. 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)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Pseudocheirus occidentalis	CR	Y	Y	0.16	6710	N/A
Zanda latirostris	EN	Y	Y	3.52	15	N/A
Isoodon fusciventer	P4	Y	Y	0.43	47	N/A

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

Appendix C. 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." <u>Assessment:</u> The area proposed to be cleared contains an individual multi stemmed peppermint tree and 0.0028 ha of understory vegetation adjacent to the Locke Nature Reserve.	Not likely to be at variance	Yes Refer to Section 3.2.1, above.		
While the multi stemmed peppermint tree represents suitable foraging habitat for western ringtail possums, the proposed clearing is not likely to comprise a high level of biodiversity given the small extent of clearing with degraded understory vegetation. It is likely that higher levels of biodiversity would be present within the local area, including the Locke Nature Reserve.				
<u>Principle (b):</u> "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."	At variance	Yes Refer to Section 3.2.1,		
<u>Assessment:</u> The area proposed to be cleared contains suitable habitat for critically endangered western ringtail possums (see Appendix B.3.). However, given the extent of the proposed clearing, it is unlikely that the clearing of an isolated tree in an already cleared area, will result in the loss of significant habitat for this species.		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> : The area proposed to be cleared contains an individual multi stemmed peppermint tree and 0.0028 ha of understory vegetation within an already cleared and disturbed area. It is unlikely to represent significant habitat for any threatened flora species listed under the BC Act.	Not likely to be at variance	No		

Assessment against the clearing principles	Variance level	Is further consideration required?	
<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 (TEC) listed under BC Act. Given the distance and separation from the closest TEC, the proposed clearing is not likely to impact or be necessary for the maintenance of any state or Commonwealth listed TEC.			
Environmental value: significant remnant vegetation and conservation ar	eas		
Principle (e): "Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."	At variance	Yes	
<u>Assessment:</u> The extent of the native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia.		Refer to Section 3.2.2, above.	
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 and due to the fact the proposed clearing area occurs within an already cleared and disturbed area, the proposed clearing is not likely to have an impact on the environmental values of 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 No be at variance		
<u>Assessment:</u> The application area is limited to clearing of an individual tree and minor extent of understory vegetation in degraded (Keighery, 1994) condition.			
Given that the distance to the nearest wetland and considering the minor extent of clearing extent, it is unlikely to impact on- or off-site hydrology or the environmental values of any riparian vegetation communities.			
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	
<u>Assessment:</u> The mapped soils are not highly susceptible to land degradation risk except high water repellence risk. Noting the extent of the application area and the condition of the vegetation, the proposed clearing is not likely to have an appreciable impact on land degradation.	variance		
Principle (i): "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> The application area is mapped within a proclaimed groundwater area. However, given the extent of the proposed clearing, and the vegetation is the degraded (Keighery, 1994) vegetation condition and that no watercourses are recorded within the application area, the proposed clearing is unlikely to impact surface or groundwater quality.			

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
Assessment: The mapped soils and topographic contours in the surrounding area do not indicate the proposed clearing is likely to contribute to increased incidence or intensity of flooding.		
Noting this, the extent of the proposed clearing and condition of the vegetation, the proposed clearing is unlikely to contribute to increased incidence or intensity of flooding.		

Appendix D. 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.

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.

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

Appendix E. Representative photographs

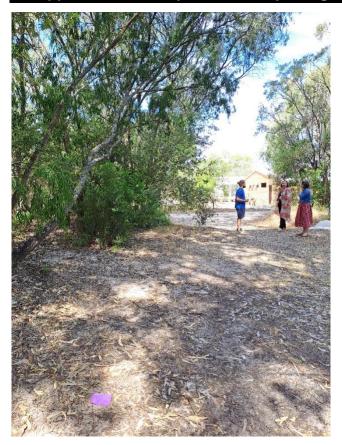


Figure 2: Photograph of the understory vegetation



Figure 3: Photograph of the multi-stemmed peppermint tree



Figure 4: Photograph of the proposed shed location within the reserve



OFFICIAI

Quote for a 6m x 7.5m x 2.5m Shed

Quote No: 230890S-4 Date: 30/08/2023 View & Edit in 3D: https://webshed.royssheds.com.au/#XCaiWwcgHAi/0





Shed Kit Supply:

Shed Kit Build:

Figure 5: Photograph of the proposed shed and dimensions

Appendix F. Sources of information

F.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)

F.2. References

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