



# **CLEARING PERMIT**

Granted under section 51E of the Environmental Protection Act 1986

# **PERMIT DETAILS**

Area Permit Number:	CPS 10788/1
File Number:	DWERVT16586
Duration of Permit:	From 18 March 2025 to 18 March 2027

# PERMIT HOLDER

City of Bunbury

# LAND ON WHICH CLEARING IS TO BE DONE

Lot 216 on Deposited Plan 49936, Davenport Lot 6092 on Plan 19647 (Crown Reserve 46486), Davenport

# **AUTHORISED ACTIVITY**

The permit holder must not clear more than 0.05 hectares of *native vegetation* 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 18 March 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. Directional clearing

The permit holder must:

- (a) conduct *clearing* activities in a slow, progressive manner towards adjacent *native vegetation*; and
- (b) allow a reasonable time for fauna present within the area being cleared to move into adjacent *native vegetation* ahead of the *clearing* activity.

### 5. 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 5(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 5(b)(ii) must be relocated by a *western ringtail possum specialist* to a *suitable habitat*, or as otherwise approved by the *CEO*.
- (d) Where fauna is identified under condition 5(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

# 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.	1. In relation to the authorised clearing activities generally		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;			
		(c)	the date that the area was cleared			
		(d)	the direction of clearing;			
		(e)	the size of the area cleared (in hectares);			
		(f)	actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with condition 2; and			
		(g)	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			
		(h)	actions taken to manage and mitigate impacts to western ringtail possums in accordance with condition 5.			

# Table 1: Records that must be kept

# 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.			
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.			
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)			
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)	<ul> <li>means habitat known to support western ringtail possums</li> <li>(<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.</li> </ul>			
weeds	<ul> <li>means any plant – <ul> <li>(a) that is a declared pest under section 22 of the <i>Biosecurity and Agriculture Management Act 2007</i>; or</li> <li>(b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or</li> <li>(c) not indigenous to the area concerned.</li> </ul> </li> </ul>			
western ringtail possum specialist	means a fauna specialist 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 10788/1, 21 February 2025

Term	Definition
	<i>occidentalis</i> ) identification, surveys of western ringtail possums and capture and handling of western ringtail possums, and holds a valid fauna licence issued under the <i>Biodiversity Conservation Act 2016</i> .

# **END OF CONDITIONS**

Mathew Gannaway A/SENIOR MANAGER NATIVE VEGETATION REGULATION

*Officer delegated under Section 20 of the Environmental Protection Act 1986* 

21 February 2025

# **SCHEDULE 1**

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

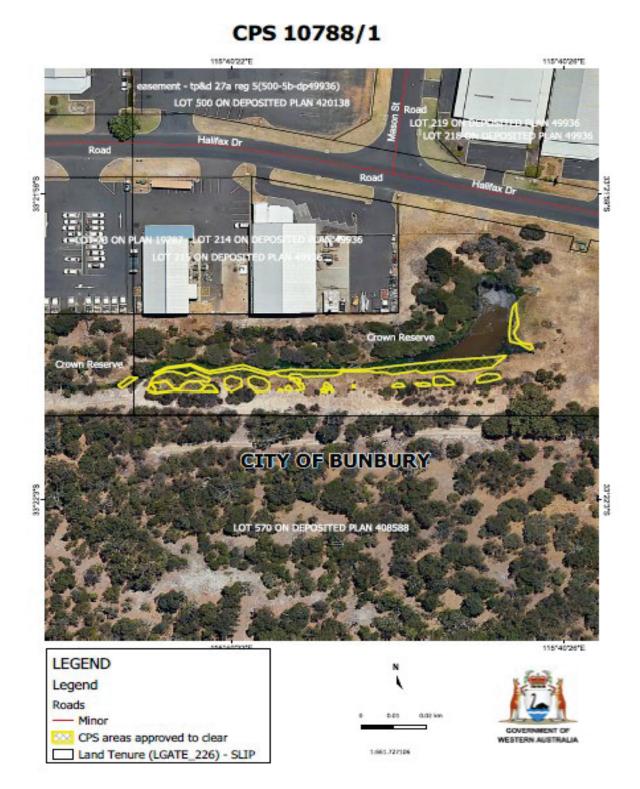


Figure 1: Map of the boundary of the areas within which clearing may occur



# **Clearing Permit Decision Report**

1 Application details	and outcome
1.1. Permit application	on details
Permit number:	CPS 10788/1
Permit type:	Area permit
Applicant name:	City of Bunbury
Application received:	7 October 2024
Application area:	0.05 hectares of native vegetation
Purpose of clearing:	Drain maintenance
Method of clearing:	Mechanical
Property:	Lot 216 on Deposited Plan 49936, Davenport
	Lot 6092 on Plan 19647 (Crown Reserve 46486), Davenport
Location (LGA area/s):	City of Bunbury
Localities (suburb/s):	Davenport

# 1.2. Description of clearing activities

The City of Bunbury (the City) is proposing to undertake the clearing of native vegetation within Lot 216 on Deposited Plan 49936 and Lot 6092 on Plan 19647 (Crown Reserve 46486), Davenport. The clearing is proposed to facilitate drain maintenance and establishing drain access for future maintenance. The vegetation proposed to be cleared is primarily sedges along the waterline and *Melaleuca* and *Agonis* saplings within the dry portion of the project area distributed across multiple separate areas (see Figure 1, Section 1.5).

1.3. Decision on application					
Decision:	Granted				
Decision date:	21 February 2025				
Decision area:	0.05 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 A), relevant datasets (see Appendix E.1), the clearing principles set out in Schedule 5 of the EP Act (see Appendix B), relevant planning instruments and any other matters considered relevant to the assessment (see Section 3). The Delegated Officer also took into consideration that the water in the drain is unable to move past the northern outlet which is leading to flooding in the Halifax Drive area.

The assessment identified that the proposed clearing will result in:

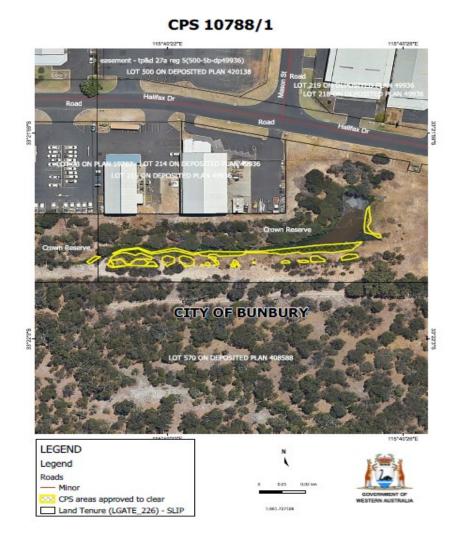
- the loss of native vegetation in an area that has been extensively cleared,
- the potential loss of native vegetation that is suitable habitat for western ringtail possum (WRP) (*Pseudocheirus occidentalis*),
- the potential introduction and spread of weeds and dieback into adjacent vegetation, which 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 including direct impacts to individual fauna and the potential to facilitate the introduction of weeds and dieback can be minimised and managed to unlikely lead to an unacceptable risk to environmental values through permit conditioning.

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,
- engage a fauna specialist to inspect the clearing area, and for the duration of, clearing activities, for the presence of WRP, to mitigate direct impacts to individuals resulting from clearing activities, and
- undertake slow, progressive one directional clearing to allow terrestrial fauna to move into adjacent habitat ahead of the clearing activity.

#### 1.5. Site map



#### Figure 1 Map of the application area

The areas crosshatched 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 51O 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)
- Rights in Water and Irrigation Act 1914 (RIWI 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 has advised the following avoidance and mitigation measures have been undertaken (City of Bunbury, 2024):

- All works are to be completed from the southern side of the drain, to avoid impacts to the heavily vegetated northern side. The southern side has many bare areas, and is already highly impacted,
- Several trees were identified and flagged on site as being able to be retained as the excavator can work
  around them. Every effort was made to retain peppermint trees in particular, with four individual peppermint
  trees identified for retention. The majority of peppermint trees to be retained are saplings (<5 years old) but
  will be retained into maturity. One mature peppermint tree was retained, just outside of the Project Area
  (western extent). In addition, four *Melaleuca* saplings were flagged for retention,
- Existing weeds within the Project Area will be removed, and machinery will be clean on entry (to reduce the risk of introducing more weeds). Following the works, the area will be managed for weeds on an ongoing basis,
- Clearing will be progressive and one-directional towards existing vegetation (east to west), to allow fauna to move away from the works as they occur,
- Sedges will be removed from site and the existing stockpiles of dried sedges will also be removed, to reduce the potential for fire (fuel load) and the potential for silt run-off to be captured in these areas and allow for weeds to reestablish, and
- The intent of the work is to establish a permanent access way for machinery to maintain the drain. Therefore, no rehabilitation is proposed within the project area.

Considering the above, 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.

## 3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix A) 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 **B**) identified that the impacts of the proposed clearing present a risk to biological values (fauna), significant remnant vegetation and conservation areas, and land and water resources. 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 Principle (b)

#### Assessment

The application area is located within the Swan Coastal Plain IBRA bioregion. According to available databases, a total of 62 conservation significant fauna species have been recorded within the local area (10-kilometre radius of the application area). These include; 30 threatened fauna species, nine priority fauna species, 21 migratory fauna species and two specially protected fauna species. Of the conservation significant fauna species recorded within the local area, the application area may provide habitat for WRP (*Pseudocheirus occidentalis*). The WRP is listed as Critically Endangered under the BC Act and EPBC Act. This assumption is based on habitat requirements, distribution, mapped vegetation type and the condition of the vegetation. Photographs provided by the applicant identified that the vegetation type within the application area was largely consistent with the mapped vegetation type in the area consisting of *Agonis flexuosa* and *Melaleuca* saplings and small sedges (City of Bunbury, 2024).

#### Western Ringtail Possum (WRP)

The 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). The current distribution of the WRP is patchy and largely restricted to the moister south-western corner of Western Australia (de Tores, 2008), especially near coastal areas of peppermint woodland and peppermint/tuart associations from the Australind/Eaton area to the Waychinicup National Park (DEC, 2012). The main identified threats to the WRP are habitat loss and fragmentation, predation, especially by introduced predators and changing fire regimes. Potential threats include climate change, competition with brushtail possum, road traffic, loss of coastal peppermint trees from dieback caused by *Phytophthora cinnamomi*, insect attack, and myrtle rust (*Puccinia psidii*) (DoEE, 2013).

The 'Western Ringtail Possum (Pseudocheirus occidentalis) Recovery Plan' outlines strategies to slow the decline in population size, extent, and area of occupancy through managing major threatening processes affecting the subpopulations and their habitats and allowing the persistence of the species in each of the identified key management zones: Swan Coastal Plain, southern forests and south coast (DPaW, 2017). The application area is located within the Swan Coastal Plain management zone.

Within this management zone, populations are associated with a diverse range of habitats including coastal heath, jarrah/marri woodland and forest, peppermint woodlands, myrtaceous heaths and shrublands, Bullich (*Eucalyptus megacarpa*) dominated riparian zones and karri forest.

Noting some of the area proposed to be cleared includes preferred habitat in peppermint trees, and local records of the species, it is considered likely that WRP occur within the application area. However, due to the immaturity of the trees and the disturbed nature of the drain area, it is more likely that WRP may utilise the site transiently for foraging or movement rather than having a resident population.

#### **Conclusion**

Based on the above assessment, the application area is not considered likely to represent significant habitat for WRP or to be critical for the continuation of the species. However, individuals may be present at the time of clearing whilst they transverse the landscape. A pre clearing inspection and slow directional clearing will mitigate the risk to individuals. In addition, the clearing activities will have the potential to impact the quality of the quality of the surrounding fauna habitat by facilitating the spread of weeds and dieback.

For the reasons set out above, it is considered that the impacts of the proposed clearing on fauna habitat can be managed through avoidance, minimisation and mitigation measures committed to by the applicant and does not constitute a significant residual impact after the management conditions as specified on the permit.

#### Conditions

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

- Slow directional clearing to allow fauna to move into adjacent vegetation ahead of the clearing activity will minimise impact to individuals,
- Fauna management conditions requiring a pre-clearing inspection of the application area for presence of WRP and for clearing to cease where any individuals are identified until the individual has dispersed or been relocated, and
- Weed and dieback management measures to assist in mitigating impacts to surrounding vegetation that provides fauna habitat.

#### 3.2.2. Significant remnant vegetation and conservation areas - Clearing Principles (e) and (h)

#### 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 per cent of that present pre-1750, below which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia, 2001). Noting that the current vegetation extent within the local area fall below the 30 per cent threshold (see Appendix A.2), the application area is considered to be a remnant within an extensively cleared landscape.

However, the Environmental Protection Authority (EPA) recognises the Greater Bunbury Region Scheme area to be a constrained area, within which a minimum 10 per cent representation threshold for ecological communities is recommended (EPA, 2008). The current vegetation extent for the Swan Coastal Plain IBRA Bioregion, the mapped vegetation complexes, and the local area are all above the 10 per cent threshold for constrained areas (see Appendix A.2).

Given the above and that the proposed clearing relates to the removal of sedges and *Melaleuca* and *Agonis* saplings, the proposed clearing is not considered to impact extensively cleared vegetation within the Greater Bunbury Region Scheme constrained area.

The application area is located adjacent to Kalgulup Regional Park. As the clearing is for scattered sedges and saplings over bare ground it is unlikely to impact the adjacent regional park due to the disturbed nature of the site and the separation by a path. However, it is acknowledged that the proposed clearing has the potential to facilitate the spread of weeds and dieback into remnants of native vegetation in the local area. A weed and dieback management condition is considered to minimise this risk, and it is not considered likely that the proposed clearing will have a significant impact on nearby significant remnant vegetation.

#### **Conclusion**

Based on the above assessment, the proposed clearing is unlikely to result in significant impacts to vegetation extent within an extensively cleared area but may facilitate the spread of weeds and dieback into nearby vegetation in the local area. For the reasons set out above, it is considered that the impacts of the proposed clearing can be managed to be environmentally acceptable by taking steps to minimise the risk of the introduction and spread of weeds and dieback and does not constitute a significant residual impact.

#### **Conditions**

To address the above impacts, the following management measure will be required as a condition on the clearing permit:

• Dieback and weed control, which ensures protocols are put in place to limit the introduction and transportation of dieback and weed affected materials.

#### 3.2.3. Land and water resources - Clearing Principles (f), (i) and (j)

#### Assessment

The application area is located adjacent to a man-made drain and therefore some of the vegetation within the application area may be growing in or associated with, an environment associated with a watercourse.

Given the extent and targeted nature of the proposed clearing, and surrounding land uses, the proposed clearing is not likely to result in any significant or long-term impacts to the ecological values of the riparian communities associated with the man-made drain within and nearby the application area. It is also not likely to impact on groundwater or surface water resources. Therefore the proposed clearing is not considered to result in any long-term impacts and cause a significant residual impact on watercourse values.

#### **Conclusion**

Based on the above assessment, the proposed clearing will not significantly impact the ecological values of riparian communities associated with the man-made drain.

#### **Conditions**

No management conditions are required in relation to this environmental value.

#### 3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on DWER's website and no public submissions were received.

The City advised DWER that local government approvals are not required, and that the proposed clearing is consistent with the City's Local Planning Scheme.

The application area is located within the Bunbury Groundwater Area, as proclaimed under the RIWI Act. Advice received from DWER's Water Licencing branch indicates that the 'drain' is not a proclaimed watercourse under the RIWI Act and therefore does not require authorisation in terms of the bed and banks, nor is it likely to require dewatering and potentially a licence under s5C (DWER, 2024).

Several Aboriginal sites of significance have been mapped within the local 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. Site characteristics

# A.1. Site characteristics

The information provided below describes the key characteristics of the area proposed to be cleared and is based on the best information available to DWER at the time of this assessment. This information was used to inform the assessment of the clearing against the Clearing Principles, contained in Appendix B.

Characteristic	Details
Local context	The area proposed to be cleared comprises of multiple patches of native vegetation in the intensive land use zone of Western Australia. It is adjacent to a man-made drain and residential dwellings to the north and Kalgulup National Park to the south.
	Spatial data indicates the local area (10-kilometre radius from the centre of the area proposed to be cleared) retains approximately 25.63 per cent of the original native vegetation cover.
Ecological linkage	No formal ecological linkages intersect the application area. South West Regional Ecological Linkage 202 is located approximately 600 metres south of the application area.
Conservation areas	The closest conservation area to the application area is the Kalgulup Regional Park which is located adjacent to the proposed clearing area.
Vegetation description	Photographs supplied by the applicant indicate the vegetation within the proposed clearing area consists of Agonis flexuosa and Melaleuca saplings over small sedges (City of Bunbury, 2024).
	Representative photos are available in Appendix D.
	This is mostly consistent with the mapped vegetation type:
	• Southern River Complex, which is described as (Heddle et al, 1980) an open woodland of <i>Corymbia calophylla</i> (Marri) - <i>Eucalyptus marginata</i> (Jarrah) - <i>Banksia</i> species with fringing woodland of <i>Eucalyptus rudis</i> (Flooded Gum) - <i>Melaleuca rhaphiophylla</i> (Swamp Paperbark) along creek beds.
	The mapped vegetation type retains approximately 18.43 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 Degraded (Keighery, 1994 –) condition.
	The full Keighery (1994) condition rating scale is provided in Appendix C.
	Representative photos are available in Appendix D.
Climate and landform	The region experiences a Mediterranean climate with cool winters and hot summers with a mean annual rainfall of 760mm.
Soil description	The soils in the application area are mapped as:
	<ul> <li>Bassendean B2 Phase (212Bs_B2) which is described as flat to gently undulating sandplain with well to moderately well drained deep bleached grey sands with a pale-yellow B horizon or a weak iron-organic hardpan 1-2 m,</li> <li>Pinjarra P1b Phase (213Pj_P1b) which is described as flat to gently undulating plain with deep acidic mottled yellow duplex (or 'effective duplex') soils. Moderately deep pale sand to loamy sand over clay: imperfectly drained and moderately susceptible to salinity in limited areas.</li> </ul>
Land degradation risk	The soils within the application area are mapped as having a high risk of subsurface acidification and phosphorus export (DPIRD, 2024).

Characteristic	Details
Waterbodies and hydrogeography	The desktop assessment and aerial imagery indicated that the application area is located adjacent to a man-made drain.
	The application area is mapped within the Bunbury Groundwater Area proclaimed under the RIWI Act.
	Groundwater salinity within the application area is mapped at 500-1000 milligrams per total dissolved solids.
Flora	The desktop assessment identified that 35 conservation significant flora species have been recorded within the local area, comprising five threatened flora species and 30 priority flora species (Western Australian Herbarium, 1998-). None of these existing records occur within the application area, with the closest record being an occurrence of <i>Platysace ramosissima</i> approximately 0.29 kilometres from the application area.
	With consideration of the site characteristics set out above, relevant datasets (see Appendix C) and the habitat preferences of the aforementioned species, the application area is not considered to provide significant habitat for conservation significant flora and did not require further consideration.
Ecological communities	The desktop assessment identified that there are no conservation significant ecological communities within the application area. The closest mapped ecological community is the Banksia Woodlands of the Swan Coastal Plain ecological community which is listed as an Endangered threatened ecological community (TEC) under the Commonwealth EPBC Act and is considered a Priority 3 ecological community (PEC) by DBCA in Western Australia, which is located adjacent to the application area.
	With consideration for the site characteristics, relevant datasets (see Appendix E.1) and supporting information (City of Bunbury, 2024), the application area is not considered likely to contain vegetation representative of a TEC or PEC.
Fauna	The desktop assessment identified that 62 conservation significant fauna species have been recorded within the local area including 30 threatened species, nine priority species, 21 migratory species and two other specially protected fauna species. None of these existing records occur within the application area, with the closest being an occurrence of <i>Pseudocheirus occidentalis</i> approximately 0.59 kilometres from the application area.
	With consideration of the site characteristics set out above, relevant datasets (see Appendix E) and the habitat preferences of the aforementioned species, the application area is considered to provide suitable habitat for conservation significant fauna species and impacts to these fauna species have been detailed under Section 3.2.2.

A.2. Vegetation ex	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	1501221.93	579813.47	38.62	222964.97	14.85
Vegetation complex					
Southern River Complex *	58781.48	10832.18	18.43	940.36	1.6

	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
Local area					
10km radius	31693.54	5832.98	25.63	-	-

\*Government of Western Australia (2019)

# A.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]
Western ringtail possum (Pseudocheirus occidentalis)	CR	Y	Y	0.59	3041	N/A

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

# A.4. Ecological community analysis table

Community name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]		Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Banksia Woodlands of the Swan Coastal Plain ecological community	P3	Ν	Ν	Y	0.01	753	N/A

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

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 not likely to contain significant flora, fauna, habitats, or a unique assemblage of plants.	Not likely to be at variance	No
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: significant habitat for conservation significant fauna. However, individuals may traverse the application area moving through the landscape.	May be at variance	Yes Refer to Section 3.2.1, above.
Principle (c):"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."Assessment:The area proposed to be cleared is unlikely to contain habitat for Threatened flora species.	Not likely to be at variance	No
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."Assessment: can indicate a threatened ecological community.	Not at variance	No
Environmental value: significant remnant vegetation and conservation ar	eas	1
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."Assessment:The extent of native vegetation in the local area is inconsistent with the national objectives and targets for biodiversity conservation in Australia. The vegetation proposed to be cleared is not considered to be part 	May be at variance	Yes Refer to Section 3.2.2, above.
diacent or nearby conservation area "		Yes Refer to Section 3.2.2, above.
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> Given the application area is located adjacent to a man-made drain, the proposed clearing is growing in, or in association with, an environment associated with a watercourse.	At variance	Yes Refer to Section 3.2.3, above.

Assessment against the clearing principles	Variance level	Is further consideration required?
<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 nutrient export and subsurface acidification. 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	
<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."	May be at variance	Yes Refer to Section 3.2.3, above.
<u>Assessment:</u> Given the application area is located next to a man-made drain, the proposed clearing may impact surface or ground water quality. However, due to the extent of the clearing and management measures in place, it is unlikely to affect surface or groundwater.		5.2.5, 80076.
<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	Not likely to be at	Yes
flooding."	variance	Refer to Section 3.2.3, above.
<u>Assessment:</u> 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.		

# 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.

Condition	Description
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 (City of Bunbury, 2024)



Figure 2. Photograph of the vegetation proposed to be cleared (City of Bunbury, 2024)



Figure 3. Photograph of the vegetation proposed to be cleared (City of Bunbury, 2024)





Figure 6. Photograph of the vegetation proposed to be cleared (City of Bunbury, 2024)



Figure 7. Photograph of the vegetation proposed to be cleared (City of Bunbury, 2024)



Figure 8. Photograph of the vegetation proposed to be cleared (City of Bunbury, 2024)

# Appendix E. Sources of information

# E.1. GIS databases

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

- 10 Metre Contours (DPIRD-073)
- 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)
- 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)

# E.2. References

City of Bunbury (2024) Clearing permit application and supporting information for clearing permit application CPS 10788/1, received 7 October 2024 (DWER Ref: DWERVT16586).

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Department of Climate Change, Energy, the Environment and Water (DCCEEW) (2023). Species Profile and Threats Database. Pseudocheirus occidentalis — Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit. Department of Climate Change, Energy, the Environment and Water, Australian Government (accessed December, 2024).
- Department of Environment and Conservation (Western Australia) (DEC) (2012). *Fauna profile, western ringtail possum Pseudocheirus occidentalis (Thomas, 1888*). Available at: http://www.dec.wa.gov.au/publications/cat\_view/365-fauna-management/370-fauna-species-profiles.htm
- Department of the Environment and Energy (DoEE) (2013) *Approved Conservation Advice for Pseudocheirus occidentalis (western ringtail possum) (s266B of the Environment Protection and Biodiversity Conservation Act 1999)*. Department of the Environment and Energy, Australian government. Available at: <u>http://www.environment.gov.au/biodiversity/threatened/species/pubs/25911-conservation-advice.pdf</u>

- Department of Environment Regulation (DER) (2013). A guide to the assessment of applications to clear native vegetation. Perth. Available from: <u>https://www.der.wa.gov.au/images/documents/your-environment/native-vegetation/Guidelines/Guide2\_assessment\_native\_veg.pdf.</u>
- Department of Parks and Wildlife (DPaW) (2017). Western Ringtail Possum (*Pseudocheirus occidentalis*) Recovery Plan. Wildlife Management Program No. 58. Department of parks and Wildlife, Perth, WA. Department of Primary Industries and Regional Development (DPIRD) (2019). *NRInfo Digital Mapping. Department*
- of Primary Industries and Regional Development. (DPIRD) (2019). NRING Digital Mapping. Department of Primary Industries and Regional Development. Government of Western Australia. URL: <u>https://maps.agric.wa.gov.au/nrm-info/</u> (accessed 16 December 2024).
- Department of Water and Environmental Regulation (DWER) (2019). *Procedure: Native vegetation clearing permits*. Joondalup. Available from: <a href="https://dwer.wa.gov.au/sites/default/files/Procedure Native vegetation clearing permits v1.PDF">https://dwer.wa.gov.au/sites/default/files/Procedure Native vegetation clearing permits v1.PDF</a>.
- Department of Water and Environmental Regulation (DWER) (Regulatory Services Water) (2024) *Rights in Water and Irrigation Act 1914 advice for clearing permit application CPS 10788/1*, received 16 December 2024 (DWER Ref: DWERDT1051545).
- de Tores PJ (2008). *Western ringtail possum, Pseudocheirus occidentalis*. In C. Van Dyck, & R. Strahan, The Mammals of Australia (pp. 253-255). Chatswood, Australia: Reed New Holland.
- 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
- Heddle, E. M., Loneragan, O. W., and Havel, J. J. (1980) *Vegetation Complexes of the Darling System, Western Australia*. In Department of Conservation and Environment, Atlas of Natural Resources, Darling System, Western Australia.
- Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.
- Mattiske, E.M. and Havel, J.J. (1998) Vegetation Complexes of the South-west Forest Region of Western Australia. Maps and report prepared as part of the Regional Forest Agreement, Western Australia for the Department of Conservation and Land Management and Environment Australia.
- Molloy, S., Wood, J., Hall, S., Wallrodt, S. and Whisson, G. (2009) *South West Regional Ecological Linkages Technical Report*, Western Australian Local Government Association and Department of Environment and Conservation, Perth.
- Northcote, K. H. with Beckmann G G, Bettenay E., Churchward H. M., van Dijk D. C., Dimmock G. M., Hubble G. D., Isbell R. F., McArthur W. M., Murtha G. G., Nicolls K. D., Paton T. R., Thompson C. H., Webb A. A. and Wright M. J. (1960-68) *Atlas of Australian Soils*, Sheets 1 to 10, with explanatory data. CSIRO and Melbourne University Press: Melbourne.
- Schoknecht, N., Tille, P. and Purdie, B. (2004) Soil-landscape mapping in South-Western Australia Overview of Methodology and outputs Resource Management Technical Report No. 280. Department of Agriculture.
- Western Australian Herbarium (1998-). *FloraBase the Western Australian Flora*. Department of Biodiversity, Conservation and Attractions, Western Australia. <u>https://florabase.dpaw.wa.gov.au/</u> (Accessed 16 December 2024)