

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	CPS 8195/2
Permit Holder:	City of Busselton
Duration of Permit:	From 16 June 2019 to 16 June 2029

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

1. Purpose for which clearing may be done

Clearing for the purpose of constructing the Eastern Link.

2. Land on which clearing is to be done

Lot 40 on Deposited Plan 222226 (Crown Reserve 2236), Busselton Lot 41 on Deposited Plan 222226 (Crown Reserve 2236), Busselton Lot 43 on Deposited Plan 222226 (Crown Reserve 2237), Busselton Lot 231 on Deposited Plan 91174 (Crown Reserve 2241), Busselton Lot 265 on Deposited Plan 222226 (Crown Reserve 7443), Busselton Lot 511 on Deposited Plan 408687 (Crown Reserve 52822), Busselton Road Reserve (PIN 11370127), Busselton Road Reserve (PIN 11370129), Busselton Road Reserve (PIN 11370130), Busselton Road Reserve (PIN 11370166), Busselton Road Reserve (PIN 11438900), Busselton Water Feature (PIN 11725413), Busselton

3. Area of clearing

- (a) The Permit Holder must not clear more than 0.49 hectares of native vegetation within the area hatched yellow on attached Plan 8195/2(a).
- (b) The 0.49 hectares of native vegetation to be cleared shall not include more than seven mature *Agonis flexuosa* trees.

4. Period in which clearing is authorised

The Permit Holder shall not clear any native vegetation after 16 June 2024.

5. Application

This Permit allows the Permit Holder to authorise persons, including employees, contractors and agents of the Permit Holder, to clear native vegetation for the purposes of this Permit subject to compliance with the conditions of this Permit and approval from the Permit Holder.

6. Type of clearing authorised

This Permit authorises the Permit Holder to clear native vegetation for the activities described in condition 1 of this Permit to the extent that the Permit Holder has the power to carry out works involving clearing for those activities under the *Local Government Act 1995* or any other written law.

7. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared authorised under this Permit, the Permit Holder must have regard to the following principles, set out in order of preference:

- (a) avoid the clearing of native vegetation;
- (b) minimise the amount of native vegetation to be cleared; and
- (c) reduce the impact of clearing on any environmental value.

8. Dieback and weed management

When undertaking any clearing authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the 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.

9. Fauna management – translocations

Prior to clearing, the Permit Holder must provide to the *CEO* a copy of the fauna licence obtained under the *Biodiversity Conservation Act 2016* for the translocation of Carter's freshwater mussel (*Westralunio carteri*) and western ringtail possum (*Pseudocheirus occidentalis*) individuals.

10. Fauna management – pre-clearing inspections

- (a) In relation to the area hatched yellow on attached Plan 8195/2(a), the Permit Holder must engage a *fauna specialist* to inspect that area immediately prior to, and for the duration of, clearing, for the presence of western ringtail possum(s) (*Pseudocheirus occidentalis*).
- (b) Clearing must cease in any area where a western ringtail possum (*Pseudocheirus occidentalis*) is identified until either:
 - (i) the individual has been removed by a *fauna specialist*; or
 - (ii) the individual has moved on from that area to adjoining *suitable habitat*.
- (c) Any western ringtail possum (*Pseudocheirus occidentalis*) individuals removed in accordance with condition 10(b)(i) of this Permit must be relocated by a *fauna specialist* to *suitable habitat*.
- (d) Where a western ringtail possum(s) (*Pseudocheirus occidentalis*) is identified under condition 10(a) of this Permit, the Permit Holder must provide the following records to the *CEO* as soon as practicable:
 - (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 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (iv) the number of individuals removed and relocated;
 - (v) the date each individual was removed;
 - (vi) the date each individual was relocated;
 - (vii) the location where each individual was relocated to, recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees; and
 - (viii) details pertaining to the circumstances of any death of, or injury sustained by, an individual.

11. Fauna management – rope bridges

- (a) Within 6 months of the commencement of clearing, the Permit Holder must install four western ringtail possum (*Pseudocheirus occidentalis*) rope bridges in accordance with the following requirements:
 - (i) two rope bridges must be installed over the Eastern Link, one on each foreshore of the Lower Vasse River;
 - (ii) two rope bridges must be installed over the Lower Vasse River, one on each side of the Eastern Link; and
 - (iii) the end of each rope bridge must be connected to at least two mature trees, or two different locations in the canopy of a single mature tree, at a height of at least three metres above ground level.
- (b) The Permit Holder must maintain the rope bridges installed for the remaining term of this Permit.

12. Revegetation – mitigation

- (a) Within 24 months of the commencement of clearing, the Permit Holder must revegetate 0.16 hectares of the area hatched yellow on attached Plan 8195/2(a) by planting *Eucalyptus rudis*, *Agonis flexuosa*, *Melaleuca rhaphiophylla*, *Melaleuca preissii*, *Melaleuca teretifolia* and *Melaleuca viminea* at a combined density of at least 400 stems per hectare.
- (b) The Permit Holder must maintain a combined density of at least 400 stems per hectare for the remaining term of this Permit.

13. Revegetation – mitigation

- (a) Within 24 months of the commencement of clearing, the Permit Holder must revegetate the area hatched green on attached Plan 8195/2(a) by planting *Lepidosperma gladiatum* (sword sedge) so as to achieve a native vegetation cover of at least 75 per cent.
- (b) The Permit Holder must achieve a native vegetation cover of at least 75 per cent within 5 years of the commencement of clearing and maintain a native vegetation cover of at least 75 per cent for the remaining term of this Permit.

14. Offset – Lot 230

- (a) Within 12 months of the commencement of clearing, the Permit Holder must revegetate the area hatched orange on attached Plan 8195/2(a) by planting *local provenance* native understorey species so as to achieve a native understorey cover of at least 75 per cent within 3 years of planting.
- (b) In relation to the area hatched orange on attached Plan 8195/2(a), the Permit Holder must maintain a native understorey cover of at least 75 per cent for the remaining term of this Permit.
- (c) Within 12 months of the commencement of clearing, the Permit Holder must provide to the *CEO* a copy of the executed change in purpose of the area hatched orange on attached Plan 8195/2(a) within Lot 230 on Deposited Plan 222226 (being Crown Reserve 7442) from 'Recreation' to 'Recreation' and 'Conservation'.

15. Offset – Lot 42

- (a) Within 12 months of the commencement of clearing, the Permit Holder must revegetate the area hatched red on attached Plan 8195/2(a) by:
 - (i) planting *local provenance* native understorey species so as to achieve a native understorey cover of at least 75 per cent within 3 years of planting; and
 - (ii) planting Agonis flexuosa at a density of at least 400 stems per hectare.
- (b) In relation to the area hatched red on attached Plan 8195/2(a), the Permit Holder must:
 - (i) maintain a density of *Agonis flexuosa* of at least 400 stems per hectare for the remaining term of this Permit; and
 - (ii) maintain a native understorey cover of at least 75 per cent for the remaining term of this Permit.
- (c) Within 12 months of the commencement of clearing, the Permit Holder must
 - (i) give a conservation covenant under section 30B of the *Soil and Land Conservation Act* 1945 setting aside the area hatched red on attached Plan 8195/2(a) for the protection and management of vegetation in perpetuity; and
 - (ii) provide to the CEO a copy of the executed conservation covenant.

16. Offset - Lot 509

- (a) Within 12 months of the commencement of clearing, the Permit Holder must revegetate the area hatched red on attached Plan 8195/2(b) by:
 - (i) planting *local provenance* native understorey species so as to achieve a native understorey cover of at least 75 per cent within 3 years of planting; and
 - (ii) planting Agonis flexuosa at a density of at least 400 stems per hectare.
- (b) In relation to the area hatched red on attached Plan 8195/2(b), the Permit Holder must:
 - (i) maintain a density of *Agonis flexuosa* of at least 400 stems per hectare for the remaining term of this Permit; and
 - (ii) maintain a native understorey cover of at least 75 per cent for the remaining term of this Permit.

17. Record keeping

The Permit Holder must maintain the following records:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
 - the boundaries of clearing undertaken on each date, recorded using a Global Positioning System GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (ii) the size of the area cleared (in hectares);
 - (iii) the number of peppermint (Agonis flexuosa) trees cleared;
 - (iv) the location of each peppermint (*Agonis flexuosa*) tree cleared recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (v) actions taken to avoid, minimise and reduce the impacts and extent of clearing in accordance with condition 7 of this Permit;
 - (vi) actions taken to minimise the risk of the introduction and spread of *weeds* and *dieback* in accordance with condition 8 of this Permit; and
 - (vii) details required in accordance with fauna management conditions 9 and 10 of this Permit.
- (b) In relation to fauna management pursuant to condition 11 of this Permit:
 - (i) a copy of the design drawings for each rope bridge;
 - (ii) the date(s) each rope bridges was installed;
 - (viii) the location of each rope bridge installed recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (iii) photographs of each rope bridge as installed; and

- (iv) the date(s) each rope bridge was maintained and a description of the maintenance activities undertaken.
- (c) In relation to revegetation activities undertaken pursuant to conditions 12 to 16 of this Permit:
 - (i) the date(s) each area was revegetated;
 - (ii) the location of each area revegetated recorded using a GPS unit set to GDA94, expressing the geographical coordinates in Eastings and Northings or decimal degrees;
 - (iii) at least two photographs of each area revegetated taken on an annual basis at the same location each year;
 - (iv) a description of the revegetation activities undertaken each year for each area revegetated; and
 - (v) a description of the tree density and native understorey vegetation cover for each area revegetated recorded on an annual basis.

18. Reporting

- (a) The Permit Holder must provide to the CEO on or before 30 June of each year, a written report:
 - (i) of records required under condition 17 of this Permit; and
 - (ii) concerning activities done by the Permit Holder under this Permit between 1 January to 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit has been undertaken, a written report confirming that no clearing under this Permit has been undertaken, must be provided to the *CEO* on or before 30 June of each year.
- (c) Prior to 16 March 2029, the Permit Holder must provide to the *CEO* a written report of records required under condition 17 of this Permit where these records have not already been provided under condition 18(a) of this Permit.

Definitions

The following meanings are given to terms used in this Permit:

CEO means the Chief Executive Officer of the Department responsible for the administration of the clearing provisions under the *Environmental Protection Act 1986*;

dieback means the effect of Phytophthora species on native vegetation;

fauna specialist: means a person who holds a tertiary qualification specializing 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 *Biodiversity Conservation Act 2016*;

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

local provenance means native vegetation seeds and propagating material from natural sources within 100 kilometres and the same Interim Biogeographic Regionalisation for Australia (IBRA) subregion of the area cleared.

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;

suitable habitat: means habitat known to support western ringtail possums (*Pseudocheirus occidentalis*) within the known current distribution of the species. This often includes stands of myrtaceous trees (usually Peppermint Tree (*Agonis flexuosa*)) growing near swamps, watercourses or floodplains, and at topographic low points which provide cooler, often more fertile, conditions.

weed/s means any plant -

- (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or
- (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or
- (c) not indigenous to the area concerned.

Mathew Gannaway MANAGER NATIVE VEGETATION REGULATION

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

9 October 2019

Plan 8195/2 (a)



25

0

50

100

33°39'15"S

Plan 8195/2 (b)



Meters



1. Application details

1.1. Perm	nit application deta	ails			
Permit applic	ation No.:	8195/2			
Permit type:	acaived data:	Purpose Permit 19 September 2019			
4.2 Application is	icent detaile				
Applicant's n	ame:	City of Busselton			
1.3. Prop	ertv details				
Property:	ment Authority:	Lot 40 on Deposited Plan 2222 Lot 41 on Deposited Plan 2222 Lot 43 on Deposited Plan 2222 Lot 231 on Deposited Plan 2222 Lot 231 on Deposited Plan 2222 Lot 265 on Deposited Plan 2222 Lot 511 on Deposited Plan 408 Road Reserve (PIN 11370127 Road Reserve (PIN 11370129 Road Reserve (PIN 11370130) Road Reserve (PIN 11370166 Road Reserve (PIN 11370166) Road Reserve (PIN 11438900) Water Feature (PIN 11725413) City of Busselton	26 (Crown Reserve 2236), Busselton 26 (Crown Reserve 2236), Busselton 26 (Crown Reserve 2237), Busselton 74 (Crown Reserve 2241), Busselton 226 (Crown Reserve 7443), Busselton 687 (Crown Reserve 52822), Busselton 687 (Crown Reserve 52822), Busselton 687 (Busselton 7, Busselton 7, Busselton 7, Busselton 7, Busselton 7, Busselton 7, Busselton		
1.4. Appl	ication				
Clearing Area	a (ha) No. Tree	es Method of Clearing	Purpose category:		
0.49		Mechanical Removal	Road construction or upgrades		
1.5. Decis	sion on applicatio	n			
Decision: Date:	Granted 9 October 2019				
Reasons for	On 17 May 2019, C	learing Permit CPS 8195/1 was	granted to clear up to 0.49 hectares of native vegetation for		
Decision:	the purpose of cons	structing the Eastern Link. An ap	peal was lodged against the grant of the permit.		
	This clearing permit amendment gives effect to the determination of the Minister for Environment (Minister) to partly allow appeal C030 of 2019. The Minister has requested the Department of Water and Environmental Regulation (DWER) amend condition 11(a) of the Clearing Permit CPS 8195/1 to require the permit holder to install rope bridges within six months of the commencement of clearing.				
	Given the above, the Delegated Officer decided to grant a clearing permit subject to the amended fauna management – rope bridges condition.				
2. Site Infor	mation				
Clearing DescriptionThe proposed clearing of 0.49 hectares of native vegetation within an application area measuring 1.25 hectares (Figure 1) is for the City of Busselton's Eastern Link project. The Eastern Link project involves the construction of a new two lane road linking Causeway Road (near Rosemary Drive) to Cammilleri Court (at the intersection with Peel Terrace). The new road will also include a new dual use path on its western side and a new bridge over the Lower Vasse River. The bridge will comprise a single span without piers.					
	Note: The application vegetation. This was	n form submitted on 14 Septem later confirmed to be an error wi	ber 2018 refers to the clearing of 0.56 hectares of native the actual intended applied clearing being 0.49 hectares.		
Vegetation Description	Two Heddle vegetation Vasse comp rudis (flood Eucalyptus Tecticornia a Quindalup of dune alliano Melaleuca la Acacia roste Geographe al., 2016).	on complexes are mapped within olex – Mixture of the closed scru ed gum) - <i>Melaleuca</i> species a <i>marginata</i> (jarrah) - <i>Corymbia</i> and <i>Sarcocornia</i> species (samph omplex – Coastal dune complex e and the mobile and stable dun <i>anceolata</i> (Rottnest teatree) - <i>C</i> <i>ellifera</i> (summer-scented wattle) Bay (Government of Western Au	the application area: ub of <i>Melaleuca</i> species fringing woodland of <i>Eucalyptus</i> and open forest of <i>Eucalyptus gomphocephala</i> (tuart) - a calophylla (marri). Will include areas dominated by ire) near Mandurah and south of the Capel River. consisting mainly of two alliances - the strand and fore- e alliance. Local variations include the low closed forest of <i>allitris preissii</i> (Rottnest Island pine), the closed scrub of and the low closed <i>Agonis flexuosa</i> (peppermint) forest of stralia, 2018b taken from Heddle et al., 1980 and Webb et		

	The Vasse complex is mapped over the portion of the application area south of the Lower Vasse River with the Quindalup complex mapped over the remainder.
	 A flora and vegetation survey commissioned by the applicant and undertaken by Strategen Environmental recorded five different vegetation types within the application area: VT1 – Agonis flexuosa low woodland over *Cynodon dactylon grassland (managed); VT2 – Eucalyptus rudis, Eucalyptus cornuta and *Eucalyptus grandis mid woodland over Melaleuca rhaphiophylla and Agonis flexuosa low open woodland over Callistemon sp. low open shrubland over *Cenchrus clandestinus and Bolboschoenus caldwellii low grassland/sedgeland; VT3 – Melaleuca rhaphiophylla, Melaleuca teretifolia and Melaleuca preissii low open forest over Melaleuca viminea mid shrubland over *Cynodon dactylon and *Cenchrus clandestinus low grassland; VT4 – Salicornia quinqueflora, Tecticornia indica subsp. bidens and Salicornia blackiana low samphire shrubland; and VT4d - *Carex divisa closed sedgeland over *Stenotaphrum secundatum low open grassland (Strategen Environmental, 2017).
	VT1 was recorded on the northern side of the Lower Vasse River with the remaining vegetation types all recorded on the southern side.
	The flora and vegetation survey also recorded areas of 'Open Water' (OW) and 'Cleared or manicured grassland' (CL) within the application area (Strategen Environmental, 2017).
Vegetation Condition	 Vegetation condition within the application area was recorded by Strategen Environmental using the Keighery (1994) condition scale as follows: Good = 18.3 per cent Degraded = 13.2 per cent Completely Degraded = 40.5 per cent (Strategen Environmental, 2017).
	The remaining 28 per cent of the application area comprised areas of OW (Strategen Environmental, 2017).
	 Keighery (1994) vegetation condition ratings are defined as follows: Pristine: Pristine or nearly so, no obvious signs of disturbance. Excellent: Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Very Good: Vegetation structure altered; obvious signs of disturbance. Good: Vegetation structure significantly altered by very obvious signs of multiple disturbance; retains basic structure or ability to regenerate. Degraded: Basic vegetation structure severely impacted by disturbance; scope for regeneration but not to a state approaching Good condition without intensive management. Completely Degraded: The structure of the vegetation is no longer intact and the area is completely or almost completely without native species.
	The application area has historically been highly modified. Aerial imagery from 1987 (Figure 2) shows the application area containing little remnant native vegetation. Vegetation cover has increased since this time which is likely attributable to both plantings and natural recruitment of both native and non-native species.
	A site inspection of the application area by the Department of Water and Environmental Regulation (DWER) confirmed that the majority of the application area is in a Completely Degraded condition (DWER, 2018).
Soil type	Soils north of the river are expected to comprise calcareous sand of aeolian origin. Soils south of the river are expected to comprise imported fill associated with a disused railway embankment and land adjacent to Causeway Road, and silts in wetland areas (Strategen Environmental, 2018).



Figure 2. Application area (1987 aerial imagery)

3. Assessment of application against clearing principles, planning instruments and other relevant matters

The amendment is a result of an appeal determination made by the Minister for Environment regarding conditions of clearing permit CPS 8195/1.

The assessment against the clearing principles outlined in Schedule 5 of the *Environmental Protection Act 1986* has not changed and can be found in the Clearing Permit Decision Report CPS 8195/1.

Planning instruments and other relevant matters.

The assessment against planning instruments and other matters has not changed and can be found in clearing permit decision report CPS 8195/1.

4. References

- Department of Water and Environmental Regulation (DWER) (2018). Site Inspection Report CPS 8195/1. Site inspection undertaken 5 December 2018 (DWER Ref: A1748449).
- Government of Western Australia (2018b). 2017 South West Vegetation Complex Statistics. Current as of October 2017. WA Department of Biodiviersity, Conservation and Attractions, Perth. <u>https://catalogue.data.wa.gov.au/dataset/dbca</u>
- Heddle, E.M., Loneragan, O.W. and Havel, J.J. (1980). Vegetation of the Darling System. In: DCE 1980 Atlas of Natural Resources, Darling System, Western Australia. Department of Conservation and Environment, Perth, 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.

Strategen Environmental (2017). Detailed Flora and Vegetation Survey – Eastern Link. Unpublished report prepared for the City of Busselton, 11 December 2017. Perth, Western Australia (DWER Ref: A1721346).

Strategen Environmental (2018). Busselton Eastern Link Project – Native vegetation clearing permit application – supporting documentation. Unpublished report prepared for the City of Busselton, September 2018 (DWER Ref: A1721346).

Webb, A., Kinloch, J., Keighery, G. and Pitt, G. (2016). The extension of vegetation complex mapping to landform boundaries within the Swan Coastal Plain landform and forested region of south west Western Australia. Department of Parks and Wildlife, Perth, Western Australia.

Geographic Information System (GIS) datasets:

- Cadastre, Land Tenure
- Hydrography, linear
- Interim Biogeographic Regionalisation of Australia (IBRA)
- Landgate Imagery
- Native Vegetation Current Extent
- Pre-European Vegetation
- DBCA Species and Communities (accessed 11 February 2019)