



## **CLEARING PERMIT**

*Granted under section 51E of the Environmental Protection Act 1986*

### **PERMIT DETAILS**

Area Permit Number: 5792/1

File Number: 2011/006816-3

Duration of Permit: From 28 December 2013 to 28 December 2015

### **PERMIT HOLDER**

City of Busselton.

### **LAND ON WHICH CLEARING IS TO BE DONE**

Lot 95 on Deposited Plan 208891 (Reserve 8485), Busselton.

Lot 324 on Deposited Plan 208891 (Reserve 8485), Busselton.

Lot 325 on Deposited Plan 208891 (Reserve 8485), Busselton.

Lot 338 on Deposited Plan 208891 (Reserve 8485), Busselton.

Lot 418 on Deposited Plan 189088 (Reserve 28535), Busselton.

Queen Street road reserve (PIN 11370090), Busselton.

Marine Terrace road reserve (PIN 11436260), Busselton.

Georgette Street road reserve (PIN 11436246), Busselton.

### **AUTHORISED ACTIVITY**

The Permit Holder shall not clear more than 30 native trees within the areas shaded yellow on attached Plan 5792/1a.

### **CONDITIONS**

#### **1. Western Ringtail Possum Management Plan**

- (a) The Permit Holder must prepare a Western Ringtail Possum Management Plan.
- (b) The Western Ringtail Possum Management Plan must be approved by the CEO prior to commencing works.
- (c) Prior to clearing the Permit Holder must implement the approved Western Ringtail Possum Management Plan.

#### **2. Native Vegetation Conservation**

- (a) In respect to the area hatched red on attached plan 5792/1b, the permit holder shall amend the vesting of the land from its existing stated purpose to 'Conservation and Recreation'.
- (b) The vesting amendment outlined in condition 2(a) shall include, but not be limited to, the following conditions:
  - (i) native vegetation in the area subject to vesting must not be cleared, other than for clearing required under another prescribed written law;
  - (ii) the land subject the vesting shall not be used for the purpose of cultivation of crops or pasture, or for the de-pasturing of any stock; and
  - (iii) the vesting is to apply for a minimum of 30 years;
- (c) the permit holder is to execute and return the vesting amendment described in condition 2(a) of this permit prior to 28 December 2014.

#### **3. Records to be kept**

In relation to condition 1 of this Permit the Permit Holder must maintain records of activities undertaken in accordance with the Western Ringtail Possum Management Plan.

#### 4. 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 3 of this Permit; and
  - (ii) concerning activities done by the Permit Holder under this Permit between 1 January and 31 December of the preceding calendar year.
- (b) If no clearing authorised under this Permit was undertaken between 1 January to 31 December of the preceding calendar year, a written report confirming that no clearing under this permit has been carried out, must be provided to the CEO on or before 30 June of each year.
- (c) Prior to 28 September 2015, the Permit Holder must provide to the CEO a written report of records required under condition 3 of this Permit where these records have not already been provided under condition 4(a) of this Permit.



M Warnock  
MANAGER  
NATIVE VEGETATION CONSERVATION BRANCH

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

28 November 2013



# Plan 5792/1a



## LEGEND

- Cadastre
- Local Government Authorities
- Road Centrelines
- Clearing Instruments
- Areas Approved to Clear
- Busseton 50cm Orthomosaic - Landgate 2007



Scale 1:5000  
Approximate when reproduced at A4

Geocentric Datum Australia 1984

Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*amend* Date 28/1/13

M Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1986

Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



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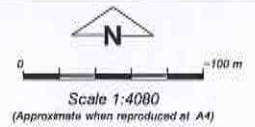


# Plan 5792/1b



## LEGEND

- Road Centrelines
- Cadastre
- Clearing Instruments
- Areas Subject to Conditions



Geocentric Datum Australia 1994  
 Note: the data in this map have not been projected. This may result in geometric distortion or measurement inaccuracies.

*M. Warnock* Date 28/11/17  
 M. Warnock

Officer with delegated authority under Section 20 of the Environmental Protection Act 1985  
 Information derived from this map should be confirmed with the data custodian acknowledged by the agency acronym in the legend.



\* Project Data. This data has not been quality assured. Please contact map author for details.





## 1. Application details

### 1.1. Permit application details

Permit application No.: 5792/1  
Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: City of Busselton

### 1.3. Property details

Property: LOT 338 ON PLAN 208891 (Lot No. 338 GEOGRAPHE BAY BUSSELTON 6280)  
LOT 325 ON PLAN 208891 (Lot No. 325 MARINE BUSSELTON 6280)  
LOT 418 ON PLAN 189088 (Lot No. 418 QUEEN BUSSELTON 6280)  
LOT 95 ON PLAN 208891 (Lot No. 95 GEOGRAPHE BAY BUSSELTON 6280)  
ROAD RESERVE (BUSSELTON 6280)  
LOT 324 ON PLAN 208891 (Lot No. 324 MARINE BUSSELTON 6280)  
City of Busselton

Local Government Area: City of Busselton  
Colloquial name:

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
	30	Mechanical Removal	Recreation

### 1.5. Decision on application

Decision on Permit Application: Grant  
Decision Date: 28 November 2013

## 2. Site Information

### 2.1. Existing environment and information

#### 2.1.1. Description of the native vegetation under application

Vegetation Description	Clearing Description	Vegetation Condition	Comment
Beard Vegetation Association: 990 - Low forest; peppermint ( <i>Agonis flexuosa</i> ) (Shepherd et al. 2001).	The clearing of 30 native trees within Lot 95, 324, 325 and 338 on Deposited Plan 208891 (Reserve 8485), Lot 418 on Plan 189088 (Reserve 28535), Queen Street, Marine Terrace and Georgette Street road reserves, Busselton, is for the purpose of the Busselton Foreshore Redevelopment, in the City of Busselton.	Completely Degraded: No longer intact; completely/almost completely without native species (Keighery 1994).	Vegetation condition and description were obtained through aerial imagery and supporting information provided by the application (City of Busselton 2013a).

## 3. Assessment of application against clearing principles

### (a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

**Comments** **Proposal is not likely to be at variance to this Principle**

The application is to clear up to 30 Peppermint trees (*Agonis flexuosa*) for the purpose of redeveloping the Busselton Foreshore. The application area is parkland cleared with no under or mid storey vegetation (City of Busselton 2013a) and is therefore in completely degraded (Keighery 1994) condition.

The trees under application have diameters at 1.4 metres from the base of the tree that range from 100 millimetres to 1500 millimetres. One of the trees under application is in poor health, with the remaining in good health (Arbor Guy 2013)

There are numerous priority flora species within the local area (10 kilometre radius). The trees under application are not priority flora species nor are they representative of a priority ecological community.

There are numerous conservation significant fauna species within the local area (10 kilometre radius), in particular the Western Ringtail Possum (*Pseudocheirus occidentalis*; rare or likely to become extinct, Wildlife Conservation Act 1950; endangered, Environment Protection and Biodiversity Conservation Act 1999)(DPaW 2007-). The application area consists of 30 *Agonis flexuosa*, this species is synonymous with habitat for western ringtail possums (WRPs).

Although the trees under application may be considered to contain significant habitat for WRPs, they do not hold a high level of floristic and faunal diversity and therefore the proposed clearing is not likely to be at variance to this principle.

**Methodology**    References:  
Arbor Guy 2013  
City of Busselton 2013a  
DPaW 2007-  
Keighery 1994  
GIS Databases:  
- SAC Biodatasets

**(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 indigenous to Western Australia.**

**Comments      Proposal is at variance to this Principle**

There are numerous conservation significant fauna species within the local area (10 kilometre radius), in particular the trees under application may contain habitat suitable for WRP.

The WRP is an arboreal possum, which spends most of its time high in the forest canopy. They eat leaves, especially those of the peppermint, and shelter in tree hollows or dreys. Historically, the WRP was commonly found throughout the forests of the south west of Western Australia. Today, the WRP can be found living in coastal peppermint woodlands and ludlow tuart (*Eucalyptus gomphocephala*) forests. Populations are now limited to three areas, with the largest one near the town of Busselton (Burbridge 2004 & DSEWPC 2011).

The WRP has disappeared from 90 percent of its original range due to a number of threats including habitat loss due to land clearing and logging. The habitat loss has resulted in remaining bushland becoming fragmented, and results in the lack of old trees with suitable hollows for the possum to rest in. Some of these trees take hundreds of years to grow to a suitable size to provide hollows. The most significant threat to the species currently is the ongoing clearing of habitat in the Busselton area for urban development (DSEWPC 2011).

There is significant pressure on the habitat of WRP in the Busselton - Dunsborough coastal strip, with agricultural and urban development leading to the loss of WRP habitat. This habitat loss combined with other threatening processes has led to unnatural changes to the local WRP population and has now made it important to protect remaining habitat and manage WRP welfare during development (DEC 2009).

WRP surveys were conducted in December 2012 (NGH Environmental 2013) and July 2013 (Ecosystem Solutions 2013). The survey in July was conducted to quantify the abundance and distribution of WRPs during an anticipated trough in the population (Ecosystem Solutions 2013). The survey recommends a further survey in an anticipated peak population period (October) to determine the full extent and utilisation of the area by the species. The first survey in December covered the approximately 33 hectares area which is being redeveloped (the site) (NGH Environmental 2013). The survey in July covered the site as well as a buffer of 150 metres around the site. Both surveys included the trees under application as well as other vegetation (Ecosystem Solutions 2013).

During the July survey, 99 WRP dreys were identified within the survey area; 44 within the site and 55 within the buffer area (Ecosystem Solutions 2013). Nocturnal surveys identified 61 WRP one night (13 within the site, 48 within the buffer) and 80 the following night (29 within the site, 51 within the buffer) (Ecosystem Solutions 2013). It is likely that the survey did not identify all the WRP within the survey area. WRP scats were found under most of the vegetation surveyed (Ecosystem Solutions 2013). Within the site, the possums spotted and the dreys identified were concentrated in three locations (Ecosystem Solutions 2013). The trees under application do not occur within these areas.

Several WRPs have been identified within and adjacent to the trees under application. Approximately 5 dreys occur within trees under application, and several others occur adjacent to trees under application.

WRPs within the application area may be displaced during the clearing process. The applicant has proposed staged clearing of the area, which will aid in the re-establishment of WRPs into retained habitat within the site and the buffer. The WRP surveys highlight the inter-relationship and the probable movement of animals between the site and the buffer area, suggesting the loss of individual trees may only cover a portion of the territory of a number of individual animals and therefore the impact will be reduced.

The proposed clearing will result in a reduction of WRP habitat, however the applicant has advised the proposed redevelopment includes future plantings which are likely to provide functional habitat for this species once established.

The vegetation under application is in completely degraded (Keighery 1994) condition. Given the lack of understorey within the application area, the vegetation under application is unlikely to provide habitat for ground dwelling fauna.

Given the vegetation under application contains significant habitat for WRPs, the proposed clearing is at variance to this principle. A WRP management plan will assist in reducing the impact to this species' habitat and welfare during clearing.

To offset the residual environmental impacts identified above the applicant will change the vesting purpose of Lot 324 on Plan 208891 from 'Recreation and Camping' to 'Conservation and Recreation'. Lot 324 is approximately 1.6 hectares and contains approximately 0.8 hectares of known WRP habitat.

**Methodology** References:  
 Burbridge 2004  
 DEC 2009  
 DPaW 2007-  
 DSEWPC 2011  
 Ecosystem Solutions 2013  
 Keighery 1994  
 NGH Environmental 2013

**(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.**

**Comments** **Proposal is not at variance to this Principle**  
 There are numerous rare flora species within the local area (10 kilometre radius). The trees under application are not rare flora species.

Therefore, the proposed clearing is not at variance to this principle.

**Methodology** GIS Databases:  
 - SAC Biodatasets

**(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.**

**Comments** **Proposal is not at variance to this Principle**  
 There are several threatened ecological communities within the local area (10 kilometre radius). The trees under application are not representative of a threatened ecological community.

Therefore, the proposed clearing is not at variance to this principle.

**Methodology** GIS Databases:  
 - SAC Biodatasets

**(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.**

**Comments** **Proposal is at variance to this Principle**  
 Aerial photography indicates the local area (10 kilometre radius) is approximately 10 percent vegetated.

The IBRA Bioregion (Swan Coastal Plain) and the local government agency (City of Busselton) retain approximately 39 percent and 43 percent of their respective pre-European extents (Government of Western Australia 2013).

The application area is mapped as Beard Vegetation Association 990, which retains approximately 359 hectares (18 percent) of its pre-European extent within the Swan Coastal Plain IBRA Bioregion.

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 trees under application provide significant fauna habitat and therefore the application area is a significant remnant.

Therefore, the proposed clearing is at variance to this principle.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion*				
Swan Coastal Plain	1 501 222	587 708	39	35
Shire*				
City of Busselton	146 478	62 332	43	66
Beard Vegetation Association in Bioregion*				
990	1 952	361	18	11

**Methodology**   References:  
City of Busselton 2013b  
Commonwealth of Australia 2001  
Government of Western Australia 2013  
GIS Databases:  
- NLWRA, Current extent of Native Vegetation  
- Busselton Townsite 20cm Orthomosaic - Landgate 2008  
- Pre-European Vegetation  
- SAC Biodatasets

**(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.**

**Comments      Proposal is not at variance to this Principle**

There are several watercourses within the local area (10 kilometre radius). The application area is located approximately 100 metres from the coastline.

There are no mapped watercourses or wetlands within the application area and the trees under application are not growing in association with a watercourse.

Given the above, the proposed clearing is not at variance to this principle.

**Methodology**   References:  
GIS Databases:  
- Hydrography, Linear

**(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.**

**Comments      Proposal is not at variance to this Principle**

The soil within the application area is mapped as A13, which Northcote et al (1960 - 1968) describes as coastal dune formations backed by the low-lying deposits of inlets and estuaries: chief soils are calcareous sands on the dunes.

The mean annual rainfall of the application area is 800 millimetres.

Given the proposed clearing consists of individual trees, the clearing will not cause significant land degradation.

Therefore the proposed clearing is not at variance to this principle.

**Methodology**   GIS Databases:  
- Mean Annual Rainfall  
- Soils, Statewide

**(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.**

**Comments      Proposal is not at variance to this Principle**

There are numerous Department of Parks and Wildlife managed lands within the local area (10 kilometre radius). The closest of these is the Ngari Capes Marine Park, which is located approximately 150 metres from the application area. There is an unnamed nature reserve located approximately 850 metres from the application area.

The vegetation under application is not connected to these reserves as they are separated by main roads and residential areas. Therefore, the proposed clearing is not at variance to this principle.

**Methodology**   GIS Databases:  
- DEC Tenure

**(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.**

**Comments      Proposal is not at variance to this Principle**

There are no watercourses or wetlands within the application area and therefore the proposed clearing will not impact on the quality of surface water in any nearby watercourse or wetland.

The groundwater salinity of the application area is 3000 - 7000 milligrams per litre of Total Dissolved Solids, this



level of salinity is moderately saline to saline. Given the clearing is comprised of 30 trees, the proposed clearing will not increase the risk of salinisation.

Therefore the proposed clearing is not at variance to this principle.

**Methodology** GIS Databases:  
- Groundwater Salinity  
- Hydrography, Linear

**(j) Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.**

**Comments Proposal is not at variance to this Principle**

The application is to clear 30 native trees from the application area. There are no wetlands, watercourses or areas subject to inundation mapped within the application area.

Based on the above, the clearing as proposed will not increase the incidence or intensity of flooding, and is therefore not at variance to this principle.

**Methodology** GIS Databases:  
- Hydrography, Linear

**Planning instrument, Native Title, Previous EPA decision or other matter.**

**Comments**

The application is to clear up to 30 Peppermint trees for the purpose of the Busselton Foreshore Redevelopment (City of Busselton 2013a). The application was originally to clear up to 74 trees covering approximately 0.327 hectares. The application was amended to remove 44 trees as they are not native vegetation as defined in the Environmental Protection Act 1986 and the Environment Protection (Clearing of Native Vegetation) Regulations 2004.

The Busselton Foreshore Redevelopment requires clearing of approximately 0.18 hectares of vegetation and is proposed to include 16.721 hectares of revegetation. The applicant has advised that the redevelopment will include staged clearing and that significant revegetation will occur at the same time as clearing (City of Busselton 2013b). The proposed revegetation includes planting of advanced (5 years old) Peppermint trees and, where possible, local provenance understorey species (City of Busselton 2013b).

To offset the residual environmental impacts identified above the applicant will change the vesting purpose of Lot 324 on Plan 208891 from 'Recreation and Camping' to 'Conservation and Recreation'. Lot 324 is approximately 1.6 hectares and contains approximately 0.8 hectares of known WRP habitat.

The application area is located within the Busselton Capel Groundwater Water Area covered by the Rights in Water and Irrigation Act 1914. The Department of Water has advised that there are licences to take groundwater and construct bores within the application area (DoW 2013).

The former Department of Sustainability, Environment, Water, Population and Communities (DSEWPC) has determined that the Busselton Foreshore Redevelopment proposal as a 'controlled action' and requires assessment and approval before it can proceed (DSEWPC 2013). The Department of the Environment (formerly DSEWPC) has not completed the assessment of the proposal.

No public submissions have been received in relation to the proposed clearing.

**Methodology** References:  
City of Busselton 2013a  
City of Busselton 2013b  
DoW 2013  
DSEWPC 2013  
GIS Databases:  
- RIWI Act areas

#### **4. References**

- Arbor Guy (2013) Arboricultural Report for the City of Busselton – Tree Condition Survey Barnard Park and Foreshore. Arbor Guy – Certified Tree Specialists, Western Australia. DER REF: A669983.
- Burbidge, A. (2004) Threatened Animals of Western Australia, Department of Conservation and Land Management, Perth, Western Australia.
- City of Busselton (2013a) Clearing Permit Application for Busselton Foreshore Redevelopment. Received 5/09/2013. City of Busselton, Western Australia. DER REF: A669981.
- City of Busselton (2013b) Supporting documentation provided to DSEWPC - Referral of proposed action. City of Busselton, Western Australia.
- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- DEC (2009) Development Planning guidelines for Western Ringtail Possums in Busselton and Dunsborough. Department of Environment and Conservation, Western Australia.
- DoW (2013) Advice received for Clearing Permit Application CPS 5792/1. Received 8/10/2013. Department of Water, Western

Australia. DER REF: A681700.

DPaW (2007-) NatureMap: Mapping Western Australia's Biodiversity. Department of Environment Regulation. URL: <http://naturemap.der.wa.gov.au/>. Accessed 02/10/2013.

DSEWPC (2011) Western Ringtail Possum Fact Sheet

(<http://www.environment.gov.au/biodiversity/threatened/publications/pubs/tsd07-w-ringtail-possum.pdf>). Department of Sustainability, Environment, Water, Populations and Communities, Canberra.

DSEWPC (2013) Notification of Referral Decision and Designated Proponent - controlled action. Department of Sustainability, Environment, Water, Population and Communities, Canberra.

Ecosystem Solutions Pty Ltd (2013) Busselton Foreshore and Surrounds - Western Ringtail Possum Survey. Ecosystem Solutions Pty Ltd, Western Australia.

Government of Western Australia. (2013). 2012 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2012. WA Department of Environment and Conservation, Perth.

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

NGH Environmental (2013) Busselton Foreshore Redevelopment Project - Western Ringtail Possum Report. NGH Environmental, Western Australia.

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.

Shepherd, D.P., Beeston, G.R., and Hopkins, A.J.M. (2001), Native Vegetation in Western Australia. Technical Report 249. Department of Agriculture Western Australia, South Perth.

## 5. Glossary

Term	Meaning
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community