



## CLEARING PERMIT

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

### PERMIT DETAILS

Area Permit Number: 4916/1  
File Number: 2011/006816-1  
Duration of Permit: From 1 June 2012 to 1 June 2014

### PERMIT HOLDER

City of Busselton

### LAND ON WHICH CLEARING IS TO BE DONE

LOT 500 ON PLAN 40449 (Quindalup)  
LOT 502 ON PLAN 40449 (Quindalup)  
Geographe Bay Road reserve (PIN 11846215)

### AUTHORISED ACTIVITY

The Permit Holder shall not clear more than 0.5 hectares of native vegetation within the area cross hatched yellow on attached Plan 4916/1a.

### CONDITIONS

#### 1. Revegetation

The Permit Holder shall establish and maintain peppermint trees (*Agonis flexuosa*) within the area cross hatched red on attached Plan 4916/1b in accordance with the following conditions:

- (a) for every peppermint tree (*Agonis flexuosa*) cleared two peppermint trees (*Agonis flexuosa*) are to be established and maintained; and
- (b) *planting* is to commence within twelve months of clearing any area authorised under this Permit.

#### 2. Fauna management

- (a) Prior to undertaking any clearing authorised under this Permit, the areas shall be inspected by a *possum spotter* who shall identify habitat suitable to be utilised by Western Ringtail Possums (*Pseudocheirus occidentalis*);
- (b) Prior to clearing, any habitat identified by condition 2(a) shall be inspected by a *possum spotter* for the presence of Western Ringtail Possums (*Pseudocheirus occidentalis*);
- (c) Prior to undertaking any clearing authorised under this Permit, the Permit Holder shall engage a *possum spotter* to remove and relocate fauna identified under condition 2(b).

#### 3. Records must be kept

The Permit Holder must maintain the following records for activities done pursuant to this Permit:

- (a) In relation to the clearing of native vegetation authorised under this Permit:
  - (i) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 1994 (GDA94), expressing the geographical coordinates in Eastings and Northings;
  - (ii) the date that the area was cleared; and
  - (iii) the size of the area cleared (in hectares).

- (b) In relation to fauna management pursuant to condition 2 of this Permit:
- (i) the location of each *habitat tree* 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;
  - (ii) the location of identified Western Ringtail Possums (*Pseudocheirus occidentalis*); 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; and
  - (iii) a copy of the *possum spotter's* report.

#### 4. Reporting

- (a) The Permit Holder must provide to the CEO on or before 1 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
- (b) Prior to 1 March 2014, 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.

#### DEFINITIONS

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

*planting* means the re-establishment of vegetation by creating favourable soil conditions and planting seedlings of the desired species;

*possum spotter* means a suitably experienced zoologist or Western Ringtail Possum (*Pseudocheirus occidentalis*) rehabilitator holding a Regulation 17 (scientific) license.



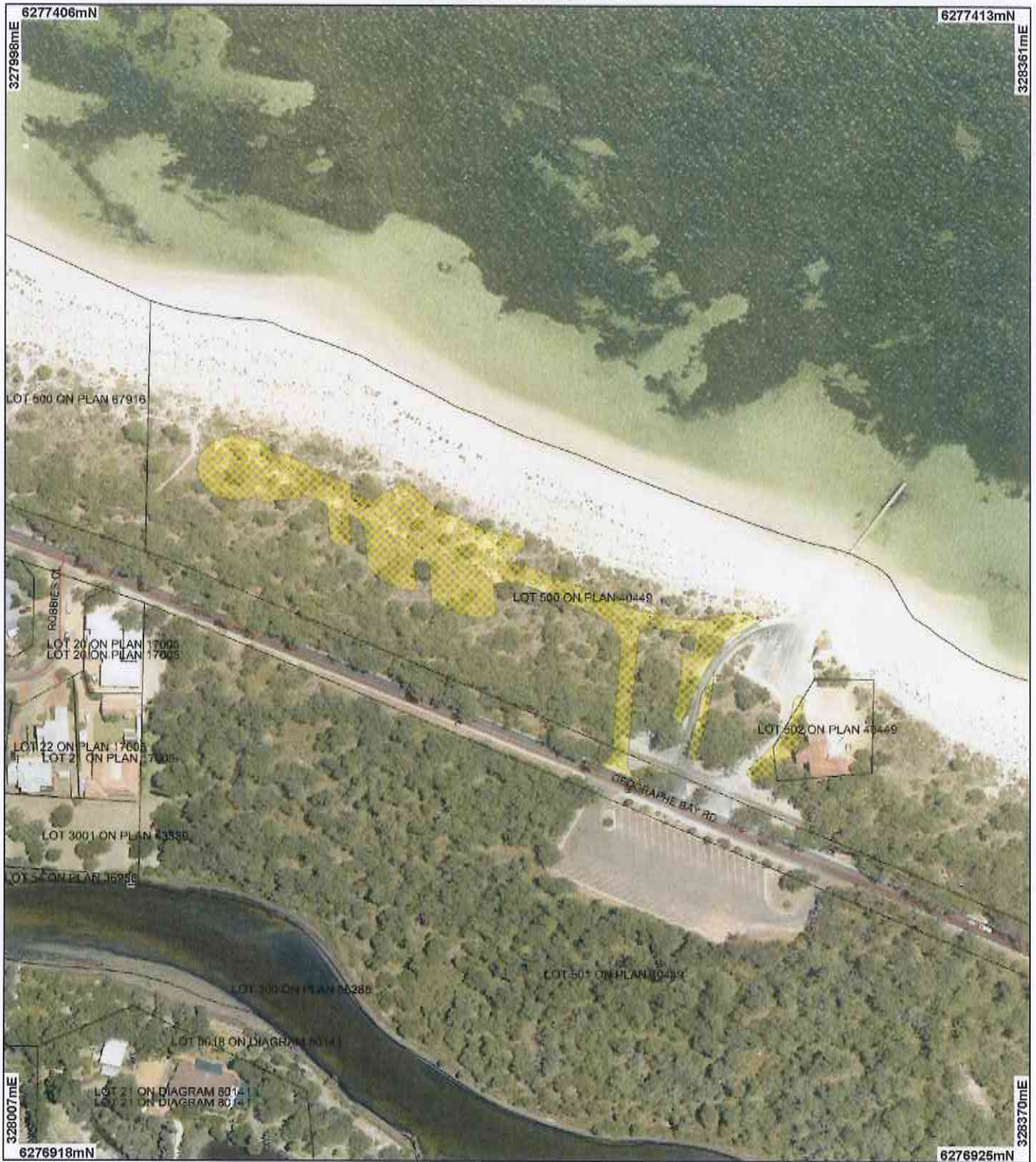
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Robert Atkins  
DEPUTY DIRECTOR GENERAL, ENVIRONMENT  
DEPARTMENT OF ENVIRONMENT AND CONSERVATION

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

10 May 2012

# Plan 4916/1a



## LEGEND

- Clearing instruments
- Areas Approved to Clear
  - Road Centrelines
  - Cadastre

Busselton Townsite 20cm  
Orthomosaic - Landgate  
2008



Scale 1:2150

(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

Date 10.5.12  
R. Atkins

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.



Department of  
Environment and Conservation

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# Plan 4619/1b



## LEGEND

- Road Centrelines
- Clearing Instruments
- Local Government Authorities
- Areas Subject to Conditions

Busselton 50cm Orthomosaic - Landgate 2007



0 ————— 200 m

Scale 1:7906  
(Approximate when reproduced at A4)

Geocentric Datum Australia 1994

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

Date 10.5.17  
Robert Atkins

Officer with delegated authority under Section 20 of the Environmental Protection Act 1985

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## 1. Application details

### 1.1. Permit application details

Permit application No.: 4916/1

Permit type: Area Permit

### 1.2. Proponent details

Proponent's name: City of Busselton

### 1.3. Property details

Property: LOT 500 ON PLAN 40449 (Lot No. 500 GEOGRAPHE BAY QUINDALUP 6281)  
LOT 502 ON PLAN 40449 (Lot No. 502 GEOGRAPHE BAY QUINDALUP 6281)  
ROAD RESERVE (QUINDALUP 628)

Local Government Area: City Of Busselton

Colloquial name: Geographe Bay Road

### 1.4. Application

Clearing Area (ha)	No. Trees	Method of Clearing	For the purpose of:
0.5		Mechanical Removal	Building or Structure

### 1.5. Decision on application

Decision on Permit Application: Grant

Decision Date: 10 May 2012

## 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
Mapped Beard vegetation association 990: Low forest peppermint ( <i>Agonis flexuosa</i> ) (Shepherd, 2009)	The application is to clear 0.5 hectares for the purpose of constructing a car park.  The vegetation under application is a <i>Agonis flexuosa</i> woodland, with understory and groundcover species consisting of <i>Acacia cochlearis</i> , <i>Spyridium globulosum</i> , <i>Olearia axillaris</i> , <i>Acacia littorea</i> and a dense ground cover of <i>Lepidosperma gladiatum</i> (DEC, 2012). There is evidence of weeds present on the edges of the vegetation under application (DEC, 2012).  The vegetation under application is considered to be in a good to excellent (Keighery, 1994) condition (DEC, 2012), with the majority in a very good (Keighery, 1994) condition (DEC, 2012).	Excellent: Vegetation structure intact; disturbance affecting individual species, weeds non-aggressive (Keighery 1994)  To  Good: Structure significantly altered by multiple disturbance; retains basic structure/ability to regenerate (Keighery 1994)	The condition of the vegetation under application was obtained from a site inspection undertaken by the Department of Environment and Conservation (DEC) on the 4 of April, 2012.

### 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 at variance to this Principle**

The application is to clear 0.5 hectares for the purpose of constructing a car park approximately 2km from the townsite of Quindalup. The vegetation under application is in a good to excellent (Keighery, 1994) condition (DEC, 2012) and consists of a *Agonis flexuosa* woodland, with understory and groundcover species consisting of *Acacia cochlearis*, *Spyridium globulosum*, *Olearia axillaris*, *Acacia littorea* and a dense ground cover of *Lepidosperma gladiatum* (DEC, 2012).

The southern section of the area under application comprises of a taller *Agonis flexuosa* woodland which is considered to be a part of the Consolidated Dunes of Geographe Bay. The Consolidated Dunes of Geographe Bay could potentially be classified within the Geographe Bay consolidated Quindalup Dune plant community (Webb et al, 2009). This vegetation community is highly restricted and much of it has been cleared with intact examples of this community being uncommon. The vegetation of the Geographe Bay Quindalup Dunes is part of Floristic Community Type (FCT) 30b. This plant community is currently recognised as a Priority 3 Ecological Community (DEC, 2010).

The area under application provides significant habitat for the conservation significant Western Ringtail Possum (*Pseudocheirus occidentalis*) and is part of an important remnant of vegetation for local fauna species that use Toby Inlet.

The area under application is represented by Beard vegetation association 990, which has 18 percent and 359 hectares of its pre-European vegetation remaining in the Swan Coastal Plain Bioregion. The application occurs within an extensively cleared landscape, with approximately 20 percent of native vegetation remaining within a 10km radius of the application area.

Given that the application area is in good to excellent (Keighery, 1994) condition (DEC, 2012), is representative of under represented vegetation and unique vegetation within a fragmented and extensively cleared local area and contains significant habitat for local fauna including conservation significant fauna, the proposed clearing is considered to comprise a high level of biological diversity. Therefore the application is at variance to this principle.

The footprint of the current application (0.5) has been chosen by the applicant based on advice from DEC (1 February, 2011) to minimise the environmental issues raised within the applicant's previous application, CPS 3923/1.

##### Methodology

##### References

- Keighery (1994)
- Shire of Busselton (2004)
- Shepherd (2009)
- DEC (2012)
- Webb et al (2009)
- GIS Databases
  - Pre-European Vegetation
  - NLWA, Current Extent of Native Vegetation

#### (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**

Eight conservation significant fauna species have been recorded within a 10km radius of the area under application. This includes but is not limited to, the Quenda (*Isoodon obesulus fusciventer*), Western brush wallaby (*Macropus irma*), Dunsborough Burrowing Crayfish (*Engaewa reducta*), Chuditch (*Dasyurus geoffroii*) and the Western Ringtail Possum (*Pseudocheirus occidentalis*).

The vegetation under application consists of an *Agonis flexuosa* woodland and is considered to be in good to excellent (Keighery, 1994) condition (DEC 2012).

Western Ringtail Possums inhabit coastal peppermint forest between Bunbury and Albany especially near Busselton. A fauna survey undertaken in 1997 (Hart et al 1997) found that both the conservation significant Western Ringtail Possum and the Quenda occurs within Reserve 46 and it's likely for both these species to utilize the area under application. In addition, the fauna survey also considered Reserve 46 to provide habitat for the conservation significant Water-rat (*Hydromys chrysogaster*) which has been recorded around Toby Inlet.

The Southern Swan Coastal Plain region is the most important area for the Western Ringtail Possum as there is large population and dense peppermint habitat (Commonwealth of Australia 2009). The Environment Protection and Biodiversity and Conservation Act policy statement 3.10 has identified the area under application as occurring within core habitat for the Western Ringtail Possum. The Significant Impact Guidelines for the Vulnerable Western Ringtail Possum in the Southern Swan Coastal Plain, WA (Commonwealth of Australia 2009) state that core habitat should be maintained and enhanced to protect this species from further

decline. There is a possibility of a significant impact on the species if the proposed action will result in clearing of more than 0.5ha within habitat for this species (Commonwealth of Australia 2009). Therefore, the proposed clearing contains significant habitat for the Western Ringtail Possum. A recent site inspection undertaken by DEC (2012) identified scats of the Western Ringtail Possum at both ends of the application area.

Whilst the Quenda and Water-rat are known to occur within the area, it is considered that the vegetation under application is not limited as their required habitat. The habitat of the Quenda normally consists of dense scrubby, often swampy, vegetation with dense cover up to one metre high, often feeds in adjacent forest and woodland that is burnt on a regular basis and in areas of pasture and cropland lying close to dense cover. On the Swan Coastal Plain Quendas are often associated with wetlands (DEC, 2007). The Water-rats habitat consists of fresh brackish water habitats in the south-west of Western Australia, but occurs in marine environments along the Pilbara coastline and offshore islands (DEC, 2007).

The area under application is part of a 13ha Crown Reserve 46 and is one of the few large areas of relatively undisturbed native vegetation remaining around Toby Inlet (Shire of Busselton 2004). The Shire of Busselton's Management Plan for Reserve 46 considers the vegetation as significant as it represents one of the few larger areas of undisturbed *Agonis flexuosa* forest remaining in the Toby inlet area (Shire of Busselton 2004). The occurrence of the Western Ringtail Possums in the application area, along with the vegetation under application considered to be suitable habitat for other species of conservation significance, it is considered that any further clearing of the *Agonis flexuosa* woodland, classified as significant habitat for the Western Ringtail Possum is likely to impact on their conservation status.

Given the above the application is at variance to this principle. Fauna management through engagement of a possum spotter to manage risks to Western Ringtail Possum will mitigate potential impacts.

The footprint area of the current application (0.5ha) has been chosen by the applicant based on advice from DEC (1 February 2011) to mitigate impacts to the Western Ringtail Possum that were identified within the applicant's previous application, CPS 3923/1.

**Methodology**    References  
-Commonwealth of Australia (2009)  
-DEC (2010)  
- Hart et al (1997)  
- Keighery (1994)  
-Shire of Busselton (2004)

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

**Comments**    **Proposal is not likely to be at variance to this Principle**  
Several declared rare flora (DRF) species have been recorded within 10km of the area under application. The closest mapped DRF species to the application area is *Caladenia viridescens*, located approximately 4km south of the proposed clearing.

All of the rare flora species have been recorded in different soil and vegetation types to the area under application, thus it is not likely that the application area comprises of suitable habitat for DRF species recorded in the local area.

The application is not likely to be at variance to this principle.

**Methodology**    GIS Databases  
-SAC Bio Datasets (April 2012)  
-Pre-European Vegetation  
-Soils, Statewide

**(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 likely to be at variance to this Principle**  
Two threatened ecological communities (TEC's) have been recorded within the 10 km of the application area. The recorded TEC's are referred to as SCP 1b, *Eucalyptus calophylla* woodlands on heavy soils of the southern Swan Coastal Plain and *Eucalyptus calophylla* *Eucalyptus marginata* woodlands on sandy clay soils of the southern Swan Coastal Plain.

The area under application consists of an *Agonis flexuosa* woodland (DEC 2012) and therefore is unlikely to comprise of or be necessary for the maintenance of the threatened ecological communities listed above. The proposed clearing is not likely to be at variance to this Principle.

**Methodology**    References  
-DEC (2012)  
GIS Databases

**(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**  
 The area under application has been mapped as Beard vegetation association 990, which has 18 percent and 359 hectares of its pre-European vegetation remaining in the Swan Coastal Plain Bioregion (Shepherd, 2009).  
 Beard vegetation association 990 retains less than the 30 percent threshold recommended in the National Objectives Targets for Biodiversity Conservation of which species loss appears to accelerate exponentially at an ecosystem level (Commonwealth of Australia 2001).  
 In addition, the area under application exists within an extensively cleared landscape with approximately 20 percent of pre-European vegetation remaining in the local area (10km radius).  
 The Shire of Busselton's Management Plan for Reserve 46 considers the vegetation as significant as it represents one of the few larger areas of undisturbed *Agonis flexuosa* forest remaining in the Toby inlet area (Shire of Busselton 2004). The vegetation contains habitat for conservation significant fauna known to occur in the area.  
 Given that the vegetation association under application is poorly represented within the Bioregion, the application occurs within an extensively cleared landscape and provides significant habitat for fauna of conservation significance, the vegetation under application is significant as a remnant.  
 The application is at variance to this principle. Planting of two peppermint trees (*Agonis flexuosa*) for every peppermint tree that is cleared, in a 8.2ha Crown Reserve 1079, located approximately 3.8km southeast of the proposed clearing area (see Plan 4789/1b) will assist in addressing values of the remnant.

	Pre-European (ha)	Current Extent (ha)	Remaining (%)	Extent in DEC Managed Lands (%)
IBRA Bioregion Swan Coastal Plain	1,501,209	587,889	39	33
Shire City of Busselton	146,479	62,783	42	64
Beard Vegetation Association in Bioregion 990	1,948	359	18	10

**Methodology**      **References**  
 -Shepherd (2009)  
 -Commonwealth of Australia (2001)  
 -Shire of Busselton (2004)  
**GIS Databases**  
 -Pre-European Vegetation  
 -Interim Biogeographic Regionalisation of Australia  
 -NLWA, Current Extent of Native Vegetation

**(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 likely to be at variance to this Principle**  
 The closest inland watercourse and wetland to the area under application is Toby Inlet occurring 170 metres south of the application area. Toby Inlet is a Conservation Category Wetland and an Environmental Protection Policy Lake.  
 The Indian Ocean waterline occurs approximately 50 metres north of the application area.  
 The vegetation between Toby Inlet and the application area is separated by Geographe Bay Road, thus the vegetation within Toby Inlet and the application area are not connected. Given this it is not likely that the vegetation under application is associated with a watercourse or wetland, therefore the application is not likely to be at variance to this principle.

**Methodology**      **GIS Databases**  
 -Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
 -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 likely to be at variance to this Principle**  
The area under application has been mapped as consisting of coastal dune formations containing chief soils of calcareous sands (Northcote et al, 1960-1968). The removal of vegetation has the potential to increase wind erosion given the sandy nature of the soils within the application area.

However, given the relatively small amount of proposed clearing, it is considered unlikely that any significant land degradation will occur from the possible wind erosion.

The application is not likely to be at variance to this principle.

**Methodology** References  
-Northcote et al (1960-68)  
GIS Databases  
-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**  
The closest conservation area to the proposed clearing site is the Locke Nature Reserve, located approximately 7.78 km south east of the application area.

Given the distance to the nearest conservation area and that the area under application is not connected to the conservation areas through continuous vegetation, the proposed clearing is not likely to impact these areas.

The application is not likely to be 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 likely to be at variance to this Principle**  
The closest inland watercourse and wetland to the area under application is Toby Inlet occurring 170 metres south of the application area.

The vegetation under application and the vegetation within the Toby Inlet are not connected as they are separated by Geographe Bay Road. Given this it is unlikely that the clearing as proposed will significantly impact upon groundwater or surface water in the local area.

The proposed clearing is not likely to be at variance to this principle.

**Methodology** GIS Databases  
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
-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 likely to be at variance to this Principle**  
The closest inland watercourse and wetland to the area under application is Toby Inlet occurring 170 metres south of the application area.

The vegetation within the area under application and the Toby inlet are not connected and are separated by Geographe Bay Road. Given this and the relatively small area proposed to be cleared (0.5ha) it is not considered for the proposed clearing to be at variance to this Principle.

**Methodology** GIS Databases  
-Geomorphic Wetlands (Mgt Categories), Swan Coastal Plain  
-Hydrography, linear

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

**Comments**  
Reserve 46 is vested with the Shire of Busselton as A class reserve for Camping and Recreation and is designated for vegetation protection under the Dunsborough Structure Plan (Shire of Busselton 2004).

The Shire of Busselton has developed a Management Plan for Quindalup Reserve No 46 in May 2004. The management plan recommends that the A Class reserve's purpose be changed to 'Conservation and Recreation' and to protect the vegetation within the reserve. To reduce damage to vegetation surrounding carparks, the management plan states that 'further carparks need to be restricted' (Shire of Busselton 2004).

The Shire of Busselton have advised that council agreed to amend the Management Plan for Quindalup Reserve No 46 via resolution for the development of the car park in April 2012 (Shire of Busselton, 2012)

Five submissions from the public have been received opposing the proposed clearing of 0.5 ha within Reserve 46, Geographe Bay Road. The submissions raised concerns about;

- Ecological Impacts to the *Agonis flexuosa* and associated plant community and the lack of this vegetation type remaining in the local area.
- Impacts to the Western Ringtail Possum and other local fauna known to occur in the area
- Land degradation in the form of wind erosion.
- The application not comply with the Management Plan developed for Reserve 46 and that no community consultation has been carried out as required within the Management Plan.
- The proposed clearing is within an A-class reserve.

The issues raised from the submissions have been addressed within principles (a), (b), (e) and (g). The submission concerns about the proposal being outside the scope of the Management Plan for Quindalup Reserve No 46 has been addressed within this section of the report.

The applications relates to a previous application CPS 3923/1. The assessment report on CPS 3923/1 identified a number of environmental issues which the City of Busselton were asked to address, consequently the City withdrew the application. DEC suggested to the City of Busselton an alternative location of the car park along the foreshore area to the west of the boat ramp and beyond the northern extent of Peppermint woodlands which runs along Geographe Bay Road would result in a better environmental outcome.

**Methodology**    References  
-Shire of Busselton (2004)

#### 4. References

- Commonwealth of Australia (2001) National Objectives and Targets for Biodiversity Conservation 2001-2005, Canberra.
- Commonwealth of Australia (2009) Environmental Protection of Biodiversity and Conservation Act Policy Statement 3.10- Significant Impact Guidelines for the Vulnerable Western Ringtail Possum (*Pseudocheirus occidentalis*) in the southern Swan Coastal Plain, Western Australia. Department of the Environment, Water, Heritage and the Arts.
- DEC (2012) Site Inspection Report and Regional Advice for Clearing Permit Application CPS 3923/1 Reserve 46 Geographe Bay Road Reserve, Quindalup. Site inspection undertaken 6/10/2010. Department of Environment and Conservation, Western Australia (DEC Ref A498072).
- DEC (2010) *Priority ecological communities list (May 2010)*. DEC Species & Communities Branch. Available at: [www.dec.wa.gov.au/management-and-protection/threatened-species/wa-s-threatened-ecological-communities.html](http://www.dec.wa.gov.au/management-and-protection/threatened-species/wa-s-threatened-ecological-communities.html).
- Hart, Simpson and Associates (1997). Toby Inlet Terrestrial Fauna. Unpublished report to Sussex LCDC.
- Keighery, B.J. (1994) Bushland Plant Survey: A Guide to Plant Community Survey for the Community. Wildflower Society of WA (Inc). Nedlands, 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. (2009) Adapted from: 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.
- Shire of Busselton (2004) Management Plan Quindalup Reserve No 46. Prepared by Toby Inlet Catchment Group for The Shire of Busselton.
- Webb, Keighery, Keighery, Longman, Black and O'onner (2009) The Flora and Vegetation of the Busselton Plain (Swan Coastal Plain). Department of Environment and Conservation, Perth Western Australia.

#### 5. Glossary

Term	Meaning
BCS	Biodiversity Coordination Section of DEC
CALM	Department of Conservation and Land Management (now BCS)
DAFWA	Department of Agriculture and Food
DEC	Department of Environment and Conservation
DEP	Department of Environmental Protection (now DEC)
DoE	Department of Environment

DoIR	Department of Industry and Resources
DRF	Declared Rare Flora
EPP	Environmental Protection Policy
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
TEC	Threatened Ecological Community
WRC	Water and Rivers Commission (now DEC)



## PROCEDURES TO MINIMISE RISK TO WESTERN RINGTAIL POSSUMS DURING VEGETATION CLEARING AND BUILDING DEMOLITION

(June 2009)

**IMPORTANT: Contact DEC Busselton on 9752 5555 prior to clearing commencing.**

These procedures are generally for development activities that occur on smaller lots (<2ha). The clearing of vegetation on larger lots should be discussed with DEC.

### **Identify trees to be retained**

Clearing of native vegetation within the proposed development site should avoid any unnecessary clearing of trees. Trees retained within the development site, proposed Public Open Space and within road verges provide valuable habitat for WRP. Trees to be retained should be marked so that they are clearly recognised by clearing contractors.

### **Suitable expertise on-site**

A suitably experienced zoologist or WRP rehabilitator ('possum spotter') should be onsite when clearing is being undertaken. The 'possum spotter' is to provide advice and direction to contractors undertaking the clearing in relation to WRP matters. The contract manager or supervisor is the person responsible for all work undertaken and the safety of all personnel on site at all times.

It is suggested that the 'possum spotter' attend the site the day before clearing commences to be familiar with the location of any WRP and dreys. A person who is required to handle WRP during a clearing event that is part of development proposal should hold a Regulation 17 (scientific) licence.

### **Advice to clearing contractors**

Prior to clearing, clearing contractors should be properly inducted by the 'possum spotter' about the identification and protection of trees to be retained, trees to be cleared and about the likely presence of WRP among trees and other vegetation that will be cleared.

No dogs should be taken on the site.

### **Tree removal**

The 'possum spotter' with the clearing supervisor is to inspect all trees to be removed and agree on a process and timetable for clearing. Trees that have WRP currently in them may need to be left for a subsequent day when the tree may be vacant. Where possible clearing should be undertaken in a systematic manner that minimises disruption to WRP. If there is suitable habitat adjoining the development site, a clearing pattern that encourages the movement of WRP to this habitat should be adopted.

In moderate or high-density sites, if a machine operator sees a WRP in a tree that is about to be cleared, trees should be bumped or shaken firstly. Following this the machine operator should wait and observe the tree for a short time. If present, the shaking of the tree may cause any WRP and other fauna to move and, hopefully, opportunity to safely evacuate. It would also increase the chance that the machine operator will see the animal/s prior to pushing down the tree.

In the event that a WRP is observed in a tree that is about to be cleared and there is a tree marked for retention near the tree which is to be cleared, then the tree should be gently lowered to the ground to give the animal opportunity to safely evacuate. The animal/s then need to be encouraged to move towards and occupy the trees to be retained.

If there are no trees to be retained within proximity of a tree that has a WRP and needs to be cleared, then the WRP can be removed by the 'possum spotter' using an elevated platform or by lowering the tree to the ground. The WRP is to be relocated to the nearest suitable habitat.



Dreys should be inspected prior to clearing and possibly removed. Dreys that remain in the tree during clearing have to be checked as soon as possible as baby WRP may remain in the drey.

Clearing should be undertaken on a face so as to drive WRP towards suitable habitat.

#### **Services**

The proponent will need to identify where underground services are to be installed and to ensure any detrimental impact from these services is minimised.

#### **Understorey vegetation**

There will always be a possibility that WRP, Southern Brown Bandicoots, etc, will be found in under and midstorey vegetation. Care needs to be taken when clearing this vegetation with a check to be undertaken by foot prior to machines entering the areas and clearing this vegetation.

#### **Injured WRP**

If contractors encounter injured WRP during clearing operations, then the 'possum spotter' needs to be notified immediately so that arrangements can be made for the welfare of the injured animal.

#### **Stockpile practices**

Contractors need to be made aware that displaced WRP may shelter within stockpiled vegetation. Therefore, to minimise any accidental injury or death of WRP, personnel involved in the removal or disposal of stockpiles need to be made aware of and be prepared for the potential presence of WRP. If WRP are encountered then the Department needs to be immediately notified. Any dreys in fallen trees are to be removed prior to stockpiling as WRP have been known to return to their dreys/trees.

The preference is that vegetation is not stockpiled but removed on the same day clearing occurs. If vegetation is to be stockpiled on-site, then it is preferable to place it in cleared areas as far as possible from retained remnant vegetation. Chipping of removed debris is to be undertaken away from retained habitat to minimise the noise impacts on WRP.

In large clearing events where chipping will be undertaken over a number of days, it is preferred that the chipper remains in one position and vegetation is brought to the chipper as opposed to the chipper moving through the site. This is to consolidate the noise impacts in one area of the development site.

#### **Buildings**

Site workers are to be advised about the potential presence of WRP in derelict buildings and to stage works to minimise potential injuries to WRP during demolition works. Prior to clearing works commencing, the roof and ceilings on derelict buildings should be removed prior to demolition to allow for dispersal of WRP. DEC should be immediately notified of any WRP that may be inadvertently injured during demolition works.

There is a risk to WRP if rat or mouse baiting is undertaken prior to demolition. Appropriate methods of baiting need to be engaged if rats or mice are to be controlled prior to demolition. One method is to place the poison out of WRP reach, inside poly pipe secured to a beam in the roof space. The pipe should be about 1m long and no greater than 50mm in diameter. Another method is to place a plastic ice-cream container upside down over rat poison with small arches cut into the side of the container. The arches should be a maximum height and width of about 50mm and the container secured to a rafter.

#### **Post Clearing Reporting**

The proponent is to provide DEC with a report on the impact on WRP during the habitat removal process within 28 days of completion of vegetation clearing or building demolition works.



Department of  
**Environment and Conservation**

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Enquiries: DEC Wildlife Licensing  
Phone: (08) 9334 0439  
Fax: (08) 9334 0278  
E-mail: [wildlifelicensing@dec.wa.gov.au](mailto:wildlifelicensing@dec.wa.gov.au)

### **To the Applicant**

Dear Sir/Madam,

When completing the Regulation 17 Application for a Licence to take Fauna for Scientific purposes please note the following:-

#### **(1) RETURNS**

Reg.17 licence applicants are to note and fulfil the following condition associated with this licence.

'Within one month of the expiration of this licence (or at such other time or times as the Director General may determine) the holder shall furnish to the Director General a return setting out in full detail the number of each species of fauna taken during the currency of the licence, the localities where the species was/were taken and the method of handling of such fauna and disposal of specimens. A copy of any paper or report resulting from this research should be lodged in due course with the Director General. In the case of consultants, a list of the fauna handled, the localities involved and a copy of the interpretive data prepared should be lodged.'

#### **Fauna Survey Returns System**

Returns of fauna taken under a Regulation 17 'Licence to Take Fauna' may take several forms such as a written letter, thesis, report, published paper etc. forwarded to the Senior Fauna Licensing Officer (Fauna). In addition to this, in October 2008 DEC introduced a means of collecting, collating and making fauna data available to licence holders online. This is called *Fauna Survey* and it is now compulsory for licence holders to provide information on the species observed and the locations at which they were recorded in the approved .csv file format. DEC provides the server for data storage, a website to make returns online and a return template system which must be used to submit all data. All licence holders must see the following website and use the template provided online to fill in the data using the fields specified.

**ALL Regulation 17 licence holders must make returns online, in the fauna survey return data format shown on the website.**

[www.dec.wa.gov.au/fauna\\_returns](http://www.dec.wa.gov.au/fauna_returns)

#### **(2) EXPORTS**

##### **Within Australia**

In the case of an applicant who wishes to send material collected under a Reg.17 licence out of Western Australia (WA) to other parts of Australia then application for a State Government Department of Environment and Conservation (DEC) Reg.18 export licence must be made prior to transport.

After collecting activities have been completed, the licensee or authorised agent must apply for this

export licence and specify in writing; the number and types of specimens (keyed-out and identified as accurately as possible) and the dates & locations from where they were collected, date of shipment, name & address of receiver. Note that Import licenses may need to be obtained from the relevant State Government 'receiving' state or territory.

DEC export licenses can be applied for by letter, fax 08 9334 0278 or by e-mail to [wildlifelicencing@dec.wa.gov.au](mailto:wildlifelicencing@dec.wa.gov.au). There is no fee for bone fide scientific exports and at least three working days should be allowed for processing.

### **Outside Australia**

In the case of an applicant who wishes to send material collected under a Reg.17 licence overseas, application for a State Government DEC Reg.18 export licence must be made prior to transport.

After collecting activities have been completed, the licensee or authorised agent must apply for this export licence and specify in writing; the number and types of specimens (keyed-out and identified as accurately as possible) and the dates & locations from where they were collected, date of shipment, name & address of receiver. DEC export licenses can be applied for by letter, fax 08 9334 0278 or by e-mail to [wildlifelicencing@dec.wa.gov.au](mailto:wildlifelicencing@dec.wa.gov.au).

There is no fee for bone fide scientific exports and at least two working days should be allowed for processing.

Additionally, Federal Government export licenses need to be applied for prior to shipment of collected material out of Australia. Application is to be made to International Wildlife Trade, Department of the Environment, Water, Heritage and the Arts, [www.environment.gov.au](http://www.environment.gov.au), GPO BOX 787, CANBERRA, A.C.T. 2601. Phone +61 02 6274 1900, fax +61 02 6274 1921 or e-mail [wildlifetrade@environment.gov.au](mailto:wildlifetrade@environment.gov.au).

Allow at least 10 working days for processing. Costs will be determined on enquiry.

### **(3) SPECIMEN LODGEMENT**

Reg.17 licence applicants are to note and fulfil the following conditions associated with this licence.

All holotypes and syntypes and a half share of paratypes of species or subspecies permitted to be permanently taken under this licence shall be donated to the Western Australian Museum. Duplicates (one pair in each case) of any species collected which represents a significant extension of geographic range shall be donated on request to the Western Australian Museum.

To prevent any unnecessary collecting in this state, all specimens and material collected under the authority of this license shall, on request, be loaned to the Western Australian Museum. Also, the unused portion or portions of any specimen collected under the authority of this license shall be offered for donation to the Western Australian Museum or made available to other scientific workers if so required.

To liaise with the relevant curator (or delegate) of Western Australian Museum Collections and Research Facility, Kew Street, Welshpool Western Australia 6106. Postal: Locked Bag 49, Welshpool DC. WA 6986, phone +61 8 9212 3700, fax +61 8 9212 3882 or e-mail [reception@museum.wa.gov.au](mailto:reception@museum.wa.gov.au). Web: [www.museum.wa.gov.au](http://www.museum.wa.gov.au).

In order to facilitate these requirements, both overseas residents and non West Australian-based Australian resident licensees should donate all collected specimens, samples etc. to the WA Museum prior to their departure. The museum will then take their share entitlement as above and then forward the balance to the collector at his or her nominated address. As the WA Museum has export clearance then this negates the need for export licence application as previously discussed above.

**(4) GENERAL**

If any applicant for a Reg.17 licence will not or cannot adhere to the above requirements which form part of this licence, then NO licence will be issued.

Yours sincerely,

D Stefoni

.....

for Keiran McNamara  
DIRECTOR GENERAL  
24 November 2008



**RETURN TO:**  
 DEC Licencing  
 Locked Bag 30  
 Bentley Delivery Centre  
 Western Australia 6983  
 Fax 08 9334 0278  
 E-mail: [wildlifelicencing@dec.wa.gov.au](mailto:wildlifelicencing@dec.wa.gov.au)



Department of  
**Environment and Conservation**

*Our environment, our future*



## REGULATION 17

### APPLICATION FOR A LICENCE TO TAKE (I.E. CAPTURE, COLLECT, DISTURB, STUDY) FAUNA FOR SCIENTIFIC PURPOSES

Please allow 20 working days for the processing of your application. No fees apply to this permit type. Incomplete forms may result in delays in assessment, or rejection of the application. Email is the preferred method for submitting forms, but a signature is mandatory; you can paste a scanned electronic signature on the form or sign and post or fax the form.

#### Important information for applicants

This form is to be used to apply for a scientific purposes licence under the provisions of *Wildlife Conservation Act 1950*. Before lodging this application you should be familiar with the requirements of the associated legislation available via the State Law Publisher, [www.slp.wa.gov.au](http://www.slp.wa.gov.au).

The information requested will enable your application to be processed. Read and answer ALL relevant sections, filling in the white boxes and indicating when information is unknown or not applicable. If you have queries about how to complete this form correctly, contact the Species and Communities Branch on 08 9334 0455.

TO MARK BOXES WITH A CROSS ☒: ON THE VIEW MENU, FOLLOW YOUR SOFTWARE INSTRUCTIONS FOR CHECK BOXES IN 'FORMS'. \*DENOTES COMPULSORY FIELD.

<b>1. Name and date of birth</b>	
FAMILY NAME*	TITLE
GIVEN NAME/S*	DATE OF BIRTH*
<b>2. Contact Details</b>	
ADDRESS*	POST CODE*
TELEPHONE (BUSINESS HOURS) *	TELEPHONE (AFTER HOURS)
FACSIMILE*	MOBILE
E-MAIL*	
POSTAL ADDRESS (TYPE "AS ABOVE" IF THE SAME AS RESIDENTIAL ADDRESS)	POST CODE
<b>3. Relevant qualifications</b>	
<b>4. Project details</b>	
Project name	

**Introduction and Background**

DESCRIBE THE CONTEXT AND THE SIGNIFICANCE OF THE PROJECT. PROVIDE A BRIEF REVIEW OF THE STATE OF CURRENT KNOWLEDGE AND IDENTIFY INFORMATION GAPS.

**Objectives**

DESCRIBE THE WORK AND INDICATE ITS SIGNIFICANCE AND POTENTIAL VALUE TO SCIENCE AND CONSERVATION

**Methods/Procedures**

DESCRIBE THE TECHNIQUES AND EQUIPMENT TO BE USED FOR TAKING FAUNA, INCLUDING MEANS OF MAINTAINING THE WELFARE OF THE FAUNA. FOR TRAPPING DETAIL THE TYPE AND NUMBER IN THE NEXT SECTION.

**Traps**

IF USING TRAPS, SHOW TYPE, SIZE AND NUMBER TO BE SET

LARGE CAGE TRAPS	e.g. 20 x 5 sites	DRY PIT TRAPS	
SMALL CAGE TRAPS		WET PIT TRAPS	
ELLIOT TRAPS		OTHER TRAPS (SPECIFY)	
OTHER TECHNIQUES (SPECIFY)			

**Milestones (if applicable)**

LIST AND DATE THE ANTICIPATED PROGRESS TOWARDS THE OBJECTIVES

**Anticipated outcomes and conservation / management benefits****Communication of results**

OUTLINE PLAN FOR COMMUNICATION OF RESULTS TO ONE OR MORE KEY GROUPS, INCLUDING THE SCIENTIFIC COMMUNITY, NATURAL RESOURCE MANAGERS AND AGENCIES, EDUCATIONAL INSTITUTIONS AND THE GENERAL PUBLIC.

**5. Duration of the field component of the project (maximum 12 months only)**

START DATE*	END DATE*

**6. Location of project**

NOTE: LICENCES ARE NOT NORMALLY ISSUED TO COLLECT IN NATURE RESERVES OR NATIONAL PARKS. APPLICATIONS TO COLLECT IN NATURE RESERVES OR NATIONAL PARKS MUST BE SUPPORTED BY FULL REASONS AND A SEPARATE REGULATION 4 APPLICATION FORM MUST BE COMPLETED.

**7. Specimens to be collected / captured**

DESCRIBE OR IF POSSIBLE FILL OUT THE TABLE BELOW. LICENCES ARE NOT NORMALLY ISSUED TO COLLECT THREATENED SPECIES. IF TAKING THREATENED SPECIES, PLEASE PROVIDE JUSTIFICATION BELOW.

COMMON NAME	SCIENTIFIC NAME	QUANTITY

**8. Personnel**

<b>WILL COLLECTING BE DONE BY ADDITIONAL PERSONNEL?</b>		
<input type="checkbox"/> Yes <input type="checkbox"/> No		
<b>IF YES, LIST NAMES, CONTACT DETAILS AND QUALIFICATIONS OF COLLECTORS BELOW</b>		
<b>NAME</b>	<b>RESIDENTIAL ADDRESS</b>	<b>QUALIFICATIONS</b>
<b>9. Ultimate fate of fauna taken</b>		
IF ANY FAUNA ARE TO BE EUTHANIZED, PROVIDE DETAILS OF THE TECHNIQUE		
<b>10. Means, Facilities and Place of Holding fauna</b>		
SPECIFY DETAILS OF THE FACILITY WHERE THE FAUNA ARE TO BE HELD FOR YOUR RESEARCH WORK (IF APPLICABLE)		
<b>11. Relevant Institution Animal Ethics Approval Number from your organisation's AEC</b>		
ATTACH A COPY OF THE AEC APPLICATION AND APPROVAL TO THIS APPLICATION (IF APPLICABLE)		
<b>12. Project proposal</b>		
A COPY OF THE PROJECT PROPOSAL IS PROVIDED (COMPULSORY FOR HONS, MASTERS, PHD LEVEL PROJECTS AND FOR ORGANISATIONS WHICH DO NOT HAVE AN ANIMAL ETHICS COMMITTEE)		
<input type="checkbox"/> YES <input type="checkbox"/> NO		
<b>13. Institution</b>		
PRIVATE INDIVIDUAL	<input type="checkbox"/>	
PRIVATE CONSULTING GROUP	<input type="checkbox"/>	
SCIENTIFIC INSTITUTION, UNIVERSITY OR OTHER TERTIARY INSTITUTION ETC?	<input type="checkbox"/>	
	NAME OF INSTITUTION:	
	NAME OF HEAD OF DEPARTMENT:	
I HEREBY CERTIFY THAT THIS IS A BONA FIDE SCIENTIFIC FAUNA PROJECT AND THAT FAUNA WILL NOT BE USED FOR EXHIBITION OR SALE:	SIGNATURE OF HEAD OF DEPARTMENT:	
	DATE	
OTHER (SPECIFY)		
<b>14. Sponsor</b>		
NAME, ADDRESS AND CONTACT DETAILS OF ANY ORGANISATIONS SPONSORING / FUNDING THE PROJECT		
<b>15. Financial basis</b>		
WHAT IS THE FINANCIAL BASIS FOR THE RESEARCH?		
<input type="checkbox"/> Direct financial gain (e.g. consulting fees)		
<input type="checkbox"/> Indirect financial gain (e.g. grants or funding)		
<input type="checkbox"/> Commercial gain from sale of information derived from the research		
<input type="checkbox"/> No financial gain of any form		
<b>16. Referees</b>		
NAMES AND FULL CONTACT DETAILS OF TWO REFEREES WHO HAVE BEEN CONTACTED BY THE APPLICANT AND WHO CAN ATTEST TO THE APPLICANT'S CONTRIBUTION TO AND EXPERTISE IN THE FIELD OF THE PROJECT		
REFEREE 1	REFEREE 2	
<b>17. I hereby:</b>		
17.1. <i>certify that the information provided in this application is true and correct, and</i>		
17.2. <i>agree to submit my licence return using the Fauna Survey Returns system (and the approved .csv file format) as described in the attached letter.</i>		
SIGNATURE	DATE	