

**Lot 9001 Waterloo
Road
Roelands WA**

Fauna Protection Management Plan



Bio Diverse Solutions
FINAL v.2
04/07/2019

DOCUMENT CONTROL

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1. Introduction and Scope

Roelands Development Pty Ltd ("the client") commissioned Bio Diverse Solutions as Environmental Consultants to undertake a broad scale habitat survey and identify significant habitat trees within road reserve areas of the proposed subdivision at Lot 9001 Waterloo Road Roelands (the "subject site") as per WAPC 154305 (Condition 15). The "survey area" is defined as the proposed road reserve areas. Refer to Figure 1 over the page for subdivision plan. Trees not contained within the proposed road reserve areas will remain and were not assessed as part of this survey. Site assessment was undertaken by Conservation Biologist Bianca Theyer (Bio Diverse Solutions) on the 29th May 2019.

The scope of works included:

- Undertake site survey of trees and threatened fauna presence on site (possums and black cockatoo's), record condition/size, GPS and photograph trees;
- Prepare summary of findings and recommendations for the site in reference to threatened fauna presence/absence within the survey area (road reserves); and
- Prepare a fauna protection management plan to help guide clearing/construction works within the survey area to provide protection to the site's environmental assets.



2. Existing Land Uses and Vegetation Type

The land within the subject site (Lot 9001) is predominately disturbed agricultural land with stands of *Corymbia calophylla* (Marri) and no native understorey species. The site has previously been utilised for agricultural purposes mainly grazing of cattle and horses but is currently not utilised. Refer to Figure 2 below for photographs of land uses / vegetation type within the subject site.



Figure 2: Photographs of subject site depicting the agricultural landscape and stands of Marri trees.

3. Fauna

3.1. Desktop Assessment

Desktop inventory of potential fauna species likely to occur within 10 km of the survey area was undertaken using the following databases:

- DBCA's Nature Map Database Search (combined data from DBCA, Western Australian Museum and Birds Australia) (DBCA 2007-); and
- Protected matters search tool (DoE 2019).

The list compiled from this data (Appendix A) is based on observations from a broader area than the survey area and is likely to include species that are vagrants or would not occur in the actual survey area due to a lack of suitable habitat or poor ecological connectivity. The databases also often included very old records and in some cases the species in question may have become locally or regionally extinct.

3.2. Field Methodology

Field survey work was carried out by Bianca Theyer a Conservation Biologist from Bio Diverse Solutions on the 29th May 2019. Vegetation units observed during the site survey were used to define broad fauna habitat types across the site (See Section 1 and Figures 12-15). The main aim of the habitat assessment was to determine the likelihood of threatened species utilising the road reserve areas and the significance of the habitat to them.

Targeted assessment was carried out for *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), and *Pseudocheirus occidentalis* (Western ringtail possum).

Targeted assessment techniques included:

- Survey for potential breeding trees for *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo) and *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo), including identification of all suitable trees species within the survey area with a Diameter at Breast Height (DBH) of over 50cm;
- Surveys for foraging habitat for *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo) and *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo), including observation of any actual foraging evidence such as chewed nuts, cones or stripped bark; and
- Surveys for potential habitat trees for *Pseudocheirus occidentalis* (Western ringtail possum), through identification of dreys, hollows, tree scratchings and foliar feeding.

The assessment was carried out in a manner consistent with the following documents developed by the EPA and Department of Environment and Energy (DoEE) formerly the Department of Sustainability, Water, Population, and Communities (DSEWPac) and Department of the Environment, Water, Heritage and the Arts (DEWHA):

- EPA (2016a) Technical Guidance: Terrestrial Fauna Surveys;
- EPA (2016b) Technical Guidance: Sampling Methods for Terrestrial Vertebrate Fauna;
- DEWHA (2010) Survey guidelines for Australia's threatened birds;
- DSEWPac (2011) Survey Guidelines for Australia's Threatened Mammals; and
- DSEWPac (2012) Referral Guidelines for Three Threatened Black Cockatoo Species.

The conclusions presented are based upon opportunistic field data collected over a limited period of time and are indicative of the environmental condition of the site at the time. With respect to opportunistic observations, the possibility exists that species may not have been detected during field investigations due to seasonal inactivity during the field survey and species present within micro habitats not surveyed. Lack of observational data should therefore not necessarily be taken as an indication that a species is absent from the site.

3.3. Threatened Fauna Habitat Assessment Results

Habitat and Significant Tree Assessment

Assessment of potential or actual habitat trees that will need to be removed due to the construction of the road reserves and corresponding photographs of significant trees (>500mm DBH) are presented in Appendix B. Trees were deemed significant where DBH was >500mm or where there was significant evidence of tree usage (i.e. dreys, hollows, tree scratchings, feed evidence). Within the survey area 80 trees were recorded, of these 36 were >500mm and 44 <500mm. Trees <500mm DBH were still recorded as they are to be removed and had evidence of fauna activity. There were 28 trees that were dead of which 3 contained hollows with the remaining having limited or no hollow forming potential. Two of these dead hollow bearing trees have begun to fall over and are leaning against living trees providing further habitat. Within a stand of trees located along the eastern boundary 7 trees were assessed as an existing access track runs through here which may provide potential access to roads for lots in this area. These trees are to remain and will undergo trimming of upper branches only.

Threatened Fauna

There is a very high level of activity throughout the survey area, with almost every tree showing signs of usage through tree scratchings. Scratchings that were light and mainly in the upper canopy are consistent with Western ringtail possum presence, whilst the heavier disturbances/scratchings located on the tree trunks is more consistent with Common brushtail possum presence. It is likely both species are present in the survey area. Refer to Figure 3 for images of possum utilisation throughout the survey area. There was evidence of feeding throughout the survey area through chewed leaves and flower buds on the ground. Scats identified were located at the base of trees, and fit the size and composite material specifications for Western ringtail possums. While the scats could have been from Common brushtail possums, the complete lack of omnivorous materials and the location of the scats made this unlikely. One drey was also opportunistically detected outside of the designated survey area (within a proposed lot). Although the stands of marri's are dispersed throughout the whole of the subject site the areas are relatively large in size and have good canopy connection throughout, particularly trees along the southern boundary. The proposed road reserve along the southern boundary had the most suitable habitat for arboreal species; there were multiple hollows (as described above) in dead trees as well as canopy connection through to suitable habitat in the adjacent property. There were multiple trees within this section of the survey area that had hollow forming potential. Scats were also located within this area (Refer to Figure 3).

There were some scattered and intermittent signs of black cockatoo feeding, however there was no evidence of highly utilised feed trees nor any sign of active breeding hollows identified for the three black cockatoo species within the survey area. The overwhelming majority of chewed Marri nuts observed were consistent with that of a parrot species such as the Australian Ringneck Parrot. Refer to Figure 3 depicting chewed nuts observed throughout the site. The only species known to be an important food source for the black cockatoos, that was present within the survey areas was marri (Department of Environment 2019a; 2019b; 2019c). This indicates that although the site contains potential foraging and breeding habitat for the three species the quality of forage is marginal and the area is not currently a favoured feeding site.

Summary

- 56 trees confirmed habitat for Western ringtail possum;
- A total of 36 trees >500mm are to be removed;
- A total of 37 trees <500mm are to be removed; and
- No feed or breeding trees identified for any of the three black cockatoo species.



Figure 3: Evidence of habitat utilisation and fauna presence throughout the survey area.

Photographs a & b: Examples of Marri nuts encountered across the survey area showing chew patterns consistent with Parrot species.

Photograph c: Example of tree scratching on the underside of tree branches encountered across the survey area.

Photograph d: Western ringtail possum scat located at the base of a Marri tree.



a)



b)



c)



d)



e)



f)

Figure 3 continued

Photograph a: Western ringtail possum scat located at base of Marri tree.

Photographs b-f: Examples of tree scratchings on Marri trunks and branches throughout the survey area.

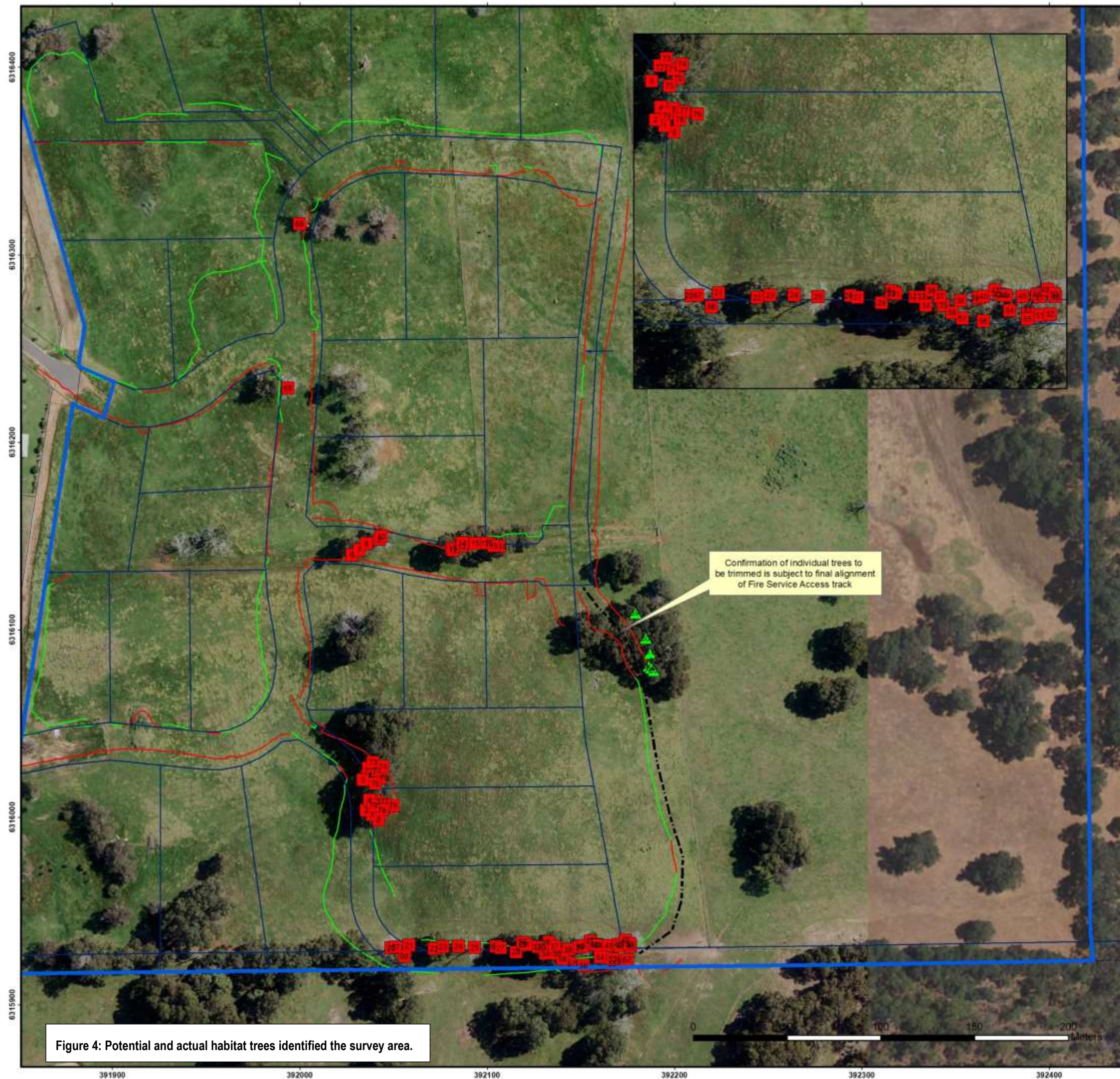


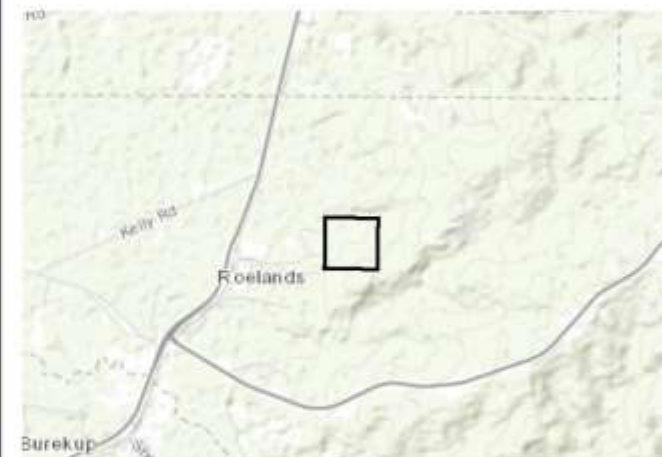
Figure 4: Potential and actual habitat trees identified the survey area.



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Overview Map Scale 1:100,000

Legend

- Subject Site
- Lot Layout
- Cadastre
- Fire Service Access Track (Potential)

Potential and Actual Habitat Trees

- Remove
- ▲ Trim

Road Earthworks

- Cut
- Fill



Scale
1:2,000 @ A3
GDA MGA 94 Zone 50

Data Sources
Aerial Imagery: WA Now, Landgate Subscription Imagery
Cadastre, Relief Contours and Roads: Landgate 2017
IRIS Road Network: Main Roads Western Australia 2017
Overview Map: World Topographic map service, ESRI 2012

CLIENT

Roelands Development Pty Ltd
Lot 9001 Waterloo Road
Roelands, WA

Potential and Actual Habitat Trees

Assessor	QA Check	Drawn by
BT	KK	BT
STATUS	FILE	DATE
FINAL	MPM002-004	11/06/2019

4. Threatened Fauna Protection Management

4.1. Overview of Potential Impacts

Potential adverse direct and indirect impacts from the construction of the road reserves are outline below.

Table 1: Potential impacts to fauna and habitat during road construction activities.

Direct	
Habitat removal, loss and/or modification and interaction with vehicles.	<p>The construction of road reserves within the subdivision would result in removal of native vegetation and potential impacts of this clearing and construction may include:</p> <ul style="list-style-type: none"> • Removal of and/or disturbance to fauna habitat; • Habitat fragmentation; • Injury and mortality to fauna during clearing of fauna habitat and habitat trees; • Disturbance to breeding fauna; and • Loss of individuals through collisions with vehicles.
Indirect	
Noise and vibration	The clearing of trees and construction of the road reserves will generate noise and vibrations due to the machinery present on site during this time. Given construction and clearing will be undertaken in a short period of time noise and vibration impacts will be temporary.
Dust	Construction machinery and activities may disturb local fauna, temporarily inhibiting their usual movements. Dust impacts are unlikely to have long-term impacts to the fauna in the area.

4.2. Appointed Personnel and Contacts

- Zoologist / fauna spotter: Dr Karlene Bain (Bio Diverse Solutions) 9842 1575.
- Environmental Officer: Bianca Theyer (Bio Diverse Solutions) 9842 1575.
- DBCA Representative: Tracy Teede 9725 4300.
- Proponent / Site Supervisor: George Chaffey 0418 932 408.
- Civil Engineer: Craig Pippin 0488 910 222.
- Machine Contractors: TBC.

4.3. Threatened Fauna and Fauna Habitat Management Control Measures

Threatened fauna and fauna habitat mitigation and management measures for construction activities are outlined in Table 2 over the page. These have been broken into pre-clearing, clearing/construction and post clearing measures.

As part of the clearing operations a suitably qualified specialist (i.e. Zoologist) must be present on-site during clearing operations as a “fauna spotter” and to provide guidance to contractors regarding felling trees etc. as required (DPAW 2015). This person must have the appropriate DBCA licences and have relevant experience in handling fauna likely to be encountered on site. They must also adhere to the relevant DBCA Standard Operating Procedures (SOP) which include but are not limited to:

- Animal handling and restraint using soft containment;
- Hand capture of wildlife;
- Care of evicted pouch young; and
- Transport and temporary holding of wildlife.

Given there is suitable habitat in adjacent property to the south (Lot 9000; Land ID Number 3726251 and Lot 51; Land Id Number 3452913) that is likely part of the home range for any fauna on site, any fauna captured during the clearing operations should be released in a suitable area within this lot, unless otherwise instructed by DBCA. In this instance DBCA is to notify the proponent / Environmental Officer where animals are to be released.

It is advised that clearing operations occur outside of the breeding season. As stated within the western ringtail possum recovery plan (DPAW, 2014) coastal populations can breed year-round with peaks in April to July and then September to November (Jones *et al.* 1994). Breeding in inland forest are more discrete with the majority of

breeding occurring in May and June, and then October and November (Wayne *et al.* 2005). Given the location of the survey area and the habitat they are occupying, the population of western ringtail possums are likely to have a similar breeding behaviour to that of the jarrah forest populations. A conservative clearing exclusion period to protect their breeding period would be April-July and September-November.

Brushtail possums also tend to breed in autumn and spring. Given no black cockatoo breeding hollows were observed during the survey it is unlikely clearing will result in any locally adverse impacts.

Given engineering designs are still to be finalised if areas of vegetation not assessed in this survey fall into areas that will undergo construction the Environmental Officer / Zoologist must assess these trees prior to clearing operations. If during the clearing process particular trees are deemed unsafe / unstable etc again the Environmental Officer / Zoologist on site must assess these trees for fauna and potential fauna habitat.

Clearing and construction works are recommended to occur during August 2019 and/or December 2019-March 2020. Clearing of the site involves the mechanical removal of trees and are to follow to management control measure outlined over the page.

Table 2: Threatened Fauna and Fauna Habitat Management and Mitigation Measures.

Management Control Measures / Strategy	Tactics	Timing	Responsibility
Pre-clearing			
Incorporate discussion on fauna impacts and mitigation measures into Site Induction for construction personnel/contractors. Contractors should be familiar with processes to be put in place if they unexpectedly come across fauna during clearing works.	Provide FPMP to contractors.	Pre-clearing	Site Supervisor
	Zoologist/Environmental Officer to be on site to brief contractors prior to clearing operations to provide advice and direction to contractors undertaking the clearing.		Environmental Officer / Zoologist
Pre clearing survey to be undertaken the day before clearing activities to re-familiarise and locate and identify any fauna and/or hollows, dreys etc. that have developed since the initial fauna survey was undertaken.	Pre-clearing survey includes a formal and detailed assessment of each tree that has been identified as a habitat tree (particularly those containing hollows or dreys) to identify the current status of occupancy and the need for capture and removal of individuals prior to the tree being disturbed. Any fauna identified during this survey are to be captured and relocated to the designated release area.	Pre-clearing	Environmental Officer / Zoologist
Ensure areas to be cleared are clearly identified, defined and inspected. Areas to be retained should also be clearly communicated to contractors prior to works commencing.	During the pre-clearing inspection of the survey area trees are to be demarcated as trees to be retained and trees that are to remain.	Pre-clearing	Environmental Officer / Zoologist
	After the pre-clearing survey, Site Supervisor is to ensure all trees within the survey / proposed road reserve area have been assessed. If there are any trees deemed to be unsafe or further clearing is required the Zoologist/Environmental officer is to be notified so assessments can be undertaken.		Site Supervisor
Consultation with DBCA as to where threatened fauna on site are to be released or relocated.	Confirmation of where fauna is to be released. Nearest suitable habitat is Lots 9000 and 51 and is likely part of home range.	Pre-clearing	DBCA Representative Environmental Officer / Zoologist

Table 2 continued.

Management Control Measures / Strategy	Tactics	Timing	Responsibility
Clearing			
A two-step clearing process should be undertaken whereby non-habitat trees are removed first providing time for undetected sheltering fauna to move on.	Removal of demarcated non-habitat trees as per pre-clearing survey undertaken by Zoologist/Environmental Officer.	During clearing	Site Supervisor Machine Contractors
Machinery operators are to undertake clearing operations in a sensitive manner to minimise any adverse impacts to undetected fauna.	Prior to felling of habitat trees i.e. hollows present (or trees within which fauna has been observed) they should be "bumped/shaken" to encourage any remaining undetected fauna present to move on. Wait and observe the tree for a short amount of time prior to felling the tree. Felled habitat trees should remain on the ground for a short period of time to be inspected by the Zoologist/Environmental Officer allowing any undetected or trapped fauna to be removed and/or safely escape.	During clearing	Machine Contractors
	Inspection of habitat trees with hollows once felled to ensure no undetected fauna has become trapped or is sheltering inside. This should occur immediately after their felling, prior to any further processing works.		Environmental Officer / Zoologist
Removal of undetected fauna (including non-target species utilising trees) detected during clearing activities.	Clearing work is to cease and the Zoologist/Environmental officer notified.	During clearing	Site Supervisor Machine Contractors
	Fauna to be given a chance to safely vacate the area on their own if it is safe to do so. If the animal in question does not move on it should be removed and relocated to the nearest suitable habitat.		Environmental Officer / Zoologist
Stockpiling of felled trees is not encouraged as fauna may shelter in these stockpiles. Removal of felled vegetation on the same day is preferred. If stockpiling is to occur it must be placed in cleared areas as far as possible from retained vegetation.	Inspections for fauna and fauna management strategies should be applied during removal of stockpiled vegetation, following the same recommendations as for during clearing activities.	During clearing	Site Supervisor Machine Contractors
	Inspect stockpiled vegetation for any sheltering fauna. If fauna is encountered, they are to be captured and released in adjacent suitable habitat.	During clearing	Environmental Officer / Zoologist

Table 2 continued.

Management Control Measures / Strategy	Tactics	Timing	Responsibility
Clearing			
Machine contractors encounter injured fauna during the clearing operations.	Clearing works are to cease whilst the Zoologist/Environmental officer is notified.	During clearing	Machine Contractors
	The Zoologist/Environmental Officer is to capture the injured fauna and appropriate arrangements made. This will include contacting a local wildlife carer and/or the DBCA offices.		Environmental Officer / Zoologist
Construction			
During the road construction activities contractors must be aware that fauna may still be present in retained vegetation.	<p>All efforts to minimise disturbance should be undertaken. These may include:</p> <ul style="list-style-type: none">• No direct unnecessary contact with fauna;• No disturbance to remaining trees;• Ensure slow vehicular speed limits to reduce the chance of fauna fatalities; and• Ensure contractor management plans/strategies for dust, noise etc. are adhered to.	During construction	Site Supervisor Machine Contractors
Reporting of injured fauna	Report any injured fauna to the Environment Officer and if safe to do so put the injured animal in a fauna bag (pillow case, jumper etc.) and leave in a dark quiet place on their advice. Arrangements should be made for the welfare of the injured animal i.e. contact DBCA or a Wildlife Carer.	During construction	Site Supervisor Machine Contractors Environmental Officer Zoologist
Post Clearing			
The client is to provide a post clearing report to DBCA South West Region within 28 days of the clearing event.	This report is to include a copy of fauna licences, advise the number and location of fauna, active hollows and dreys and include a map depicting the trees removed and retained.	Post Clearing	Proponent DBCA Representative Environmental Officer Zoologist

4.4. Licencing / Implementation

The proponent "Roelands Development Pty Ltd" will not commence site works without the approval of this Fauna Protection Management Plan from DBCA. Site works are scheduled to take place in August 2019, and will not commence until approved DBCA Fauna Licences have been obtained by the appointed Zoologist / Environmental Officer and any relocation procedures have been confirmed by DBCA.

5. References

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6. Appendices

Appendix A – Database searches

Appendix B - Actual and potential habitat trees within the survey area

Appendix A

Database searches

NatureMap Fauna Species Report (10km)

Created By Guest user on 24/05/2019

Kingdom Animalia
Current Names Only Yes
Core Datasets Only Yes
Method 'By Line'
Vertices 33° 17' 09" S,115° 50' 18" E 33° 17' 09" S,115° 50' 20" E 33° 17' 08" S,115° 50' 22" E 33° 17' 08" S,115° 50' 24" E 33° 17' 08" S,115° 50' 26" E 33° 17' 08" S,115° 50' 27" E 33° 17' 08" S,115° 50' 29" E 33° 17' 08" S,115° 50' 30" E 33° 17' 07" S,115° 50' 31" E 33° 17' 07" S,115° 50' 33" E 33° 17' 08" S,115° 50' 35" E 33° 17' 09" S,115° 50' 36" E 33° 17' 08" S,115° 50' 38" E 33° 17' 08" S,115° 50' 40" E 33° 17' 08" S,115° 50' 42" E 33° 17' 09" S,115° 50' 44" E 33° 17' 09" S,115° 50' 44" E
Group By Family

Family	Species	Records
Acanthizidae	6	159
Accipitridae	7	23
Actinopodidae	1	3
Agamidae	1	1
Anatidae	10	179
Anhingidae	1	5
Araneidae	4	4
Ardeidae	6	55
Artamidae	2	6
Baetidae	1	1
Cacatuidae	1	8
Caenidae	1	1
Campephagidae	1	25
Canidae	1	14
Casuariidae	1	2
Ceratopogonidae	1	1
Charadriidae	3	6
Cheluidae	1	2
Chironomidae	3	5
Climacteridae	1	1
Columbidae	4	23
Corduliidae	1	1
Corixidae	1	2
Corvidae	3	86
Cracticidae	3	94
Cuculidae	3	8
Dasyuridae	4	15
Delphinidae	1	1
Desidae	1	1
Dicruridae	3	120
Dytiscidae	1	2
Ecnomidae	1	1
Elapidae	4	5
Estrilidae	1	1
Falconidae	4	12
Felidae	1	1
Galaxiidae	1	2
Gekkonidae	2	6
Geotriidae	1	5
Gripopterygidae	1	1
Halcyonidae	3	48
Hemicorduliidae	1	1
Henicopidae	1	3
Hirundinidae	2	27
Hydrophilidae	1	1
Hydropsychidae	1	1
Hyriidae	1	3
Idiopidae	2	2
Laridae	3	8
Limnodynastidae	1	26
Linyphiidae	1	1
Lycosidae	1	3
Macropodidae	2	66
Maluridae	2	43
Meliphagidae	5	85
Meropidae	1	9
Micropholcommatidae	1	4
Molossidae	1	2
Muridae	2	13
Myobatrachidae	2	5
Myrmecobiidae	1	1
Nemesiidae	1	1
Neosittidae	1	2
Notonectidae	1	1
Oligochaeta	1	2
Oniscidae	1	1
Pachycephalidae	2	37
Palaemonidae	1	1
Parastacidae	2	8

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.



Department of Biodiversity,
Conservation and Attractions



Pardalotidae	2	44
Pelecyanidae	1	6
Peramelidae	1	3
Percichthyidae	1	4
Perthidae	1	1
Petroicidae	2	36
Phalacrocoracidae	5	42
Phalangeridae	2	40
Phasianidae	1	1
Podicipedidae	3	39
Pseudocheiridae	1	74
Psittacidae	13	230
Rallidae	9	64
Recurvirostridae	2	5
Scincidae	8	78
Scirtidae	1	1
Scolopacidae	2	3
Scolopendridae	3	3
Simuliidae	1	2
Sparassidae	1	1
Sylviidae	1	6
Tachyglossidae	1	5
Telephlebiidae	1	1
Threskiornithidae	2	19
Tipulidae	1	1
Trienonychidae	1	1
Trochanteridae	1	1
Turnicidae	1	1
Urodacidae	1	1
Varanidae	2	5
Velliidae	1	2
Vespertilionidae	6	10
Zosteropidae	1	40
TOTAL	219	2063

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Acanthizidae					
1.	24260	<i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261	<i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262	<i>Acanthiza inornata</i> (Western Thornbill)			
4.	25530	<i>Gerygone fusca</i> (Western Gerygone)			
5.	25534	<i>Sericornis frontalis</i> (White-browed Scrubwren)			
6.	30948	<i>Smicromis brevirostris</i> (Weebill)			
Accipitridae					
7.	25536	<i>Accipiter fasciatus</i> (Brown Goshawk)			
8.	24285	<i>Aquila audax</i> (Wedge-tailed Eagle)			
9.	24288	<i>Circus approximans</i> (Swamp Harrier)			
10.		<i>Elanus axillaris</i>			
11.	24293	<i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)			
12.	24295	<i>Haliastur sphenurus</i> (Whistling Kite)			
13.	47965	<i>Hieraaetus morphnoides</i> (Little Eagle)			
Actinopodidae					
14.		<i>Missulena granulosa</i>			
Agamidae					
15.	25510	<i>Pogona minor</i> (Dwarf Bearded Dragon)			
Anatidae					
16.	24312	<i>Anas gracilis</i> (Grey Teal)			
17.	24313	<i>Anas platyrhynchos</i> (Mallard)			
18.	24315	<i>Anas rhynchotis</i> (Australasian Shoveler)			
19.	24316	<i>Anas superciliosa</i> (Pacific Black Duck)			
20.	24318	<i>Aythya australis</i> (Hardhead)			
21.	24319	<i>Biziura lobata</i> (Musk Duck)			
22.	24321	<i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
23.	24322	<i>Cygnus atratus</i> (Black Swan)			
24.	24328	<i>Oxyura australis</i> (Blue-billed Duck)		P4	
25.	24331	<i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
Anhingidae					
26.	47414	<i>Anhinga novaehollandiae</i> (Australasian Darter)			
Araneidae					
27.		<i>Araneus senicaudatus</i> subsp. <i>simplex</i>			Y
28.		<i>Argiope trifasciata</i>			
29.		<i>Austracantha minax</i>			
30.		<i>Eriophora biapicata</i>			
Ardeidae					
31.	25558	<i>Ardea ibis</i> (Cattle Egret)			
32.	41324	<i>Ardea modesta</i> (great egret, white egret)			
33.	24340	<i>Ardea novaehollandiae</i> (White-faced Heron)			
34.	24341	<i>Ardea pacifica</i> (White-necked Heron)			
35.		<i>Egretta novaehollandiae</i>			
36.	25564	<i>Nycticorax caledonicus</i> (Rufous Night Heron)			
Artamidae					
37.	25566	<i>Artamus cinereus</i> (Black-faced Woodswallow)			
38.	24353	<i>Artamus cyanopterus</i> (Dusky Woodswallow)			
Baetidae					
39.		<i>Baetidae</i> sp.			
Cacatuidae					
40.		<i>Eolophus roseicapillus</i>			
Caenidae					
41.		<i>Caenidae</i> sp.			
Campephagidae					
42.	25568	<i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
Canidae					
43.	24040	<i>Vulpes vulpes</i> (Red Fox)	Y		
Casuariidae					
44.	24470	<i>Dromaius novaehollandiae</i> (Emu)			
Ceratopogonidae					

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
45.	<i>Ceratopogonidae</i> sp.			
Charadriidae				
46.	47937 <i>Elsemyornis melanops</i> (Black-fronted Dotterel)			
47.	25577 <i>Vanellus miles</i> (Masked Lapwing)			
48.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
Cheluidae				
49.	43380 <i>Chelodina collyie</i> (South-western Snake-necked Turtle)			
Chironomidae				
50.	<i>Chironominae</i> sp.			
51.	<i>Orthoclaudiinae</i> sp.			
52.	<i>Tanypodinae</i> sp.			
Climacteridae				
53.	47915 <i>Climacteris rufus</i> (Black-tailed Treecreeper)			
Columbidae				
54.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
55.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
56.	25587 <i>Phaps elegans</i> (Brush Bronzewing)			
57.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
Corduliidae				
58.	<i>Corduliidae</i> sp.			
Corixidae				
59.	<i>Corixidae</i> sp.			
Corvidae				
60.	25592 <i>Corvus coronoides</i> (Australian Raven)			
61.	24417 <i>Corvus coronoides</i> subsp. <i>perplexus</i> (Australian Raven)			
62.	<i>Corvus splendens</i> subsp. <i>protegatus</i>			
Cracticidae				
63.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
64.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
65.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
Cuculidae				
66.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
67.	25601 <i>Chrysococcyx lucidus</i> (Shining Bronze Cuckoo)			
68.	24432 <i>Chrysococcyx lucidus</i> subsp. <i>plagosus</i> (Shining Bronze Cuckoo)			
Dasyuridae				
69.	25449 <i>Antechinus flavipes</i> (Yellow-footed Antechinus)			
70.	24092 <i>Dasyurus geoffroii</i> (Chuditch, Western Quoll)		T	
71.	48070 <i>Phascogale tapoatafa</i> subsp. <i>wambenger</i> (South-western Brush-tailed Phascogale, Wambenger)		S	
72.	<i>Sminthopsis murina</i>			
Delphinidae				
73.	30954 <i>Tursiops aduncus</i> (Indo-Pacific Bottlenose Dolphin)			
Desidae				
74.	<i>Badumna insignis</i>			
Dicruridae				
75.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
76.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
77.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
Dytiscidae				
78.	<i>Dytiscidae</i> sp.			
Ecnomidae				
79.	<i>Ecnomidae</i> sp.			
Elapidae				
80.	25250 <i>Elapognathus coronatus</i> (Crowned Snake)			
81.	25253 <i>Parasuta gouldii</i>			
82.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
83.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
Estrilidae				
84.	24645 <i>Stagonopleura oculata</i> (Red-eared Firetail)			
Falconidae				
85.	25621 <i>Falco berigora</i> (Brown Falcon)			

	Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
86.	25622	<i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
87.	24472	<i>Falco cenchroides</i> subsp. <i>cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
88.	25624	<i>Falco peregrinus</i> (Peregrine Falcon)		S	
Felidae					
89.	24041	<i>Felis catus</i> (Cat)	Y		
Galaxiidae					
90.	34028	<i>Galaxias occidentalis</i> (Western Minnow)			
Gekkonidae					
91.	24980	<i>Christinus marmoratus</i> (Marbled Gecko)			
92.	24983	<i>Underwoodisaurus milii</i> (Barking Gecko)			
Geotriidae					
93.	34030	<i>Geotria australis</i> (Pouched Lamprey)		P3	
Gripopterygidae					
94.		<i>Gripopterygidae</i> sp.			
Halcyonidae					
95.	30901	<i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
96.	25549	<i>Todiramphus sanctus</i> (Sacred Kingfisher)			
97.	24309	<i>Todiramphus sanctus</i> subsp. <i>sanctus</i> (Sacred Kingfisher)			
Hemicorduliidae					
98.		<i>Hemicorduliidae</i> sp.			
Henicopidae					
99.		<i>Henicops dentatus</i>			
Hirundinidae					
100.	24491	<i>Hirundo neoxena</i> (Welcome Swallow)			
101.	48061	<i>Petrochelidon nigricans</i> (Tree Martin)			
Hydrophilidae					
102.		<i>Hydrophilidae</i> sp.			
Hydropsychidae					
103.		<i>Hydropsychidae</i> sp.			
Hyriidae					
104.	34113	<i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T	
Idiopidae					
105.		<i>Aganippe raphiduca</i>			
106.	48935	<i>Idiosoma sigillatum</i> (Swan Coastal Plain shield-backed trapdoor spider)		P3	
Laridae					
107.	48587	<i>Hydroprogne caspia</i> (Caspian Tern)		IA	
108.	24511	<i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Silver Gull)			
109.	48594	<i>Sternula nereis</i> (Fairy Tern)			
Limnodynastidae					
110.	25410	<i>Heleioporus eyrei</i> (Moaning Frog)			
Linyphiidae					
111.		<i>Laetesia mollita</i>			
Lycosidae					
112.		<i>Tasmanicosa leuckartii</i>			
Macropodidae					
113.	24132	<i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
114.	24145	<i>Setonix brachyurus</i> (Quokka)		T	
Maluridae					
115.	25650	<i>Malurus elegans</i> (Red-winged Fairy-wren)			
116.	25654	<i>Malurus splendens</i> (Splendid Fairy-wren)			
Meliphagidae					
117.	24560	<i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
118.	24561	<i>Anthochaera carunculata</i> (Red Wattlebird)			
119.	24562	<i>Anthochaera lunulata</i> (Western Little Wattlebird)			
120.	25661	<i>Lichmera indistincta</i> (Brown Honeyeater)			
121.	24596	<i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
Meropidae					
122.	24598	<i>Merops ornatus</i> (Rainbow Bee-eater)			
Micropholcommatidae					

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
123.	<i>Raveniella peckorum</i>			
Molossidae				
124.	48005 <i>Mormopterus kitcheneri</i> (South-western Free-tailed Bat)			
Muridae				
125.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
126.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
Myobatrachidae				
127.	25401 <i>Crinia pseudinsignifera</i> (Bleating Froglet)			
128.	25404 <i>Geocrinia leai</i> (Ticking Frog)			
Myrmecobiidae				
129.	24146 <i>Myrmecobius fasciatus</i> (Numbat, Walpurti)		T	
Nemesiidae				
130.	<i>Aname mainae</i>			
Neosittidae				
131.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
Notonectidae				
132.	<i>Notonectidae</i> sp.			
Oligochaeta				
133.	<i>Oligochaeta</i> sp.			
Oniscidae				
134.	<i>Oniscidae</i> sp.			
Pachycephalidae				
135.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
136.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
Palaemonidae				
137.	<i>Palaemonidae</i> sp.			
Parastacidae				
138.	33939 <i>Cherax cainii</i> (Marron)			
139.	<i>Cherax quinquecarinatus</i>			
Pardalotidae				
140.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
141.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
Pelecanidae				
142.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
Peramelidae				
143.	48588 <i>Isodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
Percichthyidae				
144.	<i>Nannoperca vittata</i>			
Perthidae				
145.	<i>Perthidae</i> sp.			
Petroicidae				
146.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
147.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
Phalacrocoracidae				
148.	<i>Microcarbo melanoleucos</i>			
149.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
150.	25698 <i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
151.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
152.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
Phalangeridae				
153.	25521 <i>Trichosurus vulpecula</i> (Common Brushtail Possum)			
154.	24158 <i>Trichosurus vulpecula</i> subsp. <i>vulpecula</i> (Common Brushtail Possum)			
Phasianidae				
155.	24671 <i>Coturnix pectoralis</i> (Stubble Quail)			
Podicipedidae				
156.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
157.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
158.	24682 <i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Pseudocheiridae				
159.	24166 <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum, ngwayir)		T	
Psittacidae				
160.	<i>Barnardius zonarius</i>			
161.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
162.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
163.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
164.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black Cockatoo)		T	
165.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		T	
166.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
167.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
168.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
169.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
170.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
171.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
172.	<i>Purpurecephalus spurius</i>			
Rallidae				
173.	25727 <i>Fulica atra</i> (Eurasian Coot)			
174.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
175.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
176.	24763 <i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (Dusky Moorhen)			
177.	25730 <i>Gallirallus philippensis</i> (Buff-banded Rail)			
178.	24765 <i>Gallirallus philippensis</i> subsp. <i>mellori</i> (Buff-banded Rail)			
179.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
180.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
181.	24771 <i>Porzana tabuensis</i> (Spotless Crane)			
Recurvirostridae				
182.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
183.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
Scincidae				
184.	25047 <i>Ctenotus impar</i>			
185.	25096 <i>Egernia kingii</i> (King's Skink)			
186.	25100 <i>Egernia napoleonis</i>			
187.	25119 <i>Hemiergis quadrilineata</i>			
188.	25133 <i>Lerista elegans</i>			
189.	25154 <i>Lerista microtis</i> subsp. <i>microtis</i>			
190.	25191 <i>Morethia lineocellata</i>			
191.	25519 <i>Tiliqua rugosa</i>			
Scirtidae				
192.	<i>Scirtidae</i> sp.			
Scolopacidae				
193.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
194.	24808 <i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
Scolopendridae				
195.	<i>Cormocephalus aurantipes</i>			
196.	<i>Cormocephalus strigosus</i>			
197.	<i>Scolopendra laeta</i>			
Simuliidae				
198.	<i>Simuliidae</i> sp.			
Sparassidae				
199.	<i>Isopoda leishmanni</i>			
Sylviidae				
200.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
Tachyglossidae				
201.	24207 <i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
Telephlebiidae				
202.	<i>Telephlebiidae</i> sp.			
Threskiornithidae				
203.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
204.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Tipulidae				
205.	<i>Tipulidae sp.</i>			
Triaenonychidae				
206.	<i>Nunciella aspera</i>			
Trochanteriidae				
207.	<i>Trachycosmus sculptilis</i>			
Turnicidae				
208.	48147 <i>Turnix varius</i> (Painted Button-quail)			
Urodacidae				
209.	<i>Urodacus novaehollandiae</i>			
Varanidae				
210.	25218 <i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
211.	25225 <i>Varanus rosenbergi</i> (Heath Monitor)			
Veliidae				
212.	<i>Veliidae sp.</i>			
Vespertilionidae				
213.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
214.	24187 <i>Chalinolobus morio</i> (Chocolate Wattled Bat)			
215.	24189 <i>Falsistrellus mackenziei</i> (Western False Pipistrelle, Western Falsistrelle)		P4	
216.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
217.	24195 <i>Nyctophilus gouldi</i> (Gould's Long-eared Bat)			
218.	24206 <i>Vespadelus regulus</i> (Southern Forest Bat)			
Zosteropidae				
219.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silveryeye)			

Conservation Codes

T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.



EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 07/06/19 12:58:22

[Summary](#)

[Details](#)

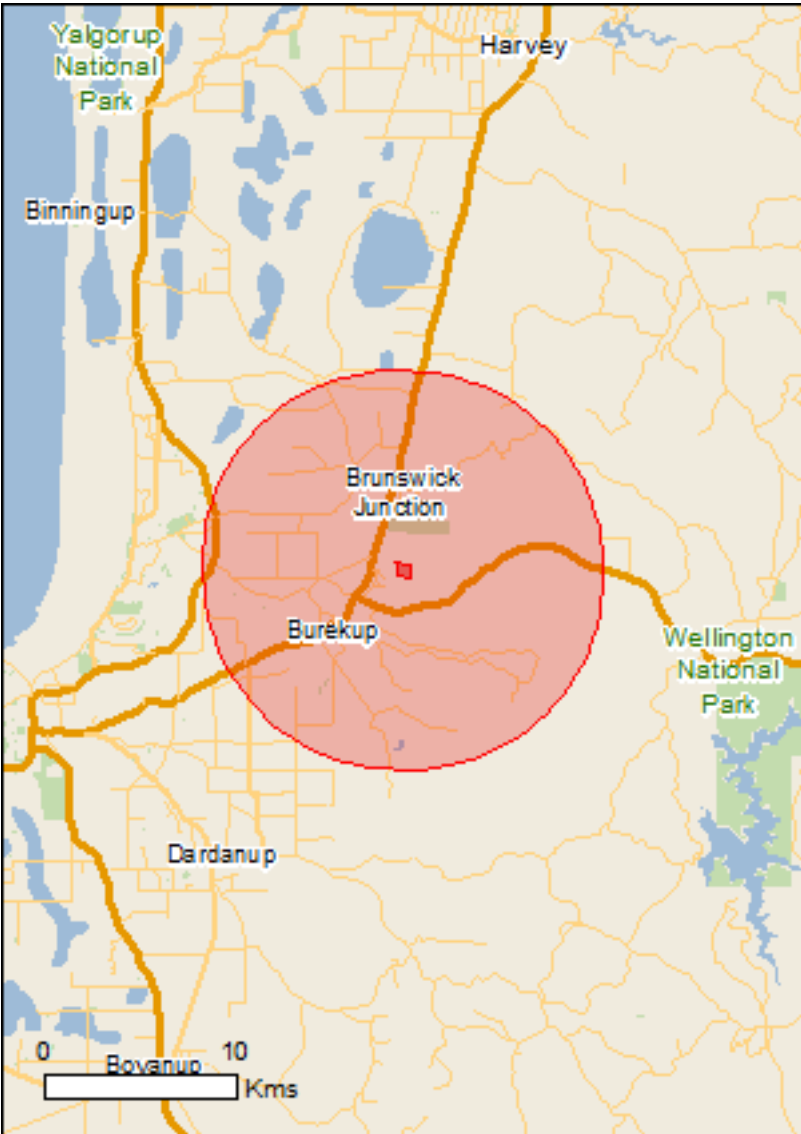
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



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Summary

Matters of National Environmental Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	31
Listed Migratory Species:	10

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <http://www.environment.gov.au/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	16
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have nominated.

State and Territory Reserves:	3
Regional Forest Agreements:	1
Invasive Species:	29
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Corymbia calophylla - Xanthorrhoea preissii woodlands and shrublands of the Swan Coastal Plain	Endangered	Community known to occur within area

Listed Threatened Species

[Resource Information]

Name	Status	Type of Presence
Birds		
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area
Calyptorhynchus baudinii Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Species or species habitat known to occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Fish		

Name	Status	Type of Presence
Galaxiella nigrostriata Blackstriped Dwarf Galaxias, Black-stripe Minnow [88677]	Endangered	Species or species habitat likely to occur within area
Nannatherina balstoni Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Bettongia penicillata ogilbyi Woylie [66844]	Endangered	Species or species habitat known to occur within area
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
Pseudocheirus occidentalis Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat known to occur within area
Other		
Westralunio carteri Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Banksia nivea subsp. uliginosa Swamp Honeypot [82766]	Endangered	Species or species habitat may occur within area
Banksia squarrosa subsp. argillacea Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat may occur within area
Brachyscias verecundus Ironstone Brachyscias [81321]	Critically Endangered	Species or species habitat may occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat likely to occur within area
Chamelaucium sp. S coastal plain (R.D.Royce 4872) Royce's Waxflower [87814]	Vulnerable	Species or species habitat may occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat known to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat known to occur within area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat known to occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species

Name	Status	Type of Presence
Lambertia echinata subsp. occidentalis Western Prickly Honeysuckle [64528]	Endangered	habitat known to occur within area Species or species habitat may occur within area
Synaphea sp. Fairbridge Farm (D. Papenfus 696) Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
Synaphea sp. Serpentine (G.R. Brand 103) [86879]	Critically Endangered	Species or species habitat may occur within area
Synaphea stenoloba Dwellingup Synaphea [66311]	Endangered	Species or species habitat likely to occur within area

Listed Migratory Species

[Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area

Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area

Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area

Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
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Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
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Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
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Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
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Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area
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Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
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Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
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Other Matters Protected by the EPBC Act

Commonwealth Land

[Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Name
Commonwealth Land -

Listed Marine Species

[Resource Information]

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat known to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Breeding known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
NTWA Bushland covenant (0146)	WA
Unnamed WA46108	WA
Wellington	WA

Regional Forest Agreements	[Resource Information]
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Note that all areas with completed RFAs have been included.

Name	State
South West WA RFA	Western Australia

Invasive Species	[Resource Information]
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Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resouces Audit, 2001.

Name	Status	Type of Presence
Birds		
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Passer domesticus House Sparrow [405]		Species or species habitat likely to occur within area
Passer montanus Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area

Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area

Name	Status	Type of Presence
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus declinatus Bridal Veil, Bridal Veil Creeper, Pale Berry Asparagus Fern, Asparagus Fern, South African Creeper [66908]		Species or species habitat likely to occur within area
Asparagus plumosus Climbing Asparagus-fern [48993]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area

Name	Status	Type of Presence
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Solanum elaeagnifolium Silver Nightshade, Silver-leaved Nightshade, White Horse Nettle, Silver-leaf Nightshade, Tomato Weed, White Nightshade, Bull-nettle, Prairie-berry, Satansbos, Silver-leaf Bitter-apple, Silverleaf-nettle, Trompillo [12323]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species distributions have been derived through a variety of methods. Where distributions are well known and if time permits, maps are derived using either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc) together with point locations and described habitat; or environmental modelling (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where very little information is available for species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc). In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

The following groups have been mapped, but may not cover the complete distribution of the species:

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

Such breeding sites may be important for the protection of the Commonwealth Marine environment.

Coordinates

-33.285281 115.841307,-33.285424 115.844655,-33.29059 115.844741,-33.290303 115.838132,-33.287577 115.838904,-33.285711 115.838303,-33.28485 115.837188,-33.285352 115.841393,-33.285281 115.841307

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- [-Natural history museums of Australia](#)
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- [-Other groups and individuals](#)

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact Us](#) page.

Appendix B

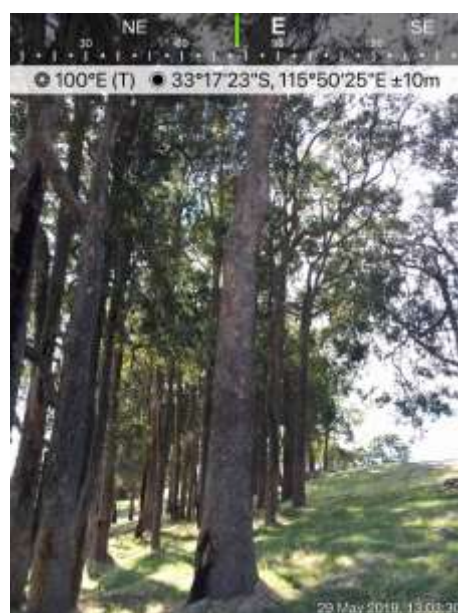
Actual and potential habitat trees within the survey area

Table 3: Actual and potential habitat trees within the subject site.

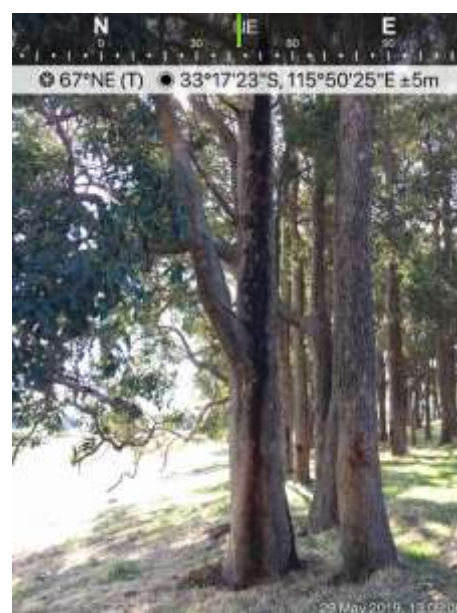
FID	Species	DBH	Northing	Easting	Comments	Works	Photo ID
0	<i>Corymbia calophylla</i>	556mm	6315999.464	392040.1174	No dreys or hollows. Scratchings present. No Black Cockatoo feed evidence	Remove	20
1	<i>Corymbia calophylla</i>	583mm	6316001.293	392038.7994	Scratchings present. No hollows or dreys. Very minor feed evidence (chewed nuts)	Remove	24
2	<i>Corymbia calophylla</i>	502mm	6316003.775	392035.5776	Scratchings present. No dreys or hollows. No potential	Remove	29
3	<i>Corymbia calophylla</i>	Non-significant	6316006.255	392039.5887	Scratchings present. No hollow potential	Remove	
4	<i>Corymbia calophylla</i>	495mm	6316009.122	392037.4583	Scratchings present, no dreys or hollow. No hollow potential	Remove	40
5	<i>Corymbia calophylla</i>	805mm	6316019.925	392034.0395	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	46
6	<i>Corymbia calophylla</i>	724mm	6316139.999	392028.1039	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	112
7	<i>Corymbia calophylla</i>	485mm	6316142.647	392031.9115	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	120
8	<i>Corymbia calophylla</i>	Non-significant	6316145.955	392035.9197	Dead with stags. No hollows	Remove	
9	<i>Corymbia calophylla</i>	Non-significant	6316148.298	392042.8225	Dead, no hollows and limited hollow potential	Remove	
10	<i>Corymbia calophylla</i>	630mm	6316149.829	392043.8455	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	125
11	<i>Corymbia calophylla</i>	785mm	6316143.529	392081.3785	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	129
12	<i>Corymbia calophylla</i>	Non-significant	6316142.573	392082.1683	Scratchings present, no dreys or hollow. No hollow potential	Remove	
13	<i>Corymbia calophylla</i>	490mm	6316144.767	392086.7041	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	132
14	<i>Corymbia calophylla</i>	Non-significant	6316146.309	392087.0906	Scratchings present, no dreys or hollow. No hollow potential	Remove	
15	<i>Corymbia calophylla</i>	733mm	6316146.058	392094.0533	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	134
16	<i>Corymbia calophylla</i>	544mm	6316146.037	392101.1501	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	136
17	<i>Corymbia calophylla</i>	Non-significant	6316146.187	392100.0029	Scratchings present, no dreys or hollow. No hollow potential	Remove	
18	<i>Corymbia calophylla</i>	740mm	6316144.594	392106.7321	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	139
19	<i>Corymbia calophylla</i>	Non-significant	6316144.776	392103.812	Scratchings present, no dreys or hollow. No hollow potential	Remove	
20	<i>Corymbia calophylla</i>	Non-significant	6315930.382	392049.0617	Dead trees no hollows	Remove	
21	<i>Corymbia calophylla</i>	Non-significant	6315931.801	392058.5579	Scratchings present, no dreys or hollow. No hollow potential	Remove	
22	<i>Corymbia calophylla</i>	805mm	6315929.962	392072.1035	Scratchings present, no dreys or hollow. Limited hollow potential. Dead tree adjacent with hollows may be providing nearby habitat.	Remove	149
23	<i>Corymbia calophylla</i>	1136mm	6315930.9	392076.6687	Dead tree leaning into adjacent tree. Hollow present and likely being utilised	Remove	153; 1533; 1538
24	<i>Corymbia calophylla</i>	500mm	6315931.123	392085.0149	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	156
25	<i>Corymbia calophylla</i>	710mm	6315930.482	392093.5406	Dead no hollows and limited hollow potential	Remove	159
26	<i>Corymbia calophylla</i>	Non-significant	6315931.105	392105.0418	No activity and no hollow potential	Remove	
27	<i>Corymbia calophylla</i>	Non-significant	6315930.385	392107.4495	Scratchings present, no dreys or hollow. No hollow potential	Remove	
28	<i>Corymbia calophylla</i>	650mm	6315928.207	392115.8219	Scratchings present, no dreys or hollow. Limited hollow potential. Scat located nearby tree base.	Remove	165
29	<i>Corymbia calophylla</i>	494mm	6315932.381	392119.2826	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	167
30	<i>Corymbia calophylla</i>	605mm	6315933.24	392119.0805	Scratchings present, no dreys or hollow. Hollow forming potential	Remove	170
31	<i>Corymbia calophylla</i>	590mm	6315932.078	392120.8144	Dead. Potential hollow present. Leaning into adjacent tree potentially providing habitat.	Remove	174
32	<i>Corymbia calophylla</i>	Non-significant	6315930.94	392127.4595	Scratchings present, no dreys or hollow. No hollow potential	Remove	
33	<i>Corymbia calophylla</i>	480mm	6315930.706	392129.6911	Scratchings present, no dreys or hollow. No hollow potential	Remove	178
34	<i>Corymbia calophylla</i>	690mm	6315927.286	392131.417	Scratchings present, no dreys or hollow. Hollow forming potential	Remove	180
35	<i>Corymbia calophylla</i>	511mm	6315927.394	392137.491	Scratchings present, no dreys or hollow. Limited hollow potential	Remove	182
36	<i>Corymbia calophylla</i>	893mm	6315933.468	392133.2727	Scratchings present, no dreys or hollow. Hollow forming potential	Remove	184
37	<i>Corymbia calophylla</i>	520mm	6315931.031	392136.2871	Scratchings present, no dreys or hollow. Hollow forming potential	Remove	187
38	<i>Corymbia calophylla</i>	1215mm	6315929.488	392143.5153	Hollow tree, multiple stags/potential hollow entrances. Impossible to tell activity status from ground	Remove	189; 1543; 1545
39	<i>Corymbia calophylla</i>	591mm	6315930.692	392149.723	Dead. Limited hollow potential	Remove	191
40	<i>Corymbia calophylla</i>	Non-significant	6315931.319	392151.6003	Dead. No activity and no hollow potential	Remove	

Table 3 Continued.

FID	Species	DBH	Northing	Easting	Comments	Works	Photo ID
41	<i>Corymbia calophylla</i>	Non-significant	6315933.865	392155.5734	Limited activity. No hollow potential	Remove	
42	<i>Corymbia calophylla</i>	Non-significant	6315932.126	392157.4304	Dead. No activity and no hollow potential	Remove	
43	<i>Corymbia calophylla</i>	Non-significant	6315931.936	392158.5749	Dead. No activity and no hollow potential	Remove	
44	<i>Corymbia calophylla</i>	Non-significant	6315931.747	392159.5765	Dead. No activity and no hollow potential	Remove	
45	<i>Corymbia calophylla</i>	540mm	6315931.545	392165.3209	Dead. No activity and limited hollow potential	Remove	195
46	<i>Corymbia calophylla</i>	Non-significant	6315932.294	392170.3265	Dead. No activity and no hollow potential	Remove	
47	<i>Corymbia calophylla</i>	Non-significant	6315931.319	392171.3248	Dead. No activity and no hollow potential	Remove	
48	<i>Corymbia calophylla</i>	Non-significant	6315931.412	392176.8415	Dead. No activity and no hollow potential	Remove	
49	<i>Corymbia calophylla</i>	490mm	6315934.394	392174.0359	Dead. No activity and no hollow potential	Remove	197
50	<i>Corymbia calophylla</i>	570mm	6315932.511	392176.2928	Dead. No activity and limited hollow potential	Remove	199
51	<i>Corymbia calophylla</i>	Non-significant	6315923.601	392171.5397	Dead. No activity and no hollow potential	Remove	
52	<i>Corymbia calophylla</i>	500mm	6315924.155	392175.0639	Minor possum activity. Limited hollow potential	Remove	201
53	<i>Corymbia calophylla</i>	Non-significant	6315924.326	392167.2631	Dead. No activity and no hollow potential	Remove	
54	<i>Corymbia calophylla</i>	Non-significant	6315925.471	392160.7293	Minor possum activity. Limited hollow potential	Remove	
55	<i>Corymbia calophylla</i>	505mm	6315922.057	392167.095	Minor possum activity. Limited hollow potential	Remove	203
56	<i>Corymbia calophylla</i>	Non-significant	6315920.938	392151.6746	Dead. No activity and no hollow potential	Remove	
57	<i>Corymbia calophylla</i>	Non-significant	6315921.993	392144.2926	Dead. No activity and no hollow potential	Remove	
58	<i>Corymbia calophylla</i>	Non-significant	6315924.398	392140.5728	Dead. No activity and no hollow potential	Remove	
59	<i>Corymbia calophylla</i>	Non-significant	6316109.052	392179.3828	Minor activity. Trim for fire access.	Trim	
60	<i>Corymbia calophylla</i>	Non-significant	6316095.599	392184.8777	Minor activity. Trim for fire access.	Trim	
61	<i>Corymbia calophylla</i>	Non-significant	6316087.489	392187.1593	Minor activity. Trim for fire access.	Trim	
62	<i>Corymbia calophylla</i>	Non-significant	6316083.603	392188.4037	Dead. No activity and no hollow potential	Trim	
63	<i>Corymbia calophylla</i>	Non-significant	6316080.786	392186.3675	Minor activity. Trim for fire access.	Trim	
64	<i>Corymbia calophylla</i>	Non-significant	6316079.713	392187.6305	Minor activity. Trim for fire access.	Trim	
65	<i>Corymbia calophylla</i>	Non-significant	6316078.357	392189.0238	Minor activity. Trim for fire access.	Trim	
66	<i>Corymbia calophylla</i>	Non-significant	6315925.893	392056.1484	Dead / dying trees no hollows	Remove	
67	<i>Corymbia calophylla</i>	Non-significant	6315930.693	392051.3158	Dead trees no hollows	Remove	
68	<i>Corymbia calophylla</i>	Non-significant	6316228.932	391993.954	Dead tree no hollows	Remove	
69	<i>Corymbia calophylla</i>	Non-significant	6316316.486	392000.0782	Dead tree no hollows	Remove	
70	<i>Corymbia calophylla</i>	Non-significant	6316021.087	392043.4316	Scratchings present. No hollow potential	Remove	
71	<i>Corymbia calophylla</i>	Non-significant	6316025.028	392041.5376	Scratchings present, no dreys or hollow. No hollow potential	Remove	
72	<i>Corymbia calophylla</i>	Non-significant	6316026.262	392036.7992	Scratchings present, no dreys or hollow. No hollow potential	Remove	
73	<i>Corymbia calophylla</i>	Non-significant	6316029.393	392039.2168	Scratchings present, no dreys or hollow. No hollow potential	Remove	
74	<i>Corymbia calophylla</i>	723mm	6316027.099	392044.6891	Scratchings present and freshly chewed nuts (not Black Cockatoo). No hollows and limited potential	Remove	50
75	<i>Corymbia calophylla</i>	550mm	6316017.97	392040.4452	Scratchings present, no dreys or hollow. No hollow potential	Remove	43
76	<i>Corymbia calophylla</i>	611mm	6316006.274	392050.3279	Scratchings present, no drey or hollows. No potential	Remove	32
77	<i>Corymbia calophylla</i>	Non-significant	6316007.219	392045.5677	Scratchings present, no dreys or hollow. No hollow potential	Remove	
78	<i>Corymbia calophylla</i>	Non-significant	6316004.053	392044.1909	Scratchings present, no dreys or hollow. No hollow potential	Remove	
79	<i>Corymbia calophylla</i>	Non-significant	6316006.255	392039.5887	Scratchings present, no dreys or hollow. No hollow potential	Remove	



FID: 1 Photo: 20



FID: 1 Photo: 24



FID: 2 Photo: 29



FID: 4 Photo:



FID: 5 Photo: 46



FID: 6 Photo: 112



FID: 7 Photo: 120



FID: 10 Photo: 125



FID: 11 Photo: 129



FID: 13 Photo: 132

Figure 6: Significant (>500mm DBH) trees identified throughout the subject site.



FID: 15 Photo: 134



FID: 16 Photo: 136



FID: 18 Photo: 139



FID: 22 Photo: 149



FID: 23 Photo: 153



FID: 23 Photo: 1533 & 1538



FID: 24 Photo: 156



FID: 25 Photo: 159



FID: 28 Photo: 165



FID: 29 Photo: 167

Figure 6 Continued.



FID: 30 Photo: 170



FID: 31 Photo: 174



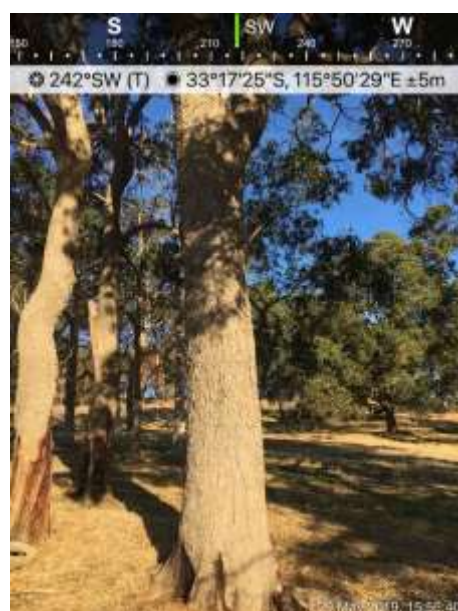
FID: 33 Photo: 178



FID: 34 Photo: 180



FID: 35 Photo: 182



FID: 36 Photo: 184



FID: 37 Photo: 187



FID: 38 Photo: 189

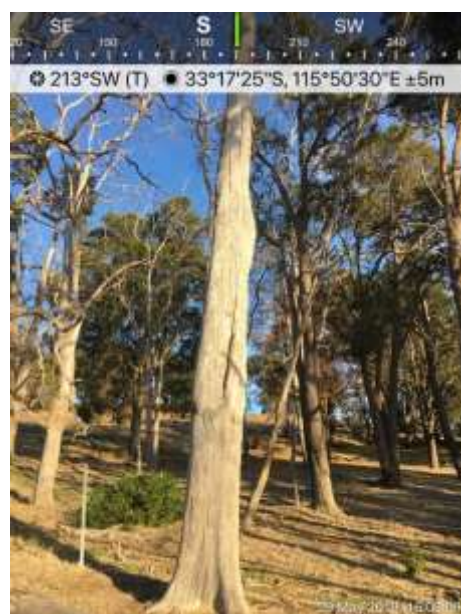


FID: 38 Photo: 1543 & 1545

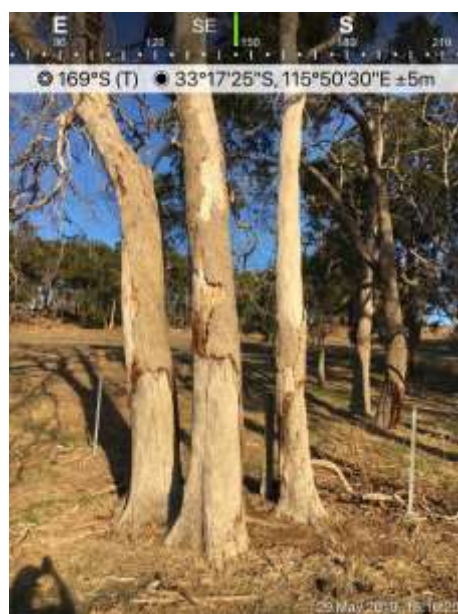


FID: 39 Photo: 191

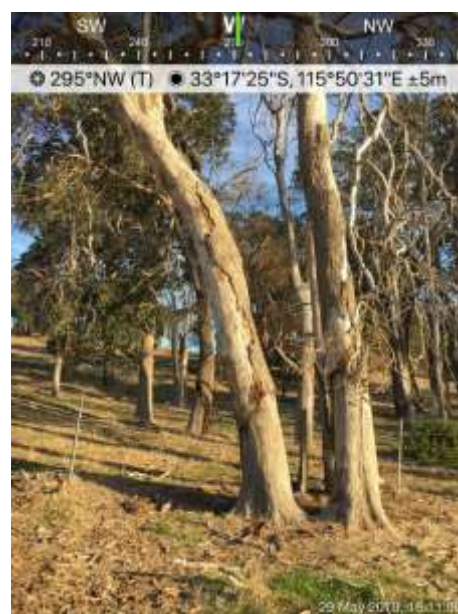
Figure 6 Continued.



FID: 45 Photo: 195



FID: 49 Photo: 197



FID: 50 Photo: 199



FID: 52 Photo: 201



FID: 55 Photo: 203



FID: 74 Photo: 50



FID: 75 Photo: 43



FID: 76 Photo: 32

Figure 6 Continued.