



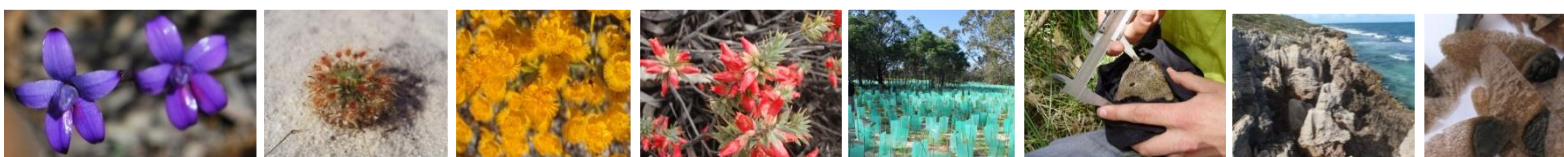
**Natural Area**  
CONSULTING MANAGEMENT SERVICES

**City of Kalamunda**

## **Flora, Fauna and Black Cockatoo Habitat Survey – Ray Owen Reserve, Lesmurdie**

**September 2020**

Natural Area Holdings Pty Ltd  
233C Drumpellier Drive, Whiteman, WA, 6076  
Ph: (08) 9209 2767  
info@naturalarea.com.au  
[www.naturalarea.com.au](http://www.naturalarea.com.au)



## Disclaimer

Natural Area Holdings Pty Ltd, trading as Natural Area Consulting Management Services (Natural Area), has prepared this report for the sole use of the Client and for the purposes as stated in the agreement between the Client and Natural Area under which this work was completed. This report may not be relied upon by any other party without the express written agreement of Natural Area.

Natural Area has exercised due and customary care in the preparation of this document and has not, unless specifically stated, independently verified information provided by others. No other warranty, expressed or implied, is made in relation to the contents of this report. Therefore, Natural Area assumes no liability for any loss resulting from errors, omission or misrepresentations made by others. This document has been made at the request of the Client. The use of this document by unauthorised third parties without written permission from Natural Area shall be at their own risk, and we accept no duty of care to any such third party.

Any recommendations, opinions or findings stated in this report are based on circumstances and facts as they existed at the time Natural Area performed the work. Any changes in such circumstances and facts upon which this document is based may adversely affect any recommendations, opinions or findings contained in this document.

No part of this document may be copied, duplicated or disclosed without the express written permission of the Client and Natural Area.

<b>Document Title</b>	KALA-R-Ray Owen Flora Fauna Survey				
<b>Location</b>	Client Folders NAC V2/City of Kalamunda/2020 Ray Owen flora fauna/Report/KALA-R-Ray Owen Flora Fauna Survey.docx				
<b>Draft/Version No.</b>	<b>Date</b>	<b>Changes</b>	<b>Prepared by</b>	<b>Approved by</b>	<b>Status</b>
Draft	September 2020	New Document	KS/SH	BC	Draft for client review and comment

---

## Executive Summary

Natural Area Consulting Management Services (Natural Area) was contracted by the City of Kalamunda to undertake a level 1 flora and vegetation survey, level 1 fauna survey and black cockatoo habitat assessment in a portion of Ray Owen Reserve, Lesmurdie. Outcomes of the survey will assist with application for a renewal of a clearing permit for the site.

The survey aimed to determine:

- flora and fauna species present (native and non-native)
- the extent and boundaries of vegetation type and condition
- the location of declared rare or priority flora, fauna and/or ecological communities
- the location of habitat trees and whether they have hollows suitable for threatened black cockatoos.

The flora and vegetation survey within site confirmed:

- a total of 124 flora species present from 33 families
- a total of 27 introduced (weeds) and 97 native flora species
- no priority or threatened flora species were found
- one vegetation type occurred within the site, namely Marri-Jarrah Woodland
- vegetation condition across the site ranged from Completely Degraded to Excellent, with majority of the site (83%) in Excellent condition.

The fauna survey within the site confirmed:

- a total of 18 fauna species present
- three mammals, one reptile and 14 bird species within the survey area
- four introduced species (one bird and three mammals)
- fourteen native species
- signs of feeding of the threatened Forest Red-tailed Black Cockatoo within the survey area and calls heard from nearby areas.

The threatened black cockatoo habitat assessment confirmed:

- a total of 33 habitat trees with a DBH >500mm were noted in the survey area, with 27 occurring in the proposed clearing area, of which 21 were Marris and six were Jarrahs
- two trees had hollows of suitable size for potential use by threatened black cockatoos
- no evidence of nesting or roosting of black cockatoos was noted during the assessment
- evidence of foraging of Marri nuts by black cockatoos was noted in three locations
- the area of good foraging habitat exceeded the 1 ha trigger value for the EPBC Act Referral guidelines for three threatened black cockatoo species.

## Contents

Executive Summary .....	3
Contents .....	4
1.0 Introduction.....	6
1.1 Location .....	6
1.2 Scope .....	6
2.0 Site Characteristics .....	8
2.1 Regional Context .....	8
2.2 Climate.....	8
2.3 Soils and Topography .....	8
2.4 Fauna Habitat .....	8
3.0 Methodology .....	10
3.1 Objectives .....	10
3.2 Desktop and Literature Review .....	10
3.3 Flora On-ground Methodology.....	10
3.3.1 Vegetation Type.....	11
3.3.2 Vegetation Condition.....	11
3.3.3 Limitations .....	12
4.0 Results .....	13
4.1 Desktop Survey.....	13
4.1.1 Significant Flora .....	13
4.1.2 Threatened Ecological Communities.....	16
4.2 Flora Survey Results.....	16
4.2.1 Flora.....	16
4.2.2 Vegetation Type.....	18
4.2.3 Threatened and Priority Ecological Communities .....	18
4.2.4 Vegetation Condition.....	19
4.3 Fauna Survey Results.....	21
4.3.1 Fauna Habitat .....	23
5.0 Implications of Results.....	25
5.1 Flora and Vegetation .....	25
5.2 Significant Flora .....	25

5.3	Threatened Ecological Communities (TEC).....	25
5.4	Black Cockatoo Habitat.....	25
5.5	Assessment Against Clearing Principles .....	29
6.0	References .....	32
	Appendix 1: NatureMap Report (5 km buffer) .....	34
	Appendix 2: Protected Matters Search Tool Report .....	53
	Appendix 3: Conservation Codes.....	66
	Western Australia .....	66
	Commonwealth.....	67
	Appendix 4: Species List .....	68

## **1.0 Introduction**

Natural Area Consulting Management Services (Natural Area) was contracted by the City of Kalamunda to undertake level 1 flora and fauna surveys and a threatened black cockatoo habitat assessment within a portion of Ray Owen Reserve, Lesmurdie. The survey was undertaken to determine fauna, flora, and vegetation communities present, including conservation significant species, vegetation types and vegetation condition and black cockatoo habitat presence and condition. Survey outcomes will assist with the application of a clearing permit renewal for the area.

### **1.1 Location**

Ray Owen Reserve survey area is approximately 1.7 ha and located adjacent to the Ray Owen Sports Centre, corner of Grove Road and Gladys Road, Lesmurdie, WA. The northern proportion of the reserve which surrounds the sports centre was the focus of the survey (Figure 1). The survey area includes the proposed clearing footprint (1.3 ha) and the buffer areas along the roads that are to remain vegetated.

### **1.2 Scope**

Natural Area's scope of works associated with the flora and fauna surveys included:

- desktop database searches to identify flora ecological communities that may be present at the site, including any conservation significant species and ecological communities
- desktop review of available data for the site including vegetation complex, soils characteristics, and topography
- a site survey to:
  - determine flora and fauna species present (native and non-native)
  - the presence of threatened and priority species or ecological communities
  - the extent of vegetation types and condition
  - determine the presence of habitat trees with a diameter at breast height (DBH) >500 mm
  - determine the presence of foraging habitat and nesting habitat for threatened black cockatoos
- reporting survey outcomes.





## 2.0 Site Characteristics

### 2.1 Regional Context

According to Interim Biogeographical Regionalisation of Australia (IBRA) descriptions, Ray Owen Reserve is located in the JAF01 – Northern Jarrah Forest subregion. This subregion occurs east of the Darling Scarp which is overlying granite and metamorphic rocks with an average elevation of 300 m. The Northern Jarrah Forest region is dominated by Jarrah-Marri forest on laterite soils and in the eastern area of the subregion is dominated by Wandoo-Marri woodland on clayey soil (Williams and Mitchell, 2001).

### 2.2 Climate

The climate experienced in the area is warm Mediterranean, with dry, hot summers and cool, wet winters. According to the Bureau of Meteorology (Perth Airport, Station ID 009021, 2020):

- average rainfall is 762.1 mm pa, with the majority falling between May and August
- average maximum temperature ranges from 18.0 °C in winter to 32 °C in summer, with the highest recorded maximum being 46.7 °C
- average minimum temperatures range from 8.0 °C in winter to 17.5 °C in summer, with the lowest recorded minimum being -1.3 °C
- predominant wind directions include morning easterlies and westerly sea breezes during summer months, with an average wind speed of 16.6 km/h and gusts of more than 100 km/h.

### 2.3 Soils and Topography

According to the Natural Resource Info (NRInfo) data maintained by the Department Primary Industries and Regional Development (DPIRD, 2020) one soil type namely Dwellingup 2 Phase (255DpDW2) exists within the site (Figure 2). This soil type is described as very gently undulating terrain with well drained, shallow to moderately deep gravelly brownish sands, pale brown sands and earthy sands overlying lateritic duricrust. Site topography ranges from 266 – 272 m AHD rising from west to east.

### 2.4 Fauna Habitat

There is potential for the three threatened black cockatoos and their habitat to occur on site including, the Carnaby's Cockatoo (*Calyptorhynchus latirostris*) listed as endangered under the *EPBC Act 1999* (Cwlth), the Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksia naso*) and the Baudin's Black Cockatoo (*Calyptorhynchus baudinii*) listed as vulnerable; all are listed as threatened under the *Biodiversity Conservation Act 2016* (WA). According to the WALGA Environmental Planning Tool (2020), Ray Owen Reserve survey area is located within in a confirmed breeding and roosting area for the threatened Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) and within a potential feeding area for the species. The location of the survey is also classified as a potential Priority 4 Quenda (*Isoodon fusciventer*) habitat (WALGA 2020).





## 3.0 Methodology

### 3.1 Objectives

The objective of the survey was to collect sufficient data to collect adequate information to enable the renewal of a clearing permit. This included undertaking a desktop review, determining flora species present, assessing vegetation type and condition, assessing the key habitats which could be used by threatened black cockatoos.

### 3.2 Desktop and Literature Review

A desktop flora and vegetation survey was undertaken to determine:

- likely native and non-native flora and fauna species present
- current extent of native vegetation
- general floristic community types
- likely presence of threatened or priority flora and fauna species
- likely presence of any threatened or priority ecological communities.

The following databases were accessed to obtain relevant information:

- NatureMap (Department of Biodiversity, Conservation and Attractions, 2020b) (Appendix 1)
- Protected Matters Search Tool (Department of the Environment and Energy (DoEE), 2020b) (Appendix 2)
- FloraBase (Department of Biodiversity, Conservation and Attractions, 2018b)
- Threatened and priority flora and ecological community database searches (Department of Biodiversity, Conservation and Attractions, 2018c).

Summary sheets of threatened flora potentially occurring in the area were created for quick reference in the field (Appendix 6).

### 3.3 Flora On-ground Methodology

Natural Area Botanists Sharon Hynes and Kylie Sadgrove traversed the site on the 29 July 2020, with key GPS data recorded using a handheld Samsung tablet loaded with GIS mapping software (Mappt), including:

- identification of flora species present by walking the site, including targeting declared rare and priority species indicated as potentially present during desktop assessments
- assessing boundaries of vegetation type and condition extent across the site
- determining the presence of any further threatened or priority listed flora species and/or ecological communities listed under the *Biodiversity and Conservation Act 2016* (WA) and/or the *Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
- locations of habitat trees with a DBH >500 mm which have the potential to provide habitat in the form of foraging, roosting or hollows for threatened black cockatoos.

The flora and vegetation survey was conducted in accordance with *Technical Guidance- Flora and Vegetation Surveys for Environmental Impact Assessment* (Environmental Protection Authority, 2016). Samples were collected, or photographs taken of unfamiliar species to enable later identification.

### 3.3.1 Vegetation Type

The vegetation type was determined using the structural classes described in *Bush Forever Volume 2* (Government of Western Australia, 2000), and records dominant over, middle and understorey species. A tablet equipped with GPS mapping software was used to mark the change in vegetation type across the site. A description of the various structural classes is provided in Table 1.

**Table 1:** Vegetation structural classes

Life Form/Height Class	Canopy Percentage Cover			
	100 – 70%	70 – 30%	30 - 10%	10 – 2 %
<b>Trees over 30 m</b>	Tall closed forest	Tall open forest	Tall woodland	Tall open woodland
<b>Trees 10 – 30 m</b>	Closed forest	Open forest	Woodland	Open woodland
<b>Trees under 10 m</b>	Low closed forest	Low open forest	Low woodland	Low open woodland
<b>Tree Mallee</b>	Closed tree mallee	Tree mallee	Open tree mallee	Very open tree mallee
<b>Shrub Mallee</b>	Closed shrub mallee	Shrub mallee	Open shrub mallee	Very open shrub mallee
<b>Shrubs over 2 m</b>	Closed tall scrub	Tall open scrub	Tall shrubland	Tall open shrubland
<b>Shrubs 1 – 2 m</b>	Closed heath	Open heath	Shrubland	Open shrubland
<b>Shrubs under 1 m</b>	Closed low heath	Open low heath	Low shrubland	Low open shrubland
<b>Grasses</b>	Closed grassland	Grassland	Open grassland	Very open grassland
<b>Herbs</b>	Closed herbland	Herbland	Open herbland	Very open herbland
<b>Sedges</b>	Closed sedgeland	Sedgeland	Open sedgeland	Very open sedgeland

(Source: Government of Western Australia, 2000)

### 3.3.2 Vegetation Condition

Vegetation condition was assessed using the rating scale outlined in *Bush Forever Volume 2* (Government of Western Australia, 2000). A tablet equipped with GPS mapping software was used to mark the vegetation condition across the site. Table 2 provides a description of the rating scale.

**Table 2:** Vegetation condition ratings

Category	Description
1    Excellent	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
2    Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
3    Good	More obvious signs of damage caused by human activities since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly less aggressive weeds.

Category	Description
4	Poor
	Still remains basic vegetation structure or ability to regenerate to it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
5	Very Poor
	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
6	Completely Degraded
	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising of weed or crop species with isolated native trees or shrubs.

### 3.3.3 Limitations

A number of limitations associated with both desktop and on-site flora surveys exist, including:

- the survey was conducted just before the optimal time of year for flora species in the Perth region with those species present at the time recorded
- database searches only provide an indication of what flora species may be present, with on ground surveys required to confirm those actually present
- the differing databases are reliant on information submitted via various reporting mechanisms, so all records of a particular species or ecological community within a specified area may not be complete
- on-ground surveys indicate species present at the time of the assessment, with species flowering at different times not always able to be identified
- not all species flower every year.

Despite these limitations, Natural Area believes 80-90% of flora species were identified.

## 4.0 Results

### 4.1 Desktop Survey

A review of NatureMap identified a total of 873 flora plant species which could potentially occur within a 5 km radius of the site including:

- 572 dicotyledons
- 22 fungi
- one gymnosperm
- 270 monocotyledons
- eight ferns.

#### 4.1.1 Significant Flora

A review of NatureMap indicated 50 conservation significant flora species listed under the *Biodiversity Conservation Act 2016* (WA), potentially occurring within 5 km of the site (Department of Biodiversity Conservation and Attractions, 2020b). A review of the Protected Matters Search Tool (PMST) (Department of the Environment and Energy, 2019) indicated 21 significant flora species listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Cwlth) as potentially occurring within a 5 km radius of the site.

A review of the DBCA's threatened and priority flora database indicated 58 priority species and 19 threatened species have previously been recorded within a 10 km buffer of the survey site. Of the 94 conservation significant species potentially found in the area, it was determined that the site conditions (soil type, drainage, location) may be suitable for 26 (highlighted in green) of these species (Table 3). Conservation code descriptions are provided in Appendix 3.

**Table 3:** Threatened and Priority flora species listed by NatureMap, PMST, and DBCA

Species Name	Cons. Code	Nature Map	PMST	DBCA
<i>Acacia anomala</i>	T, VU	X	X	X
<i>Acacia aphylla</i>	T	X		X
<i>Acacia drummondii</i> subsp. <i>affinis</i>	P3			X
<i>Acacia horridula</i>	P3			X
<i>Acacia lasiocarpa</i> var. <i>bracteolata</i> long peduncle variant	P1			X
<i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>	P3			X
<i>Acacia oncinophylla</i> subsp. <i>patulifolia</i>	P4	X		X
<i>Allocasuarina grevilleoides</i>	P3			X
<i>Andersonia gracilis</i>	T, EN	X	X	X
<i>Andersonia</i> sp. <i>Blepharifolia</i>	P2			X
<i>Anthocercis gracilis</i>	T	X		X
<i>Aponogeton hexatepalus</i>	P4			X
<i>Asteridea gracilis</i>	P3	X		X
<i>Austrostipa bronwenae</i>	T, EN	X	X	X
<i>Babingtonia urbana</i>	P3			X
<i>Banksia kippistiana</i> var. <i>paenepeccata</i>	P3			X



Species Name	Cons. Code	Nature Map	PMST	DBCA
<i>Banksia mimica</i>	T	X		X
<i>Banksia pteridifolia</i> subsp. <i>vernalis</i>	P3	X		
<i>Beaufortia purpurea</i>	P3	X		
<i>Bolboschoenus fluviatilis</i>	P1			X
<i>Boronia humifusa</i>	P1	X		X
<i>Boronia tenuis</i>	P4	X		X
<i>Bossiaea modesta</i>	P2			X
<i>Byblis gigantea</i>	P3	X		X
<i>Caladenia huegelii</i>	T			X
<i>Calandrinia uncinella</i>	P1			X
<i>Calectasia grandiflora</i>	P2			X
<i>Calothamnus accedens</i>	P4			X
<i>Calothamnus graniticus</i> subsp. <i>leptophyllus</i>	P4			X
<i>Calytrix breviseta</i> subsp. <i>breviseta</i>	EN		X	X
<i>Carex tereticaulis</i>	P3			X
<i>Chamelaucium lullfitzii</i>	EN		X	
<i>Comesperma rhadinocarpum</i>	P3			X
<i>Conospermum undulatum</i>	T, VU	X	X	X
<i>Cyanicula ixioides</i> subsp. <i>ixioides</i>	P4	X		X
<i>Darwinia apiculata</i>	T, EN	X	X	X
<i>Diplolaena andrewsii</i>	T	X		
<i>Diuris brevis</i>	P2			X
<i>Diuris drummondii</i>	T, VU	X	X	X
<i>Diuris micrantha</i>	VU		X	
<i>Diuris purdiei</i>	T	X		X
<i>Drakaea elastica</i>	EN, T	X	X	
<i>Drakaea micrantha</i>	T, VU	X	X	
<i>Drosera occidentalis</i>	P4			X
<i>Eleocharia keigheryi</i>	T, VU	X	X	X
<i>Eremophila glabra</i> subsp. <i>chlorella</i>	T, EN	X	X	X
<i>Eryngium</i> sp. <i>Subdecumbens</i>	P3			X
<i>Eucalyptus balanites</i>	T, EN	X	X	
<i>Goodenia arthrotricha</i>	T, EN	X	X	X
<i>Grevillea curviloba</i>	T, EN	X	X	
<i>Grevillea manglesii</i> subsp. <i>dissectifolia</i>	P3			X
<i>Grevillea pimeleoides</i>	P4			X
<i>Grevillea thelemanniana</i>	T, CR	X	X	X
<i>Haemodorum loratum</i>	P3			X
<i>Halgania corymbosa</i>	P3	X		X
<i>Hibbertia montana</i>	P4	X		
<i>Hydrocotyle lemnoides</i>	P4			X
<i>Hydrocotyle striata</i>	P1	X		X



Species Name	Cons. Code	Nature Map	PMST	DBCA
<i>Isopogon autumnalis</i>	P3	X		X
<i>Jacksonia gracillima</i>	P3	X		X
<i>Lasiopetalum bracteatum</i>	P4	X		X
<i>Lasiopetalum glutinosum</i> subsp. <i>glutinosum</i>	P3	X		X
<i>Lasiopetalum pterocarpum</i>	T, EN	X	X	
<i>Lepidosperma rostratum</i>	T, EN	X	X	X
<i>Macarthuria keigheryi</i>	T, EN	X	X	X
<i>Meionectes tenuifolia</i>	P3			X
<i>Melaleuca viminalis</i>	P2			X
<i>Microtis quadrata</i>	P4			X
<i>Myriophyllum echinatum</i>	P3			X
<i>Ornduffia submersa</i>	P4			X
<i>Synaphea</i> sp. Fairbridge Farm	T, EN	X	X	
<i>Paracaleana ferricola</i>	P2			X
<i>Pimelia rara</i>	P4	X		X
<i>Pithocarpa corymbulosa</i>	P3	X		X
<i>Platysace ramosissima</i>	P3			X
<i>Ptilotus pyramidatus</i>	T, CR			X
<i>Schoenus benthamii</i>	P3			X
<i>Schoenus capillifolius</i>	P3			X
<i>Schoenus griffinianus</i>	P4			X
<i>Schoenus loliaceus</i>	P2			X
<i>Schoenus natans</i>	P4			X
<i>Schoenus pennisetis</i>	P3			X
<i>Senecio leucoglossus</i>	P4	X		X
<i>Stackhousia</i> sp. Red-blotched corolla	P3	X		
<i>Stylidium aceratum</i>	P3			X
<i>Stylidium longitubum</i>	P4			X
<i>Stylidium striatum</i>	P4	X		X
<i>Styphelia filifolia</i>	P3	X		
<i>Synaphea</i> sp. Fairbridge Farm	T, CR			X
<i>Thelymitra dedmanianum</i>	T	X		
<i>Thelymitra magnifica</i>	P1	X		X
<i>Thelymitra stellata</i>	T	X		X
<i>Thysanotus anceps</i>	P3	X		X
<i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	P4	X		X

(Source: Department of Biodiversity, Conservation and Attractions, 2020a)

### 4.1.2 Threatened Ecological Communities

A review of the PMST report indicated that there are three listed Threatened Ecological Communities that could potentially occur within 5 km of the site (Table 4). A review of the DBCA's Threatened Ecological Communities database indicates that three threatened and one Priority floristic community type occur within a 5 km buffer of the area (Table 4).

**Table 4:** Potential Threatened Ecological Communities within the Ray Owen Reserve

Name	Status	Presence
Banksia woodlands of the Swan Coastal Plain	Endangered	Unlikely site not within the SCP, soil type unsuitable
Banksia attenuata woodlands over species rich dense shrublands	Endangered	Unlikely site not within the SCP, soil type unsuitable
Central North Darling Scarp Granite Shrubland Community	Priority 4	Unlikely soil type unsuitable
Clay Pans of the Swan Coastal Plain	Critically Endangered	Unlikely site is not within SCP, soil type unsuitable
Corymbia calophylla - Xanthorrhoea preissii woodlands and shrublands, Swan Coastal Plain	Critically Endangered	Unlikely site not within the SCP, soil type unsuitable
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain	Critically Endangered	Unlikely site not within the SCP, Soil type unsuitable

## 4.2 Flora Survey Results

### 4.2.1 Flora

A total of 124 flora species (taxa) were recorded from 33 families during the field survey, including 27 weeds and 97 native species. Examples of native flora species recorded are shown in Figure 3 and weed species in Figure 4. A complete flora species list is provided in Appendix 4.



**Figure 3:** Examples of native flora species recorded



**Figure 4:** Examples of weed flora species recorded



#### 4.2.2 Vegetation Type

One vegetation type was recorded across the survey site, Marri – Jarrah Woodland (Figure 5). This vegetation community is comprised of a woodland of *Corymbia calophylla* (Marri) and *Eucalyptus marginata* (Jarrah), with a middle storey of *Banksia sessilis* var. *sessilis*, *Xanthorrhoea preissii* and *Xanthorrhoea brunonis* over an understory of mixed native herbs and sedges.



**Figure 5:** Marri- Jarrah Woodland at Ray Owen Reserve, Lesmurdie.

#### 4.2.3 Threatened and Priority Ecological Communities

The Priority 4 Central North Darling Scarp Granite Shrubland Community is the closest conservation significant community occurring within 500 m of the site (DBCA, 2020c), however, this was not recorded within the site as there are no granite outcrops present and vegetation type present was a woodland not a shrubland. All the other threatened communities listed in Table 4 occur within the Swan Coastal Plain and therefore are not within the site as it is located in the Northern Jarrah Forest Region at higher elevations of the Darling Scarp. The dominant species for these community types did not match the vegetation type found on site which consisted of Jarrah and Marri Woodland.

#### 4.2.4 Vegetation Condition

Vegetation condition ranged from Completely Degraded to Excellent, with majority of the site (83%) classified as Excellent condition (Figure 5 and Table 5). The area which were classified as Completely Degraded adjacent to the carpark, is comprised of trees species only with no understorey vegetation.

**Table 5:** Vegetation condition

<b>Vegetation Condition</b>	<b>Excellent</b>	<b>Very Good</b>	<b>Good</b>	<b>Degraded</b>	<b>Completely Degraded</b>	<b>Totals</b>
<b>Area (ha)</b>	1.23	0.124	-	0.081	0.05	1.485
<b>Area (%)</b>	83%	8.3%	-	5.4%	3.3%	100





**Figure 6:**  
Vegetation Condition  
Ray Owen Reserve, Lesmurdie

Client: City of Kalamunda  
Date: 07/08/2020  
Created by: K. Sadgrove  
Image Source: Nearmap, 2020  
Datum: GDA 94





### 4.3 Fauna Survey Results

Opportunistic sightings of fauna were recorded, either directly or indications of their presence during the Level 1 fauna survey. A total of 18 species were recorded, including three mammals, one reptile and 14 birds (Table 6). Although not observed directly within the survey site, Red-tailed Black Cockatoo (*Calyptrorhynchus banksii*) were heard calling in a nearby location when conducting the survey. Evidence of feeding was observed in the form of chewed Marri (*Corymbia calophylla*) nuts by both black cockatoo's and parrots (Figure 8 and 9). Examples of fauna recorded during the survey are shown in Figure 7.

**Table 6:** Fauna species observed

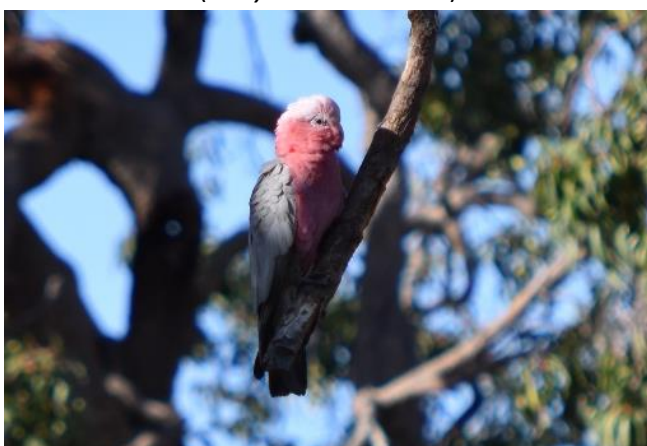
Family	Scientific Name	Common Name	Lifeform
Acanthizidae	<i>Acanthiza apicalis</i>	Inland Thornbill	Bird
Meliphagidae	<i>Anthochaera carunculata</i>	Red Wattlebird	Bird
Meliphagidae	<i>Anthochaera lunulata</i>	Western Wattlebird	Bird
Cacatuidae	<i>Cacatua roseicapilla</i>	Galah	Bird
Cacatuidae	<i>Calyptrorhynchus banksii naso</i>	Forest Red-tailed Black Cockatoo (heard calling in a nearby location)	Bird
Corvidae	<i>Corvus coronoides</i>	Australian Raven	Bird
Cracticidae	<i>Cracticus tibicen</i>	Australian Magpie	Bird
Cracticidae	<i>Cracticus torquatus</i>	Grey Butcherbird	Bird
Scincidae	<i>Cryptoblepharus</i>	Snake-eyed Skink	Reptile
Alcedinidae	<i>Dacelo novaeguineae</i> *	Laughing Kookaburra	Bird
Felidae	<i>Felis catus</i> *	Domestic Cat	Mammal
Muridae	<i>Mus musculus</i> *	House Mouse	Mammal
Leporidae	<i>Oryctolagus cuniculus</i> *	Rabbit (diggings)	Mammal
Hirundinidae	<i>Petrochelidon nigricans</i>	Tree Martin	Bird
Columbidae	<i>Phaps chalcoptera</i>	Common Bronzewing	Bird
Meliphagidae	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater	Bird
Psittacidae	<i>Platycercus spurius</i>	Red-capped Parrot	Bird
Psittacidae	<i>Platycercus zonarius</i>	Australian Ringneck	Bird



Australian Ringneck – Using existing hollows  
(*Platycercus zonarius*)



Laughing Kookaburra  
(*Dacelo novaeguineae*\*)



Galah  
(*Cacatua roseicapilla*)



New Holland Honeyeater  
(*Phylidonyris novaehollandiae*)



Red-capped Parrot  
(*Platycercus spurius*)



Western Wattlebird  
(*Anthochaera lunulata*)

**Figure 7:** Observed fauna within Ray Owen Reserve

#### 4.3.1 Fauna Habitat

Signs of feeding of the Forest Red-tailed Black Cockatoos (*Calyptorhynchus banksii naso*) was noted on site, with birds also heard calling from nearby bushland. A total of 33 habitat trees with a DBH >500 mm were recorded within the survey area, with 27 occurring within the proposed clearing areas including 21 Marri and six Jarrah trees (Figure 9).

A total of nine hollows were recorded within habitat trees, two of which are of a suitable size to be potentially utilised by black cockatoos. No current use of nesting hollows by black cockatoos was noted. Two trees with smaller hollows were being utilised by Australian Ringnecks, with one hollow observed with birds feeding young and another already with a fledgling exiting the hollow. Forest Red-tailed Black Cockatoo feeding evidence on Marris was noted in three locations within the site, with the majority of other feeding observed being by the Australian Ringneck parrots (Figures 8 and 9).

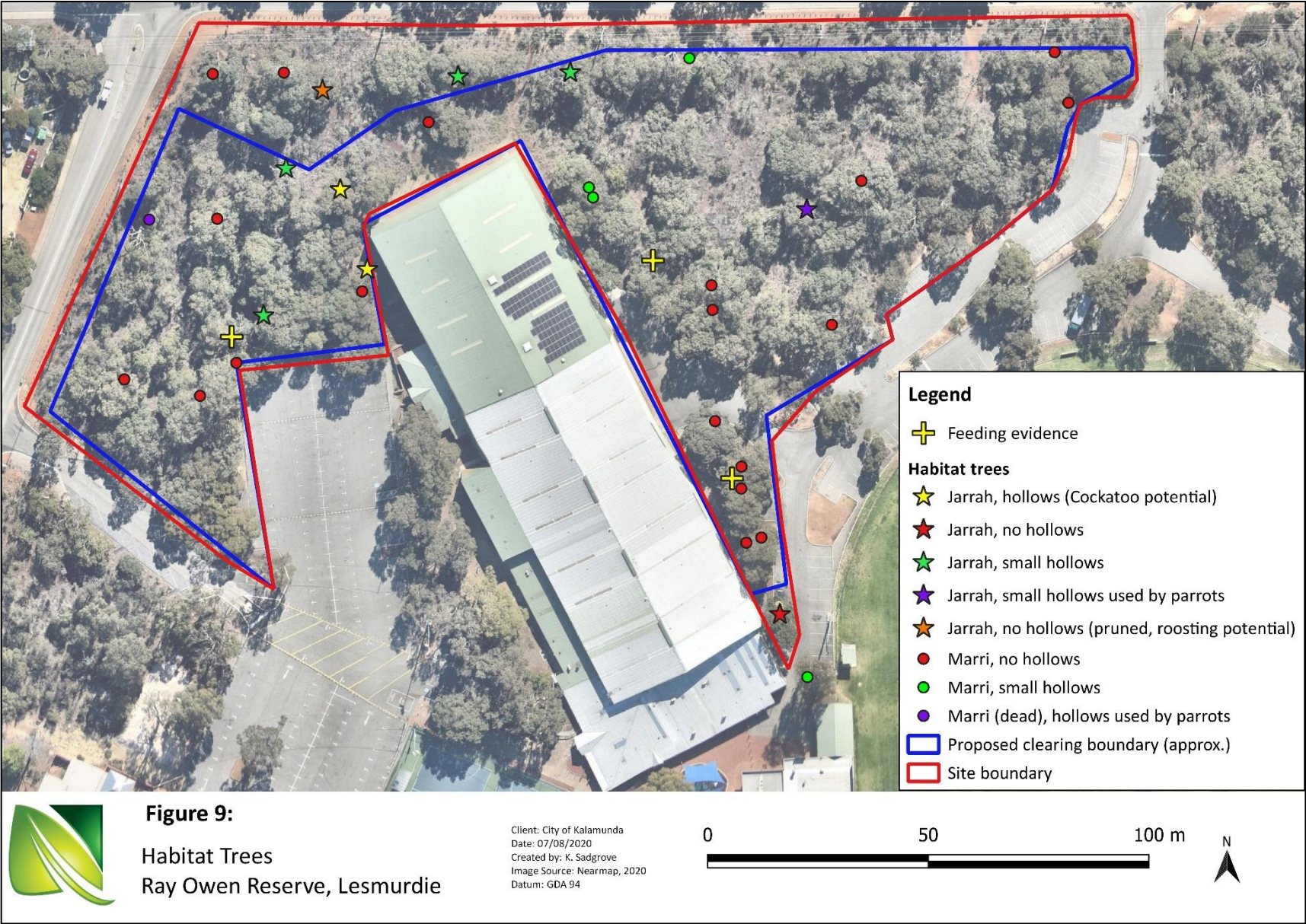


Feeding by parrot species

Feeding by Forest Red-tailed Black Cockatoos

**Figure 8:** Evidence of feeding on Marri (*Corymbia calophylla*) nuts





## **5.0 Implications of Results**

### **5.1 Flora and Vegetation**

Natural Area's August 2020 survey of a portion of the Ray Owen reserve in Lesmurdie recorded 124 flora species from 33 families, 27 of which were introduced and 97 were native. One vegetation type was identified, Marri - Jarrah Woodland with vegetation condition ranging from Completely Degraded to Excellent.

### **5.2 Significant Flora**

No threatened or priority flora species were identified during the August 2020 flora and vegetation survey. The DBCA database search did not identify any threatened or priority species within 1 km of the survey area (DBCA, 2020c). Due to the timing of the flora and vegetation survey taking place outside the optimal time of year (spring) the potential presence of some conservation significant flora cannot be ruled out as they were either dormant or not flowering (e.g. threatened orchid species).

### **5.3 Threatened Ecological Communities (TEC)**

The PMST report (Department of Agriculture, Water and the Environment, 2020a) indicated the potential presence of three threatened ecological communities to occur within or in close proximity to the site (refer to Table 4). The DBCA threatened and priority ecological community database search indicated one priority and three threatened communities to occur within the site (2020c). However, the DBCA database search indicated no presence of threatened or priority communities within the site, with the soil type being unsuitable for the listed potential communities and most communities occurring within the Swan Coastal Plain at the bottom of the Darling Scarp. The closest known community was the Priority 4 Central North Darling Scarp Granite Shrubland Community which was 500m to the west of the site (DBCA, 2020c).

Upon visitation to the site in August 2020, Natural Area botanists confirmed no presence of the TECs and PEC in Table 4 with the laterite soil on site being unsuitable for these communities and the Marri -Jarrah Woodlands not matching the dominant overstorey or other common indicative species of the listed communities. It should be noted the survey was conducted in August 2020, just outside the optimal time of year (spring). However, this did not affect the assessment of the dominant species of the vegetation on site as they were easily identified on site during the survey and did not match the listed communities composition.

### **5.4 Black Cockatoo Habitat**

Marri is a common food source for the Carnaby's Cockatoo, Baudin's and Forest Red-tailed Black Cockatoos species. Foraging by Forest Red-tailed Black Cockatoos on Marri nuts was noted on site and a total of 27 habitat trees were recorded in the proposed clearing area, with two of these having hollows suitable for use by black cockatoos. No signs of roosting or nesting by black cockatoos was found the site, although it does contain 1.3 ha of good quality foraging habitat which meets the trigger value for referral in the EPBC Act referral guidelines for three threatened black cockatoo species.

Due to the fact that the site occurs in an area that is still highly vegetated, with the Mundy Regional Park and Korung National Park in close proximity, the clearing of this area is not likely to have a significant impact on black cockatoo habitat for the region. Although the clearing is not likely to have a significant impact, it is recommended that the proposal is discussed with the Department of Agriculture, Water and Environment to determine whether a referral under the EPBC Act 1999 is warranted.

Referral guidelines in relation to the site are further discussed in Table 7.



**Table 7:** Referral guidelines for the three threatened black cockatoo species

Guideline		Comment
High risk of significant impacts: referral recommended	<ul style="list-style-type: none"> <li>Clearing of any known nesting tree</li> <li>Clearing or degradation of any part of a vegetation community known to contain breeding habitat</li> <li>Clearing of more than 1 ha of quality foraging habitat.</li> <li>Clearing or degradation (including pruning the top canopy) of a known night roosting site</li> <li>Creating a gap of greater than 4 km between patches of black cockatoo habitat (breeding, foraging or roosting).</li> </ul>	<ul style="list-style-type: none"> <li>No known nesting trees were recorded on site, although there were two trees with hollows large enough to be potentially utilised by black cockatoos</li> <li>Yes the clearing area occurs within a known breeding and roosting area according to WALGA Environmental Planning Tool</li> <li>The area contains more than 1 ha of quality foraging habitat, although it is a small area within a highly vegetated region with Mundy Regional Park and Korung National Park nearby and is unlikely to cause significant impact to the feeding habitat in this region</li> <li>Evidence of feeding was observed in three locations within the site boundary</li> <li>Clearing of this area would not cause a gap of more than 4 km between patches of black cockatoo habitat as the remainder of the vegetation at Ray Owen Reserve will be retained and similar vegetation is present in nearby reserves, Regional and National Parks.</li> </ul>
Uncertainty: referral recommended or contact the department	<ul style="list-style-type: none"> <li>Degradation (such as through altered hydrology or fire regimes) of more than 1 ha of foraging habitat. Significance will depend on the level and extent of degradation and the quality of the habitat.</li> <li>Clearing or disturbance in areas surrounding black cockatoo breeding, foraging or night roosting habitat that has the potential to degrade habitat through introduction of invasive species, edge effects, hydrological changes, increased human visitation or fire.</li> </ul>	<ul style="list-style-type: none"> <li>The area will be directly affected through clearing of black cockatoo habitat with indirect effects to the remnant vegetation within Ray Owen via fragmentation of vegetation and increased edge effects with only thin strips to be left surrounding the car parks.</li> </ul>

Guideline		Comment
	<ul style="list-style-type: none"> <li>▪ Actions that do not directly affect the listed species but that have the potential for indirect impacts such as increasing competitors for nest hollows.</li> <li>▪ Actions with the potential to introduce known plant diseases such as <i>Phytophthora</i> spp. to an area where the pathogen was not previously known.</li> </ul>	
Low risk of significant impacts: referral may not be required	<ul style="list-style-type: none"> <li>▪ Actions that do not affect black cockatoo habitat or individuals.</li> <li>▪ Actions whose impacts occur outside the modelled distribution of the three black cockatoos.</li> </ul>	<ul style="list-style-type: none"> <li>▪ Actions of clearing in this area will not significantly affect black cockatoo habitat or individual birds as none were noted on site during the August 2020 survey. Except for some transient foraging they do not appear to utilise this site for nesting or roosting, as there are larger and better quality habitat areas nearby in Mundy Regional Park that are not surrounded by residential housing.</li> </ul>

## **5.5 Assessment Against Clearing Principles**

An assessment of information obtained during the July 2020 survey has been made against the Western Australian clearing principles. It is suggested that the clearing application may be at variance to one of the ten clearing principles (Table 8).

**Table 8:** Assessment against clearing principles

Clearing Principle	Comment
A Native vegetation should not be cleared if it comprises a high level of biological diversity.	<p>The area to be cleared may be at variance with this principle:</p> <ul style="list-style-type: none"> <li>A total of 124 flora species were identified, including 97 native and 27 introduced species</li> <li>the majority (83%) of the vegetation is in Excellent condition</li> <li>during the August 2020 survey by Natural Area botanists, no conservation significant flora was identified within the proposed clearing area</li> </ul>
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.	<p>The area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> <li>the area contains habitat suitable for black cockatoo foraging, roosting and nesting, however there is a lot of nearby areas that provide higher quality habitat and are much larger than Ray Owen Reserve such as Mundy Regional Park to the west and Korung National Park to the south-east</li> </ul>
C Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, rare flora.	<p>The area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> <li>During the November 2019 survey by Natural Area botanists, no conservation significant flora was identified within the proposed clearing area</li> </ul>
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.	<p>The area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> <li>No threatened or priority ecological communities occur within the site.</li> </ul>
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.	<p>The area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> <li>Ray Owen Reserve is not a large bushland reserve and there are much larger and higher quality vegetation nearby in Mundy Regional Park to the west and Korung National Park to the south-east</li> <li>The site is situated within the Dwellingup vegetation association 3 (Beard Association) with approximately 7097.39 ha (75.61%) of the pre-European extent remaining for this vegetation complex.</li> </ul>

F	Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.	The area to be cleared is not likely to be at variance with this principle as the site has no association with a watercourse or wetland.
G	Native Vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The area to be cleared is not likely to be at variance with this principle as it is not expected to cause further land degradation and the area to be cleared is proposed to be developed around an existing structure.
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.	The area to be cleared is not likely to be at variance with this principle as the area is proposed to be developed around an existing recreation structure and is surrounded by residential housing.
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.	The area to be cleared is not likely to be at variance with this principle as no surface water courses were identified during the August 2020 survey by Natural Area botanists.
J	Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding.	<p>The area to be cleared is not likely to be at variance with this principle:</p> <ul style="list-style-type: none"> <li>▪ The area proposed to be cleared is located around an existing structure and is not expected to change or exacerbate the incidence of flooding</li> </ul>

## 6.0 References

Bureau of Meteorology, (2020), *Climate statistics for Australian Locations*. Retrieved August 2020 from: <http://www.bom.gov.au/climate/averages/>

Department of Biodiversity, Conservation and Attractions, (2019), *Conservation Codes*, accessed September 2020 via: <https://www.dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/Listings/Conservation%20code%20definitions.pdf>.

Department of Biodiversity, Conservation and Attractions, (2020a), *FloraBase*, accessed August 2020 from: <https://florabase.dpaw.wa.gov.au/>.

Department of Biodiversity, Conservation and Attractions, (2020b), *NatureMap Report, 5 km search buffer area*. Retrieved in August 2020 from <http://naturemap.dpaw.wa.gov.au/default.aspx>.

Department of Biodiversity, Conservation and Attractions (2020c), *Threatened and Priority flora, fauna and ecological community database* searches, personal communication.

Department of Agriculture, Water, and the Environment, (2020a), *Threatened species under the EPBC Act*, viewed September 2020 from: <https://www.environment.gov.au/biodiversity/threatened/species>.

Department of Agriculture, Water and the Environment, (2020b), *Protected Matters Search Tool Report*. August 2020 from: <https://www.environment.gov.au/epbc/protected-matters-search-tool>.

Department of Primary Industries and Regional Development, (2020), *NRInfo: Soils and Contours*, viewed August 2020 from: <https://www.agric.wa.gov.au/resource-assessment/nrinfo-western-australia>.

*Environment Protection and Biodiversity Conservation Act 1999* (Cwlth).

Environmental Protection Authority, (2016), *EPA Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment*, Environmental Protection Authority, Perth Western Australia

Government of Western Australian, (2000), *Bush Forever, Volume 2*, Government of Western Australia, Perth, Western Australia.

Threatened Species Scientific Committee, (2016). *Environment Protection and Biodiversity Conservation Act 1999 Approved Conservation Advice for the Banksia Woodlands of the Swan Coastal Plain ecological community*. Retrieved April 2020 from <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf>.

Williams, K., and Mitchell, D., (2001), *Jarrah Forest 1 (JF1 - Northern Jarrah Forest subregion)*, accessed August 2020 via [https://www.dpaw.wa.gov.au/images/documents/about/science/projects/waaudit/jarrah\\_forest01\\_p369-381.pdf](https://www.dpaw.wa.gov.au/images/documents/about/science/projects/waaudit/jarrah_forest01_p369-381.pdf)



Western Australian Local Government Association (WALGA), (2020), *Environmental Planning Tool – Fauna Habitat*, accessed August 2020 from: <https://walga.asn.au/Subscription-Services/Environmental-Planning-Tool.aspx>.

## **Appendix 1: NatureMap Report (5 km buffer)**

# NatureMap Species Report

Created By Guest user on 10/07/2020

Current Names Only Yes

Core Datasets Only Yes

Method 'By Circle'

Centre 116° 02' 37" E, 32° 00' 03" S

Buffer 5km

Group By Species Group

Species Group	Species	Records
Amphibian	9	80
Bird	144	7535
Bryopsid (Moss)	33	52
Dicotyledon	572	2116
Fish	2	3
Fungus	22	45
Gymnosperm	1	4
Hepatic (Liverwort)	2	2
Invertebrate	49	164
Lichen	5	6
Mammal	18	338
Monocotyledon	270	764
Pteridophyte (Fern)	8	14
Reptile	41	251
Slime Mould	2	3
<b>TOTAL</b>	<b>1178</b>	<b>11377</b>

Name ID Species Name

Naturalised

Conservation Code

<sup>1</sup>Endemic To Query Area

## Amphibian

1. 25398 *Crinia georgiana* (Quacking Frog)
2. 25399 *Crinia glauerti* (Clicking Frog)
3. 25400 *Crinia insignifera* (Squelching Froglet)
4. 25401 *Crinia pseudinsignifera* (Bleating Froglet)
5. 25409 *Heleioporus barycragus* (Hooting Frog)
6. 25410 *Heleioporus eyrei* (Moaning Frog)
7. 25415 *Limnodynastes dorsalis* (Western Banjo Frog)
8. 25378 *Litoria adelaidensis* (Slender Tree Frog)
9. 25433 *Pseudophryne guentheri* (Crawling Toadlet)

## Bird

10. 24559 *Acanthagenys rufogularis* (Spiny-cheeked Honeyeater)
11. 24260 *Acanthiza apicalis* (Broad-tailed Thornbill, Inland Thornbill)
12. 24261 *Acanthiza chrysorrhoa* (Yellow-rumped Thornbill)
13. 24262 *Acanthiza inornata* (Western Thornbill)
14. 24265 *Acanthiza uropygialis* (Chestnut-rumped Thornbill)
15. 24560 *Acanthorhynchus superciliosus* (Western Spinebill)
16. 25535 *Accipiter cirrocephalus* (Collared Sparrowhawk)
17. 25536 *Accipiter fasciatus* (Brown Goshawk)
18. 24282 *Accipiter fasciatus* subsp. *fasciatus* (Brown Goshawk)
19. 25755 *Acrocephalus australis* (Australian Reed Warbler)
20. 25544 *Aegotheles cristatus* (Australian Owlet-nightjar)
21. 24312 *Anas gracilis* (Grey Teal)
22. 24313 *Anas platyrhynchos* (Mallard)
23. 24315 *Anas rhynchotis* (Australasian Shoveler)
24. 24316 *Anas superciliosa* (Pacific Black Duck)
25. 47414 *Anhinga novaehollandiae* (Australasian Darter)
26. 24561 *Anthochaera carunculata* (Red Wattlebird)
27. 24562 *Anthochaera lunulata* (Western Little Wattlebird)
28. 24285 *Aquila audax* (Wedge-tailed Eagle)
29. 24340 *Ardea novaehollandiae* (White-faced Heron)
30. 24341 *Ardea pacifica* (White-necked Heron)
31. 25566 *Artamus cinereus* (Black-faced Woodswallow)
32. 24353 *Artamus cyanopterus* (Dusky Woodswallow)
33. 24356 *Artamus personatus* (Masked Woodswallow)

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
34.	<i>Barnardius zonarius</i>			
35.	25713 <i>Cacatua galerita</i> (Sulphur-crested Cockatoo)			
36.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
37.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
38.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
39.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
40.	25717 <i>Calyptrorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
41.	24731 <i>Calyptrorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black Cockatoo)		T	
42.	24733 <i>Calyptrorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		T	
43.	24734 <i>Calyptrorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
44.	48400 <i>Calyptrorhynchus</i> sp. (white-tailed black cockatoo)		T	
45.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
46.	24432 <i>Chrysococcyx lucidus</i> subsp. <i>plagosus</i> (Shining Bronze Cuckoo)			
47.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
48.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
49.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
50.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
51.	24416 <i>Corvus bennetti</i> (Little Crow)			
52.	25592 <i>Corvus coronoides</i> (Australian Raven)			
53.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
54.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
55.	24422 <i>Cracticus tibicen</i> subsp. <i>dorsalis</i> (White-backed Magpie)			
56.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
57.	24322 <i>Cygnus atratus</i> (Black Swan)			
58.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
59.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
60.	24606 <i>Daphoenositta chrysoptera</i> subsp. <i>pileata</i> (Varied Sittella, Black-capped Sittella)			
61.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
62.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
63.	<i>Egretta garzetta</i>			
64.	<i>Egretta novaehollandiae</i>			
65.	<i>Elanus axillaris</i>			
66.	47937 <i>Elseyornis melanops</i> (Black-fronted Dotterel)			
67.	<i>Eolophus roseicapillus</i>			
68.	24651 <i>Eopsaltria australis</i> subsp. <i>griseogularis</i> (Western Yellow Robin)			
69.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
70.	25621 <i>Falco berigora</i> (Brown Falcon)			
71.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
72.	25623 <i>Falco longipennis</i> (Australian Hobby)			
73.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
74.	25727 <i>Fulica atra</i> (Eurasian Coot)			
75.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
76.	24763 <i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (Dusky Moorhen)			
77.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
78.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
79.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
80.	24295 <i>Haliastur spheurnus</i> (Whistling Kite)			
81.	24296 <i>Hamirostra isura</i> (Square-tailed Kite)			
82.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
83.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
84.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
85.	25659 <i>Lichenostomus leucotis</i> (White-eared Honeyeater)			
86.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
87.	<i>Lophoictinia isura</i>			
88.	25650 <i>Malurus elegans</i> (Red-winged Fairy-wren)			
89.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
90.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
91.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
92.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
93.	<i>Microcarbo melanoleucos</i>			
94.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
95.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
96.	25686 <i>Neochmia temporalis</i> (Red-browed Finch)	Y		
97.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
98.	25747 <i>Ninox connivens</i> (Barking Owl)			
99.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
100.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
101.	24328 <i>Oxyura australis</i> (Blue-billed Duck)			

P4

	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
102.	25680	<i>Pachycephala rufiventris</i> (Rufous Whistler)			
103.	24624	<i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
104.	25681	<i>Pardalotus punctatus</i> (Spotted Pardalote)			
105.	24625	<i>Pardalotus punctatus</i> subsp. <i>punctatus</i> (Spotted Pardalote)			
106.	25682	<i>Pardalotus striatus</i> (Striated Pardalote)			
107.	24630	<i>Pardalotus striatus</i> subsp. <i>westraliensis</i> (Striated Pardalote)			
108.	48060	<i>Petrochelidon ariel</i> (Fairy Martin)			
109.	48061	<i>Petrochelidon nigricans</i> (Tree Martin)			
110.	48066	<i>Petroica boodang</i> (Scarlet Robin)			
111.	24659	<i>Petroica goodenovii</i> (Red-capped Robin)			
112.	25697	<i>Phalacrocorax carbo</i> (Great Cormorant)			
113.	25698	<i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
114.	24667	<i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
115.	25699	<i>Phalacrocorax varius</i> (Pied Cormorant)			
116.	24409	<i>Phaps chalcoptera</i> (Common Bronzewing)			
117.	25587	<i>Phaps elegans</i> (Brush Bronzewing)			
118.	48071	<i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
119.	24596	<i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
120.	24841	<i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
121.	25720	<i>Platycercus icterotis</i> (Western Rosella)			
122.	24747	<i>Platycercus spurius</i> (Red-capped Parrot)			
123.	25721	<i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
124.	25703	<i>Podargus strigoides</i> (Tawny Frogmouth)			
125.	25704	<i>Podiceps cristatus</i> (Great Crested Grebe)			
126.	24681	<i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
127.	24683	<i>Pomatostomus superciliosus</i> (White-browed Babbler)			
128.	25731	<i>Porphyrio porphyrio</i> (Purple Swamphen)			
129.	24767	<i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
130.	24771	<i>Porzana tabuensis</i> (Spotless Crane)			
131.		<i>Purpureicephalus spurius</i>			
132.	48096	<i>Rhipidura albiscapa</i> (Grey Fantail)			
133.	25614	<i>Rhipidura leucophrys</i> (Willie Wagtail)			
134.	25534	<i>Sericornis frontalis</i> (White-browed Scrubwren)			
135.	30948	<i>Smicornis brevirostris</i> (Weebill)			
136.	24645	<i>Stagonopleura oculata</i> (Red-eared Firetail)			
137.	25655	<i>Stipiturus malachurus</i> (Southern Emu-wren)			
138.	25597	<i>Strepera versicolor</i> (Grey Currawong)			
139.	25589	<i>Streptopelia chinensis</i> (Spotted Turtle-Dove)	Y		
140.	25590	<i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
141.	25705	<i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
142.	24682	<i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
143.	24331	<i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
144.	24845	<i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
145.	25549	<i>Todiramphus sanctus</i> (Sacred Kingfisher)			
146.	24309	<i>Todiramphus sanctus</i> subsp. <i>sanctus</i> (Sacred Kingfisher)			
147.	48141	<i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
148.	25723	<i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
149.	48147	<i>Turnix varius</i> (Painted Button-quail)			
150.	24851	<i>Turnix velox</i> (Little Button-quail)			
151.	24852	<i>Tyto alba</i> subsp. <i>delicatula</i> (Barn Owl)			
152.	25764	<i>Tyto novaehollandiae</i> (Masked Owl)			
153.	25765	<i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

#### Bryopsid (Moss)

154.	32314	<i>Archidium rehmannii</i>			
155.	32315	<i>Barbula calycina</i>			
156.	32321	<i>Bartramia breutellii</i>			
157.	32323	<i>Bartramia pseudostricta</i>			
158.	32461	<i>Campylopus bicolor</i> var. <i>bicolor</i>			
159.	32338	<i>Campylopus introflexus</i>	Y		
160.	32345	<i>Didymodon australasiae</i>			
161.	32347	<i>Ditrichum difficile</i>			
162.	32351	<i>Eccremidium pulchellum</i>			
163.	32353	<i>Entosthodon apophysatus</i>			
164.	32354	<i>Entosthodon productus</i>			
165.	32367	<i>Fissidens megalotis</i>			
166.	32368	<i>Fissidens taylorii</i>			
167.	32469	<i>Fissidens taylorii</i> var. <i>taylorii</i>			
168.	32370	<i>Funaria hygrometrica</i>			
169.	32374	<i>Gemmabryum cheelii</i>			

	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
170.	32375	<i>Gemmabryum chrysoneuron</i>			
171.	32379	<i>Gemmabryum inaequale</i>			
172.	32380	<i>Gemmabryum pachythecum</i>			
173.	32381	<i>Gemmabryum preissianum</i>			
174.	32383	<i>Gemmabryum sullivanii</i>			
175.	32384	<i>Gigaspermum repens</i>			
176.	32409	<i>Philonotis australiensis</i>			
177.	32478	<i>Pleuridium nervosum</i> var. <i>nervosum</i>			
178.	44608	<i>Rosulabryum billardieri</i>			
179.	32426	<i>Rosulabryum campylothecium</i>			
180.	32432	<i>Schizymenium bryoides</i>			
181.	32433	<i>Sematophyllum homomallum</i>			
182.	32437	<i>Syntrichia antarctica</i>			
183.	32438	<i>Syntrichia pagorum</i>			
184.	32441	<i>Tetrapterum cylindricum</i>			
185.		<i>Tortula recurvata</i>			
186.	32456	<i>Weissia rutilans</i>			

## Dicotyledon

187.	15429	<i>Acacia alata</i> var. <i>alata</i>			
188.	3219	<i>Acacia anomala</i> (Grass Wattle)		T	
189.	3220	<i>Acacia aphylla</i> (Leafless Rock Wattle)		T	
190.	15466	<i>Acacia applanata</i>			
191.	3233	<i>Acacia barbinervis</i>			
192.	15469	<i>Acacia barbinervis</i> subsp. <i>barbinervis</i>			
193.	17858	<i>Acacia dealbata</i>	Y		
194.	3294	<i>Acacia dentifera</i>			
195.	11192	<i>Acacia drummondii</i> subsp. <i>elegans</i>			
196.	3331	<i>Acacia extensa</i> (Wiry Wattle)			
197.	3382	<i>Acacia incrassata</i>			
198.	11611	<i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
199.	3454	<i>Acacia nervosa</i> (Rib Wattle)			
200.	3464	<i>Acacia obovata</i>			
201.	3469	<i>Acacia oncinophylla</i>			Y
202.	14131	<i>Acacia oncinophylla</i> subsp. <i>patulifolia</i>		P4	
203.		<i>Acacia parramattensis</i>			
204.	3502	<i>Acacia pulchella</i> (Prickly Moses)			
205.	15481	<i>Acacia pulchella</i> var. <i>glaberrima</i>			
206.	15483	<i>Acacia pulchella</i> var. <i>pulchella</i>			
207.	3504	<i>Acacia pycnantha</i> (Golden Wattle)	Y		
208.	3527	<i>Acacia saligna</i> (Orange Wattle, Kudjong)			
209.	30033	<i>Acacia saligna</i> subsp. <i>lindleyi</i>			
210.	30034	<i>Acacia saligna</i> subsp. <i>pruinescens</i>			
211.	3541	<i>Acacia sessilis</i>			
212.	3574	<i>Acacia teretifolia</i>			
213.	3602	<i>Acacia willdenowiana</i> (Grass Wattle)			
214.	6205	<i>Actinotus leucocephalus</i> (Flannel Flower)			
215.	14970	<i>Adenanthos barbiger</i>			
216.	11837	<i>Adenanthos cygnorum</i> subsp. <i>cygnorum</i> (Common Woollybush)			
217.	18396	<i>Aeonium haworthii</i>	Y		
218.	5316	<i>Agonis flexuosa</i> (Peppermint, Wonil)			
219.	1728	<i>Allocasuarina fraseriana</i> (Sheoak, Kondil)			
220.	1732	<i>Allocasuarina humilis</i> (Dwarf Sheoak)			
221.	1734	<i>Allocasuarina microstachya</i>			
222.	2648	<i>Alternanthera denticulata</i> (Lesser Joyweed)			
223.	2383	<i>Amyema preissii</i> (Wireleaf Mistletoe)			
224.	6300	<i>Andersonia aristata</i> (Rice Flower)			
225.	6314	<i>Andersonia lehmanniana</i>			
226.	11471	<i>Andersonia lehmanniana</i> subsp. <i>lehmanniana</i>			
227.	6946	<i>Anthocercis gracilis</i> (Slender Tailflower)		T	
228.	3686	<i>Aotus cordifolia</i>			
229.	28288	<i>Artemisia arborescens</i> (Silver Wormwood)	Y		
230.	20283	<i>Astartea scoparia</i> (Common Astartea)			
231.	7849	<i>Asteridea gracilis</i>		P3	
232.	4400	<i>Asterolasia pallida</i>			
233.	6323	<i>Astroloma ciliatum</i> (Candle Cranberry)			
234.	6327	<i>Astroloma foliosum</i> (Candle Cranberry)			
235.	6334	<i>Astroloma pallidum</i> (Kick Bush)			
236.	6337	<i>Astroloma stomarrhena</i> (Red Swamp Cranberry)			
237.	36441	<i>Babingtonia camphorosmae</i> (Camphor Myrtle)			
238.	45403	<i>Babingtonia pelloeae</i> (Pelloe's Babingtonia)			



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
239.	32682 <i>Banksia armata</i> var. <i>armata</i>			
240.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
241.	32678 <i>Banksia bipinnatifida</i> subsp. <i>bipinnatifida</i>			
242.	32580 <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>			
243.	32577 <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>mellicula</i>			
244.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
245.	1822 <i>Banksia ilicifolia</i> (Holly-leaved Banksia)			
246.	1823 <i>Banksia incana</i>			
247.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
248.	32211 <i>Banksia mimica</i> (Summer Honeypot)		T	
249.	32138 <i>Banksia pteridifolia</i> subsp. <i>vernalis</i>		P3	
250.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
251.	32045 <i>Banksia squarrosa</i> subsp. <i>squarrosa</i>			
252.	1852 <i>Banksia telmatiaea</i> (Swamp Fox Banksia)			
253.	32031 <i>Banksia vestita</i> (Summer Dryandra)			
254.	1855 <i>Banksia victoriae</i> (Woolly Orange Banksia)			
255.	5387 <i>Beaufortia macrostemon</i> (Darling Range Beaufortia)			
256.	5390 <i>Beaufortia purpurea</i> (Purple Beaufortia)		P3	
257.	5393 <i>Beaufortia squarrosa</i> (Sand Beaufortia, Sand Bottlebrush, Puno)			
258.	3157 <i>Billardiera floribunda</i> (White-flowered Billardiera)			
259.	25788 <i>Billardiera fraseri</i> (Elegant Pronaya)			
260.	25798 <i>Billardiera fusiformis</i> (Australian Bluebell)			
261.	11503 <i>Boronia crenulata</i> subsp. <i>crenulata</i> var. <i>crenulata</i>			
262.	4414 <i>Boronia cymosa</i> (Granite Boronia)			
263.	16618 <i>Boronia humifusa</i>		P1	
264.	4432 <i>Boronia ovata</i>			
265.	4438 <i>Boronia ramosa</i>			
266.	11381 <i>Boronia ramosa</i> subsp. <i>anethifolia</i>			
267.	11564 <i>Boronia ramosa</i> subsp. <i>ramosa</i>			
268.	4444 <i>Boronia tenuis</i> (Blue Boronia)		P4	
269.	14396 <i>Bossiaea aquifolium</i> subsp. <i>aquifolium</i>			
270.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
271.	3714 <i>Bossiaea ornata</i> (Broad Leaved Brown Pea)			
272.	6341 <i>Brachyloma preissii</i> (Globe Heath)			
273.	7878 <i>Brachyscome iberidifolia</i>			
274.	2993 <i>Brassica fruticulosa</i> (Twiggy Turnip)	Y		
275.	3178 <i>Byblis gigantea</i> (Rainbow Plant)		P3	
276.	5426 <i>Calothamnus quadrifidus</i> (One-sided Bottlebrush, Kwojdjard)			
277.	35816 <i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>			
278.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
279.	5431 <i>Calothamnus torulosus</i>			
280.	5437 <i>Calytrix acutifolia</i>			
281.	5460 <i>Calytrix fraseri</i> (Pink Summer Calytrix)			
282.	5461 <i>Calytrix glutinosa</i>			
283.	5485 <i>Calytrix variabilis</i>			
284.	19713 <i>Campsis radicans</i>	Y		
285.	2951 <i>Cassytha flava</i> (Dodder Laurel)			
286.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
287.	11501 <i>Cassytha glabella</i> forma <i>casuarinae</i>			
288.	11211 <i>Cassytha glabella</i> forma <i>dispar</i>			
289.	2956 <i>Cassytha pomiformis</i> (Dodder Laurel)			
290.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
291.	11242 <i>Cassytha racemosa</i> forma <i>pilosa</i>			
292.	11799 <i>Cassytha racemosa</i> forma <i>racemosa</i>			
293.	7916 <i>Centaurea melitensis</i> (Maltese Cockspur, Malta Thistle)	Y		
294.	6539 <i>Centaureum erythraea</i> (Common Centaury)	Y		
295.	6542 <i>Centaureum tenuiflorum</i>	Y		
296.	<i>Centratherum punctatum</i>			
297.	5498 <i>Chamelaucium uncinatum</i> (Geraldton Wax)			
298.	8971 <i>Chorizema cordatum</i>			
299.	3753 <i>Chorizema dicksonii</i> (Yellow-eyed Flame Pea)			
300.	11900 <i>Chrysanthemoides monilifera</i> subsp. <i>monilifera</i>	Y		
301.	2929 <i>Clematis pubescens</i> (Common Clematis)			
302.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
303.	4551 <i>Comesperma ciliatum</i>			
304.	4564 <i>Comesperma virgatum</i> (Milkwort)			
305.	48634 <i>Commersonia corniculata</i>			
306.	16853 <i>Conospermum capitatum</i> subsp. <i>glabratum</i>			
307.	1875 <i>Conospermum huegelii</i> (Slender Smokebush)			
308.	13999 <i>Conospermum undulatum</i>		T	

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
309.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
310.	6349 <i>Conostephium preissii</i>			
311.	5502 <i>Conothamnus trinervis</i>			
312.	20074 <i>Conyza sumatrensis</i>	Y		
313.	17104 <i>Corymbia calophylla</i> (Marri)			
314.	18320 <i>Cotoneaster pannosus</i>	Y		
315.	13354 <i>Craspedia variabilis</i>			
316.	17701 <i>Crassula closiana</i>			
317.	11563 <i>Crassula colorata</i> var. <i>colorata</i>			
318.	18397 <i>Crassula tetragona</i> subsp. <i>robusta</i>	Y		
319.	7953 <i>Crepis foetida</i> (Foetid Hawksbeard)	Y		
320.	29054 <i>Crepis foetida</i> subsp. <i>foetida</i> (Stinking Hawksbeard)	Y		
321.	35838 <i>Cristonia biloba</i> subsp. <i>biloba</i>			
322.	13470 <i>Cryptandra arbutiflora</i> var. <i>arbutiflora</i>			
323.	4804 <i>Cryptandra nutans</i>			
324.	7420 <i>Dampiera alata</i> (Winged-stem Dampiera)			
325.	7428 <i>Dampiera coronata</i> (Wedge-leaved Dampiera)			
326.	7454 <i>Dampiera linearis</i> (Common Dampiera)			
327.	5505 <i>Darwinia apiculata</i> (Scarp Darwinia)		T	
328.	5508 <i>Darwinia citridora</i> (Lemon-scented Darwinia)			
329.	18193 <i>Darwinia thymoides</i> subsp. <i>thymoides</i>			
330.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
331.	3793 <i>Daviesia angulata</i>			
332.	3799 <i>Daviesia cordata</i> (Bookleaf)			
333.	3805 <i>Daviesia decurrens</i> (Prickly Bitter-pea)			
334.	19747 <i>Daviesia decurrens</i> subsp. <i>decurrens</i>			
335.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
336.	11879 <i>Daviesia hakeoides</i> subsp. <i>hakeoides</i>			
337.	3815 <i>Daviesia horrida</i> (Prickly Bitter-pea)			
338.	3819 <i>Daviesia longifolia</i>			
339.	3824 <i>Daviesia nudiflora</i>			
340.	3832 <i>Daviesia physodes</i>			
341.	3834 <i>Daviesia polyphylla</i>			
342.	3835 <i>Daviesia preissii</i>			
343.	3839 <i>Daviesia rhombifolia</i>			
344.	3845 <i>Daviesia triflora</i>			
345.	18589 <i>Diplopeltis huegelii</i> subsp. <i>lehmannii</i>			
346.	3867 <i>Dipogon lignosus</i> (Dolichos Pea)	Y		
347.	13204 <i>Drosera callistos</i>			
348.	48724 <i>Drosera collina</i>			
349.	48751 <i>Drosera drummondii</i>			
350.	3095 <i>Drosera erythrorhiza</i> (Red Ink Sundew)			
351.	3097 <i>Drosera gigantea</i> (Giant Sundew)			
352.	3098 <i>Drosera glanduligera</i> (Pimpernel Sundew)			
353.	48768 <i>Drosera hirsuta</i>			
354.	13197 <i>Drosera hyperostigma</i>			
355.	3106 <i>Drosera macrantha</i> (Bridal Rainbow)			
356.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
357.	3110 <i>Drosera microphylla</i> (Golden Rainbow)			
358.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
359.	3123 <i>Drosera platystigma</i> (Black-eyed Sundew)			
360.	29178 <i>Drosera porrecta</i>			
361.	3124 <i>Drosera pulchella</i> (Pretty Sundew)			
362.	3125 <i>Drosera pycnoblata</i> (Pearly Sundew)			
363.	8911 <i>Drosera rosulata</i>			
364.	49090 <i>Drosera</i> sp. Branched styles (S.C. Coffey 193)			
365.	3131 <i>Drosera stolonifera</i> (Leafy Sundew)			
366.	3135 <i>Drosera zonaria</i> (Painted Sundew)			
367.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)			
368.	5187 <i>Elatine gratioloides</i> (Waterwort)			
369.	5540 <i>Eremaea fimbriata</i>			
370.	5541 <i>Eremaea pauciflora</i>			
371.	14104 <i>Eremaea pauciflora</i> var. <i>pauciflora</i>			
372.	4335 <i>Erodium cygnorum</i> (Blue Heronsbill)			
373.	15446 <i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			
374.	18299 <i>Erythrina x sykesii</i>	Y		
375.	17359 <i>Eucalyptus botryoides</i>	Y		
376.	5580 <i>Eucalyptus camaldulensis</i> (River Gum, Yabalinyba)			
377.	5615 <i>Eucalyptus decipiens</i> (Limestone Marlock, Moit)			
378.	48440 <i>Eucalyptus grandis</i>	Y		

	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
379.	5688	<i>Eucalyptus laeliae</i> (Darling Range Ghost Gum)			
380.	5708	<i>Eucalyptus marginata</i> (Jarrah, Djara)			
381.	13547	<i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah)			
382.	13548	<i>Eucalyptus marginata</i> subsp. <i>thalassica</i> (Blue-leaved Jarrah)			
383.	5763	<i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
384.	5790	<i>Eucalyptus todtiana</i> (Coastal Blackbutt)			
385.	5797	<i>Eucalyptus wandoo</i> (Wandoo, Wondou)			
386.	12906	<i>Eucalyptus wandoo</i> subsp. <i>wandoo</i>			
387.	3872	<i>Euchilopsis linearis</i> (Swamp Pea)			
388.	3880	<i>Eutaxia virgata</i>			
389.	1747	<i>Ficus carica</i> (Common Fig)	Y		
390.	2969	<i>Fumaria capreolata</i> (Whiteflower Fumitory)	Y		
391.	7321	<i>Galium divaricatum</i>	Y		
392.	3887	<i>Gastrolobium acutum</i>			
393.	20475	<i>Gastrolobium capitatum</i>			
394.	20513	<i>Gastrolobium dilatatum</i>			
395.	3899	<i>Gastrolobium epacridoides</i>			
396.	20483	<i>Gastrolobium linearifolium</i>			
397.	3912	<i>Gastrolobium oxylobioides</i> (Champion Bay Poison)			
398.	3923	<i>Gastrolobium spathulatum</i> (Poison Bush)			
399.	3936	<i>Genista linifolia</i> (Flaxleaf Broom)	Y		
400.	2835	<i>Glinus lotoides</i> (Hairy Carpet Weed)			
401.	6143	<i>Glischrocaryon aureum</i> (Common Popflower)			
402.	6587	<i>Gomphocarpus fruticosus</i> (Narrowleaf Cottonbush)	Y		
403.	11051	<i>Gomphocarpus physocarpus</i>	Y		
404.	3945	<i>Gompholobium aristatum</i>			
405.	10909	<i>Gompholobium confertum</i>			
406.	3950	<i>Gompholobium knightianum</i>			
407.	3951	<i>Gompholobium marginatum</i>			
408.	3954	<i>Gompholobium polymorphum</i>			
409.	3955	<i>Gompholobium preissii</i>			
410.	3956	<i>Gompholobium shuttleworthii</i>			
411.	3957	<i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
412.	16746	<i>Gonocarpus benthamii</i> subsp. <i>benthamii</i>			
413.	6149	<i>Gonocarpus cordiger</i>			
414.	29362	<i>Goodenia coerulea</i>			
415.	12520	<i>Goodenia fasciculata</i>			
416.	19286	<i>Goodenia pulchella</i> subsp. <i>Coastal Plain A (M. Hislop 634)</i>			
417.	1964	<i>Grevillea bipinnatifida</i> (Fuchsia Grevillea)			
418.	19628	<i>Grevillea bipinnatifida</i> subsp. <i>bipinnatifida</i>			
419.	1997	<i>Grevillea endlicheriana</i> (Spindly Grevillea)			
420.	2032	<i>Grevillea leucopteris</i> (White Plume Grevillea)			
421.	13450	<i>Grevillea manglesii</i> subsp. <i>manglesii</i>			
422.	2066	<i>Grevillea pilulifera</i> (Woolly-flowered Grevillea)			
423.	15839	<i>Grevillea preissii</i> subsp. <i>preissii</i>			
424.	2080	<i>Grevillea quercifolia</i> (Oak-leaf Grevillea)			
425.	2101	<i>Grevillea synapheae</i> (Catkin Grevillea)			
426.	14421	<i>Grevillea synapheae</i> subsp. <i>synapheae</i>			
427.	2107	<i>Grevillea thelemanniana</i> (Spider Net Grevillea)		T	
428.	2122	<i>Grevillea wilsonii</i> (Native Fuchsia)			
429.	5014	<i>Guichenotia sarotes</i>			
430.	2128	<i>Hakea amplexicaulis</i> (Prickly Hakea)			
431.	2136	<i>Hakea candolleana</i>			
432.	2143	<i>Hakea conchifolia</i> (Shell-leaved Hakea)			
433.	2149	<i>Hakea cristata</i> (Snail Hakea)			
434.	2152	<i>Hakea cyclocarpa</i> (Ramshorn)			
435.	2158	<i>Hakea erinacea</i> (Hedge-hog Hakea)			
436.	2166	<i>Hakea incrassata</i> (Marble Hakea)			
437.	2171	<i>Hakea laurina</i> (Pincushion Hakea, Kodjet)			
438.	2175	<i>Hakea lissocarpha</i> (Honey Bush)			
439.	2185	<i>Hakea myrtoidea</i> (Myrtle Hakea)			
440.	2197	<i>Hakea prostrata</i> (Harsh Hakea)			
441.	2203	<i>Hakea ruscifolia</i> (Candle Hakea)			
442.	31793	<i>Hakea</i> sp. <i>Eastern coastal plain (G.J. Keighery 8014)</i>			
443.	2206	<i>Hakea stenocarpa</i> (Narrow-fruited Hakea)			
444.	2212	<i>Hakea sulcata</i> (Furrowed Hakea)			
445.	2214	<i>Hakea trifurcata</i> (Two-leaf Hakea)			
446.	2215	<i>Hakea undulata</i> (Wavy-leaved Hakea)			
447.	6686	<i>Halgania corymbosa</i>		P3	
448.	3961	<i>Hardenbergia comptoniana</i> (Native Wisteria)			

	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
449.	6838	<i>Hemiandra linearis</i> (Speckled Snakebush)			
450.	6839	<i>Hemiandra pungens</i> (Snakebush)			
451.	6856	<i>Hemigenia incana</i> (Silky Hemigenia)			
452.	29632	<i>Hemigenia parviflora</i>			
453.	41020	<i>Hemiphora bartlingii</i> (Woolly Dragon)			
454.	5108	<i>Hibbertia acerosa</i> (Needle Leaved Guinea Flower)			
455.	5112	<i>Hibbertia aurea</i>			
456.	5114	<i>Hibbertia commutata</i>			
457.	20051	<i>Hibbertia diamesogenos</i>			
458.	19778	<i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>			
459.	5134	<i>Hibbertia huegelii</i>			
460.	5135	<i>Hibbertia hypericoides</i> (Yellow Buttercups)			
461.	45534	<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			
462.	5139	<i>Hibbertia lasiopus</i> (Large Hibbertia)			
463.	5146	<i>Hibbertia montana</i>		P4	
464.	5148	<i>Hibbertia mylnei</i>			
465.	5152	<i>Hibbertia ovata</i>			
466.	5155	<i>Hibbertia pilosa</i> (Hairy Guinea Flower)			
467.	5169	<i>Hibbertia serrata</i> (Serrate Leaved Guinea Flower)			
468.		<i>Hibbertia</i> sp.			
469.	11481	<i>Hibbertia spicata</i> subsp. <i>spicata</i>			
470.	48381	<i>Hibbertia striata</i>			
471.	5173	<i>Hibbertia subvaginata</i>			
472.	6222	<i>Homalosciadium homalocarpum</i>			
473.	3964	<i>Hovea chorizemifolia</i> (Holly-leaved Hovea)			
474.	3966	<i>Hovea pungens</i> (Devil's Pins, Puyenak)			
475.	3968	<i>Hovea trisperma</i> (Common Hovea)			
476.	18296	<i>Humulus lupulus</i>	Y		
477.	12741	<i>Hyalosperma cotula</i>			
478.	5216	<i>Hybanthus calycinus</i> (Wild Violet)			
479.	12007	<i>Hybanthus floribundus</i> subsp. <i>floribundus</i>			
480.	6226	<i>Hydrocotyle callicarpa</i> (Small Pennywort)			
481.	11074	<i>Hydrocotyle striata</i>		P1	
482.	5817	<i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
483.	35074	<i>Hypocalymma angustifolium</i> subsp. <i>Dandaragan plateau</i> (S. Patrick 702A)			
484.	5825	<i>Hypocalymma robustum</i> (Swan River Myrtle)			
485.	8086	<i>Hypochoeris glabra</i> (Smooth Catsear)	Y		
486.	9352	<i>Hypochoeris radicata</i> (Flat Weed, Cats-ear)	Y		
487.	2221	<i>Isopogon asper</i>			
488.	2227	<i>Isopogon divergens</i> (Spreading Coneflower)			
489.	29775	<i>Isopogon drummondii</i>		P3	
490.	2229	<i>Isopogon dubius</i> (Pincushion Coneflower)			
491.	2237	<i>Isopogon sphaerocephalus</i> (Drumstick Isopogon)			
492.	7396	<i>Isotoma hypocrateriformis</i> (Woodbridge Poison)			
493.	3997	<i>Jacksonia alata</i>			
494.	3998	<i>Jacksonia angulata</i>			
495.	4010	<i>Jacksonia floribunda</i> (Holly Pea)			
496.	4012	<i>Jacksonia furcellata</i> (Grey Stinkwood)			
497.	20462	<i>Jacksonia gracillima</i>		P3	
498.	4018	<i>Jacksonia lehmannii</i>			
499.	4025	<i>Jacksonia restioides</i>			
500.	4029	<i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
501.	4037	<i>Kennedia coccinea</i> (Coral Vine)			
502.	4044	<i>Kennedia prostrata</i> (Scarlet Runner)			
503.	4045	<i>Kennedia stirlingii</i> (Bushy Kennedia)			
504.	15498	<i>Kunzea glabrescens</i> (Spearwood)			
505.	5835	<i>Kunzea micrantha</i>			
506.	11289	<i>Labichea lanceolata</i> subsp. <i>lanceolata</i>			
507.	3669	<i>Labichea punctata</i> (Lance-leaved Cassia)			
508.	29046	<i>Lactuca serriola</i> forma <i>serriola</i>	Y		
509.	18585	<i>Lagenophora huegelii</i>			
510.	2249	<i>Lambertia multiflora</i> (Many-flowered Honeysuckle)			
511.	14083	<i>Lambertia multiflora</i> var. <i>darlingensis</i>			
512.	5025	<i>Lasiopetalum bracteatum</i> (Helena Velvet Bush)		P4	
513.	5034	<i>Lasiopetalum glabratum</i>			
514.	45081	<i>Lasiopetalum glutinosum</i> subsp. <i>glutinosum</i>		P3	
515.	4047	<i>Lathyrus tingitanus</i> (Tangier Pea)	Y		
516.	38324	<i>Lavandula dentata</i> var. <i>candicans</i>	Y		
517.	38323	<i>Lavandula stoechas</i> subsp. <i>stoechas</i>	Y		
518.	13284	<i>Lawrencella rosea</i>			

	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
519.	7568	<i>Lechenaultia biloba</i> (Blue Leschenaultia)			
520.	44490	<i>Leontodon rhagadioloides</i>	Y		
521.	2342	<i>Leptomeria cunninghamii</i>			
522.	5847	<i>Leptospermum erubescens</i> (Roadside Teatree)			
523.	5850	<i>Leptospermum laevigatum</i> (Coast Teatree)	Y		
524.	6367	<i>Leucopogon capitellatus</i>			
525.	6374	<i>Leucopogon conostephioides</i>			
526.	6416	<i>Leucopogon nutans</i> (Drooping Leucopogon)			
527.	6434	<i>Leucopogon polymorphus</i>			
528.	6436	<i>Leucopogon propinquus</i>			
529.	6439	<i>Leucopogon pulchellus</i> (Beard-heath)			
530.	6444	<i>Leucopogon sprengelioides</i>			
531.	40803	<i>Leucopogon squarrosus</i> subsp. <i>squarrosus</i>			
532.	6454	<i>Leucopogon verticillatus</i> (Tassel Flower)			
533.	7676	<i>Levenhookia pusilla</i> (Midget Stylewort)			
534.	7677	<i>Levenhookia stipitata</i> (Common Stylewort)			
535.	4362	<i>Linum marginale</i> (Wild Flax)			
536.	4363	<i>Linum trigynum</i> (French Flax)	Y		
537.	7406	<i>Lobelia rhombifolia</i> (Tufted Lobelia)			
538.	7407	<i>Lobelia rhytidosperra</i> (Wrinkled-seeded Lobelia)			
539.	7365	<i>Lonicera japonica</i> (Japanese Honeysuckle)	Y		
540.	8564	<i>Lotus subbiflorus</i>	Y		
541.	4063	<i>Lotus uliginosus</i> (Greater Lotus)	Y		
542.	36375	<i>Lysimachia arvensis</i> (Pimpernel)	Y		
543.	34736	<i>Lysinema pentapetalum</i>			
544.	5281	<i>Lythrum hyssopifolia</i> (Lesser Loosestrife)	Y		
545.	2838	<i>Macarthuria apetala</i>			
546.	2839	<i>Macarthuria australis</i>			
547.	19421	<i>Marianthus bicolor</i> (Painted Marianthus)			
548.	17637	<i>Marianthus candidus</i> (White Marianthus)			
549.	17636	<i>Marianthus coeruleopunctatus</i> (Blue-spotted Marianthus)			
550.	17635	<i>Marianthus drummondianus</i>			
551.	17633	<i>Marianthus erubescens</i>			
552.	4079	<i>Medicago polymorpha</i> (Burr Medic)	Y		
553.	4080	<i>Medicago sativa</i> (Alfalfa)	Y		
554.	19721	<i>Melaleuca armillaris</i>	Y		
555.	36296	<i>Melaleuca armillaris</i> subsp. <i>armillaris</i>	Y		
556.	13273	<i>Melaleuca incana</i> subsp. <i>incana</i>			
557.	5926	<i>Melaleuca lateritia</i> (Robin Redbreast Bush)			
558.	5943	<i>Melaleuca nesophila</i> (Mindiyed)			
559.	18394	<i>Melaleuca parviceps</i>			
560.	48990	<i>Melaleuca quinquenervia</i>	Y		
561.	5958	<i>Melaleuca radula</i> (Graceful Honey Myrtle)			
562.	5959	<i>Melaleuca raphiophylla</i> (Swamp Paperbark)			
563.	5961	<i>Melaleuca scabra</i> (Rough Honey Myrtle, Wurru Bush)			
564.	5983	<i>Melaleuca trichophylla</i>			
565.	5987	<i>Melaleuca viminea</i> (Mohan)			
566.	14344	<i>Millotia tenuifolia</i> var. <i>tenuifolia</i> (Soft Millotia)			
567.	4090	<i>Mirbelia dilatata</i> (Holly-leaved Mirbelia)			
568.	4100	<i>Mirbelia spinosa</i>			
569.	7085	<i>Misopates orontium</i> (Lesser Snapdragon)	Y		
570.	4662	<i>Monotaxis grandiflora</i> (Diamond of the Desert)			
571.	19585	<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>			
572.	2415	<i>Muehlenbeckia polybotrya</i>			
573.	2401	<i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
574.	2365	<i>Oxalis benthamiana</i>			
575.	2367	<i>Oxalis scalariformis</i>			
576.	8143	<i>Olearia paucidentata</i> (Autumn Scrub Daisy)			
577.	18254	<i>Opercularia apiciflora</i>			
578.	7346	<i>Opercularia echinocephala</i> (Bristly Headed Stink Weed)			
579.	7348	<i>Opercularia hispidula</i> (Hispid Stinkweed)			
580.	18255	<i>Opercularia vaginata</i> (Dog Weed)			
581.	46207	<i>Opuntia tomentosa</i>	Y		
582.	4113	<i>Ornithopus compressus</i> (Yellow Serradella)	Y		
583.	7122	<i>Orobancha minor</i> (Lesser Broomrape)	Y		
584.	4348	<i>Oxalis caprina</i>	Y		
585.	4349	<i>Oxalis corniculata</i> (Yellow Wood Sorrel)	Y		
586.	18331	<i>Oxalis debilis</i> var. <i>corymbosa</i> (Pink Shamrock)	Y		
587.	30375	<i>Oxalis exilis</i>			
588.	4352	<i>Oxalis glabra</i>	Y		

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
589.	4354 <i>Oxalis incarnata</i>	Y		
590.	4355 <i>Oxalis perennans</i>			
591.	4358 <i>Oxalis purpurea</i> (Largeflower Wood Sorrel)	Y		
592.	17114 <i>Paraserianthes lophantha</i> subsp. <i>lophantha</i>			
593.	7089 <i>Parentucella latifolia</i> (Common Bartsia)	Y		
594.	5225 <i>Passiflora filamentosa</i>	Y		
595.	10828 <i>Pavonia hastata</i>	Y		
596.	6245 <i>Pentapeltis peltigera</i>			
597.	16477 <i>Pericalymma ellipticum</i> var. <i>ellipticum</i>			
598.	16478 <i>Pericalymma ellipticum</i> var. <i>floridum</i>			
599.	13911 <i>Persicaria decipiens</i>			
600.	2255 <i>Persoonia angustiflora</i>			
601.	2262 <i>Persoonia elliptica</i> (Spreading Snottygobble)			
602.	2267 <i>Persoonia longifolia</i> (Snottygobble)			
603.	2284 <i>Petrophile biloba</i> (Granite Petrophile)			
604.	20391 <i>Petrophile juncifolia</i>			
605.	2299 <i>Petrophile linearis</i> (Pixie Mops)			
606.	2301 <i>Petrophile macrostachya</i>			
607.	2308 <i>Petrophile seminuda</i>			
608.	2312 <i>Petrophile striata</i>			
609.	19825 <i>Petrorhagia dubia</i>	Y		
610.	18529 <i>Philotheca spicata</i> (Pepper and Salt)			
611.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
612.	17794 <i>Phyllanthus tenellus</i>	Y		
613.	6983 <i>Physalis peruviana</i> (Cape Gooseberry)	Y		
614.	2408 <i>Pilostyles hamiltonii</i>			
615.	5231 <i>Pimelea angustifolia</i> (Narrow-leaved Pimelea)			
616.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)			
617.	5238 <i>Pimelea ciliata</i> (White Banjine)			
618.	11928 <i>Pimelea ciliata</i> subsp. <i>ciliata</i>			
619.	11402 <i>Pimelea imbricata</i> var. <i>piligera</i>			
620.	11182 <i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>			
621.	5260 <i>Pimelea rara</i> (Summer Pimelea)		P4	
622.	5264 <i>Pimelea spectabilis</i> (Bunjong)			
623.	12041 <i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>			
624.	5268 <i>Pimelea sulphurea</i> (Yellow Banjine)			
625.	8163 <i>Pithocarpa corymbulosa</i> (Corymbose Pithocarpa)		P3	
626.	8165 <i>Pithocarpa pulchella</i> (Beautiful Pithocarpa)			
627.	18352 <i>Pithocarpa pulchella</i> var. <i>melanostigma</i>			
628.	6253 <i>Platysace filiformis</i>			
629.	6255 <i>Platysace juncea</i>			
630.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
631.	8177 <i>Podolepis lessonii</i>			
632.	8182 <i>Pododthea angustifolia</i> (Sticky Longheads)			
633.	8183 <i>Pododthea chrysantha</i> (Yellow Pododthea)			
634.	8395 <i>Polygala myrtifolia</i> (Myrtleleaf Milkwort)	Y		
635.	4578 <i>Polygala virgata</i>	Y		
636.	43303 <i>Protea repens</i>	Y		
637.	17211 <i>Prunus cerasifera</i>	Y		
638.	4155 <i>Psoralea pinnata</i> (African Scurfpea)	Y		
639.	13255 <i>Pterochaeta paniculata</i>			
640.	2716 <i>Ptilotus declinatus</i> (Curved Mulla Mulla)			
641.	11260 <i>Ptilotus drummondii</i> var. <i>drummondii</i> (Pussytail)			
642.	2720 <i>Ptilotus esquamatus</i>			
643.	2742 <i>Ptilotus manglesii</i> (Pom Poms, Mulamula)			
644.	4172 <i>Pultenaea ericifolia</i>			
645.	8195 <i>Quinetia urvillei</i>			
646.	3061 <i>Raphanus raphanistrum</i> (Wild Radish)	Y		
647.	13234 <i>Rhodanthe manglesii</i>			
648.	6020 <i>Rinzia crassifolia</i> (Darling Range Rinzia)			
649.	20506 <i>Rubus anglocandicans</i>	Y		
650.	20496 <i>Rubus laudatus</i>	Y		
651.	2429 <i>Rumex acetosella</i> (Sorrel)	Y		
652.	2356 <i>Santalum acuminatum</i> (Quandong, Warnga)			
653.	7602 <i>Scaevola calliptera</i>			
654.	7613 <i>Scaevola glandulifera</i> (Viscid Hand-flower)			
655.	7635 <i>Scaevola pilosa</i> (Hairy Fan-flower)			
656.	7636 <i>Scaevola platyphylla</i> (Broad-leaved Fanflower)			
657.	13182 <i>Scaevola repens</i> var. <i>repens</i>			
658.	6033 <i>Scholtzia involucreta</i> (Spiked Scholtzia)			



	Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
659.	8203	<i>Senecio diaschides</i>			
660.	8212	<i>Senecio leucoglossus</i>		P4	
661.	20663	<i>Senecio multicaulis</i> subsp. <i>multicaulis</i>			
662.	4980	<i>Sida hookeriana</i>			
663.	2910	<i>Silene nocturna</i> (Mediterranean Catchfly)	Y		
664.	8231	<i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
665.	2912	<i>Spergula arvensis</i> (Corn Spurry)	Y		
666.	4205	<i>Sphaerolobium linophyllum</i>			
667.	4206	<i>Sphaerolobium macranthum</i>			
668.	4207	<i>Sphaerolobium medium</i>			
669.	6930	<i>Stachys arvensis</i> (Staggerweed)	Y		
670.	4716	<i>Stachystemon vermicularis</i>			
671.	4733	<i>Stackhousia monogyna</i>			
672.	9070	<i>Stackhousia pubescens</i> (Downy Stackhousia)			
673.	43540	<i>Stackhousia</i> sp. Red-blotched corolla (A. Markey 911)		P3	
674.	13475	<i>Stenanthemum humile</i>			
675.	19403	<i>Stenopetalum gracile</i>			
676.	2316	<i>Stirlingia latifolia</i> (Blueboy)			
677.	7681	<i>Stylidium affine</i> (Queen Triggerplant)			
678.	7684	<i>Stylidium amoenum</i> (Lovely Triggerplant)			
679.	30278	<i>Stylidium androsaceum</i>			
680.	25831	<i>Stylidium araeophyllum</i> (Stilt Walker)			
681.	7692	<i>Stylidium breviscapum</i> (Boomerang Triggerplant)			
682.	7693	<i>Stylidium brunonianum</i> (Pink Fountain Triggerplant)			
683.	7694	<i>Stylidium bulbiferum</i> (Circus Triggerplant)			
684.	7696	<i>Stylidium calcaratum</i> (Book Triggerplant)			
685.	7698	<i>Stylidium caricifolium</i> (Milkmaids)			
686.	7699	<i>Stylidium carnosum</i> (Fleshy-leaved Triggerplant)			
687.	7702	<i>Stylidium ciliatum</i> (Golden Triggerplant)			
688.	7713	<i>Stylidium dichotomum</i> (Pins-and-needles)			
689.	7716	<i>Stylidium diuroides</i> (Donkey Triggerplant)			
690.	11808	<i>Stylidium diuroides</i> subsp. <i>diuroides</i>			
691.	19251	<i>Stylidium eriopodium</i>			
692.	7736	<i>Stylidium hispidum</i> (White Butterfly Triggerplant)			
693.	7745	<i>Stylidium junceum</i> (Reed Triggerplant)			
694.	7752	<i>Stylidium lineatum</i> (Sunny Triggerplant)			
695.	7772	<i>Stylidium perpusillum</i> (Tiny Triggerplant)			
696.	7773	<i>Stylidium petiolare</i> (Horn Triggerplant)			
697.	7774	<i>Stylidium piliferum</i> (Common Butterfly Triggerplant)			
698.	7783	<i>Stylidium pycnostachyum</i> (Downy Triggerplant)			
699.	33106	<i>Stylidium recurvum</i>			
700.	7785	<i>Stylidium repens</i> (Matted Triggerplant)			
701.	7787	<i>Stylidium rhynchocarpum</i> (Black-beaked Triggerplant)			
702.	25806	<i>Stylidium scariosum</i>			
703.	7798	<i>Stylidium schoenoides</i> (Cow Kicks)			
704.	7803	<i>Stylidium striatum</i> (Fan-leaved Triggerplant)		P4	
705.	45594	<i>Stylidium tenue</i> subsp. <i>majusculum</i> (Showy Fountain Triggerplant)			
706.	45593	<i>Stylidium tenue</i> subsp. <i>tenue</i> (Little Fountain Triggerplant)			
707.	23511	<i>Stylidium thesioides</i> (Delicate Triggerplant)			
708.	7806	<i>Stylidium utricularioides</i> (Pink Fan Triggerplant)			
709.	40947	<i>Stylidium xanthellum</i>			
710.	48297	<i>Styphelia filifolia</i>		P3	
711.	6476	<i>Styphelia tenuiflora</i> (Common Pinheath)			
712.	2321	<i>Synaphea acutiloba</i> (Granite Synaphea)			
713.	12914	<i>Synaphea decorticans</i>			
714.	2323	<i>Synaphea gracillima</i>			
715.	2325	<i>Synaphea pinnata</i> (Helena Synaphea)			
716.	2329	<i>Synaphea spinulosa</i>			
717.	15532	<i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
718.	20135	<i>Taxandria linearifolia</i>			
719.	4251	<i>Templetonia drummondii</i>			
720.	4535	<i>Tetradlea hirsuta</i> (Black Eyed Susan)			
721.	48342	<i>Tetradlea hirsuta</i> subsp. <i>hirsuta</i>			
722.	4537	<i>Tetradlea nuda</i>			
723.	4544	<i>Tetradlea setigera</i>			
724.	5080	<i>Thomasia foliosa</i>			
725.	5084	<i>Thomasia grandiflora</i> (Large Flowered Thomasia)			
726.	5087	<i>Thomasia macrocarpa</i> (Large Fruited Thomasia)			
727.	5105	<i>Thomasia triphylla</i>			
728.	8248	<i>Tolpis barbata</i> (Yellow Hawkweed)	Y		

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
729.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
730.	8251 <i>Trichocline spathulata</i> (Native Gerbera)			
731.	4291 <i>Trifolium arvense</i> (Hare's Foot Clover)	Y		
732.	17542 <i>Trifolium arvense</i> var. <i>arvense</i>	Y		
733.	17763 <i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	Y		
734.	4298 <i>Trifolium hirtum</i> (Rose Clover)	Y		
735.	17788 <i>Trifolium pratense</i> var. <i>sativum</i>	Y		
736.	15509 <i>Trifolium tomentosum</i> var. <i>tomentosum</i>	Y		
737.	4737 <i>Tripterococcus brunonis</i> (Winged Stackhousia)			
738.	13479 <i>Trymalium ledifolium</i> var. <i>rosmarinifolium</i>			
739.	33418 <i>Trymalium odoratissimum</i> subsp. <i>odoratissimum</i>			
740.	8255 <i>Ursinia anthemoides</i> (Ursinia)	Y		
741.	38388 <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Y		
742.	8257 <i>Vellereophyton dealbatum</i> (White Cudweed)	Y		
743.	15431 <i>Verticordia acerosa</i> var. <i>acerosa</i>			
744.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			
745.	15433 <i>Verticordia huegelii</i> var. <i>huegelii</i>			
746.	15434 <i>Verticordia insignis</i> subsp. <i>insignis</i>			
747.	14714 <i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>		P4	
748.	6107 <i>Verticordia pennigera</i>			
749.	15618 <i>Verticordia plumosa</i> var. <i>plumosa</i>			
750.	4325 <i>Viminaria juncea</i> (Swishbush, Koweda)			
751.	6575 <i>Vinca major</i> (Blue Periwinkle)	Y		
752.	17042 <i>Vitis vinifera</i>	Y		
753.	7389 <i>Wahlenbergia preissii</i>			
754.	6283 <i>Xanthosia atkinsoniana</i>			
755.	6284 <i>Xanthosia candida</i>			
756.	6285 <i>Xanthosia ciliata</i>			
757.	6289 <i>Xanthosia huegelii</i>			
758.	44861 <i>Xerochrysum macranthum</i>			

## Fish

759.	34028 <i>Galaxias occidentalis</i> (Western Minnow)			
760.	<i>Phalloceros caudimaculatus</i>			

## Fungus

761.	46334 <i>Amanita kalamundae</i> (Kalamunda Lepidella)		P3	
762.	<i>Austroboletus occidentalis</i>			
763.	<i>Boletus</i> sp.			
764.	<i>Coltricia cinnamomea</i>			
765.	38771 <i>Coltriciella dependens</i>			
766.	38874 <i>Cortinarius globuliformis</i>			
767.	<i>Hebeloma aminophilum</i>			
768.	<i>Hydnangium carneum</i>			
769.	38796 <i>Hypholoma australe</i>			
770.	48517 <i>Inocybe fibrillosibrunnea</i>			
771.	38802 <i>Laccocephalum tumulosum</i>			
772.	<i>Lactarius clarkeae</i>			
773.	<i>Phytophthora cinnamomi</i>			
774.	<i>Pisolithus</i> sp.			
775.	38836 <i>Russula erumpens</i>			
776.	38837 <i>Russula flocktoniae</i>			
777.	<i>Schizophyllum commune</i>			
778.	38843 <i>Tapinella panuoides</i>			
779.	45845 <i>Tilletia viennotii</i>			
780.	45896 <i>Ustilago bromivora</i>			
781.	45902 <i>Ustilago nuda</i>			
782.	45906 <i>Ustilago tepperi</i>			

## Gymnosperm

783.	85 <i>Macrozamia riedlei</i> ( <i>Zamia</i> , <i>Djiridji</i> )			
------	---	--	--	--

## Hepatic (Liverwort)

784.	<i>Asterella drummondii</i>			
785.	<i>Riccia multifida</i>			

## Invertebrate

786.	<i>Aname mainae</i>			
787.	<i>Aname tepperi</i>			
788.	<i>Arachnura higginsi</i>			
789.	<i>Araneus cyphoxis</i>			
790.	<i>Araneus eburnus</i>			
791.	<i>Argiope trifasciata</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
792.	<i>Artoria linnaei</i>			
793.	<i>Austracantha minax</i>			
794.	<i>Backobourkia heroine</i>			
795.	<i>Ballarra longipalpus</i>			
796.	<i>Cercophonius granulatus</i>			
797.	<i>Cercophonius sulcatus</i>			
798.	<i>Ceryda cursitans</i>			
799.	33939 <i>Cherax cainii</i> (Marron)			
800.	<i>Cherax destructor</i>			
801.	<i>Cherax quinquecarinatus</i>			
802.	<i>Cormocephalus aurantiipes</i>			
803.	<i>Cormocephalus rubriceps</i>			
804.	<i>Cormocephalus strigosus</i>			
805.	<i>Cormocephalus turneri</i>			
806.	<i>Delena cancerides</i>			
807.	<i>Dingosa serrata</i>			
808.	<i>Dinocambala ingens</i>			
809.	<i>Eriophora biapicata</i>			
810.	<i>Eupograptus kottae</i>			
811.	<i>Hoggicosa storri</i>			
812.	<i>Holconia westralia</i>			
813.	<i>Idiommatia blackwalli</i>			
814.	<i>Isopoda leishmanni</i>			
815.	<i>Isopedella cana</i>			
816.	<i>Latrodectus hasseltii</i>			
817.	<i>Masasteron maini</i>			
818.	<i>Missulena granulosa</i>			
819.	<i>Missulena hoggi</i>			
820.	<i>Missulena occatoria</i>			
821.	<i>Nephila edulis</i>			
822.	<i>Occiperipatoides gilesii</i>			
823.	<i>Ommatoiulus moreletii</i>			
824.	<i>Oxyopes gracilipes</i>			
825.	<i>Raveniella cirrata</i>			
826.	<i>Raveniella peckorum</i>			
827.	<i>Scolopendra laeta</i>			
828.	<i>Synsphyronus magnus</i>			
829.	<i>Tasmanicosa leuckartii</i>			
830.	<i>Urodacus novaehollandiae</i>			
831.	<i>Urodacus planimanus</i>			
832.	<i>Venator immansueta</i>			
833.	<i>Venatrix arenaris</i>			
834.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T	

#### Lichen

835.	42106 <i>Austroparmelia conlabrosa</i>			
836.	27668 <i>Cladia schizopora</i>			
837.	27906 <i>Parapropidia leptocarpa</i>			
838.	27952 <i>Pertusaria remota</i>			
839.	28356 <i>Xanthoparmelia verrucella</i>			

#### Mammal

840.	24088 <i>Antechinus flavipes</i> subsp. <i>leucogaster</i> (Yellow-footed Antechinus, Mardo)			
841.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)		T	
842.	24086 <i>Cercartetus concinnus</i> (Western Pygmy-possum, Mundarda)			
843.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattle Bat)			
844.	24092 <i>Dasyurus geoffroyi</i> (Chuditch, Western Quoll)		T	
845.	30916 <i>Funambulus pennanti</i> (Indian Palm Squirrel)	Y		
846.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
847.	48588 <i>Isodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
848.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
849.	24223 <i>Mus musculus</i> (House Mouse)	Y		
850.	48022 <i>Notamacropus irma</i> (Western Brush Wallaby)		P4	
851.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
852.	48070 <i>Phascogale tapoatafa</i> subsp. <i>wambenger</i> (South-western Brush-tailed Phascogale, Wambenger)		S	
853.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
854.	24199 <i>Scotorepens balstoni</i> (Inland Broad-nosed Bat)			
855.	24145 <i>Setonix brachyurus</i> (Quokka)		T	
856.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
857.	24206 <i>Vespadelus regulus</i> (Southern Forest Bat)			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Monocotyledon</b>				
858.	1505 <i>Agave americana</i> (Century Plant)	Y		
859.	179 <i>Agrostis gigantea</i> (Redtop Bent)	Y		
860.	23474 <i>Agrostocrinum hirsutum</i>			
861.	1261 <i>Agrostocrinum scabrum</i> (Blue Grass Lily)			
862.	184 <i>Aira caryophyllea</i> (Silvery Hairgrass)	Y		
863.	185 <i>Aira cupaniana</i> (Silvery Hairgrass)	Y		
864.	1056 <i>Alexgeorgea nitens</i>			
865.	1374 <i>Allium ampeloprasum</i>	Y		
866.	194 <i>Amphipogon amphipogonoides</i>			
867.	197 <i>Amphipogon debilis</i>			
868.	199 <i>Amphipogon strictus</i> (Greybeard Grass)			
869.	200 <i>Amphipogon turbinatus</i>			
870.	11470 <i>Anigozanthos bicolor</i> subsp. <i>bicolor</i>			
871.	11434 <i>Anigozanthos humilis</i> subsp. <i>humilis</i>			
872.	1411 <i>Anigozanthos manglesii</i> (Mangles Kangaroo Paw, Kurulbrang)			
873.	11261 <i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>			
874.	11566 <i>Anigozanthos viridis</i> subsp. <i>viridis</i>			
875.	202 <i>Anthoxanthum odoratum</i> (Sweet Vernal Grass)	Y		
876.	1117 <i>Aphelia cyperoides</i>			
877.	1364 <i>Asphodelus fistulosus</i> (Onion Weed)	Y		
878.	17233 <i>Austrostipa campylachne</i>			
879.	17237 <i>Austrostipa elegantissima</i>			
880.	17245 <i>Austrostipa mollis</i>			
881.	17257 <i>Austrostipa variabilis</i>			
882.	231 <i>Avellinia michelii</i>	Y		
883.	20013 <i>Axonopus fissifolius</i>	Y		
884.	1382 <i>Baeometra uniflora</i>	Y		
885.	747 <i>Baumea rubiginosa</i>			
886.	1273 <i>Borya sphaerocephala</i> (Pincushions)			
887.	8661 <i>Brachypodium distachyon</i> (False Brome)	Y		
888.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
889.	245 <i>Briza minor</i> (Shivery Grass)	Y		
890.	249 <i>Bromus diandrus</i> (Great Brome)	Y		
891.	250 <i>Bromus hordeaceus</i> (Soft Brome)	Y		
892.	1383 <i>Burchardia bairdiae</i>			
893.	12770 <i>Burchardia congesta</i>			
894.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)			
895.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
896.	15330 <i>Caladenia arenicola</i>			
897.	44900 <i>Caladenia denticulata</i> subsp. <i>rubella</i>			
898.	1590 <i>Caladenia ferruginea</i> (Rusty Spider Orchid)			
899.	1592 <i>Caladenia flava</i> (Cowslip Orchid)			
900.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
901.	15502 <i>Caladenia footeana</i>			
902.	17980 <i>Caladenia hiemalis</i>			
903.	13859 <i>Caladenia longicauda</i> subsp. <i>clivicola</i>			
904.	15363 <i>Caladenia longicauda</i> subsp. <i>eminens</i>			
905.	15365 <i>Caladenia longicauda</i> subsp. <i>longicauda</i>			
906.	15503 <i>Caladenia paludosa</i>			
907.	15377 <i>Caladenia reptans</i> subsp. <i>reptans</i>			
908.	19309 <i>Calectasia narragara</i>			
909.	760 <i>Caustis dioica</i>			
910.	41567 <i>Cenchrus macrourus</i> (African Feather Grass)	Y		
911.	41563 <i>Cenchrus purpureus</i> (Elephant Grass)	Y		
912.	1125 <i>Centrolepis drummondiana</i>			
913.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
914.	11299 <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>			
915.	8788 <i>Chamaescilla versicolor</i>			
916.	17706 <i>Chordifex sinuosus</i>			
917.	763 <i>Chorizandra enodis</i> (Black Bristlerush)			
918.	1044 <i>Colocasia esculenta</i> (Taro)			
919.	32999 <i>Colocasia esculenta</i> var. <i>esculenta</i>	Y		
920.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
921.	12109 <i>Conostylis aculeata</i> subsp. <i>preissii</i>			
922.	1420 <i>Conostylis androstemma</i> (Trumpets)			
923.	1423 <i>Conostylis aurea</i> (Golden Conostylis)			
924.	11438 <i>Conostylis candicans</i> subsp. <i>candicans</i>			
925.	1429 <i>Conostylis caricina</i>			
926.	12035 <i>Conostylis caricina</i> subsp. <i>caricina</i>			



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
927.	1434 <i>Conostylis festuacea</i>			
928.	1436 <i>Conostylis juncea</i>			
929.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
930.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
931.	1455 <i>Conostylis setosa</i> (White Cottonhead)			
932.	48259 <i>Cortaderia selloana</i> subsp. <i>selloana</i>	Y		
933.	15114 <i>Cyanicula gemmata</i>			
934.	13826 <i>Cyanicula ixioides</i> subsp. <i>ixioides</i>		P4	
935.	15404 <i>Cyanicula sericea</i>			
936.	768 <i>Cyathochaeta avenacea</i>			
937.	769 <i>Cyathochaeta clandestina</i>			
938.	17618 <i>Cyathochaeta equitans</i>			
939.	285 <i>Cynosurus echinatus</i> (Rough Dogtail)	Y		
940.	783 <i>Cyperus congestus</i> (Dense Flat-sedge)	Y		
941.	792 <i>Cyperus eragrostis</i> (Umbrella Sedge)	Y		
942.	18198 <i>Cyperus papyrus</i>	Y		
943.	815 <i>Cyperus tenellus</i> (Tiny Flatsedge)	Y		
944.	14537 <i>Cyperus vorsteri</i>	Y		
945.	10916 <i>Cyrtostylis huegelii</i>			
946.	1218 <i>Dasypogon bromeliifolius</i> (Pineapple Bush)			
947.	1220 <i>Dasypogon obliquifolius</i>			
948.	17663 <i>Desmocladius asper</i>			
949.	17691 <i>Desmocladius fasciculatus</i>			
950.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
951.	1287 <i>Dichopogon capillipes</i>			
952.	311 <i>Digitaria ciliaris</i> (Summer Grass)	Y		
953.	316 <i>Digitaria longiflora</i>			
954.	320 <i>Digitaria sanguinalis</i> (Crab Grass)	Y		
955.	1509 <i>Dioscorea hastifolia</i> (Warrine, Waram)			
956.	19649 <i>Disa bracteata</i>	Y		
957.	12943 <i>Diuris brumalis</i>			
958.	11049 <i>Diuris corymbosa</i>			
959.	1634 <i>Diuris laxiflora</i> (Bee Orchid)			
960.	<i>Diuris longifolia</i> var. <i>parviflora</i>			Y
961.	12939 <i>Diuris magnifica</i>			
962.	46859 <i>Diuris ostrina</i>			
963.	15406 <i>Drakaea gracilis</i>			
964.	11156 <i>Drakaea livida</i>			
965.	11105 <i>Echinochloa crus-galli</i>	Y		
966.	16093 <i>Echinochloa esculenta</i>	Y		
967.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
968.	1643 <i>Elythranthera brunonis</i> (Purple Enamel Orchid)			
969.	1644 <i>Elythranthera emarginata</i> (Pink Enamel Orchid)			
970.	374 <i>Eragrostis cilianensis</i> (Stinkgrass)	Y		
971.	15412 <i>Eriochilus dilatatus</i> subsp. <i>multiflorus</i>			
972.	15414 <i>Eriochilus helonomos</i>			
973.	900 <i>Gahnia aristata</i>			
974.	434 <i>Gastidium phleoides</i> (Nitgrass)	Y		
975.	1520 <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	Y		
976.	1465 <i>Haemodorum discolor</i>			
977.	1468 <i>Haemodorum laxum</i>			
978.	1469 <i>Haemodorum loratum</i>		P3	
979.	1472 <i>Haemodorum simplex</i>			
980.	1475 <i>Haemodorum spicatum</i> (Mardja)			
981.	1293 <i>Hensmania turbinata</i>			
982.	1526 <i>Hesperantha falcata</i>	Y		
983.	444 <i>Holcus lanatus</i> (Yorkshire Fog)	Y		
984.	451 <i>Hordeum vulgare</i> (Barley)	Y		
985.	1532 <i>Ixia maculata</i> (Yellow Ixia)	Y		
986.	1533 <i>Ixia paniculata</i>	Y		
987.	1534 <i>Ixia polystachya</i> (Variable Ixia)	Y		
988.	1298 <i>Johnsonia pubescens</i> (Pipe Lily)			
989.	19632 <i>Johnsonia pubescens</i> subsp. <i>pubescens</i>			
990.	1177 <i>Juncus articulatus</i> (Jointed Rush)	Y		
991.	1180 <i>Juncus capitatus</i> (Capitate Rush)	Y		
992.	1186 <i>Juncus microcephalus</i>	Y		
993.	1221 <i>Kingia australis</i> (Kingia, Pulonok)			
994.	11464 <i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			
995.	1309 <i>Laxmannia squarrosa</i>			
996.	1075 <i>Lepidobolus preissianus</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
997.	925 <i>Lepidosperma angustatum</i>			
998.	42741 <i>Lepidosperma apricola</i>			
999.	931 <i>Lepidosperma drummondii</i>			
1000.	936 <i>Lepidosperma leptostachyum</i>			
1001.	940 <i>Lepidosperma pubisquameum</i>			
1002.	<i>Lepidosperma</i> sp.			
1003.	16284 <i>Lepidosperma</i> sp. P1 small head (M.D. Tindale 166A)			
1004.	945 <i>Lepidosperma squamatum</i>			
1005.	948 <i>Lepidosperma tetraquetrum</i>			
1006.	1653 <i>Leporella fimbriata</i> (Hare Orchid)			
1007.	1077 <i>Leptocarpus canus</i> (Hoary Twine-rush)			
1008.	46375 <i>Leptocarpus decipiens</i>			
1009.	475 <i>Lolium multiflorum</i> (Italian Ryegrass)	Y		
1010.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
1011.	1228 <i>Lomandra hermaphrodita</i>			
1012.	1229 <i>Lomandra integra</i>			
1013.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			
1014.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
1015.	1234 <i>Lomandra nigricans</i>			
1016.	1239 <i>Lomandra preissii</i>			
1017.	1240 <i>Lomandra purpurea</i> (Purple Mat Rush)			
1018.	1243 <i>Lomandra sericea</i> (Silky Mat Rush)			
1019.	1245 <i>Lomandra spartea</i>			
1020.	1097 <i>Lyginia barbata</i>			
1021.	14985 <i>Melinis repens</i>	Y		
1022.	953 <i>Mesomelaena graciliceps</i>			
1023.	955 <i>Mesomelaena pseudostygia</i>			
1024.	957 <i>Mesomelaena tetragona</i> (Semaphore Sedge)			
1025.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
1026.	1658 <i>Microtis atrata</i> (Swamp Mignonette Orchid)			
1027.	12761 <i>Microtis media</i> subsp. <i>densiflora</i>			
1028.	15419 <i>Microtis media</i> subsp. <i>media</i>			
1029.	44496 <i>Narcissus tazetta</i> subsp. <i>italicus</i>	Y		
1030.	492 <i>Neurachne alopecuroides</i> (Foxtail Mulga Grass)			
1031.	1373 <i>Ornithogalum thyrsoides</i> (Chinkerichee)	Y		
1032.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
1033.	527 <i>Paspalum dilatatum</i>	Y		
1034.	528 <i>Paspalum distichum</i> (Water Couch)	Y		
1035.	1542 <i>Patersonia babianoides</i>			
1036.	1546 <i>Patersonia juncea</i> (Rush Leaved Patersonia)			
1037.	1550 <i>Patersonia occidentalis</i> (Purple Flag, Koma)			
1038.	1551 <i>Patersonia pygmaea</i> (Pygmy Patersonia)			
1039.	14433 <i>Patersonia rudis</i> subsp. <i>rudis</i>			
1040.	11550 <i>Patersonia umbrosa</i> var. <i>xanthina</i> (Yellow Flags)			
1041.	43762 <i>Pauridia occidentalis</i> var. <i>quadriloba</i>			
1042.	40424 <i>Pentameris airoides</i> subsp. <i>airoides</i>	Y		
1043.	547 <i>Phalaris angusta</i>	Y		
1044.	551 <i>Phalaris minor</i> (Lesser Canary Grass)	Y		
1045.	552 <i>Phalaris paradoxa</i> (Paradoxa Grass)	Y		
1046.	20460 <i>Pheladenia deformis</i>			
1047.	1478 <i>Phlebocarya ciliata</i>			
1048.	1479 <i>Phlebocarya filifolia</i>			
1049.	573 <i>Poa drummondiana</i> (Knotted Poa)			
1050.	578 <i>Poa porphyroclados</i>			
1051.	109 <i>Potamogeton crispus</i> (Curly Pondweed)			
1052.	1671 <i>Prasophyllum elatum</i> (Tall Leek Orchid)			
1053.	1672 <i>Prasophyllum fimbria</i> (Fringed Leek Orchid)			
1054.	1674 <i>Prasophyllum giganteum</i> (Bronze Leek Orchid)			
1055.	1676 <i>Prasophyllum hians</i> (Yawning Leek Orchid)			
1056.	1680 <i>Prasophyllum parvifolium</i> (Autumn Leek Orchid)			
1057.	10853 <i>Prasophyllum plumiforme</i>			
1058.	1686 <i>Pterostylis barbata</i> (Bird Orchid)			
1059.	1693 <i>Pterostylis recurva</i> (Jug Orchid)			
1060.	12217 <i>Pterostylis sanguinea</i>			
1061.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
1062.	16367 <i>Pyrorchis nigricans</i> (Red beaks, Elephants ears)			
1063.	14485 <i>Romulea flava</i> var. <i>minor</i>	Y		
1064.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
1065.	14924 <i>Romulea rosea</i> var. <i>communis</i>	Y		
1066.	40431 <i>Rytidosperma acerosum</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
1067.	40427 <i>Rytidosperma setaceum</i>			
1068.	973 <i>Schoenus asperocarpus</i> (Poison Sedge)			
1069.	978 <i>Schoenus brevisetis</i>			
1070.	979 <i>Schoenus caespititius</i>			
1071.	991 <i>Schoenus grammatophyllus</i>			
1072.	998 <i>Schoenus latitans</i>			
1073.	1002 <i>Schoenus nanus</i> (Tiny Bog Rush)			
1074.	1009 <i>Schoenus pleiostemoneus</i>			
1075.	1026 <i>Schoenus unispiculatus</i>			
1076.	609 <i>Setaria palmifolia</i> (Palm Grass)	Y		
1077.	19453 <i>Setaria parviflora</i>	Y		
1078.	617 <i>Sorghum halepense</i> (Johnson Grass)	Y		
1079.	1312 <i>Sowerbaea laxiflora</i> (Purple Tassels)			
1080.	1558 <i>Sparaxis bulbifera</i>	Y		
1081.	1560 <i>Sparaxis pillansii</i> (Harlequin Flower)	Y		
1082.	1260 <i>Stypandra glauca</i> (Blind Grass)			
1083.	1034 <i>Tetraria capillaris</i> (Hair Sedge)			
1084.	1036 <i>Tetraria octandra</i>			
1085.	667 <i>Tetrarrhena laevis</i> (Forest Ricegrass)			
1086.	1701 <i>Thelymitra antennifera</i> (Vanilla Orchid)			
1087.	10856 <i>Thelymitra benthamiana</i> (Leopard Orchid)			
1088.	1705 <i>Thelymitra crinita</i> (Blue Lady Orchid)			
1089.	11053 <i>Thelymitra macrophylla</i>			
1090.	20729 <i>Thelymitra magnifica</i> (Crystal Brook Star Orchid)		P1	
1091.	10862 <i>Thelymitra stellata</i> (Star Orchid)		T	
1092.	20731 <i>Thelymitra vulgaris</i>			
1093.	673 <i>Themeda triandra</i>			
1094.	1317 <i>Thysanotus anceps</i>		P3	
1095.	1318 <i>Thysanotus arbuscula</i>			
1096.	1328 <i>Thysanotus dichotomus</i> (Branching Fringe Lily)			
1097.	1330 <i>Thysanotus fastigiatus</i>			
1098.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			
1099.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
1100.	1343 <i>Thysanotus patersonii</i>			
1101.	1350 <i>Thysanotus scaber</i>			
1102.	46055 <i>Thysanotus</i> sp. Coastal plain (N.H. Brittan 66/63)			
1103.	1351 <i>Thysanotus sparteus</i>			
1104.	1354 <i>Thysanotus tenellus</i>			
1105.	1357 <i>Thysanotus thyrsoides</i>			
1106.	1358 <i>Thysanotus triandrus</i>			
1107.	11112 <i>Tribolium uniola</i>	Y		
1108.	1482 <i>Tribonanthes brachypetala</i> (Nodding Tiurmdin)			
1109.	1483 <i>Tribonanthes longipetala</i> (Branching Tiurmdin)			
1110.	1361 <i>Tricoryne elatior</i> (Yellow Autumn Lily)			
1111.	1363 <i>Tricoryne tenella</i>			
1112.	43207 <i>Tricostularia exsul</i>			
1113.	151 <i>Triglochin striata</i>			
1114.	38401 <i>Tritonia gladiolaris</i> (Lined Tritonia)	Y		
1115.	17868 <i>Vallisneria nana</i>			
1116.	722 <i>Vulpia bromoides</i> (Squirrel Tail Fescue)	Y		
1117.	724 <i>Vulpia myuros</i> (Rat's Tail Fescue)	Y		
1118.	1567 <i>Watsonia meriana</i> (Bulbil Watsonia)	Y		
1119.	18118 <i>Watsonia meriana</i> var. <i>meriana</i>	Y		
1120.	12072 <i>Wurmbea dioica</i> subsp. <i>alba</i>			
1121.	1401 <i>Wurmbea pygmaea</i>			
1122.	1403 <i>Wurmbea tenella</i> (Eight Nancy)			
1123.	1249 <i>Xanthorrhoea acanthostachya</i>			
1124.	14544 <i>Xanthorrhoea brunonis</i> subsp. <i>brunonis</i>			
1125.	1252 <i>Xanthorrhoea drummondii</i>			
1126.	1253 <i>Xanthorrhoea gracilis</i> (Graceful Grass Tree, Mimidi)			
1127.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			

#### Pteridophyte (Fern)

1128.	25 <i>Adiantum aethiopicum</i> (Common Maidenhair)			
1129.	31 <i>Cheilanthes austrotenuifolia</i>			
1130.	34 <i>Cheilanthes distans</i> (Bristly Cloak Fern)			
1131.	51 <i>Cyathea cooperi</i>	Y		
1132.	17336 <i>Dennstaedtia davallioides</i>	Y		Y
1133.	65 <i>Pleurosorus rutifolius</i> (Blanket Fern)			
1134.	66 <i>Pleurosorus subglandulosus</i>			
1135.	79 <i>Salvinia molesta</i> (Salvinia)			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
Y				
<b>Reptile</b>				
1136.	25242 <i>Acanthophis antarcticus</i> (Southern Death Adder)		P3	
1137.	42368 <i>Acritoscincus trilineatus</i> (Western Three-lined Skink)			
1138.	25241 <i>Antaresia stimsoni</i> subsp. <i>stimsoni</i> (Stimson's Python)			
1139.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
1140.	42381 <i>Brachyuropsis semifasciatus</i> (Southern Shovel-nosed Snake)			
1141.	43380 <i>Chelodina colliei</i> (South-western Snake-necked Turtle)			
1142.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
1143.	30893 <i>Cryptoblepharus buehneri</i>			
1144.	24883 <i>Ctenophorus ornatus</i> (Ornate Crevice-Dragon)			
1145.	25039 <i>Ctenotus fallens</i>			
1146.	24999 <i>Delma grayii</i>			
1147.	25296 <i>Demansia psammophis</i> subsp. <i>reticulata</i> (Yellow-faced Whipsnake)			
1148.	24929 <i>Diplodactylus granariensis</i> subsp. <i>granariensis</i>			
1149.	24939 <i>Diplodactylus polyophthalmus</i>			
1150.	25096 <i>Egernia kingii</i> (King's Skink)			
1151.	24959 <i>Gehyra variegata</i>			
1152.	25115 <i>Hemiergis initialis</i> subsp. <i>initialis</i>			
1153.	25119 <i>Hemiergis quadrilineata</i>			
1154.	25131 <i>Lerista distinguenda</i>			
1155.	25133 <i>Lerista elegans</i>			
1156.	25005 <i>Lialis burtonis</i>			
1157.	25184 <i>Menetia greyii</i>			
1158.	25240 <i>Morelia spilota</i> subsp. <i>imbricata</i> (Carpet Python)			
1159.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
1160.	25249 <i>Neelaps calonotos</i> (Black-striped Snake, black-striped burrowing snake)		P3	
1161.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
1162.	25253 <i>Parasuta gouldii</i>			
1163.	25255 <i>Parasuta nigriceps</i>			
1164.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (Keeled Legless Lizard)			
1165.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
1166.	25261 <i>Pseudechis australis</i> (Mulga Snake)			
1167.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
1168.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
1169.	24943 <i>Strophurus spinigerus</i> subsp. <i>inornatus</i>			
1170.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
1171.	25519 <i>Tiliqua rugosa</i>			
1172.	25204 <i>Tiliqua rugosa</i> subsp. <i>aspera</i>			
1173.	25207 <i>Tiliqua rugosa</i> subsp. <i>rugosa</i>			
1174.	24983 <i>Underwoodisaurus milii</i> (Barking Gecko)			
1175.	25218 <i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
1176.	25526 <i>Varanus tristis</i> (Racehorse Monitor)			
<b>Slime Mould</b>				
1177.	38976 <i>Badhamia foliicola</i>			
1178.	39097 <i>Trichia decipiens</i>			

#### 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

<sup>1</sup> 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.



## **Appendix 2: Protected Matters Search Tool Report**



# 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: 06/08/20 13:43:19

[Summary](#)

[Details](#)

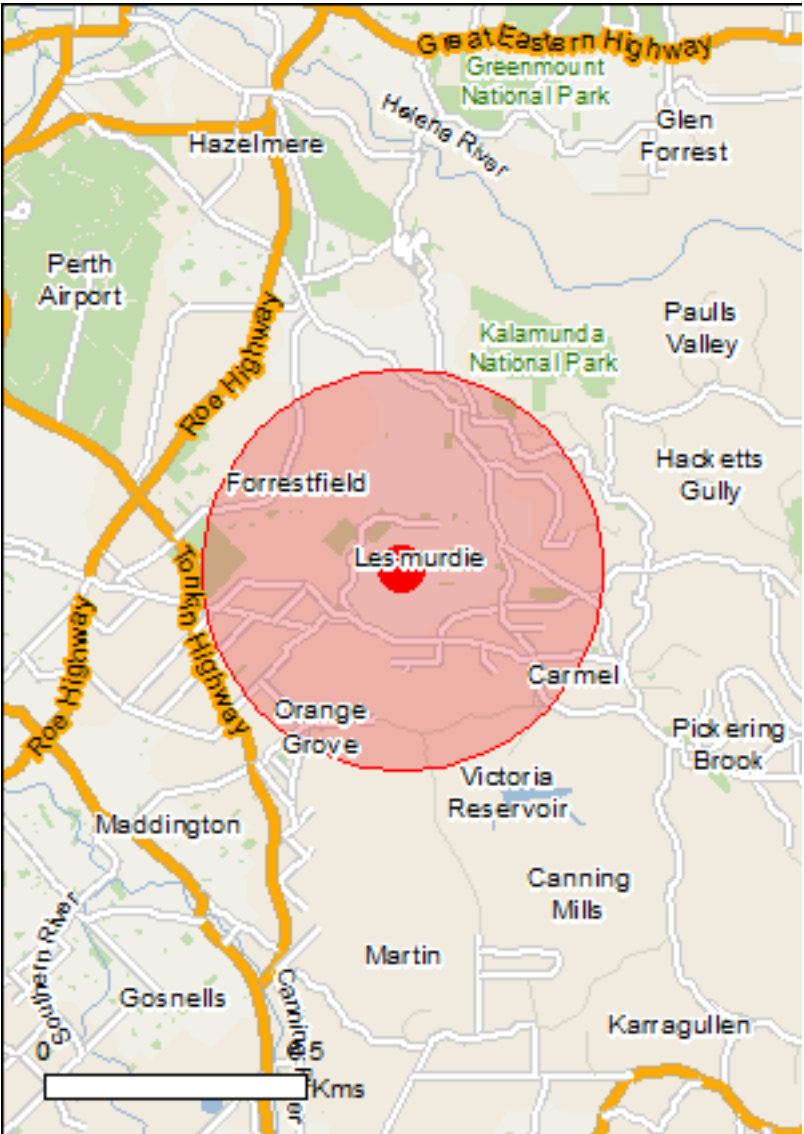
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are  
©Commonwealth of Australia  
(Geoscience Australia), ©PSMA 2010

[Coordinates](#)

[Buffer: 5.0Km](#)



# 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](#).

<a href="#">World Heritage Properties:</a>	None
<a href="#">National Heritage Places:</a>	None
<a href="#">Wetlands of International Importance:</a>	None
<a href="#">Great Barrier Reef Marine Park:</a>	None
<a href="#">Commonwealth Marine Area:</a>	None
<a href="#">Listed Threatened Ecological Communities:</a>	3
<a href="#">Listed Threatened Species:</a>	39
<a href="#">Listed Migratory Species:</a>	9

## 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.

<a href="#">Commonwealth Land:</a>	1
<a href="#">Commonwealth Heritage Places:</a>	None
<a href="#">Listed Marine Species:</a>	14
<a href="#">Whales and Other Cetaceans:</a>	None
<a href="#">Critical Habitats:</a>	None
<a href="#">Commonwealth Reserves Terrestrial:</a>	None
<a href="#">Australian Marine Parks:</a>	None

## Extra Information

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

<a href="#">State and Territory Reserves:</a>	5
<a href="#">Regional Forest Agreements:</a>	1
<a href="#">Invasive Species:</a>	42
<a href="#">Nationally Important Wetlands:</a>	None
<a href="#">Key Ecological Features (Marine)</a>	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
<a href="#">Banksia Woodlands of the Swan Coastal Plain ecological community</a>	Endangered	Community likely to occur within area
<a href="#">Clay Pans of the Swan Coastal Plain</a>	Critically Endangered	Community likely to occur within area
<a href="#">Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community</a>	Critically Endangered	Community may occur within area

Listed Threatened Species

[ Resource Information ]

Name	Status	Type of Presence
Birds		
<a href="#">Botaurus poiciloptilus</a> Australasian Bittern [1001]	Endangered	Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Calyptorhynchus banksii naso</a> Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Calyptorhynchus baudinii</a> Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Roosting known to occur within area
<a href="#">Calyptorhynchus latirostris</a> Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known to occur within area
<a href="#">Leipoa ocellata</a> Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Rostratula australis</a> Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Mammals		
<a href="#">Bettongia penicillata ogilbyi</a> Woylie [66844]	Endangered	Species or species habitat may occur within area
<a href="#">Dasyurus geoffroii</a> Chuditch, Western Quoll [330]	Vulnerable	Species or species

Name	Status	Type of Presence
<a href="#">Pseudocheirus occidentalis</a> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	habitat known to occur within area  Species or species habitat may occur within area
<a href="#">Setonix brachyurus</a> Quokka [229]	Vulnerable	Species or species habitat likely to occur within area
Plants		
<a href="#">Acacia anomala</a> Grass Wattle, Chittering Grass Wattle [8153]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Andersonia gracilis</a> Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
<a href="#">Anthocercis gracilis</a> Slender Tailflower [11103]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Austrostipa bronwenae</a> [87808]	Endangered	Species or species habitat may occur within area
<a href="#">Banksia mimica</a> Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area
<a href="#">Calytrix breviseta subsp. breviseta</a> Swamp Starflower [23879]	Endangered	Species or species habitat likely to occur within area
<a href="#">Chamelaucium sp. Gingin (N.G.Marchant 6)</a> Gingin Wax [88881]	Endangered	Species or species habitat may occur within area
<a href="#">Conospermum undulatum</a> Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Darwinia apiculata</a> Scarp Darwinia [8763]	Endangered	Species or species habitat known to occur within area
<a href="#">Diplolaena andrewsii</a> [6601]	Endangered	Species or species habitat likely to occur within area
<a href="#">Diuris drummondii</a> Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Diuris micrantha</a> Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Diuris purdiei</a> Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat likely to occur within area
<a href="#">Drakaea elastica</a> Glossy-leafed Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
<a href="#">Drakaea micrantha</a> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
<a href="#">Eleocharis keigheryi</a> Keighery's Eleocharis [64893]	Vulnerable	Species or species



Name	Status	Type of Presence
		habitat likely to occur within area
<a href="#">Eremophila glabra subsp. chlorella</a> [84927]	Endangered	Species or species habitat likely to occur within area
<a href="#">Eucalyptus x balanites</a> Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
<a href="#">Goodenia arthrotricha</a> [12448]	Endangered	Species or species habitat likely to occur within area
<a href="#">Grevillea curviloba subsp. incurva</a> Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
<a href="#">Grevillea thelemanniana</a> Spider Net Grevillea [32835]	Critically Endangered	Species or species habitat likely to occur within area
<a href="#">Lasiopetalum pterocarpum</a> Wing-fruited Lasiopetalum [64922]	Endangered	Species or species habitat may occur within area
<a href="#">Lepidosperma rostratum</a> Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area
<a href="#">Macarthuria keigheryi</a> Keighery's Macarthuria [64930]	Endangered	Species or species habitat likely to occur within area
<a href="#">Synaphea sp. Fairbridge Farm (D. Papenfus 696)</a> Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
<a href="#">Thelymitra dedmaniarum</a> Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat likely to occur within area
<a href="#">Thelymitra stellata</a> Star Sun-orchid [7060]	Endangered	Species or species habitat known to occur within area

Listed Migratory Species		[ <u>Resource Information</u> ]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
<a href="#">Apus pacificus</a>		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
<a href="#">Motacilla cinerea</a>		
Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
<a href="#">Actitis hypoleucos</a>		
Common Sandpiper [59309]		Species or species habitat likely to occur within area
<a href="#">Calidris acuminata</a>		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a>		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Species or species habitat likely to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

## Other Matters Protected by the EPBC Act

Commonwealth Land	<a href="#">[ Resource Information ]</a>
-------------------	--

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	<a href="#">[ Resource Information ]</a>
-----------------------	--

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

Name	Threatened	Type of Presence
Birds		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat likely to occur within area
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardea alba</a> Great Egret, White Egret [59541]		Species or species habitat likely to occur within area
<a href="#">Ardea ibis</a> Cattle Egret [59542]		Species or species habitat may occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat may occur within area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within

Name	Threatened	Type of Presence
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		area  Species or species habitat may occur within area
<a href="#">Numenius madagascariensis</a> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Species or species habitat likely to occur within area
<a href="#">Rostratula benghalensis (sensu lato)</a> Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[ Resource Information ]
Name	State
Kalamunda	WA
Korung	WA
Lesmurdie Falls	WA
Unnamed WA23076	WA
Unnamed WA24657	WA

Regional Forest Agreements	[ Resource Information ]
Note that all areas with completed RFAs have been included.	
Name	State
<a href="#">South West WA RFA</a>	Western Australia

Invasive Species	[ Resource Information ]
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		
Acridotheres tristis Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis European Goldfinch [403]		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

Name	Status	Type of Presence
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
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Turdus merula Common Blackbird, Eurasian Blackbird [596]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		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
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129]		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 norvegicus Brown Rat, Norway Rat [83]		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



Name	Status	Type of Presence
		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
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		Species or species habitat likely to occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista monspessulana Montpellier Broom, Cape Broom, Canary Broom, Common Broom, French Broom, Soft Broom [20126]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large- leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] 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
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		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
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species



Name	Status	Type of Presence
		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

-32.00167 116.04435

# 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 3: Conservation Codes

Conservation codes are used to describe the status of species and ecological communities that are no longer common and under threat of extinction. Species and communities can be listed under state legislation and/or commonwealth legislation.

### Western Australia

Conservation Code	Name	Description
T	Threatened	Flora or fauna that is rare or likely to become extinct, ranked according to their level of threat using IUCN Red List criteria (Schedules 1-3 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
CR	Critically endangered	Species considered to be facing an extremely high risk of extinction within the wild in the immediate future
EN	Endangered	Species considered to be facing a very high risk of extinction in the wild in the near future
VU	Vulnerable	Species considered to be facing a high risk of extinction in the wild in the medium-term future
EX	Extinct Species	Species where 'there is no reasonable doubt that the last member of the species has died (Schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice or the Wildlife Conservation (Rare Flora) Notice)
EW	Extinct in the Wild	Species that are known to only survive in cultivation, in captivity, or as a naturalised population well outside its past range; and it has not been recorded in its known or expected habitat at appropriate seasons anywhere in its past range, despite surveys over a timeframe appropriate to its life cycle and form
MI	Migratory Species	Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth (Schedule 5 of the Wildlife Conservation (Specially Protected Fauna) Notice)
CD	Conservation Dependent	Species of special conservation interest (conservation dependent fauna), being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened (Schedule 6 of the Wildlife Conservation (Specially Protected Fauna) Notice)
OS	Specially Protected	Fauna otherwise in need of special protection to ensure their conservation (Schedule 7 of the Wildlife Conservation (Specially Protected Fauna) Notice)

Conservation Code	Name	Description
P	Priority Species	Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.
P1	Priority One	Poorly known species – Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either very small or on lands not managed for conservation, such as road verges, urban areas, farmland, active mineral lease and under threat of habitat destruction or degradation.
2	Priority Two	Poorly known species – Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, such as national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves and similar.
3	Priority Three	Poorly known species – Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat
4	Priority Four	Rare or near threatened and other species in need of monitoring.

(Source: Department of Biodiversity, Conservation and Attractions, 2019)

## Commonwealth

Category	Description
<b>Critically Endangered</b>	Species facing an extremely high risk of extinction in the wild in the immediate future
<b>Endangered</b>	Species facing a very high risk of extinction in the wild in the near future
<b>Vulnerable</b>	Species facing a high risk of extinction in the wild in the medium term

(Source: Department of Agriculture, Water, and the Environment, 2020a)



## Appendix 4: Species List

Below is the complete list of flora species recorded during the 2020 survey of Ray Owen Reserve. The list is sorted by species with weeds listed, then natives species and \* denotes introduced species.

Family	Scientific Name	Common Name
Fabaceae	*Acacia iteaphylla	Flinders Range Wattle
Fabaceae	*Acacia longifolia	Sydney Golden Wattle
Fabaceae	*Acacia podalyriifolia	
Fabaceae	*Acacia pycnantha	Golden Wattle
Bignoniaceae	*Campsis radicans	Trumpet Vine
Fabaceae	*Chamaecytisus palmensis	Tagasaste
Myrtaceae	*Corymbia citriodora	Lemon-scented Gum
Asteraceae	*Cotula turbinata	Funnel Weed
Poaceae	*Ehrharta calycina	Perennial veldt grass
Poaceae	*Ehrharta longifolia	
Poaceae	*Eragrostis curvula	African Lovegrass
Myrtaceae	*Eucalyptus petiolaris	
Iridaceae	*Freesia alba x leichtlinii	
Fabaceae	*Genista linifolia	Flaxleaf Broom
Iridaceae	*Gladiolus caryophyllaceus	Wild Gladiolus
Asteraceae	*Hypochaeris radicata	Flat weed
Lamiaceae	*Lavandula stoechas	Lavender
Fabaceae	*Lupinus angustifolius	Narrowleaf Lupin
Myrtaceae	*Melaleuca nesophila	
Asteraceae	*Monoculus monstrosus	
Asteraceae	*Osteospermum ecklonis	
Fabaceae	*Podalyria sericea	
Polygalaceae	*Polygala myrtifolia	Myrtleleaf Milkwort
Iridaceae	*Romulea rosea	
Asteraceae	*Sonchus oleraceus	Common Sowthistle
Poaceae	*Tribolium uniolae	
Asteraceae	*Ursinia anthemoides	Ursinia
Fabaceae	Acacia applanata	
Fabaceae	Acacia barbinervis subsp. barbinervis	
Fabaceae	Acacia celastrifolia	Glowing Wattle
Fabaceae	Acacia extensa	Wiry Wattle
Fabaceae	Acacia pulchella var. pulchella	
Casuarinaceae	Allocasuarina fraseriana	Sheoak
Poaceae	Amphipogon amphipogonoides	
Ericaceae	Andersonia lehmanniana	
Myrtaceae	Babingtonia camphorosmae	Camphor Myrtle
Proteaceae	Banksia dallanneyi	Couch Honeypot
Proteaceae	Banksia sessilis var. sessilis	

Family	Scientific Name	Common Name
Pittosporaceae	Billardiera fraseri	Elegant Pronaya
Fabaceae	Bossiaea aquifolium	Water Bush
Fabaceae	Bossiaea ornata	Broad Leaved Brown Pea
Poaceae	Briza maxima	Blowfly Grass
Colchicaceae	Burchardia congesta	
Orchidaceae	Caladenia flava	Cowslip Orchid
Myrtaceae	Callistemon phoeniceus	Lesser Bottlebrush (not naturally occurring)
Myrtaceae	Calothamnus sanguineus	Silky-leaved Blood flower
Xanthorrhoeaceae	Chamaescilla versicolor	
Haemodoraceae	Conostylis setigera	Bristly Cottonhead
Haemodoraceae	Conostylis setosa	White Cottonhead
Myrtaceae	Corymbia calophylla	Marri
Orchidaceae	Cyanicula sericea	
Goodeniaceae	Dampiera alata	Winged-stem Dampiera
Restionaceae	Desmocladus fasciculatus	
Hemerocallidaceae	Dianella revoluta var. divaricata	Flax Lily
Orchidaceae	Diuris brumalis	
Droseraceae	Drosera erthrorhiza	Red Ink Sundew
Droseraceae	Drosera glanduligera	Pimpernel Sundew
Droseraceae	Drosera stolonifera	Leafy Sundew
Orchidaceae	Eriochilus sp.	Bunny Orchid
Myrtaceae	Eucalyptus accedens	Powderbark Wandoo
Myrtaceae	Eucalyptus camaldulensis	Rivergum
Myrtaceae	Eucalyptus marginata	Jarrah
Fabaceae	Gompholobium knightianum	
Fabaceae	Gompholobium preissii	
Fabaceae	Gompholobium tomentosum	Hairy Yellow Pea
Haloragaceae	Gonocarpus pithyoides	
Proteaceae	Grevillea synapheae	Catkin Grevillea
Proteaceae	Grevillea wilsonii	Native Fuchsia
Haemodoraceae	Haemodorum laxum	
Proteaceae	Hakea amplexicaulis	Prickly Hakea
Proteaceae	Hakea stenocarpa	Narrow-fruited Hakea
Proteaceae	Hakea trifurcata	Two-leaf Hakea
Fabaceae	Hardenbergia comptoniana	Native Wisteria
Lamiaceae	Hemiandra pungens	Snakebush
Dilleniaceae	Hibbertia hypericoides	Yellow Buttercups
Fabaceae	Hovea chorizemifolia	Holly-leaved Hovea
Fabaceae	Hovea pungens	Devil's Pins
Fabaceae	Hovea trisperma	Common Hovea
Fabaceae	Hovea trisperma var. grandiflora	

Family	Scientific Name	Common Name
Violaceae	Hybanthus floribundus subsp. floribundus	
Myrtaceae	Hypocalymma robustum	Swan River Myrtle
Fabaceae	Kennedia prostrata	Scarlet Runner
Myrtaceae	Kunzea baxteri	Baxter's Kunzea (planted)
Fabaceae	Labichea punctata	Lance-leaved Cassia
Asparagaceae	Laxmannia sessiliflora subsp. australis	
Asparagaceae	Laxmannia squarrosa	
Goodeniaceae	Lechenaultia biloba	Blue Leschenaultia
Cyperaceae	Lepidosperma pubisquameum	
Cyperaceae	Lepidosperma squamatum	
Myrtaceae	Leptospermum erubescens	Roadside Teatree
Ericaceae	Leucopogon capitellatus	
Asparagaceae	Lomandra micrantha	Small-flower Mat-rush
Asparagaceae	Lomandra nigricans	
Asparagaceae	Lomandra sericea	Silky Mat Rush
Fabaceae	Medicago polymorpha	Burr Medic
Poaceae	Neurachne alopecuroidea	Foxtail Mulga Grass
Rubiaceae	Opercularia hispidula	
Iridaceae	Orthrosanthus laxus	Morning Iris
Oxalidaceae	Oxalis pes-caprae	Soursob
Iridaceae	Patersonia juncea	Rush Leaved Patersonia
Proteaceae	Petrophile striata	
Rutaceae	Philotheca spicata	Pepper and Salt
Plantaginaceae	Plantago lanceolata	Ribwort Plantain
Orchidaceae	Pterostylis recurva	
Orchidaceae	Pterostylis sanguinea	
Orchidaceae	Pyrorchis nigricans	Red beaks
Santalaceae	Santalum acuminatum	Quandong
Goodeniaceae	Scaevola pilosa	Hairy Fan-flower (planted)
Stylidiaceae	Stylidium affine	Queen Triggerplant
Stylidiaceae	Stylidium ciliatum	Golden Triggerplant
Stylidiaceae	Stylidium schoenoides	Cow Kicks
Stylidiaceae	Stylidium striatum	
Orchidaceae	Thelymitra crinita	Blue Lady Orchid
Orchidaceae	Thelymitra macrophylla	
Malvaceae	Thomasia foliosa	
Asparagaceae	Thysanotus sp. (climber)	
Asparagaceae	Thysanotus sparteus	
Araliaceae	Trachymene pilosa	Native Parsnip
Asteraceae	Trichocline spathulata	Native Gerbera
Hemerocallidaceae	Tricoryne tenella	
Rhamnaceae	Trymalium ledifolium	

Family	Scientific Name	Common Name
Xanthorrhoeaceae	Xanthorrhoea brunonis	
Xanthorrhoeaceae	Xanthorrhoea preissii	
Apiaceae	Xanthosia candida	