

## **Appendix F** – Flora and Fauna Survey (Feb. 2019)

**Proposed  
Motorsport Park  
Lot 5780 Down  
Road, Drome WA  
6330**

**Reconnaissance Flora and Level 1 Fauna Survey  
Report**



Bio Diverse Solutions

FINAL V1

07/02/2019

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## 1. Introduction, scope and background information

The City of Albany (“the client”) commissioned Bio Diverse Solutions as Environmental Consultants to undertake a Reconnaissance Flora and Level 1 Fauna Survey within Lot 5780 Down Road, Drome WA. The scope of works included:

- Desktop assessment including all publicly available database searches and Parks and Wildlife database searches (provided by CoA);
- A Reconnaissance Flora Survey across the survey area through relevé sampling in vegetation types present, and mapping the boundaries of vegetation types;
- A Level 1 Fauna Survey across the survey area through low intensity sampling, reconnaissance surveys, and the identification, mapping and description of habitat types;
- Individual tree surveys throughout the survey area to identify breeding / nesting hollows and potential habitat trees, particularly for threatened fauna dependent on hollows, such as: the western ringtail possum, three species of threatened black cockatoos and two species of priority listed owls. GPS mark and measure every tree >500mm DBH (Significant trees) and compile excel data spreadsheet. Survey will be undertaken of every significant tree within 100m of the development footprint and within the proposed survey area;
- GIS mapping of: vegetation communities (including relevé locations), vegetation condition mapping according to the Keighery condition rating scale (Keighery 1994, Table 2), fauna habitat types and condition within the survey area;
- Preparation of Reconnaissance Flora and Level 1 Fauna and Vegetation Report, which will be aligned with the appropriate government agency legislation and guidelines.

Flora assessment was undertaken by Botanist Ellen Hickman on the 31<sup>st</sup> October and 1<sup>st</sup> November 2018. Fauna assessment was undertaken by Wildlife Ecologist Dr. Karlene Bain and Conservation and Wildlife Biologist Bianca Theyer (Bio Diverse Solutions) between the 29<sup>th</sup> of October and the 2<sup>nd</sup> November 2018.

### 1.1. Site location and Development Proposal

The “survey area” is defined as Lot 5780 Down Road and the adjacent roadside reserves situated along the northern and eastern cadastral boundaries of the lot. This site is the location of the proposed Motorsport Park, refer to current “Concept Plan’ Appendix A. Refer to Figure 1 and Appendix A – Survey Area.



Figure 1: Survey Area Locality



The survey area is based upon the likelihood of disturbance through the Motorsport Park development process. These areas included the western precinct (remnant vegetation to the west) that is unlikely to be developed, the southern central precinct (creek / drainage line and surrounding vegetation), road reserves (located along the northern and eastern boundaries of the lot), and cleared / grazed paddock areas (internal to the subject site including stands of native trees).

## 1.2. Geology and soils

Database searches using the NRInfo Portal (Department of Primary Industries and Regional Development, 2018) shows the subject site lies within the King (242Kg) and Redmond (242Re) Systems and the Albany Sandplain Zone(242). The King System is described as *“Dissected siltstone and sandstone terrain, on the southern edge of the Albany Sandplain Zone, with shallow gravel, sandy gravel, grey sandy duplex and pale deep sand. Jarrah-marri-Sheoak woodland and Mallee-heath”* (DPIRD, 2018). The Redmond System is described as *“Undulating plateau with scattered depressions, in the east of the Albany Sandplain Zone. Sandy gravel, pale deep sand, non-saline wet soils and grey sandy duplex. Marri-jarrah forest, swamp yate-paperbark-sheoak woodland and heath”* (DPIRD, 2018). The Albany Sandplain Zone is described as having *“Gently undulating plain dissected by a number of short rivers flowing south. Eocene marine sediments overlying Proterozoic granitic and metamorphic rocks. Soils are sandy duplex soils, often alkaline and sodic, with some sands and gravels.”* (DPIRD, 2018).

## 1.3. Climate

The Albany area is characterised by a Mediterranean climate with mild wet winters and mild to hot dry summers. The average annual temperature in Albany ranges from 11.8 – 19.5°C. The average summer temperature range between 14-22.9°C, whilst average winter temperatures range between 8.2-15.8°C. The annual mean rainfall for Albany is 927.1mm (BOM, 2019).

## 1.4. Water

The survey area lies within a Priority Two (P2) Public Drinking Water Source Area (WALGA, 2018a) and also partially contains the Marbellup Flats along the southern boundary which is a South Coast Significant Wetland (WALGA 2018b).

## 1.5. Existing Land use

The “survey area” is currently used for grazing cattle and for sand extraction purposes. There is also a stockpile area located in the north western corner of the property with wood chips and other materials stored here. Refer to Figure 2.



Figure 2: Photographic representation of the land uses present within the survey area.



## 2. Desktop Flora and Vegetation Values

### 2.1. Remnant Vegetation

The Survey area lies within the Jarrah Forest IBRA bioregion. Hearn *et al* (2002) describes the bioregion as; ‘Duricrusted plateau of Yilgarn Craton characterised by Jarrah-Marri forest on laterite gravels and, in the eastern part, by Wandoo - Marri woodlands on clayey soils. Eluvial and alluvial deposits support *Agonis* shrublands. In areas of Mesozoic sediments, Jarrah forests occur in a mosaic with a variety of species-rich shrublands.’

The vegetation has been mapped on a broad scale by J.S. Beard (Shepherd *et al.* 2002) in the 1970’s, where a system was devised for state-wide mapping and vegetation classification based on geographic, geological, soil, climate structure, life form and vegetation characteristics (Sandiford and Barrett, 2010). Vegetation units were regarded as associations and were grouped into Vegetation Systems representing a particular pattern of association distribution within a given area. A GIS search of J.S. Beards (DEC, 2005) vegetation classification places the survey area within two System and Vegetation Associations (Source DEC Pre-European Vegetation GIS dataset, 2005):

- **System Association Name:** Albany
- **Vegetation Association Number:** 51
- **Vegetation Description:** Cyperaceae, Restionaceae, Juncaceae (mainly in the South-West).
- **System Association Name:** Albany
- **Vegetation Association Number:** 978
- **Vegetation Description:** Jarrah, Banksia or Casuarina *Eucalyptus marginata*, *Banksia* spp., *Allocasuarina* spp.

### 2.2. Albany Regional Vegetation Survey (ARVS)

The Albany Regional Vegetation Survey (ARVS) undertaken by Sandiford and Barret in 2010 identified the vegetation within the survey area as belonging to the Jarrah/Marri/Sheoak Laterite Forest (12), Jarrah/Sheoak/*E. staeri* Sandy Woodland (13), and *Homalospermum firmum* / *Callistemon glaucus* Peat Thicket (47) unit.

### 2.3. Survey Methods

Desktop inventory of potential threatened flora species likely to occur within 15km of the survey area was undertaken using the following databases:

- Database results provided by the City of Albany;
- Nature Map Database Search (combined data from DBCA, WA Museum and WA Herbarium);
- Protected matters search tool (DoE 2017a); and
- WA Herbarium records accessed through Flora Base (Western Australian Herbarium, DPaW).

The full species list compiled from all available data (Appendix B) is based on observations from a broader area than the survey area and is likely to include species that would not occur in the actual survey area due to a lack of suitable habitat. The data also includes very old records and in some cases the species in question may have become locally or regionally extinct.

The conservation significance of flora species has been assessed using data from the following sources:

- *Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)*. Administered by the Australian Government Department of the Environment (DoE);
- *Wildlife Conservation Act 1950 (WC Act)*. Administered by the Western Australian Department of Parks and Wildlife (DPaW); and
- DBCA Priority Flora list. A non-legislative list maintained by DBCA’s Parks and Wildlife Service for management purposes.

Bio Diverse Solutions undertook the reconnaissance flora and vegetation survey between the 31<sup>st</sup> October and 1<sup>st</sup> November 2018 EPA Guidance Statement 51: *Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia* (EPA 2016). The area was surveyed using transects and traversed on foot. Along each transect, relevés were systematically surveyed within representative vegetation types to enable analysis and categorisation across the wider area. The flora was systematically recorded within the relevés and collections of plant specimens were made where further identification was required. For species that were not flowering and

where foliage or nuts / fruit couldn't be used for identification, potential habitat was used as an indication of the likelihood of species occurrence. The vegetation communities occurring within the survey area were mapped and described in detail using opportunistic mapping and relevé based surveys. Vegetation units were described based on structure, dominant taxa and cover characteristics as defined by relevé data and field observations.

A reconnaissance survey was deemed appropriate as the aim of this survey was to provide context and gather broader knowledge of the survey area. This type of survey aims to verify the desktop information obtained, and to characterise the flora / vegetation units present within the survey area. The targeted component of the flora survey aimed at identifying any potential threatened or priority species and communities within the survey area.

#### **2.4. Threatened Flora**

As a result of the above-mentioned database searches 17 DRF, 41 Priority and 1 Presumed Extinct species were identified as potentially being present within the survey area.

#### **2.5. Threatened Ecological Communities**

Database results also indicate that two Threatened Ecological Communities may be present within the survey area these being: *Subtropical and Temperate Coastal Saltmarsh* and *Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia*.

##### **2.5.1. Subtropical and Temperate Coastal Saltmarsh**

Consists of the assemblage of plants, animals and micro-organisms associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (south of 23°S latitude). The habitat is located in coastal areas under tidal influence. In southern latitudes saltmarsh are the dominant habitat in the intertidal zone and often occur in association with estuaries. It is typically restricted to the upper intertidal environment, generally between the elevation of the mean high tide, and the mean spring tide. The community consists mainly of salt-tolerant vegetation (halophytes) including: grasses, herbs, reeds, sedges and shrubs. Succulent herbs and grasses generally dominate and vegetation is generally <0.5m tall with the exception of some reeds and sedges. Many species of non-vascular plants are also found in saltmarsh, including epiphytic algae, diatoms and cyanobacterial mats. Saltmarsh consists of many vascular plant species but is dominated by relatively few families. There is also typically a high degree of endemism at the species level. The two most widely represented coastal saltmarsh plant families are the Chenopodiaceae and Poaceae. Four structural saltmarsh forms are currently recognised based on dominance of a particular vegetation type:

- dominance by succulent shrubs (e.g. *Tecticornia*)
- dominance by grasses (e.g. *Sporobolus virginicus*)
- dominance by sedges and grasses (e.g. *Juncus kraussii*, *Gahnia trifida*)
- dominance by herbs (e.g. low-growing creeping plants such as *Wilsonia backhousei*, *Samolus repens*, *Schoenus nitens*) (DBCA, 2017a).

##### **2.5.2. The Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia**

The Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia is generally kwongkan / kwongan shrubland, ranging from sparse to dense, thicket-forming, where Proteaceae species form a significant component. It is confined to the southeast botanical province of Western Australia (*sensu* Hopper and Gioia, 2004) and primarily occurs on sandplains and marine plains and lower to upper slopes and ridges, as well as uplands across this region (Department of the Environment, 2014).

## **2.6. Survey Limitations and constraints**

### Experience of personnel

Dr Ellen Hickman has over 18 years' experience as a botanist, of particular note is her work as the Rare Flora Officer in the South Coast for the then named Department of Environment and Conservation (DEC).

### Availability of local / regional contextual information

Vegetation types present within the local and regional area are well documented through the Albany Regional Vegetation Survey (ARVS). Detailed site-specific information is limited as it is privately owned land this is not considered a limiting factor for this survey.

### Proportion of flora recorded and/or collected, and identification issues

The single season vegetation and flora survey was undertaken in November 2018 (Spring) with the targeted flora survey completed at the same time. Spring is considered the optimal time for undertake vegetation and flora surveys within the South-west region. The proportion of flora identified is considered high.

### Survey effort and extent

Vegetation throughout the survey area was traversed by foot with opportunistic sampling and relevés utilised to classify the flora and vegetation present. The survey intensity was deemed appropriate for this stage of development.

### Disturbances (e.g. fire or flood)

A section of the western vegetation block had been recently burnt, however vegetation types were still able to be established based on regenerating and existing flora present. This is not deemed to have affected the completeness of the survey.

### Survey timing / season and, rainfall

As per the EPA Guidelines the survey was undertaken in Spring. The Albany area has seen a lower than average rainfall year, however this is not deemed to be a limiting factor for this survey.

### Remoteness or access issues

No restrictions were encountered. All areas were accessible by vehicle and on foot.

### 3. Flora and vegetation survey outcomes

During the field survey 141 species, consisting of 41 families and 105 genera were found. The most common families were Fabaceae, Proteaceae, Myrtaceae, Poaceae and Cyperaceae. This list includes 123 native species (Table 1) and 18 introduced species (denoted with an \*). No priority species were identified. The broadscale vegetation units are described in Section 3.1. with species identified within them outlined in Table 1 below (indicated by an X). Refer to Figure 9 for vegetation unit mapping. Relevé datasheets are presented in Appendix C.

Table 1: Flora species recorded within survey area.

Family	Genus	Species	Common Name	Vegetation Type					
				1	2	3	4	5	6
Anarthriaceae	<i>Anarthria</i>	<i>prolifera</i>		X	X				
Anarthriaceae	<i>Anarthria</i>	<i>scabra</i>			X				
Anarthriaceae	<i>Lyginia</i>	<i>barbata</i>			X				
Apiaceae	<i>Actinotus</i>	<i>glomeratus</i>			X				
Apiaceae	<i>Platysace</i>	<i>pendula</i>			X				
Apiaceae	<i>Xanthosia</i>	<i>rotundifolia</i>	Southern Cross	X	X				
Asparagaceae	<i>Laxmannia</i>	<i>jamesii</i>	James's Paperlily		X				
Asparagaceae	<i>Lomandra</i>	<i>sonderi</i>		X					
Asparagaceae	<i>Thysanotus</i>	<i>tenellus</i>		X					
Asteraceae	<i>Hypochaeris</i>	<i>radicata</i>	Flat Weed*		X				X
Campanulaceae	<i>Lobelia</i>	<i>tenuior</i>	Slender Lobelia		X				
Casuarinaceae	<i>Allocasuarina</i>	<i>fraseriana</i>	Sheoak	X	X				
Centrolepidaceae	<i>Centrolepis</i>	<i>strigosa</i>	Hairy Centrolepis		X				
Colchicaceae	<i>Burchardia</i>	<i>congesta</i>		X	X				
Cyatheaceae	<i>Cyathea</i>	<i>cooperi</i>	Tree Fern*				X		
Cyperaceae	<i>Baumea</i>	<i>preissii</i>						X	
Cyperaceae	<i>Cyathochaeta</i>	<i>avenacea</i>		X					
Cyperaceae	<i>Cyathochaeta</i>	<i>equitans</i>			X				
Cyperaceae	<i>Gahnia</i>	<i>decomposita</i>						X	
Cyperaceae	<i>Gymnoschoenus</i>	<i>anceps</i>				X			
Cyperaceae	<i>Lepidosperma</i>	<i>squamatum</i>		X					
Cyperaceae	<i>Mesomelaena</i>	<i>tetragona</i>	Semaphore Sedge	X					
Cyperaceae	<i>Tetragonia</i>	<i>octandra</i>		X					
Dasypogonaceae	<i>Dasypogon</i>	<i>bromeliifolius</i>	Pineapple Bush	X	X				
Dasypogonaceae	<i>Kingia</i>	<i>australis</i>	Kingia	X					
Dennstaedtiaceae	<i>Histiopteris</i>	<i>incisa</i>	Bat's wing Fern					X	
Dennstaedtiaceae	<i>Pteridium</i>	<i>esculentum</i>	Bracken	X	X				
Dilleniaceae	<i>Hibbertia</i>	<i>cunninghamii</i>		X					
Dilleniaceae	<i>Hibbertia</i>	<i>pilosa</i>	Hairy Guinea Flower		X				
Droseraceae	<i>Drosera</i>	<i>macrantha</i>	Bridal Rainbow	X					
Droseraceae	<i>Drosera</i>	<i>menziesii</i>	Pink Rainbow			X	X		
Elaeocarpaceae	<i>Tetratheca</i>	<i>affinis</i>			X				
Ericaceae	<i>Brachyloma</i>	<i>baxteri</i>			X				

Table 1 continued.

Family	Genus	Species	Common Name	Vegetation Type					
				1	2	3	4	5	6
Ericaceae	<i>Leucopogon</i>	<i>distans</i>			X				
Ericaceae	<i>Leucopogon</i>	<i>verticillata</i>	Tassel Flower	X					
Fabaceae	<i>Acacia</i>	<i>baileyana</i>	Cootamundra Wattle*	X					
Fabaceae	<i>Acacia</i>	<i>hastulata</i>				X			
Fabaceae	<i>Acacia</i>	<i>longifolia</i>	Sydney Wattle*	X					
Fabaceae	<i>Acacia</i>	<i>myrtifolia</i>		X					
Fabaceae	<i>Bossiaea</i>	<i>linophylla</i>		X					
Fabaceae	<i>Bossiaea</i>	<i>ornata</i>	Broad Leaved Brown Pea		X				
Fabaceae	<i>Bossiaea</i>	<i>rufa</i>			X				
Fabaceae	<i>Daviesia</i>	<i>aphylla</i>			X				
Fabaceae	<i>Daviesia</i>	<i>flexuosa</i>		X					
Fabaceae	<i>Gompholobium</i>	<i>knightianum</i>			X				
Fabaceae	<i>Gompholobium</i>	<i>ovatum</i>		X					
Fabaceae	<i>Gompholobium</i>	<i>polymorphum</i>		X					
Fabaceae	<i>Gompholobium</i>	<i>scabrum</i>			X				
Fabaceae	<i>Hovea</i>	<i>chorizemifolia</i>	Holly-leaved Hovea	X					
Fabaceae	<i>Jacksonia</i>	<i>spinosa</i>			X				
Fabaceae	<i>Kennedia</i>	<i>coccinea</i>	Coral Vine		X				
Fabaceae	<i>Latrobea</i>	<i>genistoides</i>			X				
Fabaceae	<i>Ornithopus</i>	<i>compressus</i>	Yellow Serradella*					X	
Fabaceae	<i>Psoralea</i>	<i>pinnata</i>	African Scurfpea*		X	X	X		
Fabaceae	<i>Pultenaea</i>	<i>reticulata</i>			X				
Fabaceae	<i>Sphaerolobium</i>	<i>hygrophilum</i>				X		X	
Fabaceae	<i>Sphaerolobium</i>	<i>fornicatum</i>				X		X	
Fabaceae	<i>Sphaerolobium</i>	<i>rostratum</i> (albino form)				X		X	
Fabaceae	<i>Trifolium</i>	<i>glomeratum</i>	Cluster Clover*					X	X
Goodeniaceae	<i>Dampiera</i>	<i>leptoclada</i>	Slender-shooted Dampiera			X			
Goodeniaceae	<i>Dampiera</i>	<i>pedunculata</i>		X	X				
Goodeniaceae	<i>Scaevola</i>	<i>striata</i>	Royal Robe	X					
Haemodoraceae	<i>Anigozanthos</i>	<i>preissii</i>	Albany Catspaw		X				
Haemodoraceae	<i>Conostylis</i>	<i>setigera</i>	Bristle Cottonhead	X					
Haemodoraceae	<i>Haemodorum</i>	<i>spicatum</i>	Mardja		X				
Haemodoraceae	<i>Phlebocarya</i>	<i>ciliata</i>			X				
Hemerocallidaceae	<i>Agrostocrinum</i>	<i>scabrum</i>	Blue Grass Lily		X				
Hemerocallidaceae	<i>Johnsonia</i>	<i>lupulina</i>	Hooded Lily	X					
Iridaceae	<i>Patersonia</i>	<i>babianoides</i>		X					
Iridaceae	<i>Patersonia</i>	<i>occidentalis</i>	Purple Flag	X					
Iridaceae	<i>Watsonia</i>	<i>meriana</i> var. <i>bulbillifera</i>	Bugle Lily*		X				



Table 1 continued.

Family	Genus	Species	Common Name	Vegetation Type					
				1	2	3	4	5	6
Lentibulariaceae	<i>Utricularia</i>	<i>multifida</i>	Pink Petticoats			X			
Lentibulariaceae	<i>Utricularia</i>	<i>volubilis</i>	Twining Bladderwort			X			
Lindsaeaceae	<i>Lindsaea</i>	<i>linearis</i>	Screw Fern	X					
Loganiaceae	<i>Orianthera</i>	<i>serpyllifolia</i>		X					
Loganiaceae	<i>Phyllangium</i>	<i>paradoxum</i>			X				
Loranthaceae	<i>Nuytsia</i>	<i>floribunda</i>	Christmas Tree		X				
Myrtaceae	<i>Agonis</i>	<i>theiformis</i>		X					
Myrtaceae	<i>Beaufortia</i>	<i>decussata</i>	Gravel Bottlebrush	X					
Myrtaceae	<i>Callistemon</i>	<i>glaucus</i>	Albany Bottlebrush			X	X	X	
Myrtaceae	<i>Corymbia</i>	<i>calophylla</i>	Marri	X					
Myrtaceae	<i>Eucalyptus</i>	<i>marginata</i>	Jarraah	X	X				
Myrtaceae	<i>Eucalyptus</i>	<i>staeri</i>	Albany Blackbutt		X				
Myrtaceae	<i>Homalospermum</i>	<i>firmum</i>				X	X	X	
Myrtaceae	<i>Hypocalymma</i>	<i>robustum</i>	Swan River Myrtle		X				
Myrtaceae	<i>Kunzea</i>	<i>sulphurea</i>		X					
Myrtaceae	<i>Melaleuca</i>	<i>preissiana</i>	Moonah				X		
Myrtaceae	<i>Melaleuca</i>	<i>thymoides</i>		X	X				
Myrtaceae	<i>Taxandria</i>	<i>linearifolia</i>				X			
Myrtaceae	<i>Taxandria</i>	<i>parviceps</i>		X	X				
Orchidaceae	<i>Caladenia</i>	<i>flava</i>	Cowslip Orchid		X				
Orchidaceae	<i>Gastrodia</i>	<i>lacista</i>	Potato Orchid			X			
Orchidaceae	<i>Paracaleana</i>	<i>disjuncta</i>			X				
Orchidaceae	<i>Thelymitra</i>	<i>crinita</i>	Blue Lady Orchid	X					
Orchidaceae	<i>Thelymitra</i>	<i>mucida</i>	Plum Orchid	X					
Phyllanthaceae	<i>Poranthera</i>	<i>microphylla</i>	Small Poranthera		X				
Phytolaccaceae	<i>Phytolacca</i>	<i>octandra</i>	Red Ink Plant*		X	X		X	
Poaceae	<i>Anthoxanthum</i>	<i>odoratum</i>	Sweet Vernal Grass	X					
Poaceae	<i>Avena</i>	<i>barbata</i>	Bearded Oats*	X					
Poaceae	<i>Briza</i>	<i>maxima</i>	Blowfly Grass*	X					
Poaceae	<i>Bromus</i>	<i>diandrus</i>	Great Brome*	X	X				
Poaceae	<i>Eragrostis</i>	<i>curvula</i>	African Lovegrass*		X				
Poaceae	<i>Holcus</i>	<i>lanatus</i>	Yorkshire Fog*	X			X	X	
Poaceae	<i>Lagurus</i>	<i>ovatus</i>	Hare's Tail Grass*		X				
Poaceae	<i>Lolium</i>	<i>rigidum</i>	Wimmera Ryegrass*		X				X
Poaceae	<i>Cenchrus</i>	<i>clandestinus</i>	Kikuyu*	X	X				X
Polygalaceae	<i>Comesperma</i>	<i>virgatum</i>				X		X	
Polygalaceae	<i>Rumex</i>	<i>pulcher</i>	Fiddle Dock*		X				X
Proteaceae	<i>Adenanthos</i>	<i>cuneatus</i>	Coastal Jugflower	X	X				
Proteaceae	<i>Adenanthos</i>	<i>obovatus</i>	Basket Flower		X				

Table 1 continued.

Family	Genus	Species	Common Name	Vegetation Type					
				1	2	3	4	5	6
Proteaceae	<i>Banksia</i>	<i>attenuata</i>	Slender Banksia	X	X				
Proteaceae	<i>Banksia</i>	<i>formosa</i>	Showy Dryandra	X					
Proteaceae	<i>Banksia</i>	<i>grandis</i>	Bull Banksia	X					
Proteaceae	<i>Banksia</i>	<i>ilicifolia</i>	Holly-leaved Banksia		X				
Proteaceae	<i>Banksia</i>	<i>littoralis</i>	Swamp Banksia				X	X	
Proteaceae	<i>Banksia</i>	<i>quercifolia</i>	Oak-leaved Banksia		X				
Proteaceae	<i>Conospermum</i>	<i>caeruleum</i>	Blue Brother	X					
Proteaceae	<i>Hakea</i>	<i>amplexicaulis</i>	Prickly Hakea	X					
Proteaceae	<i>Hakea</i>	<i>ruscifolia</i>	Candle Hakea	X					
Proteaceae	<i>Hakea</i>	<i>varia</i>			X				
Proteaceae	<i>Isopogon</i>	<i>longifolius</i>		X					
Proteaceae	<i>Persoonia</i>	<i>longifolia</i>	Snottygobble	X					
Proteaceae	<i>Petrophile</i>	<i>diversifolia</i>		X					
Restionaceae	<i>Desmocladus</i>	<i>fasciculatus</i>		X					
Restionaceae	<i>Empodisma</i>	<i>gracillimum</i>				X	X	X	
Restionaceae	<i>Hypolaena</i>	<i>exsulca</i>			X				
Restionaceae	<i>Leptocarpus</i>	<i>tenax</i>	Slender Twine Rush			X		X	
Restionaceae	<i>Tremulina</i>	<i>tremula</i>			X				
Rhamnaceae	<i>Spyridium</i>	<i>globulosum</i>	Basket Bush	X					
Rubiaceae	<i>Opercularia</i>	<i>hispidula</i>	Hispid Stinkweed	X					
Rutaceae	<i>Boronia</i>	<i>crenulata</i>	Aniseed Boronia	X					
Rutaceae	<i>Boronia</i>	<i>molloyae</i>	Tall Boronia					X	
Rutaceae	<i>Boronia</i>	<i>spathulata</i>	Boronia	X					
Solanaceae	<i>Solanum</i>	<i>laciniatum</i>	Kangaroo Apple*	X				X	
Stylidiaceae	<i>Stylidium</i>	<i>diversifolium</i>	Touch-me-not		X				
Stylidiaceae	<i>Stylidium</i>	<i>piliferum</i>	Common Butterfly Triggerplant	X					
Stylidiaceae	<i>Stylidium</i>	<i>schoenoides</i>	Cow Kicks	X					
Stylidiaceae	<i>Stylidium</i>	<i>spinulosum</i>	Topsy-turvy Triggerplant		X				
Thymelaeaceae	<i>Pimelea</i>	<i>imbricata</i>			X				
Xanthorrhoeaceae	<i>Xanthorrhoea</i>	<i>platyphylla</i>		X					
Xyridaceae	<i>Xyris</i>	<i>lanata</i>						X	

### 3.1. Vegetation types

The flora and vegetation survey identified six vegetation types; Jarrah/Marri/Sheoak Laterite Forest (Vegetation Type 1) Jarrah/Sheoak/*Eucalyptus staeri* Sandy Woodland (Vegetation Type 2), *Homalospermum firmum*/*Callistemon glaucus* Peat Thicket (Vegetation Type 3), *Melaleuca preissiana* Low Woodland (Vegetation Type 4), Miscellaneous Drainage Woodland/Shrubland (Vegetation Type 5) and Open paddock / agricultural land (Vegetation Type 6), including bare and sand extraction areas. A full description is provided in the following sections.

#### 3.1.1. Vegetation Type 1 - Jarrah/Marri/Sheoak Laterite Forest

Key defining features of this vegetation type are an overstorey of *Eucalyptus marginata* and *Allocasuarina fraseriana*. The relatively open and diverse shrub layer is dominated by *Banksia grandis*, *Agonis theiformis*, *Leucopogon verticillata*, *Xanthosia rotundifolia*, *Bossiaea linophylla*, *Nuytsia floribunda*, *Kingia australis*, *Hovea chorizemifolia*, *Taxandria parviceps* and *Xanthorrhoea platyphylla*. The sedges and herb layers are dominated by *Anarthria prolifera*, *Desmocladius fascicularis*, *Mesomelaena tetragona*, *Cyathochaeta equitans*, *Patersonia occidentalis*, *Haemodorum spicatum* and *Orianthera serpyllifolia*. The grass layer consists of introduced species such as *Briza maxima*\*, *Avena barbata*\*, *Holcus lanatus*\*, *Bromus diandrus*\*.

This vegetation type aligns with ARVS 12 and occurs within the remnant vegetation to the west and along the northern and eastern boundaries in the existing Down Road and Down Road South Road reserves (Figure 9). Please refer to Table 1 above for a full list of species identified during the survey and Figure 3 for images of this vegetation type.



Figure 3: Photographic representation of the vegetation type present within the survey area.



### 3.1.2. Vegetation Type 2 - Jarrah/Sheoak/Eucalyptus staeri Sandy Woodland

Key defining features of this vegetation type are an overstorey of *Eucalyptus marginata*, *Allocasuarina fraseriana*, *Eucalyptus staeri* and *Corymbia calophylla*. The relatively open and diverse shrub layer is dominated by *Banksia grandis*, *Pimelea imbricata*, *Hakea amplexicaulis*, *Leucopogon verticillata*, *Dasypogon bromeliifolius*, *Leucopogon distans*, *Boronia crenulata*, *Xanthosia rotundifolia* and *Gompholobium ovatum*. The sedges and herb layers are dominated by *Anarthria prolifera*, *Cyathochaeta equitans*, *Desmocladius fascicularis*, *Patersonia occidentalis*, *Lindsaea linearis*, *Dampiera pedunculata* and *Lepidosperma squamatum*. The grass layer consists of introduced species *Holcus lanatus*\*, *Bromus diandrus*\*, *Cenchrus clandestinus*\*, *Anthoxanthum odoratum*\*, *Lolium rigidum*\* and *Lagurus ovatus*\*.

This vegetation type aligns with ARVS 13 and occurs within the western remnant vegetation (western precinct), along the northern and eastern boundaries in the existing Down Road and Down Road South Road reserves, within remnant vegetation located to the north and south of the creek / drainage line (southern precinct) and in small isolated pockets throughout the paddocks (Figure 9). Please refer to Table 1 for a full list of species identified during the survey and Figure 4 for images of this vegetation type.



Figure 4: Photographic representation of the vegetation type present within the survey area.

### 3.1.3. Vegetation Type 3 - *Homalospermum firmum*/*Callistemon glaucus* Peat Thicket

The vegetation type is dominated by a shrub layer consisting of *Melaleuca preissiana*, *Callistemon glaucus*, *Homalospermum firmum* and *Banksia littoralis* over *Taxandria parviceps*, *Taxandria linearis* and *Acacia hastulata*. The sedges and herbs layers are dominated by *Empodisma gracillimum*, *Gymnoschoenus anceps* and *Dampiera leptoclada*. This vegetation unit aligns with ARVS 47 and occurs along the south-western boundary (recently burnt) and within the creek / drainage system located along the southern boundary (southern precinct) (Figure 9). Please refer to Table 1 for a list of species identified during the survey within this vegetation type and Figure 5 for images of this vegetation type.



Figure 5: Photographic representation of the vegetation type present within the survey area.



### 3.1.4. Vegetation Type 4 - *Melaleuca preissiana* Low Woodland

This vegetation type was dominated by a shrub layer of *Melaleuca preissiana* and *Psoralea pinnata*\* and occasional *Banksia littoralis* over *Taxandria linearis*, *Taxandria parviceps*, *Callistemon glaucus*, *Homalospermum firmum*, *Empodisma gracillimum* and *Holcus lanatus*\*. This vegetation type aligns with ARVS 49 and was found within the creek / drainage area (Figure 9). Please refer to Table 1 for a full list of species identified during the survey and Figure 6 for images of this vegetation type.



Figure 6: Photographic representation of the vegetation type present within the survey area.

### 3.1.5. Vegetation Type 5 - Miscellaneous Drainage Woodland/Shrubland

This vegetation type is dominated by *Taxandria linearis* and *Acacia hastulata* over *Homalospermum firmum*, *Callistemon glaucus* and *Boronia molloyae*. Dominant species in the sedge, herb and grass layer were *Drosera menziesii*, *Gahnia decomposita*, *Phytolacca octandra*\* and *Holcus lanatus*\*. This unit aligns with ARVS 50 and is located along the creek / drainage line situated between *Homalospermum firmum* / *Callistemon glaucus* Peat Thicket and *Melaleuca preissiana* Low Woodland vegetation types (Figure 9). Please refer to Table 1 for a full list of species identified during the survey and Figure 7 for images of this vegetation type.



Figure 7: Photographic representation of the vegetation type present within the survey area.



### 3.1.6. Vegetation Type 6 - Open paddock / agricultural land

This vegetation unit is situated internally throughout the survey area (Figure 9). It consists of grazed paddock areas / agricultural land. Species composition includes introduced paddock species such as *Cenchrus clandestinus* (Kikuyu), *Trifolium glomeratu* (Cluster Clover) *Hypochoeris radicata* (Flat Weed), *Lagurus ovatus* (Hare's Tail Grass), *Lolium rigidum* (Wimmera Ryegrass), *Rumex pulcher* (Fiddle Dock) and *Solanum laciniatum* (Kangaroo Apple). This unit also includes the bare areas associated with existing sand extraction operations. Please refer to Table 1 above for a full list of species identified during the survey and Figure 8 for images of this vegetation type.



Figure 8: Photographic representation of the vegetation type present within the survey area.

### 3.2. Extent and Conservation Significance of Vegetation Types

The vegetation types described above align with vegetation units described in the Albany Regional Vegetation Survey (ARVS) report by Sandiford and Barret (2010). This report outlines that the total remnant vegetation within the ARVS area (made up of IUCN I-IV, other Crown reserves and non-reserve areas) was 44093ha (Sandiford and Barret 2010). The local and regional extent and significance of the vegetation units is discussed below (taken from Tables 3.2 and 3.3 in Sandiford and Barret 2010).

#### ARVS Vegetation Unit 12

This ARVS unit aligns with Vegetation Type 1. The vegetation unit is the most common vegetation unit throughout the ARVS area with the total current extent at 13144ha (representing 29.8% of the total remnant vegetation in the ARVS survey area). Approximately 7879ha are found within non-reserve areas followed by Crown Reserves (3991.6ha) and IUCN I-IV Reserves (1273ha). Although this unit is the most widespread it may be restricted to the ARVS context / survey area, with its eastern range limit occurring +/- within 10km of the ARVS survey area boundary (Sandiford and Barret 2010). Other regional and local representation criteria are that the vegetation type contains Priority flora species. The vegetation unit does not contain specific habitats of significance such as wetland / riparian vegetation, wetlands of national significance etc. (Sandiford and Barret 2010).

### ARVS Vegetation Unit 13

This ARVS unit aligns with Vegetation Type 2. This vegetation unit is the second most common unit throughout the ARVS area with the total extent being 5148ha (representing 29.8% of the total remnant vegetation in the ARVS survey area). 1936ha is found in Non-Reserve areas, 1878ha in Other Crown Reserves and 1334 in IUCN Reserves. This unit is also potentially restricted to the ARVS context / survey area with its eastern range limit occurring +/- within 10km of the ARVS survey area boundary (Sandiford and Barret 2010). Other regional and local representation criteria are that the vegetation type contains Priority and Declared Rare Flora (DRF) species. The vegetation unit does not contain specific habitats of significance such as wetland / riparian vegetation, wetlands of national significance etc. (Sandiford and Barret 2010).

### ARVS Vegetation Unit 47

This ARVS unit aligns with Vegetation Type 3. The total current extent within the ARVS unit as described by Sandiford and Barret (2010) is 2083ha, consisting of 1606ha in Non-Reserves, 263ha in IUCN Reserves and 214ha in Other Crown Reserves. This unit is not restricted nor is it near its range limit. It does contain habitats of significance such as including wetland/dampland/riparian habitats and wetlands of national significance (Sandiford and Barret 2010). This vegetation unit is associated with the Marbellup flats that extends from the southern boundary of the Down Road survey area and into surrounding areas.

### ARVS Vegetation Unit 49

This ARVS unit aligns with Vegetation Type 4. The total current extent within the ARVS unit as described by Sandiford and Barret (2010) is 679ha, consisting of 476ha in Non-Reserves, 150ha in Other Crown Reserves and 53ha in IUCN Reserves. This vegetation unit has been classified as rare (<1500ha) as well as being at its eastern range limit (+/- within 10km) of the ARVS survey area boundary (Sandiford and Barret 2010). Priority flora species are found within this vegetation unit as well as significant habitat (wetland/dampland/riparian habitats). At a site-specific scale (i.e Down Road survey area) the vegetation unit is associated with the Marbellup flats that extends from within the southern boundary and into surrounding areas.

### ARVS Vegetation Unit 50

This ARVS unit aligns with Vegetation Type 5. The total current extent within the ARVS unit as described by Sandiford and Barret (2010) is 259ha, consisting of 161ha in Non-Reserves, 77ha in Other Crown Reserves and 21ha in IUCN Reserves. This unit is not included in Sandiford and Barret's conservation assessment (Table 3.3), however the vegetation unit is associated with the Marbellup flats that extends from within the southern boundary and into surrounding areas.



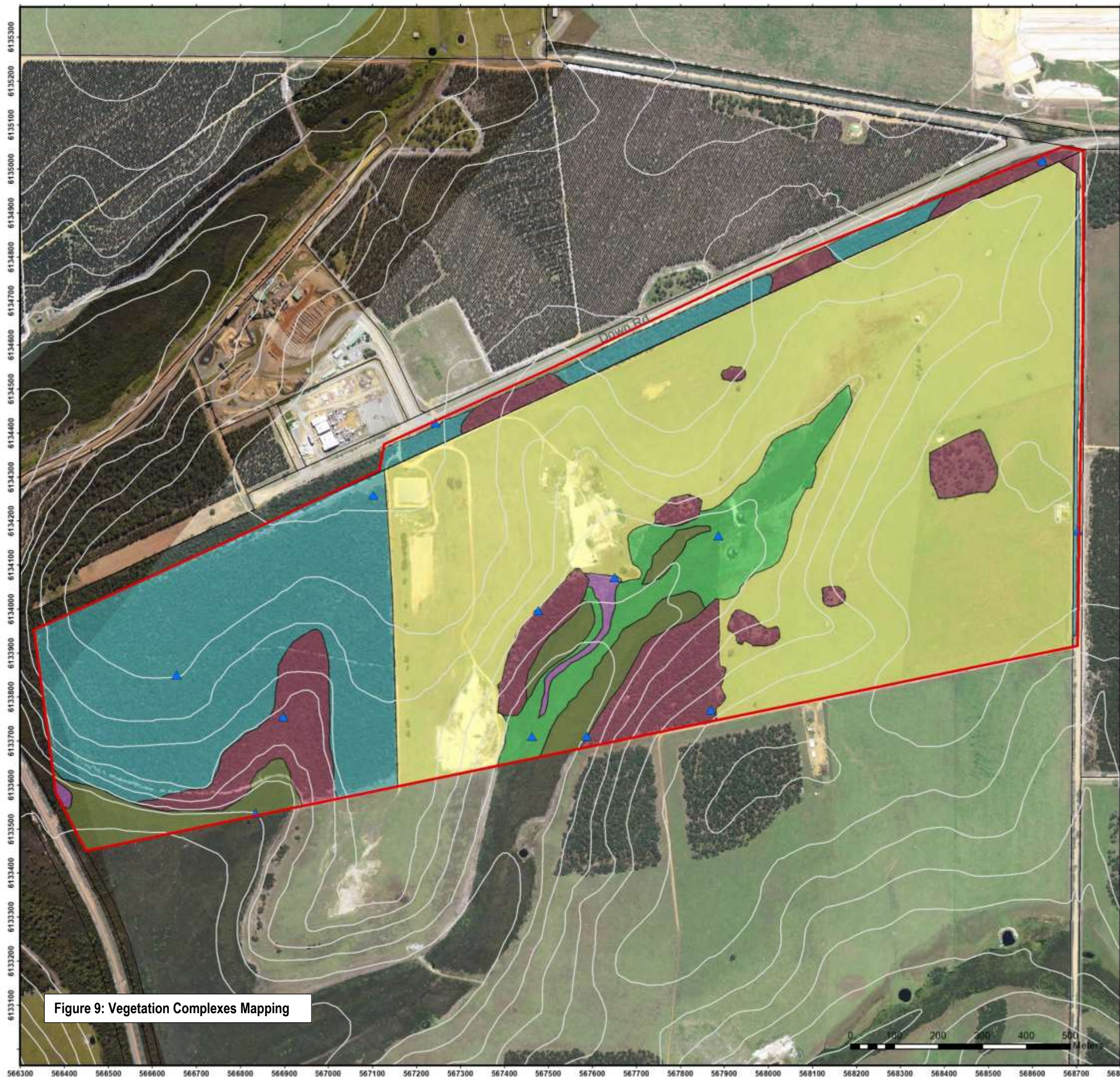
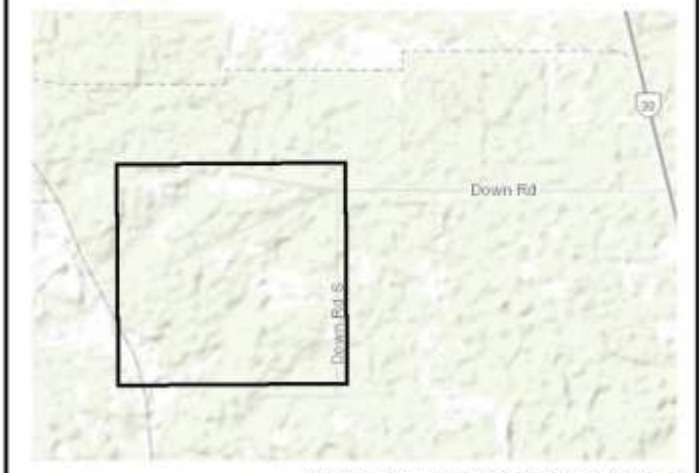


Figure 9: Vegetation Complexes Mapping



29 Hercules Crescent  
Albany, WA 6330  
Australia  
Tel: 08 9842 1575  
Fax: 08 9842 1575



Overview Map Scale 1:100,000

- Legend**
- Subject Site
  - Cadastre
  - 5m Contours
  - ▲ Vegetation Relieves
- Vegetation Complexes**
- Jarrah/Sheoak/Eucalyptus staeri Sandy Woodland
  - Jarrah/Marri/Sheoak Laterite Forest
  - Homalospermum firmum/Callistemon glaucus Peat Thicket
  - Melaleuca preissiana Low Woodland
  - Open paddock / agricultural land
  - Miscellaneous Drainage Woodland/Shrubland

Scale  
1:8,500 @ A3  
GDA MGA 94 Zone 50

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

**CLIENT**  
City of Albany  
PO Box 484  
Albany, WA 6331

### Vegetation Complexes Mapping

Assessor	QA Check	Drawn by
EH	KK	BT
STATUS	FILE	DATE
FINAL	MSC0137-002	06/02/2019



### 3.3. Vegetation Condition

The vegetation condition for the survey area has been mapped using the Keighery condition rating scale (Keighery 1994, Table 2). Vegetation in the survey area has variable condition ranging from Pristine to Completely Degraded. The majority of the western remnant vegetation block has been classified as Pristine, with two small sections classified as Excellent along its north and south eastern boundaries. The vegetation situated immediately along the creek / drainage line has been classified as both Pristine and Very Good. Roadside vegetation has been classified as both Very Good and Excellent. The paddock areas and vegetation surrounding dams and remnant vegetation have been classified as Completely Degraded due to significant structural changes such as multiple disturbances be that either through fire, clearing, weed invasion and impacts from cattle. Stands of paddock trees have also been classified as Completely Degraded due to the complete loss of structure and solely consisting of a native overstorey. Overall 121.52ha were classified as Completely Degraded, 12.06ha as Very Good, 59.76ha as Pristine and 6.78ha as Excellent. Refer to Figure 10 for vegetation condition mapping.

**Table 2: Condition Rating Scale (Keighery 1994).**

Vegetation Condition Rating	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very good	Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires; the presence of some more aggressive weeds; dieback; logging; & grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate to it. For example, disturbance to vegetation structure caused by very frequent fires; the presence of some very aggressive weeds at high density; partial clearing; dieback; & grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires; the presence of very aggressive weeds; partial clearing; dieback; & grazing.
Completely Degraded	Vegetation structure not intact; the area completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

### 3.4. Weeds and disturbance

Of the 141 species recorded within the survey area, 19 (12.7%) are introduced (Table 1). Of the 19-weed species identified across the survey area, none are a declared pest species under the *Biosecurity and Agriculture Management Act 2007*. Under the Environmental Weeds Strategy for Western Australia (CALM 1999) there are two weed species rated as Low, four species are rated as Mild, seven species are rated as Moderate, four species are rated as High and the remaining two species have no rating (Table 3). The strategy classifies weeds according to their relative level of threat to conservation (high medium or low) and this rating is based on their distribution, relative level of invasiveness and environmental impact.

**Table 3: Weed species recorded from the survey area.**

Family	Genus	Species	Vernacular	WA Weed Strategy rating (CALM 1999) / BAM Act
Asteraceae	<i>Hypochaeris</i>	<i>radicata</i>	Flat Weed	Moderate / Permitted - s11
Cyatheaceae	<i>Cyathea</i>	<i>cooperi</i>	Tree Fern	Low / Permitted - s11
Fabaceae	<i>Acacia</i>	<i>baileyana</i>	Cootamundra Wattle	Low / Permitted - s11
Fabaceae	<i>Acacia</i>	<i>longifolia</i>	Sydney Wattle	Permitted - s11
Fabaceae	<i>Ornithopus</i>	<i>compressus</i>	Yellow Serradella	Mild / Permitted - s11
Fabaceae	<i>Psoralea</i>	<i>pinnata</i>	African Scurfpea	Mild / Permitted - s11
Fabaceae	<i>Trifolium</i>	<i>glomeratum</i>	Cluster Clover	Moderate / Permitted - s11

Table 3 Continued

Family	Genus	Species	Vernacular	WA Weed Strategy rating (CALM 1999) / BAM Act
Iridaceae	<i>Watsonia</i>	<i>meriana</i> var. <i>bulbillifera</i>	Bugle Lily	High / Permitted - s11
Poaceae	<i>Avena</i>	<i>barbata</i>	Bearded Oats	Moderate / Permitted - s11
Poaceae	<i>Briza</i>	<i>maxima</i>	Blowfly Grass	Moderate / Permitted - s11
Poaceae	<i>Bromus</i>	<i>diandrus</i>	Great Brome	High / Permitted - s11
Poaceae	<i>Eragrostis</i>	<i>curvula</i>	African Lovegrass	High / Permitted - s11
Poaceae	<i>Holcus</i>	<i>lanatus</i>	Yorkshire Fog	Moderate / Permitted - s11
Poaceae	<i>Lagurus</i>	<i>ovatus</i>	Hare's Tail Grass	High / Permitted - s11
Poaceae	<i>Lolium</i>	<i>rigidum</i>	Wimmera Ryegrass	Moderate / Permitted - s11
Poaceae	<i>Cenchrus</i>	<i>clandestinus</i>	Kikuyu	Moderate / Permitted - s11
Polygalaceae	<i>Rumex</i>	<i>pulcher</i>	Fiddle Dock	Mild / Permitted - s11
Phytolaccaceae	<i>Phytolacca</i>	<i>octandra</i>	Red Ink Plant	Mild / Permitted - s11
Solanaceae	<i>Solanum</i>	<i>laciniatum</i>	Kangaroo Apple	Permitted - s11

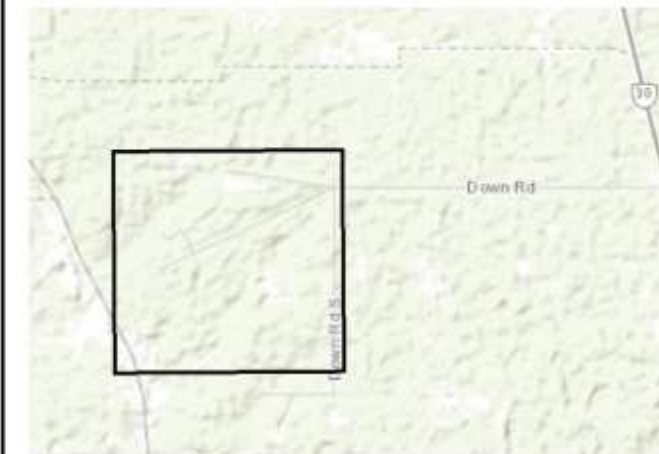




Figure 10: Vegetation Condition Mapping



29 Hercules Crescent  
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Overview Map Scale 1:100,000

**Legend**

- Subject Site
- Cadastre
- 5m Contours

**Vegetation Condition**

- Completely Degraded
- Very Good
- Excellent
- Pristine



Scale  
1:8,500 @ A3  
GDA MGA 94 Zone 50

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

**CLIENT**

City of Albany  
PO Box 484  
Albany, WA 6331

**Vegetation Condition Mapping**

Assessor <b>EH</b>	QA Check <b>KK</b>	Drawn by <b>BT</b>
STATUS <b>FINAL</b>	FILE <b>MSC0137-002</b>	DATE <b>13/12/2018</b>



### 3.5. Priority and Threatened Ecological Communities

While two threatened ecological communities were identified as potentially occurring within the survey area during the desktop assessment, neither of these were found to be present within the survey area (Table 4).

**Table 4 Potential Priority and Threatened Ecological Communities within 15km of the survey area.**

Community Name	Status	Description	Survey Outcome
Subtropical and Temperate Coastal Saltmarsh	Priority 3 (WA) VU (EPBC Act)	<p>Consists of the assemblage of plants, animals and micro-organisms associated with saltmarsh in coastal regions of sub-tropical and temperate Australia (south of 23oS latitude). The habitat is coastal areas under tidal influence. In southern latitudes saltmarsh are the dominant habitat in the intertidal zone and often occur in association with estuaries. It is typically restricted to the upper intertidal environment, generally between the elevation of the mean high tide, and the mean spring tide. The community consists mainly of salt-tolerant vegetation (halophytes) including: grasses, herbs, reeds, sedges and shrubs. Succulent herbs and grasses generally dominate and vegetation is generally &lt;0.5m tall with the exception of some reeds and sedges. Many species of non-vascular plants are also found in saltmarsh, including epiphytic algae, diatoms and cyanobacterial mats. Saltmarsh consists of many vascular plant species but is dominated by relatively few families. There is also typically a high degree of endemism at the species level. The two most widely represented coastal saltmarsh plant families are the Chenopodiaceae and Poaceae. Four structural saltmarsh forms are currently recognised based on dominance of a particular vegetation type:</p> <ul style="list-style-type: none"> <li>• dominance by succulent shrubs (e.g. <i>Tecticornia</i>)</li> <li>• dominance by grasses (e.g. <i>Sporobolus virginicus</i>)</li> <li>• dominance by sedges and grasses (e.g. <i>Juncus kraussii</i>, <i>Gahnia trifida</i>)</li> <li>• dominance by herbs (e.g. low-growing creeping plants such as <i>Wilsonia backhousei</i>, <i>Samolus repens</i>, <i>Schoenus nitens</i>) (DBCA, 2017a).</li> </ul>	Not present within the survey area. The habitat described is not present in the creek line / drainage area. The structural composition on site does not meet any of the four described as being consists with this TEC.
Proteaceae Dominated Kwongan Shrublands of the Southeast Coastal Floristic Province of Western Australia	Priority 3 (WA) EN (EPBC Act)	<p>Consists of predominantly obligate seeding proteaceous shrubland and heath (kwongan) and mallee heath on sandplain, duplex sand/clay and gravels overlying Eocene sediments, quartzite, schist, Yilgarn and Albany Fraser granite and greenstone ranges. Its flora is characterised by high species diversity and a high degree of endemism, particularly in the Stirling Range, Fitzgerald River National Park, Ravensthorpe Range and Russell Ranges. Due to the high levels of endemism, there are few species that exist across the entire range of the dense, obligate seeding Proteaceae dominated shrublands and kwongan of the Esperance Sandplains, however particular species have been identified as common dominant species in each of its ecodistricts (DBCA, 2017a).</p>	Not present within the survey area. Species composition does not meet the diagnostic features of the TEC.

#### 1.1. Threatened Flora

The scope for this survey was to provide the client with information on any threatened flora species that are potentially present within the survey area. For species that were not flowering and that require flowers for accurate identification, a risk assessment was undertaken of habitat suitability (Table 5). Species were deemed either likely or unlikely to occur in the area based on habitat suitability (e.g. soil type, vegetation type, density etc). None of the 17 DRF and 41 Priority species potentially occurring in the area were found to be present.

Table 5 Potential threatened flora located within 15km of the survey area.

Family	Species	Status (WA)	Habitat	Flowering period	Potentially Suitable Habitat Present	Survey Outcome / Comment
Asparagaceae	<i>Laxmannia jamesii</i>	P4	Grey sand. Winter-wet locations.	May-Jul	Y	Species detection within remnant vegetation to the west. Noted during the report writing process the species has been delisted.
Asparagaceae	<i>Thysanotus isantherus</i>	P4	Granite.	Nov - Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Brassicaceae	<i>Lepidium pseudotasmanicum</i>	P4	Loam, sand.	Feb or Dec	Y	Survey timing suitable. Species not found.
Centrolepidaceae	<i>Centrolepis caespitosa</i>	P4	White sand, clay. Salt flats, wet areas.	Oct-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Dasypogonaceae	<i>Calectasia cyanea</i>	T	White, grey or yellow sand, gravel. Occurs in heathland on gentle slopes with <i>Allocasuarina humilis</i> , <i>Banksia grandis</i> , <i>Adenanthos cuneatus</i> , <i>Hakea ruscifolia</i> and <i>Melaleuca thymoides</i> .	Jun-Oct	Y	Survey outside of flowering period. Species not found.
Droseraceae	<i>Drosera fimbriata</i>	P4	White sand, clay. Salt flats, wet areas.	Oct-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Ericaceae	<i>Andersonia auriculata</i>	P3	Grey or peaty sand, often over laterite. Swampy areas, granite outcrops.	Apr-Oct	Y	Survey outside of flowering period. Genus not found within the survey area. Species not found.
Ericaceae	<i>Andersonia sp. Jamesii</i> (J. Liddelow 84)	P3	Very limited publicly available information on this species			Genus not found within the survey area. Species not found.
Ericaceae	<i>Andersonia sp. Mitchell River</i> (B.G. Hammersley 925)	P3	Grey sand over laterite or granite.	Jun-Sept	Y	Survey outside of flowering period. Genus not found within the survey area. Species not found.
Ericaceae	<i>Leucopogon alternifolius</i>	P3	Grey/white sand. Swampy areas, seasonally wet areas	Aug-Dec	Y	Survey timing suitable. Species not found.



Table 5 Continued.

Family	Species	Status (WA)	Habitat	Flowering period	Potentially Suitable Habitat Present	Survey Outcome / Comment
Ericaceae	<i>Leucopogon cymbiformis</i>	P2	White/grey or yellow sand, lateritic gravelly soils. Sandplains, wet flats, foothills	Jul-Nov or Feb-Mar	Y	Survey timing suitable. Species not found.
Ericaceae	<i>Lysinema lasianthum</i>	P4	Swamps, seasonally wet areas	Jul-Nov	Y	Survey timing suitable. Species not found.
Ericaceae	<i>Sphenotoma drummondii</i>	T	Stony or shallow soils over granite or quartzite. Steep rocky slopes, crevices of rocks	Sept-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Fabaceae	<i>Acacia prismifolia</i>	X				Presumed extinct, Species not found.
Fabaceae	<i>Chorizema carinatum</i>	P3	Sand, sandy clay	Oct - Dec	Y	Survey timing suitable. Species not found.
Fabaceae	<i>Kennedia glabrata</i>	T	Soil pockets, sandy soils. Granite outcrops.	Aug-Nov	Y	Survey timing suitable. Species not found.
Haemodoraceae	<i>Conostylis misera</i>	T	White or grey sand, sandy loam. Winter-wet flats.	Oct-Nov	Y	Survey timing suitable. Species not found.
Haloragaceae	<i>Gonocarpus pusillus</i>	P4	Grey sandy clay. Winter-wet swamps	Nov-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Haloragaceae	<i>Gonocarpus simplex</i>	P4	Peaty sand. Swamps, seasonally inundated areas	Nov-Dec	Y	Survey timing suitable. Species not found.
Juncaceae	<i>Juncus meianthus</i>	P3	Black sand, sandy clay. Creeks, seepage areas	Nov-Dec or Jan	N	Survey timing suitable. No suitable habitat present. Species not found.
Malvaceae	<i>Thomasia quercifolia</i>	P4	Alluvium, sand over limestone, rocky loam. Coastal areas.	Sept-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Malvaceae	<i>Thomasia solanacea</i>	P4	Alluvium, sand over limestone, rocky loam. Coastal areas.	Sept-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Myrtaceae	<i>Astartea transversa</i>	P2	Grey sand or peaty black sandy clay on winter-wet flats in heath	Jan and Apr-Jun	Y	Survey outside of flowering period. Genus not found within the survey area. Species not found.

Table 5 Continued.

Family	Species	Status (WA)	Habitat	Flowering period	Potentially Suitable Habitat Present	Survey Outcome / Comment
Myrtaceae	<i>Melaleuca ringens</i>	P3	Sand. Limestone ridges & clifftops.	Sept-Oct	N	Survey timing suitable. No suitable habitat present. Species not found.
Myrtaceae	<i>Verticordia apecta</i>	T	Sandy clay with loam & broken granite. Slopes	Nov	N	Survey timing suitable. No suitable habitat present. Species not found.
Myrtaceae	<i>Verticordia fimbriilepis</i> subsp. <i>australis</i>	T	Shallow sand, clay loam. Granite outcrops	Oct-Dec	N	Survey timing suitable. No suitable habitat present. Species not found.
Orchidaceae	<i>Caladenia evanescens</i>	P1	Sand. Consolidated sand dunes.	Nov	N	Survey timing suitable. No suitable habitat present. Species not found.
Orchidaceae	<i>Caladenia granitora</i>	T	Shallow soil crevices on granite. Coastal areas	Oct-Nov	N	Survey timing suitable. No suitable habitat present. Species not found.
Orchidaceae	<i>Caladenia harringtoniae</i>	T	Sandy loam. Winter-wet flats, margins of lakes, creeklines, granite outcrops.	Oct-Nov	Y	Survey timing suitable. Species not found.
Orchidaceae	<i>Corybas abditus</i>	P3	Black peaty soils. Winter-wet swamps	Oct-Nov	Y	Survey timing suitable. Species not found.
Orchidaceae	<i>Corybas limpidus</i>	P4	Sand. Coastal dunes.	Aug-Sept	N	Survey outside of flowering period. No suitable habitat present. Species not found.
Orchidaceae	<i>Diuris drummondii</i>	T	Low-lying depressions, swamps.	Nov-Dec or Jan	Y	Survey timing suitable. Species not found.
Orchidaceae	<i>Drakaea micrantha</i>	T	White-grey sand.	Sept-Oct	Y	Survey outside of flowering period. Species not found.
Orchidaceae	<i>Microtis globula</i>	T	Peaty soils. Winter-wet swamps	Dec or Jan	Y	Survey outside of flowering period. Species not found.
Orchidaceae	<i>Microtis pulchella</i>	P4	Peaty sand. Winter-wet swamps	Nov-Dec or Jan	Y	Survey timing suitable. Species not found.
Orchidaceae	<i>Microtis quadrata</i>	P4	Poorly known taxa with unresolved distribution	Sept-Jan	Y	Survey timing suitable. Species not found.
Orchidaceae	<i>Prasophyllum paulinae</i>	P1	Low winter wet shrublands, in grasses and sedges in swamps	Sept-Nov	Y	Survey timing suitable. Species not found.

Table 5 Continued.

Family	Species	Status (WA)	Habitat	Flowering period	Potentially Suitable Habitat Present	Survey Outcome / Comment
Orchidaceae	<i>Pterostylis heberlei</i>	P2	Recently described (2017) very limited publicly available information			Genus not found on site. Species not found.
Orchidaceae	<i>Thelymitra variegata</i>	P2	Sandy clay, sand, laterite	Jun-Sept	Y	Survey outside of flowering period. Species not found.
Proteaceae	<i>Adenanthos x cunninghamii</i>	P4	Grey sand. Coastal dunes & sandplains	Sept-Oct	N	Survey outside of flowering period. No suitable habitat present. Species not found.
Proteaceae	<i>Banksia brownii</i>	T	Sand over laterite, gravel, loam over granite. In gullies	Mar-Jul	Y	Survey outside of flowering period. Species distinguishable outside of flowering period. Species not found.
Proteaceae	<i>Banksia goodii</i>	T	Shallow white to grey sand over laterite, in low open forest or low woodland of Jarrah and Sheoak.	May, Nov	Y	Survey timing suitable. Species not found.
Proteaceae	<i>Banksia seneciifolia</i>	P4	Sandy loam, sand. Rocky hillslopes.	Jun or Aug	N	Survey outside of flowering period. No suitable habitat present. Species not found.
Proteaceae	<i>Banksia serra</i>	P4	Gravel, sand or clay loam over laterite. Hillslopes.	Jul-Sept	Y	Survey outside of flowering period. Species not found.
Proteaceae	<i>Banksia verticillata</i>	T	Sandy loam. On or beside granite outcrops.	Jan-Apr	N	Survey outside of flowering period. No suitable habitat present. Species not found.
Proteaceae	<i>Isopogon buxifolius</i> var. <i>buxifolius</i>	P2	Grey sand. Swampy areas.	Jul-Dec	Y	Survey timing suitable. Species not found.
Proteaceae	<i>Isopogon uncinatus</i>	T	Loam or sand on granite, peaty sand. Swampy depressions, hillslopes.	Oct-Nov	Y	Survey timing suitable. Species not found.
Proteaceae	<i>Lambertia orbifolia</i> subsp. <i>orbifolia</i>	T	Shallow grey or light brown sand, grey sandy loams over laterite, gravel. Gently undulating plains, low slopes, low ridges, along roadsides	May, Aug, Nov-Dec or Jan-Feb	Y	Survey timing suitable. Species not found.
Proteaceae	<i>Synaphea incurva</i>	P1	Gravelly loam, sandy soils. Slopes.	Sept-Nov	Y	Survey timing suitable. Species not found.
Proteaceae	<i>Synaphea intricata</i>	P3	Sand, peaty sand. Flats, swampy areas	Sept-Oct	Y	Survey outside of flowering period. Species not found.

Table 5 Continued.

Family	Species	Status (WA)	Habitat	Flowering period	Potentially Suitable Habitat Present	Survey Outcome / Comment
Proteaceae	<i>Synaphea preissii</i>	P3	Sand, gravelly loam	Jul-Nov	Y	Survey timing suitable. Species not found.
Restionaceae	<i>Chordifex abortivus</i>	T	Sand. Low rises and undulating areas.	Sep-Oct	N	Survey outside of flowering period. No suitable habitat present. Species not found.
Restionaceae	<i>Leptocarpus crassipes</i>	P3	Swamps	Dec-Feb	Y	Survey outside of flowering period. Species not found.
Rhamnaceae	<i>Spyridium spadiceum</i>	P4	Sand or gravelly loam. Granitic hills	Aug-Dec or Jan-Feb/Apr	N	Survey timing suitable. No suitable habitat present. Species not found.
Rutaceae	<i>Boronia crassipes</i>	P3	Sand, peaty sand. Winter-wet swamps, creeklines.	Aug-Sept	Y	Survey outside of flowering period. Species not found.
Rutaceae	<i>Boronia virgata</i>	P4	Peaty sand or clay. Swampy or waterlogged places.	Aug-Dec	Y	Survey timing suitable. Species not found.
Stylidiaceae	<i>Stylidium falcatum</i>	P1	Sand, gravelly clay loam. Plains, lateritic ridges.	Oct-Nov	N	Survey timing suitable. No suitable habitat present. Species not found.
Stylidiaceae	<i>Stylidium gloeophyllum</i>	P4	Sandy clay loam, granite. Winter wet depressions, or fringing outcrops. Agonis, mallee, or Hakea shrubland with sedges	Oct-Dec	Y	Survey timing suitable. Species not found.
Thymelaeaceae	<i>Pimelea rosea subsp. annelsii</i>	P3	Sandy soils with gravel, laterite. Upper slopes	Sept-Nov	Y	Survey timing suitable. Species not found.

## 4. Fauna

### 4.1. Desktop Assessment

Desktop inventory of potential fauna species likely to occur within 15 km of the survey area was undertaken using the following databases and applicable reports:

- DBCA's Nature Map Database Search (combined data from DBCA, Western Australian Museum and Birds Australia) (DPaW 2007-); and
- Protected matters search tool (DoE 2017a).

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

### 4.2. Habitat Connectivity

The *South Coast Macro Corridor Network* is a bioregional and landscape-scale approach to habitat connectivity that acknowledges that remnant vegetation can play a very important role in developing corridors between protected areas to help achieve long-term biodiversity management outcomes (Wilkins *et al.* 2006; DBCA, 2017b). The subject site lies within one of the major potential vegetation corridors known as the "Marbellup Link" which connects remnant vegetation to the existing protected areas. This particular proposed corridor links remnant vegetation to the north west of the site to the Mount Lindsay, as well as connecting to the "Coastal Corridor" which ultimately connects to Torndirrup National Park (WALGA, 2018c).

At a local level the remnant vegetation within the survey area provides a corridor for wildlife along the eastern and northern property boundaries and internal throughout the site. The remnant vegetation situated within the western and southern extents of the property also provide wildlife corridors / habitat connectivity external to the site to surrounding bushland areas. The riparian vegetation situated along the Marbellup Flats (located along the southern boundary) provides a corridor to the south into the Down Road South Nature Reserve.

The vegetation types / wildlife habitat present within the survey area are well represented locally and in nearby reserves. The Jarrah / Marri dominated woodland and forest present are one of the most abundant habitat types present within the ARVS survey area, providing a significant proportion of wildlife habitat. The *Homalospermum* and *Callistemon* dominated thickets present with the survey area are not as common at a regional level based on ARVS mapping. However, these habitat types are well represented in surrounding remnant vegetation and nearby reserves such as the Down Road Nature Reserve.

### 4.3. Potential Breeding, Foraging and Roosting Black Cockatoo Habitat

Desktop searches of publicly available information indicates that areas of the Jarrah and Marri dominated vegetation throughout the survey area is potential feeding / foraging habitat to Carnaby's Black Cockatoos (WALGA, 2018d). This dataset is based on vegetation containing plant species favoured by Carnaby's Black Cockatoos not point records of feeding (WALGA, 8018d). This dataset shows no confirmed or potential breeding or roosting areas for Carnaby's Black Cockatoos to be present within the survey area. Based on known habitat preferences for Baudin's Black Cockatoos and Forest Red-tailed Black Cockatoos the vegetation present in the survey area also holds potential for foraging, breeding and roosting for the two species (DSEWPaC (2012).

### 4.4. Field Methodology

Field survey work was carried out by Dr. Karlene Bain (Wildlife Ecologist) and Bianca Theyer (Conservation and Wildlife Biologist) from Bio Diverse Solutions between the 29<sup>th</sup> of October and the 2<sup>nd</sup> November 2018 in accordance with Guidance Statement 56: *Terrestrial Fauna Surveys* (EPA 2016a). A total of 44 survey hours over 5 days were dedicated to the fauna survey. Vegetation units observed during the site survey were used to define broad fauna habitat types across the site (See Section 3). The aim of the fauna survey was to gain an understanding of what species and habitat are present in the area and to determine the likelihood of threatened species utilising the area as well as the significance of the habitat to them. As the western remnant vegetation area is not set to be developed, significant trees were not measured and mapped throughout this area. Surveys in all areas consisted of systematic transects along which evidence of fauna activity was documented and potential habitat was identified. In all areas (other than the western remnant vegetation) each individual tree with a DBH



>500mm was measured, mapped and assessed for habitat potential. All evidence of threatened species was GPS'd and all hollows were GPS'd and described, with likely occupants noted.

Targeted assessment was carried out for *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo), *Calyptorhynchus latirostris* (Carnaby's Cockatoo), *Dasyurus geoffreyi* (Chuditch), *Hydromys chrysogaster* (Water Rat), *Falsistrellus mackenziei* (Western False Pipistrelle), *Isoodon obesulus fusciventer* (Quenda), *Notamacropus irma* (Western Brush Wallaby), *Phascogale tapoatafa wambenger* (Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Setonix brachyurus* (Quokka) and *Zephyrarchaea mainae* (Western Arachnid Spider).

Targeted assessment techniques included:

- Survey for hollow-bearing trees and potential breeding trees for *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo) and *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo), including identification of all suitable trees species within the survey area with a Diameter at Breast Height (DBH) of over 500mm;
- Surveys for foraging habitat for *Calyptorhynchus banksii naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo) and *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo), including observation of any actual foraging evidence such as chewed nuts, cones or stripped bark;
- Surveys for potential habitat trees for *Pseudocheirus occidentalis* (Western Ringtail Possum), through identification of dreys, hollows and tree scratchings;
- Surveys for potential habitat and evidence of *Setonix brachyurus* (Quokka), *Isoodon obesulus fusciventer* (Quenda) presence through the identification of diggings, scats and runnels and the use of remote cameras;
- Surveys for potential habitat and evidence of *Dasyurus geoffreyi* (Chuditch) presence through the identification of scats, activity around potential den logs and the use of remote cameras;
- Surveys for potential hollows for *Phascogale tapoatafa wambenger* (Brush-tailed Phascogale);
- Surveys for potential habitat and evidence of *Notamacropus irma* (Western Brush Wallaby) presence through the identification of scats and the use of remote cameras;
- Surveys for potential habitat and evidence of *Hydromys chrysogaster* (Water Rat) through identification of scats, feeding debris and the use of remote cameras;
- Surveys for potential habitat for *Zephyrarchaea mainae* through identifying areas of suspended leaf litter;
- Surveys for potential hollows for *Falsistrellus mackenziei*; and
- General signs of habitat utilisation and evidence for any other species.

In total five cameras were placed where evidence of fauna activity was observed, in order to provide further evidence of species presence within the survey area (Refer to Figure 12). Cameras 04 and 10 were out in the field for 4 consecutive nights, whilst cameras 01, 07 and 23 were out for 3 consecutive nights.

A summary of threatened species survey outcomes are presented in Table 6. Refer to the following sections for survey outcomes.

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

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

The results presented are based upon opportunistic field data collected over a limited period of time and are indicative of the environmental condition of the site at the time. Some fauna species are reported as potentially occurring within the study area based on the presence of suitable habitat (quality and extent) within the study area or immediately adjacent. With respect to opportunistic observations, the possibility exists that certain species may not have been detected during field investigations due to seasonal inactivity during the field survey, species present

within micro habitats not surveyed, cryptic species able to avoid detection and transient wide-ranging species not present during the survey period.

#### **4.5. Survey Limitations and Constraints**

##### Experience of personnel

Dr Karlene Bain has over 20 years of fauna survey experience, Bianca Theyer has 3 years' experience.

##### Scope (what faunal groups were sampled and were there any constraints affecting this)

The scope was a Level 1 survey and this was completed. Targeted habitat assessments for Black Cockatoos, Western Ringtail Possum, Quokka, Quenda, Chuditch, Brush-tailed Phascogale, Western Brush Wallaby, Water Rat, Western Arachnid Spider and Western False Pipistrelle were also conducted.

##### Proportion of task achieved and completeness of survey

A Level 1 survey of the survey area was completed. Additional targeted survey may be required within the western block of vegetation if development is to occur within it.

##### Disturbances (e.g. fire or flood)

A section of the western vegetation block had been recently burnt, however habitat assessment for Black Cockatoos, Arboreal Mammals, Wallaby's and Water rat were not affected by this. Overall the western block had a lower sampling intensity (due to the lack of proposed development) and therefore it is not deemed to have affected the completeness of the survey.

##### Intensity of survey

A Level 1 (and supplementary targeted assessments) were deemed appropriate given the proposed development is to be restricted to previously disturbed paddock / agricultural areas.

##### Sources of information (recent or historic) and availability of contextual information

Site specific data is limited as it is privately owned land, this is not considered a limiting factor for this survey.

##### Resources (e.g. degree of expertise available)

All resources required for this survey were available.

##### Remoteness or access issues

No restrictions were encountered. All areas were accessible by vehicle and on foot.

#### **4.6. Non-Threatened Fauna survey outcomes**

A description of the broadly defined fauna habitats within the study area (based on vegetation units) is given in Section 3. The approximate extent of each identified unit is shown in the Site Vegetation Complexes Map (Figure 9). During the field survey 40 species of fauna were detected, of which three are introduced; *Felis catus* (Cat), *Vulpes Vulpes* (Red Fox) and *Oryctolagus cuniculus* (Rabbit). There were multiple dens (Fox and Rabbit) located within the northern road reserve (Figure 11), as well as the portion of remnant vegetation situated along the southern boundary (east of the creek line; Figure 11). Multiple nests and hollows for non-threatened bird species such as: *Cracticus tibicen* (Australian Magpie), *Grallina cyanoleuca* (Magpie Lark) and *Purpureicephalus spurius* (Red Capped Parrot) were detected throughout the site, as well as multiple hollows likely being utilised by *Trichosurus vulpecula* (Brushtail Possum). Two unoccupied hollows were detected within the remnant vegetation to the west as well as one active *Eolophus roseicapillus* (Galah) hollow. The subject site also provides suitable habitat for *Macropus fuliginosus* (Western Grey Kangaroo) and *Rattus fuscipes* (Bush Rat). Multiple hollows likely being utilised by *Trichosurus vulpecula* were identified across the survey area. Refer to Table 6 for a list of species detected throughout the survey area, Figure 11 for non-threatened species indicator images and Figure 12 for locations of species and / or evidence.



Figure 11: Species indicators throughout the survey area a) remote camera image of Fox near active den; b) remote camera image of a Kangaroo; c) and d) active fox den entrances; e) fox scat; f) Brushtail Possum scat.



**Table 6: Fauna species recorded within survey area (presented in alphabetical order of family, then scientific name).**

Family	Scientific name	Vernacular
Acanthizidae	<i>Gerygone fusca</i>	Western Gerygone
Accipitridae	<i>Lophoictinia isura</i>	Square-Tailed Kite
Alcedinidae	<i>Dacelo novaeguineae</i>	Laughing Kookaburra
Anatidae	<i>Chenonetta jubata</i>	Australian Wood Duck
Ardeidae	<i>Egretta novaehollandiae</i>	White-Faced Heron
Artamidae	<i>Cracticus tibicen</i>	Australian Magpie
Cacatuidae	<i>Calyptorhynchus baudinii</i> (EN)	Baudin's Cockatoo
Cacatuidae	<i>Calyptorhynchus banksii naso</i> (VU)	Forest Red-tailed Black Cockatoo
Campephagidae	<i>Coracina novaehollandiae</i>	Black-Faced Cuckoo-Shrike
Canidae	<i>Vulpes vulpes</i> *	Red Fox
Columbidae	<i>Phaps elegans</i>	Brush Bronzewing
Corvidae	<i>Corvus coronoides</i>	Australian Raven
Cuculidae	<i>Cacomantis pallidus</i>	Pallid Cuckoo
Elapidae	<i>Notechis scutatus</i>	Tiger Snake
Eolophus	<i>Eolophus roseicapillus</i>	Galah
Estrildidae	<i>Stagonopleura oculata</i>	Red-Eared Firetail
Felidae	<i>Felis catus</i> *	Cat
Hylidae	<i>Litoria adelaidensis</i>	Slender Tree Frog
Leporidae	<i>Oryctolagus cuniculus</i> *	Rabbit
Macropodidae	<i>Macropus fuliginosus</i>	Western Grey Kangaroo
Macropodidae	<i>Notamacropus irma</i> (P4)	Western Brush Wallaby
Maluridae	<i>Malurus elegans</i>	Red-Winged Fairy-Wren
Maluridae	<i>Malurus splendens</i>	Splendid Fairy-Wren
Meliphagidae	<i>Anthochaera lunulata</i>	Western Wattlebird
Meliphagidae	<i>Anthochaera carunculata</i>	Red Wattlebird
Meliphagidae	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater
Monarchidae	<i>Grallina cyanoleuca</i>	Magpie-Lark
Muridae	<i>Rattus fuscipes</i>	Bush Rat
Myobatrachidae	<i>Crinia glauerti</i>	Rattling Froglet; Clicking Froglet
Pachycephalidae	<i>Pachycephala rufiventris</i>	Rufous Whistler
Pachycephalidae	<i>Colluricincla harmonica</i>	Grey Shrike-Thrush
Peramelidae	<i>Isodon obesulus fusciventer</i> (P4)	Quenda; Southern Brown Bandicoot
Petroicidae	<i>Eopsaltria georgiana</i>	White-breasted Robin
Phalangeridae	<i>Trichosurus vulpecula</i>	Australian Brushtail Possum
Psittacidae	<i>Purpureicephalus spurius</i>	Red capped parrot
Psittacidae	<i>Platycercus icterotis</i>	Western Rosella
Psittacidae	<i>Barnardius zonarius</i>	Australian Ringneck
Rhipiduridae	<i>Rhipidura leucophrys</i>	Willie Wagtail
Rhipiduridae	<i>Rhipidura albiscapa</i>	Grey Fantail
Threskiornithidae	<i>Threskiornis spinicollis</i>	Straw-Necked Ibis

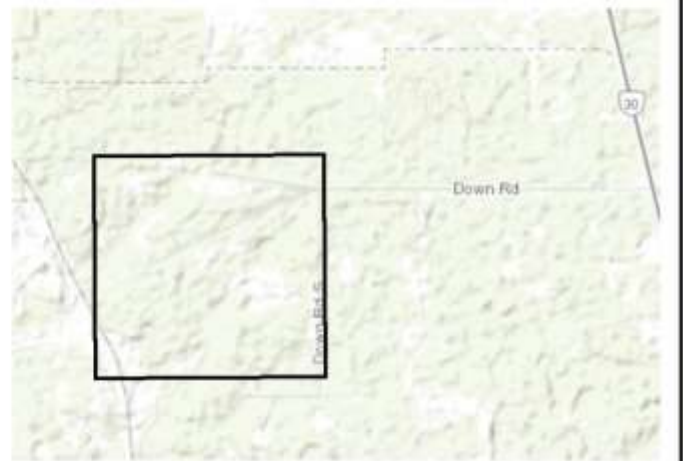




Figure 12: Fauna habitat values



29 Hercules Crescent  
Albany, WA 6330  
Australia  
Tel: 08 9842 1575  
Fax: 08 9842 1575



Overview Map Scale 1:100,000

- Legend**
- ▲ Active Den
  - ▲ Active Fox Den
  - Baudins Cockatoo
  - + Brush Wallaby
  - ▲ Brushtail Possum Scat
  - ▲ Brushtail Possum Scratchings
  - ▲ Cockatoo Hollow
  - ▲ Forest Red-Tailed BC
  - ▲ Fox Den
  - ▲ Fox Scat
  - ▲ Galah Hollow
  - ▲ Hollow
  - ▲ Possum Hollow
  - ▲ Potential Den
  - ▲ Potential den log
  - ★ Quenda
  - ▲ Rabbit
  - ▲ Unoccupied Hollow
- Subject Site
  - Cadastre
  - 📷 Camera

Scale  
1:8,500 @ A3  
GDA MGA 94 Zone 50

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

**CLIENT**  
City of Albany  
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Albany, WA 6331

### Fauna Habitat Values

Assessor <b>KB &amp; BT</b>	QA Check <b>KK</b>	Drawn by <b>BT</b>
STATUS <b>FINAL</b>	FILE <b>MSC0137-002</b>	DATE <b>30/01/2019</b>



#### 4.7. Threatened fauna outcomes

Of the 40 species detected during the survey four species; *Calyptorhynchus banksii subsp. naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Isoodon obesulus fusciventer* (Quenda), and *Notamacropus irma* (Brush Wallaby) were identified on site. Potential habitat was found for *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo), *Apus pacificus* (Fork-tailed Swift), *Falco peregrinus* (Peregrine Falcon), *Falco peregrinus subsp. macropus* (Australian Peregrine Falcon), *Tringa nebularia* (Common greenshank), *Tyto novaehollandiae subsp. novae-hollandiae* (Masked Owl (southern subsp.)), *Dasyurus geoffroii* (Chuditch), *Falsistrellus mackenziei* (Western False Pipistrelle), *Hydromys chrysogaster* (Water-rat), *Phascogale tapoatafa* (Brush-tailed Phascogale), *Pseudocheirus occidentalis* (Western Ringtail Possum), *Setonix brachyurus* (Quokka), *Galaxiella munda* (Western Mud Minnow), *Galaxiella nigrostriatal* (Black-stripe Minnow) and *Lepidogalaxias salamandroides* (Salamanderfish). A risk assessment of habitat suitability and presence / absence of species is provided in the Table 7. Whilst locations of observed evidence of species presence is presented in Figure 13.

##### Arachnid

The threatened species *Zephyrarchaea mainae* (Western Arachnid Spider) requires suspended leaf litter lodged within Restionaceae species under *Agonis flexuosa*. There were no areas of suitable habitat identified during the survey.

##### Birds

Evidence of *Calyptorhynchus banksii subsp. naso*, and *Calyptorhynchus baudinii* feeding activity was found within the remnant vegetation on the southern boundary (southern precinct) of the survey area (Figure 12). The feeding debris wasn't fresh and occurred in low quantities with the area of feeding restricted to a small number of trees. The vegetation throughout the survey area contained a very high proportion of potential feed species for each of the three Black Cockatoos such as *Eucalyptus marginata*, *Corymbia calophylla*, *Eucalyptus staeri*, *Allocasuarina fraseriana* (DoE; 2017b, 2017c, 2017d). However, the southern area of remnant vegetation southern boundary (southern precinct) had the highest occurrences of *Calyptorhynchus baudinii* and *Calyptorhynchus banksii subsp. naso* feeding signs. No feeding signs for *Calyptorhynchus latirostris* (Carnaby's Black-Cockatoo) were detected during the survey.

The majority of feeding evidence was from *Corymbia calophylla* nuts (Figure 13) and this area of vegetation had the highest amount of significant (>500mm DBH) *Corymbia calophylla* trees present. This indicates that although the site contains potential high-quality foraging habitat (dominated by Jarrah and Marri) for the three Black Cockatoo species, the quality of forage is marginal and the area is not currently a favoured feeding site. One *Calyptorhynchus baudinii* individual was heard calling during the survey as it flew over the western remnant vegetation, but it did not land within the area. There was one potential Black Cockatoo hollow observed in the remnant vegetation to the west, no other signs of habitat utilisation (feeding signs etc.) were detected. 92 hollow-bearing trees and 586 potential habitat trees (>500mm DBH) were documented throughout the survey area. No other threatened bird species were identified on site. In total, based on vegetation types and the fauna habitat within there is approximately 64.15ha of suitable Black Cockatoo Habitat.

Potential habitat was identified in remnant vegetation areas across the site for *Apus pacificus*, *Falco peregrinus*, *Falco peregrinus subsp. Macropus*, *Tringa nebularia* and *Tyto novaehollandiae subsp. novae-hollandiae* yet evidence of species presence was not identified during the survey period.

##### Mammals

Evidence of *Isoodon obesulus fusciventer* through diggings and well-established runnels is present within the western remnant vegetation block as well as in surrounding creek line vegetation (Figure 13). Defined *Notamacropus irma* runnels were identified within the creek line vegetation (Figure 13) and scats were detected within the creek vegetation (Figure 13) as well as in a stand of paddock trees east of the creek line. Potential den logs for *Dasyurus geoffroii* (Chuditch) were detected in the remnant vegetation in the southern precinct (Figure 13), however no other evidence of species presence was detected.

There was no evidence of the presence of *Hydromys chrysogaster*, *Phascogale tapoatafa*, *Pseudocheirus occidentalis* or *Setonix brachyurus*. The high level of *Trichosurus vulpecula* (Brush-tail Possum) activity throughout the survey area may be a limiting factor for these arboreal mammal species. The high level of *Vulpes vulpes* (Fox) activity and the presence of *Felis catus* (Feral Cat) may be a limiting factor for terrestrial mammal species.

Fish

Although no sampling was undertaken, the shallow creek system provides potential habitat for *Galaxiella munda*, *Galaxiella nigrostriatal* and *Lepidogalaxias salamandroides*.



**Figure 13: Threatened species indicators throughout the survey area: a) Quenda Runnel; b) Quenda digging; c) potential habitat for *Galaxiella* and *Lepidogalaxias* species; d) Potential Chuditch den log; e) Wallaby runnel; f) Wallaby scat; g) and h) *Corymbia calophylla* nuts chewed by Black Cockatoos.**



**Table 7: Risk assessment and survey outcomes for potential threatened fauna within 15km of the survey area. Species are presented alphabetised under their relevant class.**

Note: N = No, Y = Yes, P = Potential, L = Low, M = Medium, H = High

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Arachnid	<i>Zephyrarchaea mainae</i>	Western Archaeid Spider	VU / -	Search for suitable habitat including suspended leaf-litter lodged in the crown of Restionaceae species, <i>L. gladiatum</i> and <i>L. effusum</i> , which grow under long-unburnt stands of weeping peppermint ( <i>Agonis flexuosa</i> (Willd.) Sweet; Rix and Harvey, 2009, 2012)	N	M	N	
Aves (Birds)	<i>Actitis hypoleucos</i>	Common sandpiper	IA/ MI	Survey for birds in suitable habitat; almost entirely coastal.	N	H	N	
	<i>Apus pacificus</i>	Fork-tailed Swift	IA / MI	Survey of potential habitat; almost exclusively aerial, flying from less than 1 m to at least 300 m above ground over inland plains but sometimes above foothills or in coastal areas. Mostly occur over dry or open habitats, including riparian woodland and tea-tree swamps, low scrub, heathland or saltmarsh (Higgins 1999).	Y	H	N	Species not identified during survey. Suitable habitat present along creekline.
	<i>Ardenna carneipes</i>	Fleshy-footed Shearwater	VU & IA / MI	Assessment of habitat suitability including coastal areas and offshore islands	N	H	N	
	<i>Atrichornis clamosus</i>	Noisy Scrub-bird	EN / EN	Diurnal surveys of suitable habitat and potential foraging areas; dawn and dusk surveys and call back for calling birds. Preferred habitat includes low closed forests 5–15 m in height that are dominated by Eucalyptus or <i>Agonis</i> and <i>Banksia littoralis</i> and occur in the steep and wetter gullies, and drainage lines of hills and granite mountains and on the margins of freshwater lakes.	N	H	N	
	<i>Botaurus poiciloptilus</i>	Australasian Bittern	EN / EN	Dawn survey for calling males. Survey was conducted during the spring-summer breeding season for 1 hour prior to dawn and one hour after sunrise when calls are most often heard (Marchant & Higgins 1990). Weather was calm and clear, allowing for optimal listening conditions. In the south-west of Western Australia, the Australasian Bittern is found in beds of tall rush mixed with, or near, short fine sedge or open pools. The species also occurs around swamps, lakes, pools, rivers and channels fringed with lignum ( <i>Muehlenbeckia</i> sp.), cane grass ( <i>Eragrostis</i> sp.) or other dense vegetation (Marchant & Higgins 1990).	N	H	N	
	<i>Calidris alba</i>	Sanderling	IA / MI	Survey for birds in suitable habitat; almost entirely coastal.	N	H	N	
	<i>Calidris canutus</i>	Red knot	EN & IA / EN & MI	Survey for birds in suitable habitat; almost entirely coastal. Red Knots gather in large flocks on the coast in sandy estuaries with tidal mudflats	N	H	N	
	<i>Calidris ferruginea</i>	Curlew sandpiper	CR & IA / CR & MI	Survey for birds in suitable habitat; almost entirely coastal. Found on intertidal mudflats of estuaries, lagoons, mangroves, as well as beaches, rocky shores and around lakes, dams and floodwaters.	N	H	N	
	<i>Calidris ruficollis</i>	Red-necked stint	IA / MI	Survey of suitable habitat: mostly coastal areas, including sheltered inlets, bays, lagoons and estuaries with intertidal mudflats; ephemeral or permanent shallow wetlands near the coast or inland, and sometimes flooded paddocks or damp grasslands (Higgins & Davies 1996).	N	H	N	
	<i>Calidris tenuirostris</i>	Great knot	CR & IA / CR & MI	Survey for birds in suitable habitat; inhabit intertidal mudflats and sandflats in sheltered coasts, including bays harbours and estuaries.	N	H	N	
	<i>Calyptorhynchus banksii subsp. naso</i>	Forest Red-tailed Black Cockatoo	VU / VU	Dawn survey for roosting and foraging birds. Diurnal survey for nesting females, focusing on the hollows of large, mature trees. Remote cameras and diurnal assessment of the presence and extent of foraging habitat including vegetation containing proteaceous heath/woodland, eucalypt woodlands or forest (particularly Marri and Jarrah forest) and in areas dominated by <i>Pinus</i> spp. (Johnstone and Kirkby 1999).	Y	H	Y	Suitable foraging habitat is present throughout the survey area. Feeding debris and potential hollows and breeding / roosting trees located onsite. Refer to Figure 12.
	<i>Calyptorhynchus baudinii</i>	Baudin's Cockatoo	EN / EN	Dawn survey for roosting and foraging birds. Diurnal survey for nesting females, focusing on the hollows of large, mature trees. Remote cameras and diurnal assessment of the presence and extent of foraging habitat including vegetation containing proteaceous heath/woodland, eucalypt woodlands or forest (particularly Marri and Jarrah forest) and in areas dominated by <i>Pinus</i> spp. Overall Marri ( <i>Corymbia calophylla</i> ) is the primary food source with the birds using its seeds, flowers, nectar and buds.	Y	H	Y	Suitable foraging habitat is present throughout the survey area. Feeding debris and potential hollows and breeding / roosting trees located onsite. Refer to Figure 12.

Table 7 Continued.

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Aves (Birds)	<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	EN / EN	Dawn sightings and calls to identify potential breeding and roosting trees. Breeding tree survey and identification of suitable tree species within the survey area with a diameter at breast height (DBH) of over 50cm; Survey for presence and extent of foraging habitat (proteaceous heath/woodland, eucalypt woodlands or forest) and search for evidence of foraging such as chewed nuts. Carnaby's Cockatoo has been observed feeding on a wide range of foods including the seeds of Banksias, Dryandras, Corymbia, Eucalyptus, Hakeas, Grevillea, Pinus, Callitris, Jacaranda, Helianthus, Macadamia, Prunus, Carya, Liquidambar, Mesomelaena spp., Citrullus and Erodium; flower buds, flowers and nectar of Banksia, Callistemon, Corymbia, Dryandra, Eucalyptus, Grevillea, Stenocarpus, Protea spp., insect larvae and insects (including weevils) from under bark, from wood of live and dead trees and shrubs, from galls and from flowers and flower stems, of Acacia spp. (including <i>A. saligna</i> and <i>A. pentedenia</i> ) <i>Banksia</i> spp., <i>Eucalyptus</i> spp., <i>Jacksonia</i> , <i>Agonis</i> and <i>Xanthorrhoea</i> ; also the flesh and juice of apples and persimmons.	Y	H	N	Suitable foraging habitat is present throughout the survey area Potential hollows and roosting trees located onsite. No feeding evidence identified. Species not identified during survey.
	<i>Cereopsis novaehollandiae grisea</i>	Cape Barren Goose (south-western),	VU / VU	The Cape Barren Goose (south-western) can be surveyed from land, sea or air. The recommended method for land-based surveys is to conduct area searches for birds or nests. The recommended method for sea-based surveys is to circumnavigate inhabited or potentially-inhabited islands in a boat. This latter method is effective because the geese usually occur in open habitats with low vegetation and tend to walk or fly away when approached. The recommended method for aerial surveys is to employ a helicopter or light plane to search the coastline and then inland areas of inhabited or potentially-inhabited islands. It is recommended that surveys of islands be conducted during late autumn, when few birds occur on the mainland, the weather is usually fine, and the breeding season has not yet begun (reducing the risk of disturbance to breeding pairs) (DEWHA 2010; Halse et al. 1995; Shaughnessy & Haberley 1994)	N	L	N	
	<i>Charadrius leschenaultii</i>	Greater Sand Plover	VU & IA / VU & MI	Survey for birds in suitable habitat; almost entirely coastal, inhabiting littoral and estuarine habitats. Mainly occur on sheltered sandy, shelly or muddy beaches with large intertidal mudflats or sandbanks, as well as sandy estuarine lagoons (Stewart et al. 2007). Seldom occur at shallow freshwater wetlands (Storr 1977).	N	H	N	
	<i>Dasyornis longirostris</i>	Western Bristlebird	EN / EN	Diurnal surveys of suitable habitat and potential foraging areas; dawn and dusk surveys and call back for calls. Preferred habitat includes floristically diverse low dense coastal heathland (McNee 1986).	N	H	N	
	<i>Diomedea antipodensis</i>	Antipodean Albatross	EN / VU	At sea, shipboard surveys during the non-breeding season. On land, observation from onshore vantage points using telescope. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Diomedea dabbenena</i>	Tristan Albatross	CR & IA / EN & MI	At sea, shipboard surveys in the non-breeding season. On land, observation from onshore vantage points using telescopes. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Diomedea epomophora</i>	Southern Royal Albatross	VU & IA / VU & MI	At sea, shipboard surveys. On land, observation from onshore vantage points (using telescopes). Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Diomedea exulans</i>	Wandering Albatross	VU & IA / VU & MI	At sea, shipboard surveys. On land, area searches or transect surveys and observation from onshore vantage points using telescopes. Detection of flying birds and nests. Colony sites well documented (Department of Primary Industries, Water and Environment, Hobart). Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Diomedea exulans subsp. exulans</i>	Snowy Albatross	VU & IA / VU & MI	Assessment of habitat suitability including coastal areas and offshore islands	N	H	N	

Table 7 Continued.

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Aves (Birds)	<i>Diomedea sanfordi</i>	Northern Royal Albatross	EN & IA / EN & MI	At sea, shipboard surveys. The use of berley during shipboard surveys may help to attract birds and draw them in for closer observation. On land, observation from onshore vantage points using telescopes. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Falco peregrinus</i>	Peregrine Falcon	OS / -	Survey of potential habitat; almost exclusively aerial whilst hunting (flying / hovering above vegetation).	Y	H	N	Suitable habitat throughout the majority of the survey area. Species not identified during survey.
	<i>Falco peregrinus subsp. macropus</i>	Australian Peregrine Falcon	OS / -	Survey of potential habitat; almost exclusively aerial whilst hunting (flying / hovering above vegetation).	Y	H	N	Suitable habitat throughout the majority of the survey area. Species not identified during survey.
	<i>Halobaena caerulea</i>	Blue Petrel	- / VU	At sea, shipboard surveys. On land, area searches or transect surveys in potential breeding habitat to locate burrows with follow-up spotlighting at night when birds active at colony. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens, as bodies are usually displaced by currents and winds. Colony sites are well documented (DEWHA 2010).	N	H	N	
	<i>Hydroprogne caspia</i>	Caspian Tern	IA / MI	Assessment of habitat suitability including coastal areas and offshore islands	N	M	N	
	<i>Limosa lapponica</i>	Bar-tailed Godwit	IA / MI	Survey for birds in suitable habitat; inhabit estuarine mudflats, beaches and mangroves.	N	M	N	
	<i>Limosa lapponica baueri</i>	Western Alaskan Bar-tailed Godwit	VU / VU	Observation using telescope from vantage points overlooking suitable foraging or roosting habitat at appropriate periods of the tidal cycle. Occurs mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It has also been recorded in coastal sewage farms and saltworks, salt lakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (Higgins & Davies 1996).	N	L	N	
	<i>Limosa lapponica menzbieri</i>	Northern Siberian Bar-tailed Godwit	CR / CR	Observation using telescope from vantage points overlooking suitable foraging or roosting habitat at appropriate periods of the tidal cycle. The bar-tailed godwit (northern Siberian) occurs mainly in coastal habitats such as large intertidal sandflats, banks, mudflats, estuaries, inlets, harbours, coastal lagoons and bays. It has also been recorded in coastal sewage farms and saltworks, salt lakes and brackish wetlands near coasts, sandy ocean beaches, rock platforms, and coral reef-flats (Higgins & Davies 1996).	N	L	N	
	<i>Macronectes giganteus</i>	Giant Petrel	IA / EN & MI	Assessment of habitat suitability including coastal areas and offshore islands	N	H	N	
	<i>Macronectes halli</i>	Northern Giant Petrel	IA / VU & MI	At sea, shipboard surveys. On land, area searches or transect surveys and observation from onshore vantage points using telescopes. Detection of flying birds and nests. Colony sites well documented (Department of Primary Industries, Water and Environment, Hobart). Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Numenius madagascariensis</i>	Eastern Curlew	CR & IA / CR & MI	Observation using telescope from vantage points overlooking suitable foraging or roosting habitat at appropriate periods of the tidal cycle. During the non-breeding season in Australia, the eastern curlew is most commonly associated with sheltered coasts, especially estuaries, bays, harbours, inlets and coastal lagoons, with large intertidal mudflats or sandflats, often with beds of seagrass (Zosteraceae). Occasionally, the species occurs on ocean beaches (often near estuaries), and coral reefs, rock platforms, or rocky islets. The birds are often recorded among saltmarsh and on mudflats fringed by mangroves, and sometimes within the mangroves. The birds are also found in coastal saltworks and sewage farms (Marchant & Higgins, 1993).	N	L	N	
	<i>Oxyura australis</i>	Blue-billed Duck	P4 / -	Diurnal surveys of suitable habitat. Prefers deep water in large permanent wetlands and swamps with dense aquatic vegetation. The species is completely aquatic, swimming low in the water along the edge of dense cover.	N	H	N	
	<i>Pachyptila turtur subantarctica</i>	Fairy Prion	- / VU	At sea, shipboard surveys. On land, area searches or transect surveys and observation from onshore vantage points using telescopes. Detection of flying birds and burrows with follow-up spotlighting at night when birds are active at colony. Colony sites well documented (Department of Primary Industries, Water and Environment, Hobart). Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	M	N	

Table 7 Continued.

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Aves (Birds)	<i>Pandion cristatus</i>	Osprey, Eastern Osprey	IA / MI	Assessment of habitat suitability including coastal areas and offshore islands	N	H	N	
	<i>Philomachus pugnax</i>	Ruff	IA / MI	Survey for birds in suitable habitat; generally fresh, brackish or saline wetlands with exposed mudflats at the edges. It is found in terrestrial wetlands including lakes, swamps, pools, lagoons, tidal rivers, swampy fields and flood lands. They are occasionally seen on sheltered coasts, in harbours, estuaries, seashores and are known to visit sewage farms and saltworks	N	M	N	
	<i>Phoebastria fusca</i>	Sooty Albatross	EN & IA / VU & MI	At sea, shipboard surveys in the non-breeding season. On land, observation from onshore vantage points using telescopes. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	M	N	
	<i>Plegadis falcinellus</i>	Glossy Ibis	IA / MI	Survey for birds in suitable habitat; requires shallow water and mudflats, is found in well-vegetated wetlands, floodplains, mangroves and rice fields	N	M	N	
	<i>Pluvialis fulva</i>	Pacific Golden Plover	IA / MI	Surveys for birds in suitable habitat; coastal habitats, occasionally fresh, brackish or saline wetlands or claypans especially with muddy margins and often with submerged vegetation or short emergent grass. Other terrestrial habitats include short grass in paddocks, or ploughed or recently burnt areas (Marchant & Higgins 1993).	N	H	N	
	<i>Pluvialis squatarola</i>	Grey Plover	IA / MI	Surveys for birds in suitable habitat; sheltered embayments, estuaries and lagoons with mudflats and sandflats; terrestrial wetlands such as near-coastal lakes and swamps, or salt-lakes (Marchant & Higgins 1993).	N	H	N	
	<i>Pterodroma mollis</i>	Soft-plumaged Petrel	/ VU	At sea, shipboard surveys in non-breeding season. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Sternula nereis nereis</i>	Australian Fairy Tern	VU / VU	The Fairy Tern (Australian) nests on sheltered sandy beaches, spits and banks above the high tide line and below vegetation. The subspecies has been found in embayments of a variety of habitats including offshore, estuarine or lacustrine (lake) islands, wetlands and mainland coastline (Higgins & Davies 1996; Lindsey 1986a). The bird roosts on beaches at night (Higgins & Davies 1996). The Fairy Tern is similar to the Little Tern but differs in having a shorter tail, a bigger head with a larger bill and shorter, narrower wings. Fairy Tern are distinguishable in breeding plumage by their entirely yellow beaks (Higgins & Davies 1996) and the black patch at the eye which does not extend to a point at the bill (Cox & Close 1977).	N	H	N	
	<i>Thalassarche carteri</i>	Indian Yellow-nosed Albatross	EN & IA / VU & MI	At sea, shipboard surveys. On land, observation from onshore vantage points using telescopes. Detection of flying birds and nests. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Thalassarche cauta cauta</i>	Shy Albatross	VU & IA / VU & MI	At sea, shipboard surveys. On land, area searches or transect surveys, and observation from onshore vantage points (using telescopes). Detection of flying birds and nests. Colony sites well documented (Department of Primary Industries, Water and Environment, Hobart). Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Thalassarche cauta steadi</i>	White-capped Albatross	VU & IA / VU & MI	At sea, shipboard surveys. On land, observation from onshore vantage points using telescopes. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Thalassarche chlororhynchos</i>	Atlantic Yellow-nosed Albatross	VU & IA / MI	Assessment of habitat suitability including coastal areas and offshore islands	N	H	N	
	<i>Thalassarche impavida</i>	Campbell Albatross	VU & IA / VU & MI	At sea, shipboard surveys during non-breeding season. On land, observation from onshore vantage points using telescope. Detection of flying birds. Surveys of beach cast birds may provide an opportunity to detect this species, though they provide little information on origins of specimens as bodies are usually displaced by currents and winds (DEWHA 2010).	N	H	N	
	<i>Thalassarche melanophris</i>	Black-browed Albatross	EN & IA / VU & MI	Shipboard surveys. Continuous 300 m wide survey transects while the vessel is in motion (Woehler 1997). Preferred habitat Marine. Rarely fly over land except when breeding. Fly low to moderately high, rising with updraft produced by wave fronts. Accompanies fishing boats.	N	H	N	



Table 7 Continued.

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Aves (Birds)	<i>Thalasseus bergii</i>	Crested tern	IA / MI	Assessment of habitat suitability including coastal areas and offshore islands.	N	H	N	No evidence of species presence identified during the survey.
	<i>Thinornis rubricollis</i>	Hooded Plover	P4 / -	Dawn survey for birds within suitable habitat including sheltered sandy beaches and salt lakes	N	H	N	
	<i>Tringa glareola</i>	Wood Sandpiper	IA / MI	Survey for birds in suitable habitat; seen in small flocks or singly on inland shallow freshwater wetlands, often with other waders. They prefer ponds and pools with emergent reeds and grass, surrounded by tall plants or dead trees and fallen timber.	N	H	N	
	<i>Tringa nebularia</i>	Common greenshank	IA / MI	Dawn survey for calling birds and dawn survey of dam and creek line area for birds.	Y	H	N	Suitable habitat around existing dams and creek area. Species not identified during survey.
	<i>Tyto novaehollandiae subsp. novaehollandiae</i>	Masked Owl (southern subsp.)	P3 / -	Surveys for potential breeding hollows in suitable habitat; wide variety of lowland forests and woodlands that provide mature trees with hollows suitable for nesting and roosting, and nearby open areas for foraging (Schodde & Mason 1980, Peake et al. 1993). Nests in large hollows in old eucalypt trees (Kavanagh & Murray 1996). Sedentary and territorial (Schodde & Mason 1980). May occupy exclusive home ranges, and may mate for life (Kavanagh & Murray 1996).	Y	H	N	Suitable hollows throughout remnant vegetation areas. Species not identified during survey.
Fish (Actinopterygii)	<i>Galaxiella munda</i>	Western Mud Minnow	VU / -	Search for suitable habitat including small streams or shallow pools connected to streams (Pen et al. 1991).	Y	L	P	Suitable habitat present within creek; further surveys required to sample species if disturbances are likely to have direct or indirect impacts on the quality of the water and creekline habitat.
	<i>Galaxiella nigrostriata</i>	Black-stripe Minnow	P3 / -	Search for suitable habitat including small streams or shallow pools connected to streams (Pen et al. 1991).	Y	L	P	Suitable habitat present within creek; further surveys required to sample species if disturbances are likely to have direct or indirect impacts on the quality of the water and creekline habitat.
	<i>Lepidogalaxias salamandroides</i>	Salamanderfish	EN / -	Search for suitable habitat including small streams or shallow pools connected to streams	Y	L	P	Suitable habitat present within creek; further surveys required to sample species if disturbances are likely to have direct or indirect impacts on the quality of the water and creekline habitat.
	<i>Nannatherina balstoni</i>	Balston's Pygmy Perch	VU / VU	Search for suitable habitat including acidic, tannin-stained freshwater pools, streams and lakes in peat flats within 30 km of the coast of south-west Western Australia. The species prefers shallow water, and is commonly associated with tall sedge thickets and inundated riparian vegetation (Allen et al. 2002; Morgan et al. 1998).	N	H	N	
Mammalia	<i>Bettongia penicillata subsp. ogilbyi</i>	Woylie, Brush-tailed Bettong	CR / EN	Remote cameras and diurnal assessment of habitat, diggings and nest sites under dense bushes. Preferred habitat ranges from forest to grassland, coastal and inland.	Y	H	N	Suitable habitat present within areas of remnant vegetation. No evidence of species presence identified during the survey.
	<i>Dasyurus geoffroyi</i>	Chuditch	VU / VU	Remote cameras and searches for faecal material and den sites in wooded habitat. Logs must have a diameter > 30 cm and a hollow with 7–20 cm diameter and 1 m length (Dunlop and Morris 2012)	Y	H	N	Potential den logs located onsite; high level of fox activity is likely to be a limiting variable. No other evidence of species presence identified.
	<i>Falsistrellus mackenziei</i>	Western False Pipistrelle	P4 / -	Surveys for potential hollows in suitable habitat; Preferred habitat of live mainly in wet sclerophyll forests of Karri, Jarrah and Tuart eucalypts. Roost in hollows in old trees, branches and stumps, in colonies	Y	L	N	This species is directly detectable only by echo meters or observation. Potential hollows have been identified as a part of the tree surveys.
	<i>Hydromys chrysogaster</i>	Water-rat (Rakali)	P4 / -	Remote cameras and diurnal assessment of habitat and evidence of feeding. Wide variety of freshwater habitats, from subalpine streams and other inland waterways to lakes, swamps, and farm dams.	Y	H	N	Some <i>Cherax</i> feeding debris onsite, but this was more consistent with bird feeding than Water Rat.

Table 7 Continued.

Class	Scientific Name	Vernacular	Cons Code WC / EPBC Acts	Survey Method	Habitat Present	Likelihood of Detection of Species if present	Species Present	Comment
Mammalia	<i>Isoodon obesulus fusciventer</i>	Quenda	P4	Remote cameras and diurnal assessment of habitat and diggings. Inhabits a variety of habitats including forests, woodlands, shrublands and heathlands (Van Dyck and Strahan 2008). The main habitat requirement is for dense cover at ground level (Maxwell et al. 1996, Van Dyck and Strahan 2008).	Y	H	Y	Diggings in remnant vegetation and creek line habitat. Present throughout remnant vegetation areas.
	<i>Macrotis lagotis</i>	Bilby	VU / VU	Assessment of habitat and search for scat, burrows and diggings Preferred habitat is open tussock grassland on uplands and hills; mulga woodland/shrubland growing on ridges and rises, and hummock grassland (spinifex) growing on sandplains and dunes, drainage systems, salt lake systems and other alluvial areas.	N	L	N	
	<i>Notamacropus irma</i>	Western Brush Wallaby	P4 / -	Remote cameras and diurnal assessment of habitat suitability, faecal material and runnels/pads. Preferred habitat includes open forest or woodland, particularly open, seasonally-wet flats with low grasses and open scrubby thickets.	Y	H	Y	Scats consistent with Western Brush Wallaby were found in open Jarrah remnant vegetation upslope of the creekline and in the adjoining paddock areas.
	<i>Parantechinus apicalis</i>	Dibbler	EN / EN	Remote cameras and diurnal assessment of habitat suitability and diggings. Dibblers have been recorded over an extensive area and it is likely that they can occupy a diverse range of habitats. Dibblers seem to prefer vegetation with a dense canopy greater than 1 m high which has been unburnt for at least 10 years or more (Baczocha & Start 1996).	Y	M	N	Suitable habitat in remnant vegetation surrounding riparian areas and in the western block. No evidence of species presence identified during the survey.
	<i>Phascogale tapoatafa wambenger</i>	Brush-tailed Phascogale	CD / -	Remote cameras and diurnal assessment of habitat suitability, potential hollows and scratchings.	Y	H	N	Suitable habitat is present throughout the survey area. High level of Brushtail Possum activity likely to be a limiting variable.
	<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum	CR / VU	Remote cameras and diurnal assessment of habitat suitability, hollows, dreys and search for faecal material. Suitable habitat in the southern forests includes Jarrah, Marri or Karri dominated forests. South coast habitat includes coastal heath, Jarrah/Marri woodland and forest, Peppermint Tree woodland, myrtaceous heaths and shrublands, Bullich dominated riparian zones and Karri forest (DBCA 2017).	Y	H	N	Suitable habitat is present throughout the survey area High level of Brushtail Possum activity likely to be a limiting variable. No evidence of species presence identified.
	<i>Setonix brachyurus</i>	Quokka	VU / VU	Remote cameras and diurnal assessment of habitat suitability, faecal pellets and runnels. Preferred habitat includes woodland, forest, coastal heath, thicket and riparian vegetation	Y	H	N	Suitable habitat within the remnant vegetation surrounding creek line. No evidence of species presence identified.
Petromyzontida	<i>Geotria australis</i>	Pouched Lamprey	P1 / -	Search for suitable habitat. Species is anadromous and requires estuaries and coastal waters connected to freshwater rivers and streams with slow flowing, fine sediment microhabitats where spawning and development of ammocoetes occurs.	N	H	N	

#### 4.8. Significant tree outcomes

There were 678 significant trees (>500mm DBH) identified throughout the survey area, 132 *Allocasuarina fraseriana*, 141 *Corymbia calophylla*, 398 *Eucalyptus marginata* and seven *Eucalyptus staeri*. Of these 678 trees 94 contained hollows (three in *Allocasuarina fraseriana*, 12 in *Corymbia calophylla*, 78 in *Eucalyptus marginata* and one in *Eucalyptus staeri*), with a further 21 trees in the stages of developing hollows in trunks and / or branches. The highest number of hollow bearing trees are located within the area of remnant vegetation along the southern boundary (southern precinct), the northern road reserve and the large stand of paddock trees in the eastern portion of the survey area (Refer to Figure 14).

Of the 94 hollow bearing trees no evidence was found to indicate current occupancy by any of the three Black Cockatoo species. Of the existing hollows 11 are either suitable for or have the potential to develop into Black Cockatoo hollows, based on their dimensions (Trees 158, 269, 351, 389, 546, 611, 633, 636, 675, 676 and 677; Table 8). There are an additional 2 trees that have hollows forming that have good Black Cockatoo hollow forming potential (Trees 17 and 26; Table 8). Of the significant trees identified throughout the site (except for the western remnant) 63 had no clear evidence of being occupied, 11 were occupied by *Trichosurus vulpecula*, 14 were occupied by non-threatened birds, and four occupied by feral bees. Assessment of the 94 potential or actual habitat trees (with hollows) are presented in Table 8 (please refer to Appendix D for the full list of trees identified on site). Corresponding photographs of hollows within significant trees are presented in Figure 15.





Figure 14: Significant Tree with Hollows



29 Hercules Crescent  
Albany, WA 6330  
Australia  
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Overview Map Scale 1:100,000

- Legend**
- Subject Site
  - Cadastre
- Significant Trees with Hollows**
- Hollow, Occupant**
- N, Hollow forming
  - Y, Bird (Non Threatened)
  - Y, Feral Bees
  - Y, Possum
  - Y, Red-capped parrot
  - Y, Unclear Evidence of Occupancy
  - Y, Welcome swallows

Scale  
1:8,500 @ A3  
GDA MGA 94 Zone 50

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

**CLIENT**  
City of Albany  
PO Box 484  
Albany, WA 6331

**Significant Trees with Hollows**

Assessor <b>KB &amp; BT</b>	QA Check <b>KK</b>	Drawn by <b>BT</b>
STATUS <b>FINAL</b>	FILE <b>MSC0137-002</b>	DATE <b>10/12/2018</b>



**Table 8: Significant (>500mm DBH) habitat trees with hollows, potential hollows, nests or evidence of fauna activity located within the survey area.**

ID	Species	DBH (mm)	Northing	Eastings	Hollow Y/N	Location	Dimensions (cm)	Occupant	Fauna activity	Comments	Photo Id
1	<i>Eucalyptus marginata</i>	537	6133653.76	566393.75	Y	Trunk	15x12	Na		Beginnings of small hollow in upper branch 6x6cm; beginnings of hollow in fork of trunk.	1
2	<i>Eucalyptus marginata</i>	548	6133647.48	566397.94	N	Trunk	15x12	Termites	Termite mound/nest		2
5	<i>Eucalyptus marginata</i>	440	6133629.49	566405.46	Y	Trunk	18x13	Undetermined	Very low levels of bark disturbance around lower edge of hollow	Likely small bird. Too small for Black Cockatoos.	7
6	<i>Eucalyptus marginata</i>	463	6133637.55	566417.07	Y	Trunk	10x12	Undetermined	Very low levels of bark disturbance around lower edge of hollow		8
7	<i>Corymbia calophylla</i>	488	6133637.715	566423.83	N	Na	Na	Na	Large nest in canopy that looks like a raptor nest.	No fresh faecal material or feathers.	9
11	<i>Allocasuarina fraseriana</i>	453	6133607.284	566458.17	Y	Trunk	12x12	Not occupied		Hollow opens all the way thru trunk approx. 70cm deep. Possible <i>Falsistrellis</i> hollow.	10
15	<i>Allocasuarina fraseriana</i>	587	6133604.42	566480.99	Y	Branch	5x7	Not occupied	No scratching or chewing		12
17	<i>Corymbia calophylla</i>	969	6133607.95	566488.08	N	Na	Na	Na	Na	Large branch junction is beginning to form a hollow. Good potential for large hollow.	
23	<i>Allocasuarina fraseriana</i>	803	6133573.15	566562.71	N	Na	Na	Na	Na	Hollow butt.	13
26	<i>Corymbia calophylla</i>	830	6133553	566602.32	N	Na	Na	Na	Na	Large upper trunk and branches have good hollow forming potential.	
49	<i>Eucalyptus marginata</i>	962	6133995.374	567528.14	Y	Branch	15x15	Not occupied	Small amount of scratching	Shallow hollow; small hollow in branch forming as well.	22
55	<i>Eucalyptus marginata</i>	1357	6134059.876	567565.19	Y	Branch	5x4	Bird	Fresh chewing around entrance consistent with nesting activity.	Too small for Black Cockatoo.	24
57	<i>Eucalyptus marginata</i>	714	6134046.425	567538.41	Y	Trunk	3x2	Not currently occupied	No scratching	Tiny hollow.	25
76	<i>Eucalyptus marginata</i>	601	6133984.898	567475.07	N	Na	Na	Na	Stick nest, fresh faecal material and black feather	3 nests all close to each other. Magpies with juveniles calling from nearby area.	29
79	<i>Eucalyptus marginata</i>	680	6133972.03	567494.90	N	Na	Na	Na	Large stick nest high in canopy. Lots of fresh faecal material. Raptor-like		30
85	<i>Eucalyptus marginata</i>	604	6133943.376	567434.87	N	Na	Na	Na	Possum scratching		31
86	<i>Eucalyptus marginata</i>	572	6133940.983	567435.59	N	Na	Na	Na	Possum scratching		32
92	<i>Eucalyptus marginata</i>	854	6133904.848	567423.351	N	Na	Na	Na	Magpie chick in nest; faecal material;		34
95	<i>Eucalyptus marginata</i>	971	6133868.178	567415.472	Y	Branch	12x9	Not currently occupied	Bark disturbance around hollow entrance. No tracks up to hollow.	Small or medium bird.	35
98	<i>Eucalyptus marginata</i>	650	6133829.155	567389.865	N	Na	Na	Na	Magpie chick in nest; faecal material;		37
106	<i>Eucalyptus marginata</i>	933	6134381.77	568474.758	Y	Branch	15x13	Not currently occupied	Possum scratching	3 stick nests. One large and 2 medium. All unused. Hollow was checked for occupancy. Too shallow.	41
111	<i>Eucalyptus marginata</i>	539	6134354.927	568502.487	N	Na	Na	Na	Na	Small areas of bark have been stripped in the canopy. Possibly Black Cockatoos searching for invertebrates.	42
112	<i>Eucalyptus marginata</i>	533	6134341.702	568496.259	Y	Trunk	3x3	Not currently occupied	Na	Tiny hollow associated with dry side fissure.	43
113	<i>Eucalyptus marginata</i>	1098	6134332.801	568507.433	Y	Branch	25x23	Not currently occupied	Disturbed bark leading into hollow	Checked. Has historically been used. Angled branch and hollow. Bottom of branch has split and top portion of hollow has become unstable. Bottom of hollow shallow. Has potential to continue forming down into trunk.	196
122	<i>Eucalyptus marginata</i>	689	6134333.852	568455.075	Y	Branch	17x7	Not currently occupied	Old disturbance around entrance	Too small for Black Cockatoo.	44
126	<i>Eucalyptus marginata</i>	568	6134307.879	568436.677	Y	Branch	16x8	Not currently occupied	No scratching or chewing	Shallow hollow.	45
127	<i>Eucalyptus marginata</i>	602	6134303.73	568451.111	Y	Trunk	9x8	Red-capped parrot	Fresh chewing around hollow entrance	Red-capped parrot.	46

Table 8 Continued.

ID	Species	DBH (mm)	Northing	Eastings	Hollow Y/N	Location	Dimensions	Occupant	Fauna activity	Comments	Photo Id
128	<i>Eucalyptus marginata</i>	669	6134302.155	568450.140	Y	Branch	4x3	Welcome swallows	Birds observed	Mudlark nest. 3 juveniles still being fed.	54, 59
132	<i>Eucalyptus marginata</i>	514	6134272.048	568463.545	Y	Trunk	6x8	Not currently occupied	Na	Good small-medium bird hollow.	60
149	<i>Eucalyptus marginata</i>	669	6134363.58	568418.221	Y	Branch	12x7	Bird	Fresh chewing around entrance consistent with medium bird.	Too small for Black Cockatoo.	65
156	<i>Eucalyptus marginata</i>	652	6134313.678	568374.098	Y	Butt	7x4	Feral Bees	Bees observed		66
158	<i>Eucalyptus marginata</i>	736	6134288.683	568373.734	Y	Trunk	43x46		Old nest remnants this season. Possible Wattlebird feathers	Checked. Shallow. Has potential to develop into Black Cockatoo hollow.	67
161	<i>Eucalyptus marginata</i>	592	6134266.179	568377.378	N	Na	Na	Na	Fresh feeding on jarrah nuts		68
166	<i>Eucalyptus marginata</i>	389	6134266.785	568425.820	Y	Trunk	9x6	Bird	Fresh chewing around entrance	Top and side entry into hollow.	70, 71
177	<i>Eucalyptus marginata</i>	1004	6133957.808	568019.393	Y	Branch	5x6	Not currently occupied	No scratching or chewing	Branch has small diameter. Potentially suitable for small bird or mammal.	72
188	<i>Corymbia calophylla</i>	861	6133929.747	567973.993	Y	Trunk	4x4	Small bird	Fresh chewing around entrance	Small hollow.	73
228	<i>Corymbia calophylla</i>	627	6133759.988	567867.734	N	Na	Na	Na	Red-tailed Black Cockatoo feeding debris		76
230	<i>Corymbia calophylla</i>	609	6133796.336	567872.650	N	Na	Na	Na	Possum scratching		77
236	<i>Corymbia calophylla</i>	613	6133832.199	567868.691	Y	Trunk	12x7	Small bird	Fresh chewing around entrance		78
241	<i>Corymbia calophylla</i>	793	6133867.066	567868.846	N	Na	Na	Na	Red-tailed Black Cockatoo feeding debris		80
256	<i>Corymbia calophylla</i>	572	6133969.756	567875.844	N	Na	Na	Na	Red-tailed Black Cockatoo and Baudin's feeding debris		87
265	<i>Eucalyptus marginata</i>	549	6133972.231	567858.074	Y	Trunk	24x42	Not currently occupied	Down feathers and egg remnants in hollow. Old small carnivore scat	Recently used.	94
268	<i>Eucalyptus marginata</i>	1131	6133941.597	567869.866	Y	Branch	14x14	Feral Bees	Bees observed; termite mound in base	Big old tree; good hollow forming potential.	97
269	<i>Corymbia calophylla</i>	766	6133934.997	567859.045	Y	Trunk	14x15	Possum	Possum scratching	Scratching up to hollow; double entrance. Large hollow potentially suitable for Black Cockatoos.	98
270	<i>Corymbia calophylla</i>	538	6133930.236	567864.508	Y	Trunk	8x7	Not currently occupied	Fresh chewing around entrance	Small birds; shallow hollow.	99
281	<i>Eucalyptus marginata</i>	1159	6133847.058	567854.958	Y	Branch	13x12	Possum	Possum scratching	Scratching up to hollow.	88,94
282	<i>Eucalyptus marginata</i>	615	6133830.877	567857.015	Y	Trunk	13x15	Undetermined	Fresh chewing around entrance	Checked.	102
288	<i>Eucalyptus marginata</i>	661	6133765.308	567858.336	Y	Trunk	28x32	Not currently occupied	No scratching or chewing	Shallow hollow.	103
310	<i>Eucalyptus marginata</i>	804	6133914.002	567819.888	Y	Branch	9x5	Small bird	Fresh chewing around entrance; possum scratching		104
313	<i>Eucalyptus marginata</i>	812	6133933.257	567836.044	Y	Trunk	26x34	Not currently occupied	Possum scratching	Small carnivore scat and active den at base of this tree.	106
314	<i>Eucalyptus marginata</i>	518	6133938.657	567843.150	Y	Trunk	15x15	Not currently occupied	Possum scratching	Scratching up to hollow; shallow hollow.	112
319	<i>Eucalyptus marginata</i>	615	6133961.469	567842.312	Y	Trunk	12x5	Not currently occupied	No scratching or chewing		113
321	<i>Eucalyptus marginata</i>	554	6133973.872	567844.761	Y	Trunk	25x12		Fresh chewing around entrance; possum scratching	Checked. Remnants of old bee hive; 2 well-formed hollows in trunk.	114,115
330	<i>Eucalyptus marginata</i>	632	6133937.601	567797.571	Y	Trunk	16x16	Not currently occupied	Possum scratching	Scratching doesn't go all the way to hollow.	117



Table 8 Continued.

ID	Species	DBH (mm)	Northing	Eastings	Hollow Y/N	Location	Dimensions	Occupant	Fauna activity	Comments	Photo Id
331	<i>Eucalyptus marginata</i>	520	6133928.08	567812.321	Y	Trunk	12x12	Not currently occupied	No scratching or chewing	Shallow hollow.	118
332	<i>Corymbia calophylla</i>	1002	6133929.559	567812.277	Y	Branch	38x16	Poosum	Den beneath tree; possum scratching up to and around hollow	Small carnivore scats. Old; den currently inactive.	120
334	<i>Corymbia calophylla</i>	894	6133919.901	567828.499	Y	Branch	20x18	Medium bird	Fresh chewing around entrance	Small diameter branch. Large entrance. Too small for Black Cockatoo.	119
351	<i>Eucalyptus marginata</i>	675	6133889.045	567765.960	Y	Trunk	18x20	Not currently occupied	Fresh chewing around entrance; possum scratching	2 hollows within 2 mod each other. Both potential Black Cockatoo hollows.	122,123
352	<i>Corymbia calophylla</i>	526	6133899.584	567778.094	Y	Trunk	16x11	Not currently occupied	Fresh disturbance around entrance		125
356	<i>Corymbia calophylla</i>	612	6133916.019	567793.109	N	Na	Na	Na	Baudin's feeding debris		126
361	<i>Eucalyptus marginata</i>	544	6133864.187	567805.042	Y	Branch	9x8	Not currently occupied	No scratching or chewing		127,128
366	<i>Eucalyptus marginata</i>	699	6133849.56	567803.293	Y	Branch	11x11	Small bird	Fresh chewing around entrance	Additional branch hollow 8x8 with fine scratching up to and into hollow; small mammal likely. Possibly arboreal Dasyurid.	129
369	<i>Eucalyptus marginata</i>	570	6133800.778	567802.620	Y	Trunk	12x10	Not currently occupied	Poosum scratching	Shallow hollow.	130
387	<i>Eucalyptus marginata</i>	612	6133863.741	567713.06	Y	Trunk	20x18	Not currently occupied	Old nest	Small-med birds.	133
389	<i>Eucalyptus marginata</i>	640	6133842.831	567720.150	Y	Branch	26x26	Not currently occupied	Old nest	Potential Black Cockatoo hollow.	134
392	<i>Corymbia calophylla</i>	712	6133822.92	567726.642	Y	Branch	10x12	Small bird	Fresh chewing around entrance		135
393	<i>Eucalyptus marginata</i>	652	6133815.819	567746.070	Y	Branch	8x8	Small bird	Fresh chewing around entrance		136
431	<i>Eucalyptus marginata</i>	773	6133783.968	567642.126	Y	Branch	23x20	Not currently occupied	No scratching or chewing	Chimney	139
445	<i>Eucalyptus marginata</i>	856	6134159.281	568703.316	Y	Branch	32x27	Poosum	Poosum scratching	Dead. Additional hollows in nearby limbs; fresh scratching all way up to and into hollow.	140
447	<i>Allocasuarina fraseriana</i>	503	6134556.977	568705.232	N	Na	Na	Na	Sheoak nut feeding debris		141
458	<i>Eucalyptus marginata</i>	648	6135040.494	568684.752	Y	Trunk	8x4	Not currently occupied	Fresh chewing around hollow	Small bird nest this season; an additional hollow in small branch in upper canopy.	142,143
459	<i>Eucalyptus marginata</i>	808	6135029.307	568676.834	Y	Trunk	7x3	Not currently occupied	Fresh chewing around hollow	Small bird nest this season.	144
476	<i>Eucalyptus marginata</i>	764	6134975.031	568536.496	Y	Trunk	12x3	Not currently occupied	Poosum scratching	Small amount of fresh chewing around entrance. Additional small hollow in branch looks like it has been used by small birds this season.	150
479	<i>Eucalyptus marginata</i>	915	6134979.989	568517.077	Y	Branch	4x5	Not currently occupied	No scratching or chewing		152
482	<i>Eucalyptus marginata</i>	761	6134959.102	568520.583	N	Na	Na	Na	Na	Large hollow in trunk that has become unusable due to opening in side of tree associated with hollow butt.	153-155
485	<i>Eucalyptus marginata</i>	644	6134963.068	568485.175	Y	Branch	24x10	Poosum	Poosum scratching	Scratching up to and into hollow.	156
491	<i>Eucalyptus marginata</i>	718	6134933.511	568386.037	Y	Trunk	7x5	Na	Scratching up to and into hollow	Too small entrance to see into with torch. Possible small dasyurid.	157
496	<i>Corymbia calophylla</i>	649	6134897.613	568370.955	Y	Branch	3x4	Not currently occupied	No scratching or chewing	Two upright branches may also have hollows forming.	158
499	<i>Eucalyptus marginata</i>	727	6134869.808	568322.723	Y	Branch	12x9	Not currently occupied	No scratching or chewing	Shallow hollow.	160
510	<i>Eucalyptus marginata</i>	561	6134807.47	568179.973	N	Na	Na	Na	Poosum scratching and scat		161

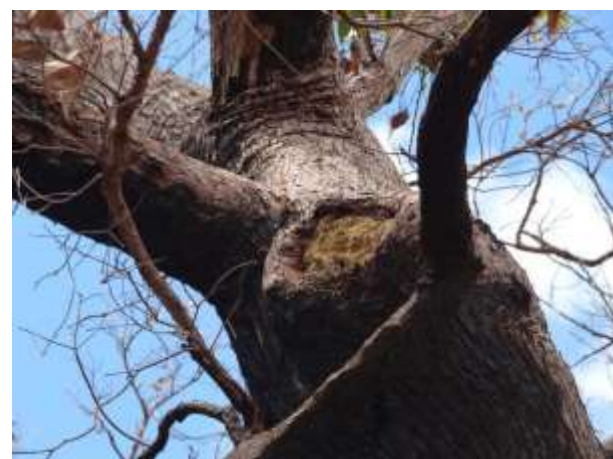
Table 8 Continued.

ID	Species	DBH (mm)	Northing	Eastings	Hollow Y/N	Location	Dimensions	Occupant	Fauna activity	Comments	Photo Id
518	<i>Eucalyptus marginata</i>	637	6134823.377	568152.735	Y	Branch	4x4	Not currently occupied	No scratching or chewing	Shallow hollow.	162
525	<i>Eucalyptus marginata</i>	660	6134901.376	568323.045	Y	Trunk	9x12	Feral Bees	Observed	Additional hollow forming higher.	163
527	<i>Eucalyptus marginata</i>	584	6134907.943	568334.758	Y	Branch	12x10	Not currently occupied	Fresh chewing around hollow	Some tracks leading up to hollow. Shallow and narrow hollow.	164
529	<i>Eucalyptus marginata</i>	558	6134378.086	567177.523	Y	Trunk	5x5	Not currently occupied	Small amount of scratching at side of hollow; cockatoo feeding debris around base of tree	Small and narrow.	166,67
530	<i>Eucalyptus marginata</i>	505	6134385.661	567190.573	Y	Trunk	8x7	Not currently occupied	No scratching or chewing	Spiderwebs across entrance; but chicken sized eggshell on ground.	168,169
531	<i>Eucalyptus marginata</i>	548	6134388.352	567200.137	Y	Trunk	18x12	Not currently occupied	No scratching or chewing	Spiderwebs across entrance.	170,171
546	<i>Eucalyptus marginata</i>	574	6134563.412	567576.047	Y	Branch	27x12	Not currently occupied	Possum scratching	Scratching not into hollow. Looks suitable for Black Cockatoo.	175
547	<i>Eucalyptus marginata</i>	790	6134552.962	567574.307	Y	Trunk	22x6	Not currently occupied	Scratching alongside hollow.		172
550	<i>Eucalyptus marginata</i>	622	6134543.133	567585.819	Y	Trunk	9x8	Possum	Possum scratching above and into hollow		173,74
556	<i>Eucalyptus marginata</i>	617	6134579.091	567602.888	Y	Branch	10x8	Not currently occupied	Fresh chewing around hollow	Medium bird has nested here this season.	177
565	<i>Corymbia calophylla</i>	889	6134588.987	567683.281	Y	Branch	35x32	Feral Bees	Bees observed		178,79
569	<i>Corymbia calophylla</i>	675	6134626.011	567708.676	Y	Branch	13x11	Not currently occupied	Possum scratching	Scratching around but not up to or into hollow. No bird chewing.	180
584	<i>Eucalyptus marginata</i>	661	6134674.879	567810.428	Y	Branch	7x3	Small bird	Fresh chewing around hollow	Additional hollow in adjoining branch. Slightly larger but no sign of recent activity.	181,82
585	<i>Eucalyptus marginata</i>	651	6134697.43	567857.248	Y	Branch	11x10	Not currently occupied	No scratching or chewing	Dead branch. Opens out to bottom. Section that is full hollow is very shallow.	183
609	<i>Eucalyptus marginata</i>	748	6134682.081	567882.599	Y	Branch	20x18	Not currently occupied	No scratching or chewing	Branch had dropped exposing the hollow. Shallow.	184
611	<i>Eucalyptus marginata</i>	493	6134672.174	567840.169	Y	Branch	35x30		Scratching alongside hollow.	Potential Black Cockatoo hollow. No signs of recent activity.	185
633	<i>Eucalyptus marginata</i>	608	6134356.943	567194.770	Y	Branch	26x26	Possum	Possum scratching	Scratching up to and into hollow; dead stag. Chimney hollow; good size for Black Cockatoo.	188
636	<i>Eucalyptus marginata</i>	912	6134367.973	567217.082	Y	Trunk	35x40	Not currently occupied	No scratching or chewing	Hollow shallow but has potential to become suitable for Black Cockatoos.	189
648	<i>Eucalyptus marginata</i>	1096	6134530.202	567559.132	Y	Branch	35x35	Not currently occupied	Scratching alongside hollow.	Dead top. Unstable.	190
672	<i>Eucalyptus marginata</i>	801	6134599.174	568342.655	Y	Trunk	28x30	Not currently occupied	Old nest remnants	Open hollow. Nest not this season.	192
675	<i>Eucalyptus marginata</i>	738	6134852.132	568621.931	Y	Trunk	9x8	Not currently occupied	Ravens	Large general hollow entrance. Main hollow inside is still quite shallow and narrow. Has good potential to form into a hollow suitable for Black Cockatoos.	193
676	<i>Eucalyptus marginata</i>	961	6134976.565	568583.213	Y	Branch	26x18	Possum	Possum scratching	Scratching up to and into hollow; dead stag. Side entrance hollow; good size for Black Cockatoo. Too unstable to climb.	194
677	<i>Eucalyptus marginata</i>	1151	6134888.714	568454.984	Y	Branch	22x26	Not currently occupied	No scratching or chewing	Good potential Black Cockatoo hollow.	195





Tree ID: 1  
Photo: 1



Tree ID: 2  
Photo: 2



Tree ID: 5  
Photo: 7



Tree ID: 6  
Photo: 8



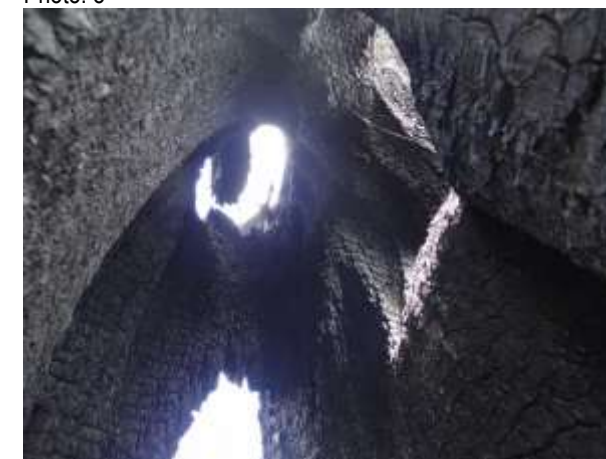
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Photo: 9



Tree ID: 11  
Photo: 10



Tree ID: 15  
Photo: 12



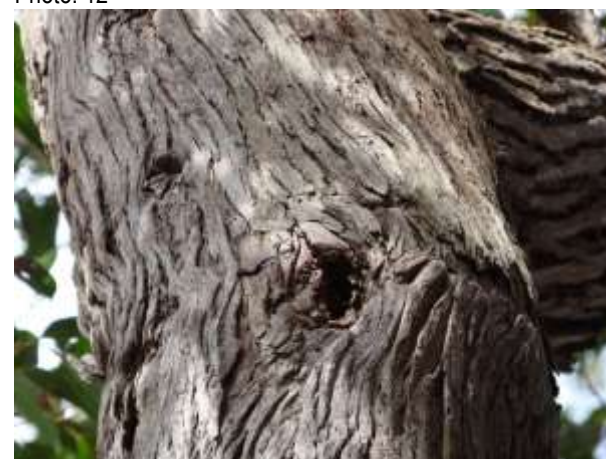
Tree ID: 23  
Photo: 13



Tree ID: 49  
Photo: 22



Tree ID: 55  
Photo: 24



Tree ID: 57  
Photo: 25



Tree ID: 76  
Photo: 29

Figure 15: Significant habitat trees with hollows or evidence of fauna activity within the survey area.





Tree ID: 79  
Photo: 30



Tree ID: 85  
Photo: 31



Tree ID: 86  
Photo: 32



Tree ID: 92  
Photo: 34



Tree ID: 95  
Photo: 35



Tree ID: 98  
Photo: 36



Tree ID: 106  
Photo: 41



Tree ID: 111  
Photo: 42



Tree ID: 112  
Photo: 43



Tree ID: 122  
Photo: 44



Tree ID: 126  
Photo: 45



Tree ID: 127  
Photo: 46

Figure 15 Continued.





Tree ID: 128  
Photo: 54



Tree ID: 128  
Photo: 59



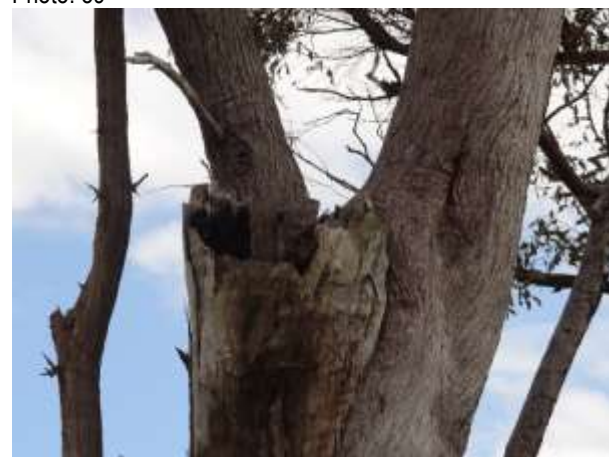
Tree ID: 132  
Photo: 60



Tree ID: 149  
Photo: 65



Tree ID: 156  
Photo: 66



Tree ID: 158  
Photo: 67



Tree ID: 161  
Photo: 68



Tree ID: 166  
Photo: 70



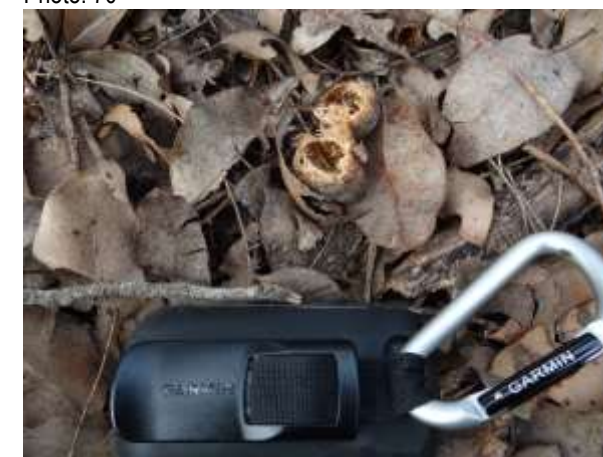
Tree ID: 166  
Photo: 71



Tree ID: 177  
Photo: 72



Tree ID: 188  
Photo: 73



Tree ID: 228  
Photo: 76

Figure 15 Continued.





Tree ID: 230  
Photo: 77



Tree ID: 236  
Photo: 78



Tree ID: 241  
Photo: 80



Tree ID: 256  
Photo: 87



Tree ID: 265  
Photo: 88



Tree ID: 265  
Photo: 94



Tree ID: 268  
Photo: 97



Tree ID: 269  
Photo: 98



Tree ID: 270  
Photo: 99



Tree ID: 281  
Photo: 100



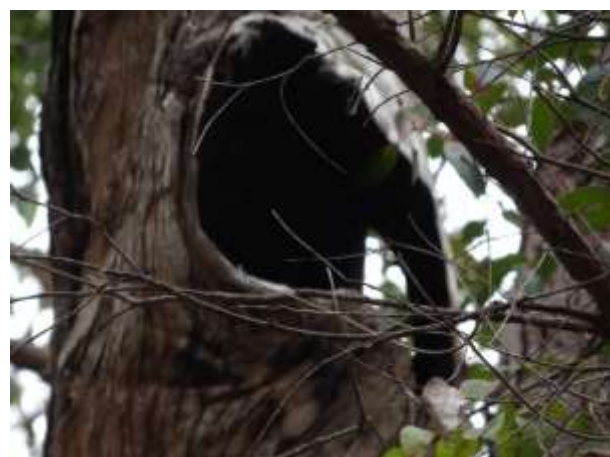
Tree ID: 281  
Photo: 101



Tree ID: 282  
Photo: 102

Figure 15 Continued.





Tree ID: 288  
Photo: 103



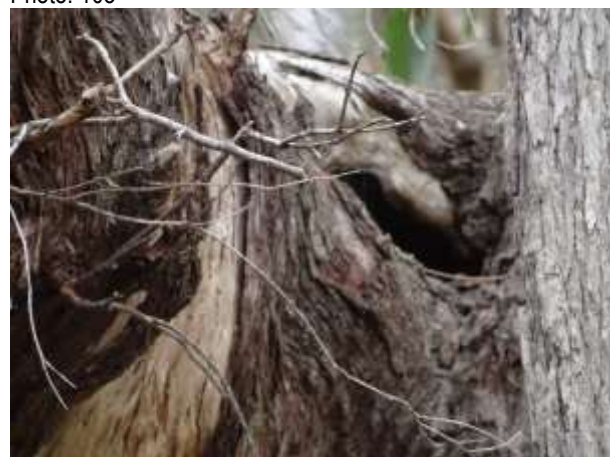
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Photo: 104



Tree ID: 313  
Photo: 106



Tree ID: 314  
Photo: 112



Tree ID: 319  
Photo: 113



Tree ID: 321  
Photo: 114



Tree ID: 321  
Photo: 115



Tree ID: 330  
Photo: 117



Tree ID: 331  
Photo: 118



Tree ID: 332  
Photo: 120



Tree ID: 334  
Photo: 119



Tree ID: 351  
Photo: 122

Figure 15 Continued.





Tree ID: 351  
Photo: 123



Tree ID: 352  
Photo: 125



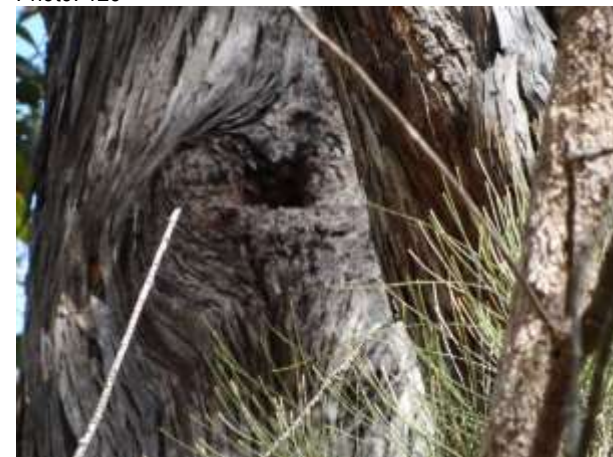
Tree ID: 356  
Photo: 126



Tree ID: 361  
Photo: 127



Tree ID: 361  
Photo: 128



Tree ID: 366  
Photo: 129



Tree ID: 369  
Photo: 130



Tree ID: 387  
Photo: 133



Tree ID: 389  
Photo: 134



Tree ID: 392  
Photo: 135



Tree ID: 393  
Photo: 136



Tree ID: 431  
Photo: 139

Figure 15 Continued.





Tree ID: 445  
Photo: 140



Tree ID: 447  
Photo: 141



Tree ID: 458  
Photo: 142



Tree ID: 458  
Photo: 143



Tree ID: 459  
Photo: 144



Tree ID: 476  
Photo: 150



Tree ID: 479  
Photo: 152



Tree ID: 482  
Photo: 155



Tree ID: 485  
Photo: 156



Tree ID: 491  
Photo: 157



Tree ID: 496  
Photo: 158



Tree ID: 499  
Photo: 160

Figure 15 Continued.





Tree ID: 510  
Photo: 161



Tree ID: 518  
Photo: 162



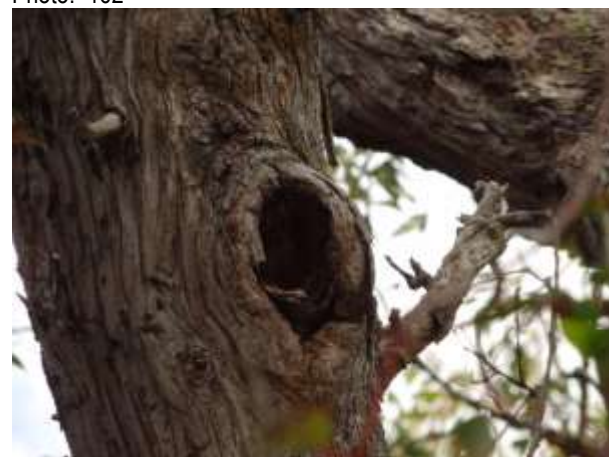
Tree ID: 525  
Photo: 163



Tree ID: 527  
Photo: 164



Tree ID: 529  
Photo: 166



Tree ID: 530  
Photo: 168



Tree ID: 531  
Photo: 170



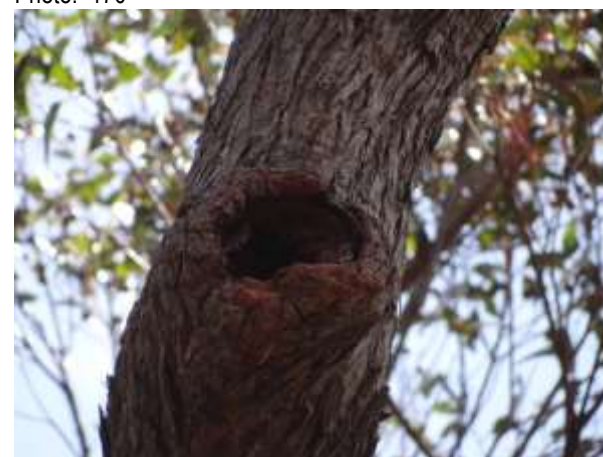
Tree ID: 546  
Photo: 175



Tree ID: 547  
Photo: 172



Tree ID: 550  
Photo: 173



Tree ID: 556  
Photo: 177



Tree ID: 565  
Photo: 178

Figure 15 Continued.





Tree ID: 569  
Photo: 180



Tree ID: 584  
Photo: 181



Tree ID: 584  
Photo: 182



Tree ID: 585  
Photo: 183



Tree ID: 609  
Photo: 184



Tree ID: 611  
Photo: 185



Tree ID: 633  
Photo: 188



Tree ID: 636  
Photo: 189



Tree ID: 648  
Photo: 190



Tree ID: 675  
Photo: 193



Tree ID: 676  
Photo: 194



Tree ID: 677  
Photo: 195

Figure 15 Continued.



## 5. Summary

### 5.1. Vegetation, Threatened and Priority Flora and Ecological Communities

The scope for this survey was to provide the client with information on flora and vegetation types present and any potential threatened flora species or TECs present within the survey area. The survey area is comprised of six vegetation types. Of these six vegetation types three are associated with the Marbellup Flats, which is a South Coast Significant Wetland.

A total of 141 species were identified during the survey including 123 native and 18 introduced species. As some of the threatened species were not in their flowering period a risk assessment was carried out on the likelihood of the species presence, with those deemed unlikely to occur in the area due to unsuitable habitat (e.g. soil types, vegetation density etc). Of the 17 DRF and 41 Priority species potentially occurring in the area, none were found to be present. Based on the existing concept design the remnant vegetation areas will not be undergoing any development.

The vegetation complexes identified within the survey area do not meet the key diagnostic features of the two TECs potentially occurring in the area. As there were no threatened flora or TECs identified within the survey area, there are no constraints to threatened species subject to the *Wildlife Conservation Act 1950*.

Remnant vegetation condition within the survey area ranged from Completely Degraded to Pristine. Stands of isolated paddock trees within existing agricultural areas have been classified as Completely Degraded. Vegetation within the road reserves are both Excellent and Very Good. The majority of the vegetation in the western remnant is Pristine, and vegetation surrounding and within the creekline is Pristine and Very Good.

### 5.2. Fauna (including threatened)

The scope for this survey was to provide the client with information on fauna (including threatened) within the survey area and likelihood of habitat utilisation. The potential species list (Table 7) outlines presence / absence of species and outlines species that are unlikely to be present due to lack of suitable habitat (Table 7). The overall value of the habitat of the survey area is considered as high, due to the types of vegetation present and the associated fauna habitat, local and regional connectivity and for supporting both known and potential habitat values for conservation significant fauna species.

A total of 40 species were detected over 44 survey hours of these three introduced species were detected throughout the survey; *Felis catus* (Cat), *Vulpes Vulpes* (Red Fox) and *Oryctolagus cuniculus* (Rabbit). There is a high level of fox activity across the site, which may be a limiting factor to the presence of some mammal species. There was a high level of non-threatened bird activity throughout the site as evidenced through the number of species (27) observed. Multiple nests and hollows for non-threatened bird species such as: *Cracticus tibicen* (Australian Magpie), *Eolophus roseicapillus* (Galah), *Grallina cyanoleuca* (Magpie Lark) and *Purpureicephalus spurius* (Red Capped Parrot) were detected throughout the site. The subject site also provides suitable habitat for *Macropus fuliginosus* (Western Grey Kangaroo), *Rattus fuscipes* (Bush Rat) and *Trichosurus vulpecula* (Brush-tail Possum). Multiple hollows likely being utilised by *Trichosurus vulpecula* were identified across the survey area.

Threatened species found within the survey area include *Calyptorhynchus banksii subsp. naso* (Forest Red-tailed Black Cockatoo), *Calyptorhynchus baudinii* (Baudin's Cockatoo), *Isoodon obesulus fusciventer* (Quenda), and *Notamacropus irma* (Brush Wallaby). The most important habitats for these species are the creek line vegetation, the surrounding remnant vegetation associated with the creek (situated along the southern boundary) and the roadside vegetation along the northern boundary. This is evident through the identification of runnels, scats, diggings, significant trees with hollows and Black Cockatoo feed signs. There was some anecdotal evidence of activity in the western remnant vegetation for *Isoodon obesulus fusciventer*, however activity levels were not significantly high. The creek system holds high habitat value for *Isoodon obesulus fusciventer*, and *Notamacropus irma*,

Potential habitat for threatened species within the survey area includes all remnant vegetation within the site, the creek system and the larger stands of paddock trees throughout the paddock areas. There is a high level of fauna activity in vegetation surrounding the creek line from both threatened and non-threatened fauna species as well as the highest occurrence of significant trees that contain hollows. This indicates that the area contains highly attractive habitat for fauna.

There is suitable habitat for *Galaxiella munda* (Western Mud Minnow) and *Galaxiella nigrostriatal* (Black-stripe Minnow) and *Lepidogalaxias salamandroides* (Salamanderfish) within the creek system. If any development or habitat modification in the creek area is proposed in the future, a targeted trapping survey would need to be undertaken to identify the occurrence of these species.

Under the definitions defined in the Black Cockatoo Referral Guidelines (DSEWPaC, 2012) individual trees of *Eucalyptus marginata*, *Corymbia calophylla*, *Eucalyptus staeri*, *Allocasuarina fraseriana* could be considered potential breeding, roosting and foraging trees. The vegetation throughout the survey area contained potential feed tree species for each of the three Black Cockatoos, including: *Eucalyptus marginata*, *Corymbia calophylla*, *Eucalyptus staeri*, *Allocasuarina fraseriana* and other Proteaceous species (DoE; 2017b, 2017c, 2017d).

The southern pocket of Jarrah / Marri remnant vegetation had the highest occurrences of *Calyptorhynchus banksii* subsp. *naso* and *Calyptorhynchus baudinii*, feeding signs. The majority of feeding evidence consisted of *Corymbia calophylla* nuts. As the number of significant Black Cockatoo feeding sites across the survey area was relatively low this indicates that although the site contains potential high value foraging habitat for the three species it is currently not a favoured feeding area. The presence of significant feeding signs in the remnant vegetation in the south appears to indicate this area is anecdotally more attractive for food than the other vegetated areas. Clearing of trees is not recommended and significant trees that contain active hollows or future Black Cockatoo hollows should be retained.

The vegetation types / wildlife habitat present within the survey area are well represented locally and in nearby reserves. The Jarrah / Marri dominated woodland and forest present are one of the most abundant habitat types present within the ARVS survey area, providing a significant proportion of wildlife habitat. The *Homalospermum* and *Callistemon* dominated thickets present with the survey area are not as common at a regional level based on ARVS mapping. However, these habitat types are well represented in surrounding remnant vegetation and nearby reserves such as the Down Road Nature Reserve.



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## **7. Appendices**

Appendix A – Survey Area and Current Proposed Concept design

Appendix B – Database Searches

Appendix C - Relevé Datasheets

Appendix D – Significant Trees



## **Appendix A**

Survey Area and Current Proposed Concept design





29 Hercules Crescent  
Albany, WA 6330  
Australia  
Tel: 08 9842 1575  
Fax: 08 9842 1575



Overview Map Scale 1:100,000

**Legend**

- Subject Site
- Cadastre
- 5m Contours



Scale  
1:8,500 @ A3  
GDA MGA 94 Zone 50

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

**CLIENT**  
City of Albany  
C/o Matt Thompson  
PO Box 484  
Albany, WA 6331

**Survey Area**

Assessor	QA Check <b>KK</b>	Drawn by <b>BT</b>
STATUS <b>FINAL</b>	FILE <b>MSC0137-002</b>	DATE <b>26/11/2018</b>





Albany Motorsport Park  
Notional Design Study  
Down Road Albany

Roberts Gardiner  
**Architects**

# **Appendix B**

Database Searches



# NatureMap Flora Species Report 15Km

Created By Guest user on 19/10/2018

Current Names Only Yes

Core Datasets Only Yes

Method 'By Line'

Vertices 34° 55' 51" S,117° 44' 06" E 34° 55' 28" S,117° 45' 08" E 34° 56' 07" S,117° 45' 08" E 34° 56'

Group By 24° S,117° 43' 39" E 34° 56' 06" S,117° 43' 29" E 34° 55' 51" S,117° 44' 09" E

Family

Family	Species	Records
Acanthizidae	8	1520
Accipitridae	14	376
Acrobolbaceae	1	5
Actinopodidae	4	20
Aegothelidae	1	9
Aeshnidae	1	2
Agamidae	1	1
Agapanthaceae	1	2
Aizoaceae	1	1
Alariaceae	1	1
Alliaceae	1	1
Amaranthaceae	2	2
Amaryllidaceae	1	1
Amphisopodidae	1	1
Anapidae	1	2
Anarthriaceae	6	36
Anatidae	13	836
Ancylidae	1	3
Anhingidae	1	14
Anthracoideaceae	1	1
Apiaceae	10	47
Apocynaceae	1	1
Apodidae	1	2
Aracanidae	3	3
Araceae	2	3
Araliaceae	7	12
Araneidae	6	55
Archaeidae	1	20
Ardeidae	7	285
Argiolestidae	1	2
Arkyidae	2	3
Artamidae	2	105
Asparagaceae	26	82
Aspleniaceae	1	4
Asteraceae	40	61
Atherinidae	2	2
Atrichornithidae	1	1
Baetidae	1	2
Balaenopteridae	1	1
Bathysauridae	1	5
Belonidae	1	15
Berycidae	1	1
Boidae	1	4
Boraginaceae	2	2
Boryaceae	2	3
Bothriuridae	1	3
Brassicaceae	7	9
Bryaceae	3	3
Burramyidae	1	5
Cacatuidae	1	112
Caddidae	1	3
Caenidae	1	15
Callanthiidae	1	2
Callionymidae	1	1
Campanulaceae	7	23
Campephagidae	1	236
Candelariaceae	4	6
Canidae	1	1
Caprifoliaceae	2	2
Caprimulgidae	1	1
Carangidae	3	5
Carcharhinidae	2	2
Caryophyllaceae	5	7
Casuaridae	1	6
Casuarinaceae	2	6
Caulerpaceae	1	1
Ceinidae	1	10
Centrolepidaceae	8	20
Cephalotaceae	1	7
Cephalozellaceae	1	1
Ceratiidae	1	1
Ceratopogonidae	1	9
Charadriidae	8	82
Cheilodactylidae	1	1
Cheloniidae	1	1
Cheluidae	1	5
Chenopodiaceae	5	9

Chernetidae	1	1
Chironemidae	2	2
Chironomidae	3	67
Cladoniaceae	16	40
Clinidae	3	5
Clupeidae	2	7
Coccocarpiaceae	1	1
Coenagrionidae	1	5
Colchicaceae	2	7
Columbidae	5	515
Congiopodidae	1	1
Congridae	1	1
Convolvulaceae	1	1
Corduliidae	1	1
Corixidae	1	7
Cortinariaceae	1	1
Corvidae	2	553
Cracticidae	4	690
Cuculidae	4	158
Culicidae	1	3
Cupressaceae	1	1
Cyperaceae	60	164
Cypridae	2	5
Cypridopsidae	1	4
Dasyatidae	1	1
Dasyornithidae	1	1
Dasyopogonaceae	5	23
Dasyuridae	5	27
Delphinidae	2	4
Dennstaedtiaceae	1	2
Desidae	3	4
Dicaeidae	1	1
Dicranaceae	3	7
Dicruridae	4	1299
Dilleniaceae	16	36
Dinolestidae	1	2
Diodontidae	2	4
Diomedelidae	2	2
Droseraceae	25	49
Dugesidae	1	1
Dytiscidae	1	17
Echeneidae	1	1
Ecnomidae	1	14
Elaeocarpaceae	7	31
Elaphomycetaceae	2	2
Elapidae	7	23
Elopidae	1	1
Empididae	1	1
Engraulidae	1	7
Ephyridae	1	1
Ericaceae	50	305
Estrilidae	1	295
Euphorbiaceae	7	14
Exocoetidae	1	1
Fabaceae	136	489
Falconidae	8	116
Fissidentaceae	1	1
Funariaceae	1	2
Galaxiidae	4	28
Garypidae	1	1
Garypinidae	1	1
Gekkonidae	1	23
Gelastocoridae	1	2
Gelidiaceae	1	2
Gempylidae	1	1
Gentianaceae	3	3
Geotriidae	1	3
Geraniaceae	3	6
Gerreidae	1	2
Girellidae	1	1
Glossiphoniidae	1	3
Gnaphosidae	1	1
Gnathanacanthidae	1	1
Gobiidae	3	7
Gomphidae	1	4
Goodeniaceae	15	67
Gordiidae	1	1
Graphidaceae	1	3
Gripopterygidae	1	4
Gyrinidae	1	2
Gyrostemonaceae	1	2
Haematopodidae	2	22
Haemodoraceae	16	50
Halcyonidae	3	468
Halimedaceae	1	1
Haloragaceae	7	10
Hebridae	1	1
Hemerocallidaceae	10	25
Hemicorduliidae	1	5
Heterodontidae	1	3
Hirundinidae	3	527
Hydatellaceae	1	7
Hydraenidae	1	1
Hydrobiosidae	1	1
Hydrometridae	1	3
Hydrophilidae	1	12
Hydropsychidae	1	8
Hydroptilidae	1	3
Hylidae	2	8
Hypnidae	1	2
Hyriidae	1	1
Icmadophilaceae	1	1
Idiopidae	1	4
Iridaceae	18	29
Istiophoridae	1	1



Iulomorphidae	2	19
Ixodidae	1	1
Juncaceae	8	21
Juncaginaceae	1	1
Kyphosidae	1	1
Labridae	5	13
Lamiaceae	6	15
Lamnidae	1	1
Lamponidae	5	12
Laridae	6	158
Lauraceae	6	18
Lecanoraceae	4	5
Lecideaceae	2	2
Lentibulariaceae	3	7
Lepidogalaxiidae	1	1
Lepidoziaceae	1	2
Leporidae	1	1
Leptoceridae	1	16
Leptophlebiidae	1	3
Liagoraceae	1	1
Libellulidae	1	2
Lichinaceae	1	1
Limnodynastidae	2	59
Linaceae	2	2
Lindsaeaceae	1	4
Lobariaceae	1	2
Loganiaceae	6	23
Lophocoleaceae	2	11
Lophotidae	1	1
Loranthaceae	1	1
Lycopodiaceae	1	4
Lycosidae	5	30
Macropodidae	3	9
Maluridae	5	961
Malvaceae	9	25
Megalariaceae	1	2
Melanostomiidae	1	1
Meliphagidae	12	1735
Menyanthaceae	3	17
Mesophelliaceae	1	2
Micropholcommatidae	2	3
Mimetidae	1	1
Miturgidae	1	1
Molidae	1	6
Molossidae	1	1
Monacanthidae	13	23
Monoscutidae	1	3
Moridae	2	3
Motacillidae	2	4
Mugilidae	1	1
Mullidae	1	1
Muraenidae	2	2
Muridae	5	75
Mycoblastaceae	2	2
Myobatrachidae	6	75
Myrtaceae	83	361
Nannoperциidae	2	22
Nemesiidae	1	84
Neobalaenidae	1	1
Neosebastidae	1	2
Neosittidae	2	22
Nomeidae	1	1
Notonectidae	1	2
Odacidae	2	2
Odontaspidae	1	1
Olacaceae	2	6
Oligochaeta	1	22
Onagraceae	2	6
Ophichthidae	2	8
Oplegnathidae	1	1
Orchidaceae	92	216
Orectobidae	2	2
Orobanchaceae	3	6
Orsolobidae	2	48
Orthotrichaceae	1	1
Ostraciidae	1	1
Otariidae	3	4
Otididae	1	4
Oxalidaceae	2	3
Pachycephalidae	7	395
Palaemonidae	1	7
Pannariaceae	2	5
Papaveraceae	2	3
Paradoxosomatidae	1	9
Pararchaeidae	1	1
Parascylliidae	1	1
Parastacidae	4	34
Pardalotidae	4	182
Parmeliaceae	23	51
Passeridae	1	7
Pataecidae	1	1
Pegasidae	1	2
Pelecyanidae	1	150
Pelecyanoididae	1	1
Pempheridae	1	1
Pentacerotidae	1	1
Peramelidae	1	35
Percichthyidae	4	43
Percidae	1	1
Peronosporaceae	1	46
Perthidae	1	11
Pertusariaceae	1	1
Petroicidae	5	372
Phalacrocoracidae	5	193
Phalangeridae	1	3

Phasianidae	4	37
Philydraceae	1	1
Phreatoicidae	1	1
Phyllanthaceae	4	7
Physciaceae	2	2
Physeteridae	1	6
Physidae	1	3
Phytolaccaceae	1	2
Pinguipedidae	1	1
Pittosporaceae	6	51
Planorbidae	1	2
Plantaginaceae	7	8
Platycephalidae	1	1
Plesiopidae	1	1
Pleuronectidae	1	1
Plotosidae	1	1
Poaceae	52	85
Podargidae	2	18
Podicipedidae	4	68
Poeciliidae	1	2
Polycentropodidae	1	1
Polygalaceae	8	25
Polygonaceae	6	12
Pomatostomidae	1	1
Potamogetonaceae	1	1
Potoroidae	1	3
Pottiaceae	3	7
Primulaceae	3	6
Pristiophoridae	1	1
Procellariidae	4	6
Prodidomidae	2	3
Proteaceae	105	612
Pseudocheiridae	1	176
Psittacidae	15	1700
Psittaculidae	1	1
Pteridaceae	1	1
Pygopodidae	2	5
Pyralidae	1	1
Racopilaceae	1	1
Rajidae	1	1
Rallidae	11	213
Ramalinaceae	2	2
Ranunculaceae	2	4
Recurvirostridae	3	28
Resedaceae	1	1
Restionaceae	31	130
Rhamnaceae	4	12
Rhinobatidae	1	1
Rhizocarpaceae	1	1
Rosaceae	2	6
Rubiaceae	2	7
Russulaceae	1	2
Rutaceae	21	118
Santalaceae	9	31
Sapindaceae	1	7
Scincidae	11	69
Sciomyzidae	1	1
Scolopacidae	10	44
Scolopendridae	2	10
Scomberesocidae	1	1
Scombridae	3	3
Scorpididae	1	2
Scrophulariaceae	1	1
Scyliorhinidae	2	3
Sebastidae	1	1
Selaginellaceae	1	1
Sematophyllaceae	1	5
Serranidae	4	6
Sillaginidae	2	31
Simuliidae	1	14
Siphonocladaceae	1	2
Siphonotidae	1	1
Solanaceae	4	4
Soleidae	3	3
Sparassidae	2	5
Sphaeriidae	1	1
Spheniscidae	1	19
Sphyracidae	1	1
Sphyrnidae	1	1
Stereocaulaceae	1	1
Stratiomyidae	1	2
Sturmidae	2	5
Stylidiaceae	38	154
Sulidae	1	6
Sylviidae	4	51
Syngnathidae	7	36
Synodontidae	2	2
Synthemistidae	1	2
Talitridae	1	1
Tarsipedidae	1	64
Telephlebiidae	1	5
Teloschistaceae	7	10
Tetragnathidae	2	2
Tetraodontidae	3	3
Tetrarogidae	1	2
Threskiornithidae	3	239
Thuidiaceae	2	3
Thylacomylidae	1	1
Thymelaeaceae	12	47
Tipulidae	1	10
Triakidae	3	5
Triglidae	2	7
Tripterygiidae	1	6
Trombidiformes	1	12
Turnicidae	2	15



Tytonidae	3	11
Uranoscopidae	2	4
Urodacidae	1	4
Urolophidae	4	10
Usneaceae	4	11
Varanidae	1	1
Veliferidae	1	1
Veliidae	1	10
Verbenaceae	1	1
Vespertilionidae	5	17
Xanthorrhoeaceae	2	2
Xyridaceae	3	20
Zamiaceae	1	3
Zeidae	1	5
Ziphiidae	1	1
Zodariidae	2	16
Zoridae	1	1
Zosteropidae	1	496
<b>TOTAL</b>	<b>1778</b>	<b>21267</b>

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Acanthizidae</b>				
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
5.	24271 <i>Gerygone fusca subsp. fusca</i> (Western Gerygone)			
6.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
7.	24279 <i>Sericornis frontalis subsp. maculatus</i> (White-browed Scrubwren)			
8.	30948 <i>Smicromis brevirostris</i> (Weebill)			
<b>Accipitridae</b>				
9.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
10.	24281 <i>Accipiter cirrocephalus subsp. cirrocephalus</i> (Collared Sparrowhawk)			
11.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
12.	24282 <i>Accipiter fasciatus subsp. fasciatus</i> (Brown Goshawk)			
13.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
14.	24288 <i>Circus approximans</i> (Swamp Harrier)			
15.	24289 <i>Circus assimilis</i> (Spotted Harrier)			
16.	<i>Elanus axillaris</i>			
17.	24290 <i>Elanus caeruleus subsp. axillaris</i> (Australian Black-shouldered Kite)			
18.	24293 <i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)			
19.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
20.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
21.	<i>Lophoictinia isura</i>			
22.	48591 <i>Pandion cristatus</i> (Osprey, Eastern Osprey)		IA	
<b>Acrobolbaceae</b>				
23.	<i>Lethocolea pansa</i>			
<b>Actinopodidae</b>				
24.	<i>Missulena granulosa</i>			
25.	<i>Missulena hoggi</i>			
26.	<i>Missulena occatoria</i>			
27.	<i>Missulena torbayensis</i>			
<b>Aegothelidae</b>				
28.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			
<b>Aeshnidae</b>				
29.	<i>Aeshnidae sp.</i>			
<b>Agamidae</b>				
30.	24907 <i>Pogona minor subsp. minor</i> (Dwarf Bearded Dragon)			
<b>Agapanthaceae</b>				
31.	18380 <i>Agapanthus praecox subsp. orientalis</i>	Y		Y
<b>Aizoaceae</b>				
32.	2794 <i>Carpobrotus aequilaterus</i> (Angular Pigface)	Y		
<b>Alariaceae</b>				
33.	26805 <i>Ecklonia radiata</i>			
<b>Alliaceae</b>				
34.	1375 <i>Allium neapolitanum</i> (Naples Onion)	Y		
<b>Amaranthaceae</b>				
35.	2655 <i>Amaranthus albus</i> (Tumbleweed)	Y		
36.	2668 <i>Amaranthus powellii</i> (Powell's Amaranth)	Y		
<b>Amaryllidaceae</b>				
37.	44496 <i>Narcissus tazetta subsp. italicus</i>	Y		
<b>Amphisopodidae</b>				
38.	<i>Amphisopodidae sp.</i>			
<b>Anapidae</b>				
39.	<i>Chasmocephalon flinders</i>			
<b>Anarthriaceae</b>				
40.	1058 <i>Anarthria gracilis</i>			
41.	1060 <i>Anarthria laevis</i>			
42.	1062 <i>Anarthria prolifera</i>			
43.	1063 <i>Anarthria scabra</i>			
44.	1097 <i>Lyginia barbata</i>			



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
45.	18049 <i>Lyginia imberbis</i>			
<b>Anatidae</b>				
46.	24310 <i>Anas castanea</i> (Chestnut Teal)			
47.	24312 <i>Anas gracilis</i> (Grey Teal)			
48.	24313 <i>Anas platyrhynchos</i> (Mallard)			
49.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
50.	25550 <i>Anas rhynchotis subsp. rhynchotis</i> (Australasian Shoveler)			
51.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
52.	24318 <i>Aythya australis</i> (Hardhead)			
53.	24319 <i>Biziura lobata</i> (Musk Duck)			
54.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
55.	24322 <i>Cygnus atratus</i> (Black Swan)			
56.	24326 <i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
57.	24328 <i>Oxyura australis</i> (Blue-billed Duck)		P4	
58.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
<b>Ancylidae</b>				
59.	<i>Ancylidae</i> sp.			
<b>Anhingidae</b>				
60.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
<b>Anthracoideaceae</b>				
61.	45801 <i>Moreaua evandrae</i>			
<b>Apiaceae</b>				
62.	6203 <i>Actinotus glomeratus</i>			
63.	6206 <i>Actinotus omnifertilis</i>			
64.	6214 <i>Centella asiatica</i>			
65.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
66.	6249 <i>Platysace compressa</i> (Tapeworm Plant)			
67.	6253 <i>Platysace filiformis</i>			
68.	6263 <i>Schoenolaena juncea</i>			
69.	6292 <i>Xanthosia rotundifolia</i> (Southern Cross)			
70.	6293 <i>Xanthosia singuliflora</i>			
71.	19330 <i>Xanthosia tasmanica</i>			
<b>Apocynaceae</b>				
72.	6565 <i>Alyxia buxifolia</i> (Dysentery Bush)			
<b>Apodidae</b>				
73.	25554 <i>Apus pacificus</i> (Fork-tailed Swift, Pacific Swift)		IA	
<b>Aracnidae</b>				
74.	<i>Aracana aurita</i>			
75.	<i>Caprichthys gymnura</i>			
76.	<i>Capropygia unistriata</i>			
<b>Araceae</b>				
77.	17659 <i>Alocasia brisbanensis</i>	Y		
78.	1049 <i>Zantedeschia aethiopica</i> (Arum Lily)	Y		
<b>Araliaceae</b>				
79.	18297 <i>Hedera helix</i>	Y		
80.	6223 <i>Hydrocotyle alata</i>			
81.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
82.	6229 <i>Hydrocotyle diantha</i>			
83.	19041 <i>Trachymene coerulea subsp. coerulea</i>			
84.	6279 <i>Trachymene ornata</i> (Spongefruit)			
85.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
<b>Araneidae</b>				
86.	<i>Arachnura higginsi</i>			
87.	<i>Araneus cyphoxis</i>			
88.	<i>Araneus senicaudatus</i>			
89.	<i>Austracantha minax</i>			
90.	<i>Backobourkia heroine</i>			
91.	<i>Nephila edulis</i>			
<b>Archaeidae</b>				
92.	42361 <i>Zephyrarchaea mainae</i> (Main's assassin spider)		T	
<b>Ardeidae</b>				
93.	25558 <i>Ardea ibis</i> (Cattle Egret)			
94.	41324 <i>Ardea modesta</i> (great egret, white egret)			
95.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
96.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
97.	24345 <i>Botaurus poiciloptilus</i> (Australasian Bittern)		T	
98.	<i>Egretta novaehollandiae</i>			
99.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
<b>Argiolestidae</b>				
100.	<i>Megapodagrionidae</i> sp.			
<b>Arkyidae</b>				
101.	<i>Arkys alticephala</i>			
102.	<i>Arkys walckenaeri</i>			
<b>Artamidae</b>				
103.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
104.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
<b>Asparagaceae</b>				
105.	1201 <i>Asparagus officinalis</i> (Asparagus)	Y		
106.	1302 <i>Laxmannia jamesii</i> (James' Paperlily)		P4	
107.	1304 <i>Laxmannia minor</i>			
108.	11464 <i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			
109.	<i>Laxmannia</i> sp.			
110.	1222 <i>Lomandra brittanii</i>			
111.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
112.	1225 <i>Lomandra drummondii</i>			
113.	1229 <i>Lomandra integra</i>			
114.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
115.	1234 <i>Lomandra nigricans</i>			
116.	1238 <i>Lomandra pauciflora</i>			
117.	1239 <i>Lomandra preissii</i>			
118.	1240 <i>Lomandra purpurea</i> (Purple Mat Rush)			
119.	1243 <i>Lomandra sericea</i> (Silky Mat Rush)			
120.	1244 <i>Lomandra sonderi</i>			
121.	1246 <i>Lomandra suaveolens</i>			
122.	1328 <i>Thysanotus dichotomus</i> (Branching Fringe Lily)			
123.	1333 <i>Thysanotus glaucifolius</i>			
124.	1335 <i>Thysanotus gracilis</i>			
125.	1336 <i>Thysanotus isantherus</i>		P4	
126.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
127.	1345 <i>Thysanotus pseudojunceus</i>			
128.	1351 <i>Thysanotus sparteus</i>			
129.	1356 <i>Thysanotus teretifolius</i>			
130.	1357 <i>Thysanotus thyrsoides</i>			
<b>Aspleniaceae</b>				
131.	61 <i>Asplenium aethiopicum</i> (Forked Spleenwort)			
<b>Asteraceae</b>				
132.	7851 <i>Asteridea pulverulenta</i> (Common Bristle Daisy)			
133.	7871 <i>Brachyscome ciliaris</i>			
134.	7909 <i>Carduus pycnocephalus</i> (Slender Thistle)	Y		
135.	7939 <i>Conyza bonariensis</i> (Flaxleaf Fleabane)	Y		
136.	20074 <i>Conyza sumatrensis</i>	Y		
137.	7943 <i>Cotula australis</i> (Common Cotula)			
138.	7945 <i>Cotula coronopifolia</i> (Waterbuttons)	Y		
139.	13354 <i>Craspedia variabilis</i>			
140.	7961 <i>Dittrichia graveolens</i> (Stinkwort)	Y		
141.	7962 <i>Dittrichia viscosa</i>	Y		
142.	9352 <i>Hypochoeris radicata</i> (Flat Weed, Cats-ear)	Y		
143.	8092 <i>Ixiolaena viscosa</i> (Sticky Ixiolaena)			
144.	8099 <i>Leontodon saxatilis</i> (Hairy Hawkbit)	Y		
145.	8127 <i>Olearia axillaris</i> (Coastal Daisybush)			
146.	8131 <i>Olearia ciliata</i> (Fringed Daisy Bush)			
147.	8133 <i>Olearia elaeophila</i>			
148.	8149 <i>Olearia rudis</i> (Rough Daisybush)			
149.	44401 <i>Olearia</i> sp. <i>Eremicola</i> (Diels & Pritzel s.n. PERTH 00449628)			
150.	42281 <i>Pithocarpa cordata</i>			
151.	8165 <i>Pithocarpa pulchella</i> (Beautiful Pithocarpa)			
152.	18352 <i>Pithocarpa pulchella</i> var. <i>melanostigma</i>			
153.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
154.	8182 <i>Podotricha angustifolia</i> (Sticky Longheads)			
155.	8184 <i>Podotricha gnaphalioides</i> (Golden Long-heads)			
156.	8622 <i>Reichardia picroides</i>	Y		Y



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
157.	13300 <i>Rhodanthe citrina</i>			
158.	20665 <i>Senecio angulatus</i>	Y		
159.	8204 <i>Senecio elegans</i> (Purple Groundsel)	Y		
160.	13554 <i>Senecio glastifolius</i>	Y		
161.	8215 <i>Senecio minimus</i> (Toothed Fireweed)			
162.	20663 <i>Senecio multicaulis</i> subsp. <i>multicaulis</i>			
163.	8218 <i>Senecio ramosissimus</i> (Auricled Groundsel)			
164.	8220 <i>Senecio vulgaris</i> (Common Groundsel)	Y		
165.	9367 <i>Sonchus hydrophilus</i> (Native Sowthistle)			
166.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
167.	25902 <i>Symphotrichum squamatum</i> (Bushy Starwort)	Y		
168.	45613 <i>Taraxacum khatoonae</i>	Y		
169.	8251 <i>Trichocline spathulata</i> (Native Gerbera)			
170.	38388 <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Y		
171.	8257 <i>Vellereophyton dealbatum</i> (White Cudweed)	Y		
<b>Atherinidae</b>				
172.	<i>Atherinosoma</i> sp.			
173.	<i>Atherinosoma wallacei</i>			
<b>Atrichornithidae</b>				
174.	24358 <i>Atrichornis clamosus</i> (Noisy Scrub-bird, tjimiluk)		T	
<b>Baetidae</b>				
175.	<i>Baetidae</i> sp.			
<b>Balaenopteridae</b>				
176.	24048 <i>Balaenoptera musculus</i> subsp. <i>brevicauda</i> (Pygmy Blue Whale)		T	
<b>Bathysauridae</b>				
177.	<i>Saurida tumbil</i>			
<b>Belonidae</b>				
178.	? ?			
<b>Berycidae</b>				
179.	<i>Centroberyx gerrardi</i>			
<b>Boidae</b>				
180.	25240 <i>Morelia spilota</i> subsp. <i>imbricata</i> (Carpet Python)			
<b>Boraginaceae</b>				
181.	6681 <i>Echium plantagineum</i> (Paterson's Curse)	Y		
182.	31013 <i>Halgania anagaloides</i> var. <i>Southern</i> (A.E. Orchard 1609)			
<b>Boryaceae</b>				
183.	1271 <i>Borya nitida</i> (Pincushions)			
184.	1273 <i>Borya sphaerocephala</i> (Pincushions)			
<b>Bothriuridae</b>				
185.	<i>Cercophonius sulcatus</i>			
<b>Brassicaceae</b>				
186.	2999 <i>Brassica rapa</i>	Y		
187.	2994 <i>Brassica x juncea</i> (Indian Mustard)	Y		
188.	3002 <i>Cakile maritima</i> (Sea Rocket)	Y		
189.	19989 <i>Lepidium didymum</i>	Y		
190.	3027 <i>Lepidium foliosum</i> (Leafy Peppergrass)			
191.	3061 <i>Raphanus raphanistrum</i> (Wild Radish)	Y		
192.	3068 <i>Sinapis arvensis</i> (Charlock)	Y		
<b>Bryaceae</b>				
193.	32417 <i>Ptychostomum angustifolium</i>			
194.	32424 <i>Rosulabryum albolimbatum</i>			
195.	32426 <i>Rosulabryum campylotheicum</i>			
<b>Burramyidae</b>				
196.	24086 <i>Cercartetus concinnus</i> (Western Pygmy-possum, Mundarda)			
<b>Cacatuidae</b>				
197.	<i>Eolophus roseicapillus</i>			
<b>Caddidae</b>				
198.	<i>Hesperopilio mainae</i>			
<b>Caenidae</b>				
199.	<i>Caenidae</i> sp.			
<b>Callanthiidae</b>				

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200.	<i>Callanthias australis</i>			
<b>Callionymidae</b>				
201.	<i>Foetorepus calauropomus</i>			
<b>Campanulaceae</b>				
202.	7396 <i>Isotoma hypocrateriformis</i> (Woodbridge Poison)			
203.	7399 <i>Isotoma scapigera</i> (Long-scaped Isotome)			
204.	9289 <i>Lobelia anceps</i> (Angled Lobelia)			
205.	7403 <i>Lobelia heterophylla</i> (Wing-seeded Lobelia)			
206.	7405 <i>Lobelia rarifolia</i>			
207.	7406 <i>Lobelia rhombifolia</i> (Tufted Lobelia)			
208.	37440 <i>Monopsis debilis</i> var. <i>depressa</i>	Y		
<b>Campephagidae</b>				
209.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
<b>Candelariaceae</b>				
210.	27641 <i>Candelaria concolor</i>			
211.	27642 <i>Candelariella antennaria</i>			
212.	<i>Candelariella</i> sp.			
213.	27644 <i>Candelariella xanthostigma</i>			
<b>Canidae</b>				
214.	24040 <i>Vulpes vulpes</i> (Red Fox)	Y		
<b>Caprifoliaceae</b>				
215.	35322 <i>Centranthus ruber</i> subsp. <i>ruber</i>	Y		
216.	7365 <i>Lonicera japonica</i> (Japanese Honeysuckle)	Y		
<b>Caprimulgidae</b>				
217.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
<b>Carangidae</b>				
218.	<i>Naucrates ductor</i>			
219.	<i>Seriola lalandi</i>			
220.	<i>Trachurus declivis</i>			
<b>Carcharhinidae</b>				
221.	<i>Carcharhinus obscurus</i>			
222.	<i>Prionace glauca</i>			
<b>Caryophyllaceae</b>				
223.	19825 <i>Petrohragia dubia</i>	Y		
224.	15972 <i>Silene gallica</i> var. <i>gallica</i>	Y		
225.	11803 <i>Silene gallica</i> var. <i>quinquevulnera</i>	Y		
226.	2912 <i>Spergula arvensis</i> (Corn Spurry)	Y		
227.	2918 <i>Stellaria media</i> (Chickweed)	Y		
<b>Casuariidae</b>				
228.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
<b>Casuarinaceae</b>				
229.	1728 <i>Allocasuarina fraseriana</i> (Sheoak, Kondil)			
230.	1732 <i>Allocasuarina humilis</i> (Dwarf Sheoak)			
<b>Caulerpaceae</b>				
231.	26573 <i>Caulerpa racemosa</i>			
<b>Ceinidae</b>				
232.	<i>Ceinidae</i> sp.			
<b>Centrolepidaceae</b>				
233.	1116 <i>Aphelia brizula</i>			
234.	1117 <i>Aphelia cyperoides</i>			
235.	43548 <i>Aphelia</i> sp. Albany (B.G. Briggs 596)			
236.	1121 <i>Centrolepis aristata</i> (Pointed Centrolepis)			
237.	1123 <i>Centrolepis caespitosa</i>		P4	
238.	1129 <i>Centrolepis glabra</i> (Smooth Centrolepis)			
239.	1132 <i>Centrolepis mutica</i>			
240.	13125 <i>Centrolepis strigosa</i> subsp. <i>strigosa</i>			
<b>Cephalotaceae</b>				
241.	3148 <i>Cephalotus follicularis</i> (Albany Pitcher Plant)			
<b>Cephaloziellaceae</b>				
242.	<i>Cephaloziella exiliflora</i>			
<b>Ceratiidae</b>				



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243.	<i>Ceratias tentaculatus</i>			
<b>Ceratopogonidae</b>				
244.	<i>Ceratopogonidae</i> sp.			
<b>Charadriidae</b>				
245.	25575 <i>Charadrius leschenaultii</i> (Greater Sand Plover)		IA	
246.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
247.	47937 <i>Eiseyornis melanops</i> (Black-fronted Dotterel)			
248.	24379 <i>Erythronyx cinctus</i> (Red-kneed Dotterel)			
249.	24382 <i>Pluvialis fulva</i> (Pacific Golden Plover)		IA	
250.	24383 <i>Pluvialis squatarola</i> (Grey Plover)		IA	
251.	48135 <i>Thinornis rubricollis</i> (Hooded Plover, Hooded Dotterel)		P4	
252.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
<b>Cheilodactylidae</b>				
253.	<i>Nemadactylus macropterus</i>			
<b>Cheloniidae</b>				
254.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
<b>Cheluidae</b>				
255.	43380 <i>Chelodina colliei</i> (South-western Snake-necked Turtle)			
<b>Chenopodiaceae</b>				
256.	2471 <i>Atriplex prostrata</i> (Hastate Orache)	Y		
257.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)			
258.	2578 <i>Rhagodia baccata</i> (Berry Saltbush)			
259.	11341 <i>Rhagodia baccata</i> subsp. <i>baccata</i>			
260.	2639 <i>Suaeda australis</i> (Seablite)			
<b>Chernetidae</b>				
261.	<i>Nesidiochernes slateri</i>			
<b>Chironemidae</b>				
262.	<i>Chironemus georgianus</i>			
263.	<i>Threpterus maculosus</i>			
<b>Chironomidae</b>				
264.	<i>Chironominae</i> sp.			
265.	<i>Orthoclaadiinae</i> sp.			
266.	<i>Tanypodinae</i> sp.			
<b>Cladoniaceae</b>				
267.	27663 <i>Cladia aggregata</i>			
268.	27668 <i>Cladia schizopora</i>			
269.	27671 <i>Cladonia angustata</i>			
270.	27673 <i>Cladonia capitellata</i>			
271.	28205 <i>Cladonia capitellata</i> var. <i>capitellata</i>			
272.	28208 <i>Cladonia cervicornis</i> subsp. <i>verticillata</i>			
273.	27677 <i>Cladonia crispata</i>			
274.	27681 <i>Cladonia glebosa</i>			
275.	27683 <i>Cladonia imbricata</i>			
276.	27684 <i>Cladonia krempelhuberi</i>			
277.	27690 <i>Cladonia praetermissa</i>			
278.	27692 <i>Cladonia rigida</i>			
279.	27693 <i>Cladonia scabriuscula</i>			
280.	27695 <i>Cladonia subradiata</i>			
281.	30457 <i>Notocladonia cochleata</i>			
282.	28071 <i>Thysanothecium scutellatum</i>			
<b>Clinidae</b>				
283.	<i>Cristiceps aurantiacus</i>			
284.	<i>Cristiceps australis</i>			
285.	<i>Heteroclinus roseus</i>			
<b>Clupeidae</b>				
286.	<i>Sardinella lemuru</i> ?			
287.	<i>Sardinops neopilchardus</i>			
<b>Coccocarpiaceae</b>				
288.	27699 <i>Coccocarpia erythroxilli</i>			
<b>Coenagrionidae</b>				
289.	<i>Coenagrionidae</i> sp.			
<b>Colchicaceae</b>				
290.	12770 <i>Burchardia congesta</i>			

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291.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)			
<b>Columbidae</b>				
292.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
293.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
294.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
295.	25587 <i>Phaps elegans</i> (Brush Bronzewing)			
296.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
<b>Congiopodidae</b>				
297.	<i>Perryena leucometopon</i>			
<b>Congridae</b>				
298.	<i>Scalanago lateralis</i>			
<b>Convolvulaceae</b>				
299.	13732 <i>Cuscuta campestris</i> (Golden dodder)	Y		
<b>Corduliidae</b>				
300.	<i>Corduliidae</i> sp.			
<b>Corixidae</b>				
301.	<i>Corixidae</i> sp.			
<b>Cortinariaceae</b>				
302.	41681 <i>Cortinarius basipurpureus</i>			
<b>Corvidae</b>				
303.	25592 <i>Corvus coronoides</i> (Australian Raven)			
304.	24417 <i>Corvus coronoides</i> subsp. <i>perplexus</i> (Australian Raven)			
<b>Cracticidae</b>				
305.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
306.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
307.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
308.	24426 <i>Strepera versicolor</i> subsp. <i>plumbea</i> (Grey Currawong)			
<b>Cuculidae</b>				
309.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
310.	24427 <i>Cacomantis flabelliformis</i> subsp. <i>flabelliformis</i> (Fan-tailed Cuckoo)			
311.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
312.	24432 <i>Chrysococcyx lucidus</i> subsp. <i>plagosus</i> (Shining Bronze Cuckoo)			
<b>Culicidae</b>				
313.	<i>Culicidae</i> sp.			
<b>Cupressaceae</b>				
314.	97 <i>Callitris roei</i> (Roe's Cypress Pine)			
<b>Cyperaceae</b>				
315.	739 <i>Baumea acuta</i> (Pale Twig-rush)			
316.	741 <i>Baumea articulata</i> (Jointed Rush)			
317.	743 <i>Baumea juncea</i> (Bare Twigrush)			
318.	746 <i>Baumea riparia</i>			
319.	747 <i>Baumea rubiginosa</i>			
320.	753 <i>Carex appressa</i> (Tall Sedge)			
321.	761 <i>Caustis pentandra</i> (Thick Twist Rush)			
322.	768 <i>Cyathochaeta avenacea</i>			
323.	17618 <i>Cyathochaeta equitans</i>			
324.	783 <i>Cyperus congestus</i> (Dense Flat-sedge)	Y		
325.	815 <i>Cyperus tenellus</i> (Tiny Flatsedge)	Y		
326.	834 <i>Evandra aristata</i>			
327.	835 <i>Evandra pauciflora</i>			
328.	20216 <i>Ficinia nodosa</i> (Knotted Club Rush)			
329.	899 <i>Gahnia ancistrophylla</i> (Hooked-leaf Saw Sedge)			
330.	902 <i>Gahnia decomposita</i>			
331.	907 <i>Gahnia trifida</i> (Coast Saw-sedge)			
332.	908 <i>Gymnoschoenus anceps</i>			
333.	20200 <i>Isolepis cernua</i> var. <i>setiformis</i>			
334.	912 <i>Isolepis cyperoides</i>			
335.	916 <i>Isolepis inundata</i> (Swamp Club Rush)			
336.	917 <i>Isolepis marginata</i> (Coarse Club-rush)			
337.	10831 <i>Isolepis prolifera</i> (Budding Club-rush)	Y		
338.	925 <i>Lepidosperma angustatum</i>			
339.	931 <i>Lepidosperma drummondii</i>			
340.	932 <i>Lepidosperma effusum</i> (Spreading Sword-sedge)			
341.	933 <i>Lepidosperma gladiatum</i> (Coast Sword-sedge, Kerbin)			



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342.	934 <i>Lepidosperma gracile</i> (Slender Sword Sedge)			
343.	14642 <i>Lepidosperma obtusum</i>			
344.	<i>Lepidosperma</i> sp.			
345.	945 <i>Lepidosperma squamatum</i>			
346.	946 <i>Lepidosperma striatum</i>			
347.	953 <i>Mesomelaena graciliceps</i>			
348.	956 <i>Mesomelaena stygia</i>			
349.	957 <i>Mesomelaena tetragona</i> (Semaphore Sedge)			
350.	970 <i>Schoenus acuminatus</i>			
351.	975 <i>Schoenus bifidus</i>			
352.	978 <i>Schoenus brevisetis</i>			
353.	979 <i>Schoenus caespititius</i>			
354.	983 <i>Schoenus cruentus</i>			
355.	984 <i>Schoenus curvifolius</i>			
356.	985 <i>Schoenus discifer</i>			
357.	986 <i>Schoenus efoliatus</i>			
358.	996 <i>Schoenus laevigatus</i>			
359.	997 <i>Schoenus lanatus</i> (Woolly Bog-rush)			
360.	1001 <i>Schoenus multiglumis</i>			
361.	1005 <i>Schoenus obtusifolius</i>			
362.	17614 <i>Schoenus plumosus</i>			
363.	1017 <i>Schoenus subbulbosus</i>			
364.	1018 <i>Schoenus subfascicularis</i>			
365.	1020 <i>Schoenus sublateralis</i>			
366.	1021 <i>Schoenus subluxus</i>			
367.	1022 <i>Schoenus submicrostachyus</i>			
368.	1023 <i>Schoenus tenellus</i>			
369.	1034 <i>Tetraria capillaris</i> (Hair Sedge)			
370.	1036 <i>Tetraria octandra</i>			
371.	35582 <i>Tetraria</i> sp. Mt Madden (C.D. Turley 40 BP/897)			
372.	43207 <i>Tricostularia exsul</i>			
373.	1038 <i>Tricostularia neesii</i>			
374.	20428 <i>Tricostularia</i> sp. south coast (R.T. Wills 1423)			
<b>Cyprididae</b>				
375.	<i>Candonocypris novaezelandiae</i>			
376.	<i>Ilyodromus ellipticus</i>			
<b>Cypridopsidae</b>				
377.	<i>Sarscypridopsis aculeata</i>			
<b>Dasyatidae</b>				
378.	<i>Dasyatis brevicaudata</i>			
<b>Dasyornithidae</b>				
379.	24440 <i>Dasyornis longirostris</i> (Western Bristlebird)		T	
<b>Dasypogonaceae</b>				
380.	1212 <i>Baxteria australis</i>			
381.	1213 <i>Calectasia cyanea</i> (Blue Tinsel Lily)		T	
382.	45758 <i>Calectasia demarzii</i> (Demar's Tinsel Lily)			
383.	1218 <i>Dasypogon bromeliifolius</i> (Pineapple Bush)			
384.	1221 <i>Kingia australis</i> (Kingia, Pulonok)			
<b>Dasyuridae</b>				
385.	24088 <i>Antechinus flavipes</i> subsp. <i>leucogaster</i> (Yellow-footed Antechinus, Mardo)			
386.	24092 <i>Dasyurus geoffroii</i> (Chuditch, Western Quoll)		T	
387.	24111 <i>Sminthopsis gilberti</i> (Gilbert's Dunnart)			
388.	25515 <i>Sminthopsis griseoventer</i> (Grey-bellied Dunnart)			
389.	<i>Sminthopsis murina</i>			
<b>Delphinidae</b>				
390.	24052 <i>Delphinus delphis</i> (Common Dolphin)			
391.	30954 <i>Tursiops aduncus</i> (Indo-Pacific Bottlenose Dolphin)			
<b>Dennstaedtiaceae</b>				
392.	13758 <i>Histiopteris incisa</i>			
<b>Desidae</b>				
393.	<i>Badumna microps</i>			
394.	<i>Baiami torbayensis</i>			
395.	<i>Desis hartmeyeri</i>			Y
<b>Dicaeidae</b>				
396.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Dicranaceae</b>				
397.	32335 <i>Campylopus bicolor</i>			
398.	32461 <i>Campylopus bicolor</i> var. <i>bicolor</i>			
399.	32338 <i>Campylopus introflexus</i>	Y		
<b>Dicruridae</b>				
400.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
401.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
402.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
403.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
<b>Dilleniaceae</b>				
404.	5108 <i>Hibbertia acerosa</i> (Needle Leaved Guinea Flower)			
405.	5109 <i>Hibbertia amplexicaulis</i>			
406.	5117 <i>Hibbertia cuneiformis</i> (Cutleaf Hibbertia)			
407.	5118 <i>Hibbertia cunninghamii</i>			
408.	5119 <i>Hibbertia depressa</i>			
409.	20051 <i>Hibbertia diamesogenos</i>			
410.	5126 <i>Hibbertia furfuracea</i>			
411.	5131 <i>Hibbertia gracilipes</i>			
412.	5132 <i>Hibbertia grossulariifolia</i>			
413.	5137 <i>Hibbertia inconspicua</i>			
414.	5143 <i>Hibbertia lineata</i>			
415.	5144 <i>Hibbertia microphylla</i>			
416.	5159 <i>Hibbertia pulchra</i>			
417.	20031 <i>Hibbertia pulchra</i> var. <i>crassinervia</i>			
418.	5162 <i>Hibbertia racemosa</i> (Stalked Guinea Flower)			
419.	<i>Hibbertia</i> sp.			
<b>Dinolestidae</b>				
420.	<i>Dinolestes lewini</i>			
<b>Diodontidae</b>				
421.	<i>Allomycterus pilatus</i>			
422.	<i>Diodon nichthemerus</i>			
<b>Diomedidae</b>				
423.	30836 <i>Diomedea exulans</i> subsp. <i>exulans</i> (Snowy Albatross)		T	
424.	34007 <i>Thalassarche chlororhynchos</i> (Atlantic Yellow-nosed Albatross)		T	
<b>Droseraceae</b>				
425.	3094 <i>Drosera dichrosepala</i> (Rusty Sundew)			
426.	13200 <i>Drosera enodes</i>			
427.	13218 <i>Drosera erythrogyne</i>			
428.	3096 <i>Drosera fimbriata</i> (Manypeaks Sundew)		P4	
429.	3098 <i>Drosera glanduligera</i> (Pimpernel Sundew)			
430.	3102 <i>Drosera huegelii</i> (Bold Sundew)			
431.	19256 <i>Drosera intricata</i>			
432.	3105 <i>Drosera leucoblasta</i> (Wheel Sundew)			
433.	3106 <i>Drosera macrantha</i> (Bridal Rainbow)			
434.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
435.	11853 <i>Drosera menziesii</i> subsp. <i>menziesii</i>			
436.	48710 <i>Drosera micrantha</i>			
437.	3110 <i>Drosera microphylla</i> (Golden Rainbow)			
438.	3111 <i>Drosera modesta</i> (Modest Rainbow)			
439.	3112 <i>Drosera myriantha</i> (Star Rainbow)			
440.	3113 <i>Drosera neesii</i> (Jewel Rainbow)			
441.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
442.	3122 <i>Drosera platypoda</i> (Fan-leaved Sundew)			
443.	3124 <i>Drosera pulchella</i> (Pretty Sundew)			
444.	3128 <i>Drosera ramellosa</i> (Branched Sundew)			
445.	13186 <i>Drosera roseana</i>			
446.	3130 <i>Drosera scorpioides</i> (Shaggy Sundew)			
447.	<i>Drosera</i> sp.			
448.	3131 <i>Drosera stolonifera</i> (Leafy Sundew)			
449.	8914 <i>Drosera sulphurea</i> (Sulphur-flowered Sundew)			
<b>Dugesidae</b>				
450.	<i>Dugesidae</i> sp.			
<b>Dytiscidae</b>				
451.	<i>Dytiscidae</i> sp.			
<b>Echeneidae</b>				



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
452.	<i>Remora remora</i>			
<b>Ecnomidae</b>				
453.	<i>Ecnomidae sp.</i>			
<b>Elaeocarpaceae</b>				
454.	4524 <i>Platytheca galioides</i>			
455.	4526 <i>Tetratheca affinis</i>			
456.	4536 <i>Tetratheca hispidissima</i>			
457.	4544 <i>Tetratheca setigera</i>			
458.	4546 <i>Tetratheca virgata</i>			
459.	4547 <i>Tremandra diffusa</i>			
460.	4548 <i>Tremandra stelligera</i>			
<b>Elaphomycetaceae</b>				
461.	39900 <i>Elaphomyces chlorocarpus</i>			
462.	39901 <i>Elaphomyces symeae</i>			
<b>Elapidae</b>				
463.	25251 <i>Echiopsis curta</i> (Bardick)			
464.	25250 <i>Elapognathus coronatus</i> (Crowned Snake)			
465.	43384 <i>Hydrophis platurus</i> (Yellow-bellied Seasnake)			
466.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
467.	25255 <i>Parasuta nigriceps</i>			
468.	25259 <i>Pseudonaja affinis subsp. affinis</i> (Dugite)			
469.	30818 <i>Rhinoplocephalus bicolor</i> (Square-nosed Snake)			
<b>Elopidae</b>				
470.	<i>Elops hawaiensis</i>			
<b>Empididae</b>				
471.	<i>Empididae sp.</i>			
<b>Engraulidae</b>				
472.	<i>Engraulis australis</i>			
<b>Ephydriidae</b>				
473.	<i>Ephydriidae sp.</i>			
<b>Ericaceae</b>				
474.	6295 <i>Acrotriche cordata</i> (Coast Ground Berry)			
475.	6301 <i>Andersonia auriculata</i>		P3	
476.	6306 <i>Andersonia caerulea</i> (Foxtails)			
477.	25844 <i>Andersonia caerulea subsp. caerulea</i>			
478.	19623 <i>Andersonia depressa</i>			
479.	6317 <i>Andersonia micrantha</i>			
480.	6320 <i>Andersonia simplex</i> (Spiked Andersonia)			
481.	41737 <i>Andersonia sp. Jamesii</i> (J. Liddelow 84)		P4	
482.	16997 <i>Andersonia sp. Mitchell River</i> (B.G. Hammersley 925)		P3	
483.	6321 <i>Andersonia sprengelioides</i>			
484.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			
485.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
486.	46733 <i>Brachyloma baxteri</i>			
487.	6352 <i>Cosmelia rubra</i> (Spindle Heath)			
488.	6355 <i>Leucopogon alternifolius</i>		P3	
489.	6358 <i>Leucopogon assimilis</i>			
490.	6360 <i>Leucopogon australis</i> (Spiked Beard-heath)			
491.	6384 <i>Leucopogon cymbiformis</i>		P2	
492.	6385 <i>Leucopogon denticulatus</i>			
493.	6387 <i>Leucopogon distans</i>			
494.	6394 <i>Leucopogon gibbosus</i>			
495.	6396 <i>Leucopogon glabellus</i>			
496.	6399 <i>Leucopogon gracilis</i>			
497.	6402 <i>Leucopogon hirsutus</i>			
498.	40940 <i>Leucopogon obovatus subsp. obovatus</i>			
499.	40941 <i>Leucopogon obovatus subsp. revolutus</i>			
500.	6425 <i>Leucopogon oxycedrus</i>			
501.	6427 <i>Leucopogon parviflorus</i> (Coast Beard-heath)			
502.	6428 <i>Leucopogon pendulus</i>			
503.	6435 <i>Leucopogon polystachyus</i>			
504.	6436 <i>Leucopogon propinquus</i>			
505.	6440 <i>Leucopogon racemosus</i>			
506.	6441 <i>Leucopogon reflexus</i> (Heart-leaf Beard-heath)			
507.	10755 <i>Leucopogon rubricaulis</i>			
508.	14637 <i>Leucopogon sp. Coujinup</i> (M.A. Burgman 1085)			

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509.	34718 <i>Leucopogon</i> sp. <i>Southern Forests (B.G. Hammersley 1000)</i>			
510.	6449 <i>Leucopogon tamariscinus</i>			
511.	6454 <i>Leucopogon verticillatus</i> ( <i>Tassel Flower</i> )			
512.	6456 <i>Lysinema ciliatum</i> ( <i>Curry Flower</i> )			
513.	6457 <i>Lysinema conspicuum</i>			
514.	6459 <i>Lysinema fimbriatum</i>			
515.	6460 <i>Lysinema lasianthum</i>		P4	
516.	34736 <i>Lysinema pentapetalum</i>			
517.	6464 <i>Needhamiella pumilio</i>			
518.	31931 <i>Sphenotoma capitata</i>			
519.	6467 <i>Sphenotoma dracophylloides</i>			
520.	31952 <i>Sphenotoma gracilis</i> ( <i>Swamp Paper-heath</i> )			
521.	31951 <i>Sphenotoma parviflora</i>			
522.	48617 <i>Styphelia</i> sp. <i>Albany (M. Hislop 2218)</i>			
523.	6476 <i>Styphelia tenuiflora</i> ( <i>Common Pinheath</i> )			
<b>Estrilidae</b>				
524.	24645 <i>Stagonopleura oculata</i> ( <i>Red-eared Firetail</i> )			
<b>Euphorbiaceae</b>				
525.	4585 <i>Amperea ericoides</i>			
526.	4588 <i>Amperea volubilis</i>			
527.	4636 <i>Euphorbia paralias</i> ( <i>Sea Spurge</i> )	Y		
528.	4638 <i>Euphorbia peplus</i> ( <i>Petty Spurge</i> )	Y		
529.	4648 <i>Euphorbia terracina</i> ( <i>Geraldton Carnation Weed</i> )	Y		
530.	4666 <i>Monotaxis occidentalis</i>			
531.	4695 <i>Ricinocarpos glaucus</i>			
<b>Exocoetidae</b>				
532.	<i>Cypselurus</i> sp.			
<b>Fabaceae</b>				
533.	15429 <i>Acacia alata</i> var. <i>alata</i>			
534.	15466 <i>Acacia appplanata</i>			
535.	3239 <i>Acacia biflora</i>			
536.	3247 <i>Acacia browniana</i>			
537.	11731 <i>Acacia browniana</i> var. <i>browniana</i>			
538.	3262 <i>Acacia cochlearis</i> ( <i>Rigid Wattle</i> )			
539.	3275 <i>Acacia crassiuscula</i>			
540.	3282 <i>Acacia cyclops</i> ( <i>Coastal Wattle</i> )			
541.	17858 <i>Acacia dealbata</i>	Y		
542.	16975 <i>Acacia decurrens</i>	Y		
543.	11192 <i>Acacia drummondii</i> subsp. <i>elegans</i>			
544.	3331 <i>Acacia extensa</i> ( <i>Wiry Wattle</i> )			
545.	3363 <i>Acacia hastulata</i>			
546.	3383 <i>Acacia incurva</i>			
547.	3413 <i>Acacia leioderma</i>			
548.	3424 <i>Acacia littorea</i>			
549.	17861 <i>Acacia longifolia</i>	Y		
550.	3428 <i>Acacia luteola</i>			
551.	10955 <i>Acacia melanoxylon</i>	Y		
552.	3453 <i>Acacia myrtifolia</i>			
553.	3482 <i>Acacia paradoxa</i> ( <i>Kangaroo Thorn</i> )	Y		
554.	3497 <i>Acacia prismifolia</i>		X	
555.	3502 <i>Acacia pulchella</i> ( <i>Prickly Moses</i> )			
556.	15482 <i>Acacia pulchella</i> var. <i>goadbyi</i>			
557.	15483 <i>Acacia pulchella</i> var. <i>pulchella</i>			
558.	3504 <i>Acacia pycnantha</i> ( <i>Golden Wattle</i> )	Y		
559.	3523 <i>Acacia robiniae</i>			
560.	3564 <i>Acacia subcaerulea</i>			
561.	3569 <i>Acacia sulcata</i>			
562.	13504 <i>Acacia sulcata</i> var. <i>sulcata</i>			
563.	3576 <i>Acacia tetragonocarpa</i>			
564.	3588 <i>Acacia uliginosa</i>			
565.	15487 <i>Acacia varia</i> var. <i>varia</i>			
566.	3602 <i>Acacia willdenowiana</i> ( <i>Grass Wattle</i> )			
567.	3689 <i>Aotus intermedia</i>			
568.	3690 <i>Aotus passerinoides</i>			
569.	14396 <i>Bossiaea aquifolium</i> subsp. <i>aquifolium</i>			
570.	3707 <i>Bossiaea dentata</i>			
571.	3713 <i>Bossiaea linophylla</i>			
572.	3714 <i>Bossiaea ornata</i> ( <i>Broad Leaved Brown Pea</i> )			



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573.	14291 <i>Bossiaea praetermissa</i>			
574.	3718 <i>Bossiaea rufa</i>			
575.	10861 <i>Callistachys lanceolata</i> (Wonnich)			
576.	14724 <i>Callistachys</i> sp. south-coast variant (M. Carter 180)			
577.	18156 <i>Chamaecytisus palmensis</i> (Tagasaste)	Y		
578.	13112 <i>Chorizema aciculare</i> subsp. <i>aciculare</i>			
579.	13113 <i>Chorizema carinatum</i>		P3	
580.	3754 <i>Chorizema diversifolium</i>			
581.	3757 <i>Chorizema glycinifolium</i>			
582.	3758 <i>Chorizema ilicifolium</i> (Holly Flame Pea)			
583.	12765 <i>Chorizema nanum</i>			
584.	3760 <i>Chorizema reticulatum</i> (Showy Flame Pea)			
585.	3761 <i>Chorizema rhombeum</i>			
586.	14586 <i>Chorizema spathulatum</i>			
587.	3763 <i>Chorizema uncinatum</i>			
588.	3791 <i>Daviesia alternifolia</i>			
589.	3799 <i>Daviesia cordata</i> (Bookleaf)			
590.	3811 <i>Daviesia flexuosa</i>			
591.	3812 <i>Daviesia gracilis</i>			
592.	15505 <i>Daviesia incrassata</i> subsp. <i>incrassata</i>			
593.	3817 <i>Daviesia inflata</i>			
594.	3818 <i>Daviesia lancifolia</i>			
595.	3840 <i>Daviesia spinosissima</i>			
596.	3867 <i>Dipogon lignosus</i> (Dolichos Pea)	Y		
597.	3872 <i>Euchilopsis linearis</i> (Swamp Pea)			
598.	3876 <i>Eutaxia epacridoides</i>			
599.	20214 <i>Eutaxia myrtifolia</i>			
600.	3879 <i>Eutaxia parvifolia</i>			
601.	3880 <i>Eutaxia virgata</i>			
602.	3891 <i>Gastrolobium bilobum</i> (Heart Leaf Poison)			
603.	3893 <i>Gastrolobium brownii</i>			
604.	20490 <i>Gastrolobium coriaceum</i>			
605.	19190 <i>Gastrolobium cuneatum</i>			
606.	20511 <i>Gastrolobium minus</i>			
607.	20503 <i>Gastrolobium rubrum</i>			
608.	20500 <i>Gastrolobium sericeum</i>			
609.	3932 <i>Gastrolobium velutinum</i> (Stirling Range Poison)			
610.	3948 <i>Gompholobium capitatum</i>			
611.	10909 <i>Gompholobium confertum</i>			
612.	3950 <i>Gompholobium knightianum</i>			
613.	3951 <i>Gompholobium marginatum</i>			
614.	3953 <i>Gompholobium ovatum</i>			
615.	3954 <i>Gompholobium polymorphum</i>			
616.	3955 <i>Gompholobium preissii</i>			
617.	11083 <i>Gompholobium scabrum</i>			
618.	3958 <i>Gompholobium venustum</i> (Handsome Wedge-pea)			
619.	11115 <i>Gompholobium villosum</i>			
620.	3961 <i>Hardenbergia comptoniana</i> (Native Wisteria)			
621.	3964 <i>Hovea chorizemifolia</i> (Holly-leaved Hovea)			
622.	3965 <i>Hovea elliptica</i> (Tree Hovea)			
623.	3968 <i>Hovea trisperma</i> (Common Hovea)			
624.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
625.	19700 <i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>			
626.	4028 <i>Jacksonia spinosa</i>			
627.	4036 <i>Kennedia carinata</i>			
628.	4037 <i>Kennedia coccinea</i> (Coral Vine)			
629.	37960 <i>Kennedia coccinea</i> subsp. <i>calcaria</i>			
630.	37961 <i>Kennedia coccinea</i> subsp. <i>esotera</i>			
631.	4047 <i>Lathyrus tingitanus</i> (Tangier Pea)	Y		
632.	4048 <i>Latrobea brunonis</i>			
633.	4049 <i>Latrobea diosmifolia</i>			
634.	4050 <i>Latrobea genistoides</i>			
635.	17757 <i>Latrobea</i> sp. South Coast (A.M. Ashby 1949)			
636.	8564 <i>Lotus subbiflorus</i>	Y		
637.	4063 <i>Lotus uliginosus</i> (Greater Lotus)	Y		
638.	4076 <i>Medicago lupulina</i> (Black Medic)	Y		
639.	4079 <i>Medicago polymorpha</i> (Burr Medic)	Y		
640.	4114 <i>Ornithopus pinnatus</i> (Slender Serradella)	Y		
641.	17114 <i>Paraserianthes lophantha</i> subsp. <i>lophantha</i>			
642.	4140 <i>Phyllota barbata</i>			

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643.	4155 <i>Psoralea pinnata</i> (African Scurfpea)	Y		
644.	4164 <i>Pultenaea aspalathoides</i>			
645.	4172 <i>Pultenaea ericifolia</i>			
646.	4181 <i>Pultenaea reticulata</i>			
647.	4186 <i>Pultenaea tenuifolia</i>			
648.	4187 <i>Pultenaea verruculosa</i>			
649.	4200 <i>Sphaerolobium alatum</i>			
650.	17551 <i>Sphaerolobium drummondii</i>			
651.	4202 <i>Sphaerolobium fornicatum</i>			
652.	4204 <i>Sphaerolobium grandiflorum</i>			
653.	20302 <i>Sphaerolobium hygrophilum</i>			
654.	4206 <i>Sphaerolobium macranthum</i>			
655.	4207 <i>Sphaerolobium medium</i>			
656.	4208 <i>Sphaerolobium nudiflorum</i>			
657.	17547 <i>Sphaerolobium pubescens</i>			
658.	17548 <i>Sphaerolobium rostratum</i>			
659.	4211 <i>Sphaerolobium vimineum</i> (Leafless Globe Pea)			
660.	4292 <i>Trifolium campestre</i> (Hop Clover)	Y		
661.	4293 <i>Trifolium cernuum</i> (Drooping Flower Clover)	Y		
662.	4295 <i>Trifolium dubium</i> (Suckling Clover)	Y		
663.	4307 <i>Trifolium repens</i> (White Clover)	Y		
664.	17115 <i>Trifolium repens</i> var. <i>repens</i>	Y		
665.	4315 <i>Trifolium tomentosum</i> (Woolly Clover)	Y		
666.	4317 <i>Ulex europaeus</i> (Gorse)	Y		
667.	11474 <i>Vicia sativa</i> subsp. <i>nigra</i>	Y		
668.	4325 <i>Viminaria juncea</i> (Swishbush, Koweda)			
<b>Falconidae</b>				
669.	25621 <i>Falco berigora</i> (Brown Falcon)			
670.	24471 <i>Falco berigora</i> subsp. <i>berigora</i> (Brown Falcon)			
671.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
672.	24472 <i>Falco cenchroides</i> subsp. <i>cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
673.	25623 <i>Falco longipennis</i> (Australian Hobby)			
674.	24474 <i>Falco longipennis</i> subsp. <i>longipennis</i> (Australian Hobby)			
675.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
676.	24475 <i>Falco peregrinus</i> subsp. <i>macropus</i> (Australian Peregrine Falcon)		S	
<b>Fissidentaceae</b>				
677.	32369 <i>Fissidens tenellus</i>			
<b>Funariaceae</b>				
678.	32370 <i>Funaria hygrometrica</i>			
<b>Galaxiidae</b>				
679.	<i>Galaxias maculatus</i>			
680.	34028 <i>Galaxias occidentalis</i> (Western Minnow)			
681.	34026 <i>Galaxiella munda</i> (mud minnow, western dwarf galaxias)		T	
682.	34027 <i>Galaxiella nigrostriata</i> (Black-stripe Minnow, black-striped dwarf galaxias)		T	
<b>Garypidae</b>				
683.	<i>Synsphyronus magnus</i>			
<b>Garypinidae</b>				
684.	<i>Protogarypinus giganteus</i>			
<b>Gekkonidae</b>				
685.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
<b>Gelastocoridae</b>				
686.	<i>Gelastocoridae</i> sp.			
<b>Gelidiaceae</b>				
687.	27196 <i>Pterocladia rectangularis</i>			
<b>Gempylidae</b>				
688.	<i>Thyrsites atun</i>			
<b>Gentianaceae</b>				
689.	6542 <i>Centaurium tenuiflorum</i>	Y		
690.	6543 <i>Cicendia filiformis</i> (Slender Cicendia)	Y		
691.	41660 <i>Schenkia australis</i>			
<b>Geotriidae</b>				
692.	34030 <i>Geotria australis</i> (Pouched Lamprey)		P1	
<b>Geraniaceae</b>				
693.	4339 <i>Geranium molle</i> (Dove's Foot Cranesbill)			



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
694.	4342 <i>Pelargonium australe</i> (Wild Geranium)	Y		
695.	4343 <i>Pelargonium capitatum</i> (Rose Pelargonium)	Y		
<b>Gerreidae</b>				
696.	<i>Parequula melbournensis</i>			
<b>Girellidae</b>				
697.	<i>Girella zebra</i>			
<b>Glossiphoniidae</b>				
698.	<i>Glossiphoniidae</i> sp.			
<b>Gnaphosidae</b>				
699.	<i>Megamyrmecon penicillatum</i>			Y
<b>Gnathanacanthidae</b>				
700.	<i>Gnathanacanthus goetzeei</i>			
<b>Gobiidae</b>				
701.	<i>Callogobius mucosus</i>			
702.	<i>Favonigobius lateralis</i>			
703.	<i>Pseudogobius olorum</i>			
<b>Gomphidae</b>				
704.	<i>Gomphidae</i> sp.			
<b>Goodeniaceae</b>				
705.	7411 <i>Anthotium humile</i> (Dwarf Anthotium)			
706.	7439 <i>Dampiera fasciculata</i> (Bundled-leaf Dampiera)			
707.	7452 <i>Dampiera leptoclada</i> (Slender-shooted Dampiera)			
708.	7454 <i>Dampiera linearis</i> (Common Dampiera)			
709.	7462 <i>Dampiera pedunculata</i>			
710.	7487 <i>Diaspasis filifolia</i> (Thread-leaved Diaspasis)			
711.	7508 <i>Goodenia filiformis</i> (Thread-leaved Goodenia)			
712.	7517 <i>Goodenia incana</i> (Hoary Goodenia)			
713.	7523 <i>Goodenia leptoclada</i> (Thin-stemmed Goodenia)			
714.	7572 <i>Lechenaultia expansa</i>			
715.	7614 <i>Scaevola globulifera</i>			
716.	7626 <i>Scaevola nitida</i> (Shining Fanflower)			
717.	7646 <i>Scaevola striata</i> (Royal Robe)			
718.	13175 <i>Scaevola striata</i> var. <i>striata</i>			
719.	7665 <i>Velleia trinervis</i>			
<b>Gordiidae</b>				
720.	<i>Gordiidae</i> sp.			
<b>Graphidaceae</b>				
721.	41267 <i>Halegrapha mucronata</i>			
<b>Gripopterygidae</b>				
722.	<i>Gripopterygidae</i> sp.			
<b>Gyrinidae</b>				
723.	<i>Gyrinidae</i> sp.			
<b>Gyrostemonaceae</b>				
724.	2787 <i>Gyrostemon sheathii</i>			
<b>Haematopodidae</b>				
725.	25627 <i>Haematopus fuliginosus</i> (Sooty Oystercatcher)			
726.	24487 <i>Haematopus longirostris</i> (Pied Oystercatcher)			
<b>Haemodoraceae</b>				
727.	11931 <i>Anigozanthos bicolor</i> subsp. <i>decrescens</i>			
728.	1407 <i>Anigozanthos flavidus</i> (Tall Kangaroo Paw)			
729.	1413 <i>Anigozanthos preissii</i> (Albany Catspaw)			
730.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
731.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
732.	1441 <i>Conostylis misera</i> (Grass Conostylis)		T	
733.	1447 <i>Conostylis pusilla</i>			
734.	1453 <i>Conostylis serrulata</i>			
735.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
736.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
737.	1468 <i>Haemodorum laxum</i>			
738.	1474 <i>Haemodorum sparsiflorum</i>			
739.	1475 <i>Haemodorum spicatum</i> (Mardja)			
740.	1478 <i>Phlebocarya ciliata</i>			

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741.	1481 <i>Tribonanthes australis</i>			
742.	1485 <i>Tribonanthes violacea</i>			
<b>Halcyonidae</b>				
743.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
744.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
745.	24309 <i>Todiramphus sanctus</i> subsp. <i>sanctus</i> (Sacred Kingfisher)			
<b>Halimedaceae</b>				
746.	47213 <i>Halimeda versatilis</i>			
<b>Haloragaceae</b>				
747.	33620 <i>Glischrocaryon angustifolium</i>			
748.	6160 <i>Gonocarpus paniculatus</i>			
749.	6162 <i>Gonocarpus pusillus</i>		P4	
750.	6166 <i>Gonocarpus simplex</i>		P4	
751.	6171 <i>Haloragis digyna</i>			
752.	34676 <i>Meionectes brownii</i> (Swamp Raspwort)			
753.	34964 <i>Trihaloragis hexandra</i> subsp. <i>hexandra</i>			
<b>Hebridae</b>				
754.	<i>Hebridae</i> sp.			
<b>Hemerocallidaceae</b>				
755.	23474 <i>Agrostocrinum hirsutum</i>			
756.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
757.	1277 <i>Caesia occidentalis</i>			
758.	1285 <i>Corynotheca micrantha</i> (Sand Lily)			
759.	12012 <i>Corynotheca micrantha</i> var. <i>panda</i>			
760.	1297 <i>Johnsonia lupulina</i> (Hooded Lily)			
761.	1299 <i>Johnsonia teretifolia</i> (Hooded Lily)			
762.	1260 <i>Stypandra glauca</i> (Blind Grass)			
763.	1361 <i>Tricoryne elatior</i> (Yellow Autumn Lily)			
764.	29478 <i>Tricoryne</i> sp. South Coast (T.E.H. Aplin 2653)			
<b>Hemicorduliidae</b>				
765.	<i>Hemicorduliidae</i> sp.			
<b>Heterodontidae</b>				
766.	<i>Heterodontus portusjacksoni</i>			
<b>Hirundinidae</b>				
767.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
768.	48060 <i>Petrochelidon ariel</i> (Fairy Martin)			
769.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
<b>Hydatellaceae</b>				
770.	1139 <i>Trithuria bibracteata</i>			
<b>Hydraenidae</b>				
771.	<i>Hydraenidae</i> sp.			
<b>Hydrobiosidae</b>				
772.	<i>Hydrobiosidae</i> sp.			
<b>Hydrometridae</b>				
773.	<i>Hydrometridae</i> sp.			
<b>Hydrophilidae</b>				
774.	<i>Hydrophilidae</i> sp.			
<b>Hydropsychidae</b>				
775.	<i>Hydropsychidae</i> sp.			
<b>Hydroptilidae</b>				
776.	<i>Hydroptilidae</i> sp.			
<b>Hylidae</b>				
777.	25378 <i>Litoria adelaidensis</i> (Slender Tree Frog)			
778.	25388 <i>Litoria moorei</i> (Motorbike Frog)			
<b>Hypnidae</b>				
779.	<i>Hypnos monopterygium</i>			
<b>Hyriidae</b>				
780.	<i>Hyriidae</i> sp.			
<b>Icmadophilaceae</b>				
781.	28060 <i>Siphula coriacea</i>			



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<b>Idiopidae</b>				
782.	<i>Aganippe raphiduca</i>			
<b>Iridaceae</b>				
783.	18279 <i>Babiana angustifolia</i>	Y		
784.	11445 <i>Ferraria crispa</i> subsp. <i>crispa</i>	Y		
785.	18392 <i>Freesia alba</i> x <i>leichtlinii</i>	Y		
786.	1524 <i>Gladiolus undulatus</i> ( <i>Wild Gladiolus</i> )	Y		
787.	29193 <i>Iris laevigata</i>	Y		Y
788.	1533 <i>Ixia paniculata</i>	Y		
789.	1534 <i>Ixia polystachya</i> ( <i>Variable Ixia</i> )	Y		
790.	1542 <i>Patersonia babianoides</i>			
791.	1547 <i>Patersonia lanata</i> ( <i>Woolly Patersonia</i> )			
792.	1550 <i>Patersonia occidentalis</i> ( <i>Purple Flag, Koma</i> )			
793.	30471 <i>Patersonia occidentalis</i> var. <i>angustifolia</i>			
794.	30476 <i>Patersonia occidentalis</i> var. <i>latifolia</i>			
795.	1553 <i>Patersonia umbrosa</i> ( <i>Yellow Flags</i> )			
796.	14432 <i>Patersonia umbrosa</i> var. <i>umbrosa</i>			
797.	1558 <i>Sparaxis bulbifera</i>	Y		
798.	13103 <i>Watsonia borbonica</i>	Y		
799.	18108 <i>Watsonia meriana</i> var. <i>bulbillifera</i>	Y		
800.	18118 <i>Watsonia meriana</i> var. <i>meriana</i>	Y		
<b>Istiophoridae</b>				
801.	<i>Makaira indica</i>			
<b>Iulomorphidae</b>				
802.	<i>Atelomastix mainae</i>			
803.	<i>Samichus decoratus</i>			
<b>Ixodidae</b>				
804.	<i>Ixodes australiensis</i>			
<b>Juncaceae</b>				
805.	1178 <i>Juncus bufonius</i> ( <i>Toad Rush</i> )	Y		
806.	1180 <i>Juncus capitatus</i> ( <i>Capitate Rush</i> )	Y		
807.	1185 <i>Juncus kraussii</i> ( <i>Sea Rush</i> )			
808.	14631 <i>Juncus meianthus</i>		P3	
809.	1186 <i>Juncus microcephalus</i>	Y		
810.	1187 <i>Juncus oxycarpus</i>	Y		
811.	1188 <i>Juncus pallidus</i> ( <i>Pale Rush</i> )			
812.	1190 <i>Juncus planifolius</i> ( <i>Broadleaf Rush</i> )			
<b>Juncaginaceae</b>				
813.	18587 <i>Triglochin nana</i>			
<b>Kyphosidae</b>				
814.	<i>Kyphosus gladius</i> MS			
<b>Labridae</b>				
815.	<i>Achoerodus gouldii</i>			
816.	<i>Austrolabrus maculatus</i>			
817.	<i>Haletta semifasciata</i>			
818.	<i>Ophthalmolepis lineolatus</i>			
819.	<i>Siphonognathus argyrophanes</i>			
<b>Lamiaceae</b>				
820.	6855 <i>Hemigenia humilis</i>			
821.	6865 <i>Hemigenia podalyrina</i>			
822.	6880 <i>Leonotis leonurus</i> ( <i>Lion's Ear</i> )	Y		
823.	6904 <i>Microcorys virgata</i>			
824.	6913 <i>Prostanthera canaliculata</i>			
825.	6939 <i>Westringia dampieri</i>			
<b>Lamnidae</b>				
826.	34031 <i>Carcharodon carcharias</i> ( <i>Great White Shark</i> )		T	
<b>Lamponidae</b>				
827.	<i>Lampona cylindrata</i>			
828.	<i>Lampona foliifera</i>			
829.	<i>Lampona punctigera</i>			
830.	<i>Lampona torbay</i>			Y
831.	<i>Prionosternum scutatatum</i>			
<b>Laridae</b>				
832.	<i>Chroicocephalus novaehollandiae</i>			

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833.	48587 <i>Hydroprogne caspia</i> (Caspian Tern)		IA	
834.	24511 <i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Silver Gull)			
835.	25638 <i>Larus pacificus</i> (Pacific Gull)			
836.	24522 <i>Sterna bergii</i> (Crested Tern)			
837.	48597 <i>Thalasseus bergii</i> (Crested Tern)		IA	
<b>Lauraceae</b>				
838.	2951 <i>Cassytha flava</i> (Dodder Laurel)			
839.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
840.	11857 <i>Cassytha glabella</i> forma <i>glabella</i>			
841.	2954 <i>Cassytha micrantha</i>			
842.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
843.	11242 <i>Cassytha racemosa</i> forma <i>pilosa</i>			
<b>Lecanoraceae</b>				
844.	27698 <i>Clauzadeana macula</i>			
845.	27803 <i>Lecanora farinacea</i>			
846.	<i>Lecanora</i> sp.			
847.	28037 <i>Ramboldia stuartii</i>			
<b>Lecideaceae</b>				
848.	27826 <i>Lecidea sarcogynoides</i>			
849.	<i>Lecidea</i> sp.			
<b>Lentibulariaceae</b>				
850.	7145 <i>Utricularia menziesii</i> (Redcoats)			
851.	7148 <i>Utricularia multifida</i>			
852.	7153 <i>Utricularia tenella</i>			
<b>Lepidogalaxiidae</b>				
853.	47983 <i>Lepidogalaxias salamandroides</i> (Salamanderfish)		T	
<b>Lepidoziaceae</b>				
854.	<i>Kurzia compacta</i>			
<b>Leporidae</b>				
855.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
<b>Leptoceridae</b>				
856.	<i>Leptoceridae</i> sp.			
<b>Leptophlebiidae</b>				
857.	<i>Leptophlebiidae</i> sp.			
<b>Liagoraceae</b>				
858.	27030 <i>Liagora wilsoniana</i>			
<b>Libellulidae</b>				
859.	<i>Libellulidae</i> sp.			
<b>Lichinaceae</b>				
860.	<i>Pterygiopsis</i> sp.			
<b>Limnodynastidae</b>				
861.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
862.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
<b>Linaceae</b>				
863.	4362 <i>Linum marginale</i> (Wild Flax)			
864.	4363 <i>Linum trigynum</i> (French Flax)	Y		
<b>Lindsaeaceae</b>				
865.	59 <i>Lindsaea linearis</i> (Screw Fern)			
<b>Lobariaceae</b>				
866.	27997 <i>Pseudocyphellaria neglecta</i>			
<b>Loganiaceae</b>				
867.	6504 <i>Logania buxifolia</i>			
868.	6515 <i>Logania vaginalis</i> (White Spray)			
869.	46255 <i>Orianthera campanulata</i>			
870.	46314 <i>Orianthera serpyllifolia</i>			
871.	46315 <i>Orianthera serpyllifolia</i> subsp. <i>serpyllifolia</i>			
872.	16177 <i>Phyllangium paradoxum</i>			
<b>Lophocoleaceae</b>				
873.	<i>Chiloscyphus semiteres</i>			
874.	<i>Chiloscyphus semiteres</i> var. <i>semiteres</i>			



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<b>Lophotidae</b>				
875.	<i>Eumecichthys fiski</i>			Y
<b>Loranthaceae</b>				
876.	2401 <i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
<b>Lycopodiaceae</b>				
877.	12783 <i>Lycopodiella serpentina</i>			
<b>Lycosidae</b>				
878.	<i>Artonia cingulipes</i>			
879.	<i>Artonia flavimana</i>			
880.	<i>Artoriopsis eccentrica</i>			
881.	<i>Tasmanicos leuckartii</i>			
882.	<i>Venatrix pullastra</i>			
<b>Macropodidae</b>				
883.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
884.	48022 <i>Notamacropus irma</i> (Western Brush Wallaby)		P4	
885.	24145 <i>Setonix brachyurus</i> (Quokka)		T	
<b>Maluridae</b>				
886.	25650 <i>Malurus elegans</i> (Red-winged Fairy-wren)			
887.	24551 <i>Malurus pulcherrimus</i> (Blue-breasted Fairy-wren)			
888.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
889.	25655 <i>Stipiturus malachurus</i> (Southern Emu-wren)			
890.	24554 <i>Stipiturus malachurus</i> subsp. <i>westernensis</i> (Southern Emu-wren)			
<b>Malvaceae</b>				
891.	48634 <i>Commersonia corniculata</i>			
892.	40863 <i>Commersonia corylifolia</i> (Hazel-leaved Rulingia)			
893.	40920 <i>Commersonia grandiflora</i>			
894.	36522 <i>Malva pseudolavatera</i>	Y		
895.	5092 <i>Thomasia pauciflora</i> (Few Flowered Thomasia)			
896.	5094 <i>Thomasia purpurea</i>			
897.	5096 <i>Thomasia quercifolia</i> (Oak Leaved Thomasia)		P4	
898.	5100 <i>Thomasia solanacea</i>		P4	
899.	5105 <i>Thomasia triphylla</i>			
<b>Megalariaceae</b>				
900.	27850 <i>Megalaria grossa</i>			
<b>Melanostomiidae</b>				
901.	<i>Opostomias micripnus</i>			Y
<b>Meliphagidae</b>				
902.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
903.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
904.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
905.	24567 <i>Epthianura albifrons</i> (White-fronted Chat)			
906.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
907.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
908.	24582 <i>Lichmera indistincta</i> subsp. <i>indistincta</i> (Brown Honeyeater)			
909.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
910.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
911.	24587 <i>Melithreptus chloropsis</i> (Western White-naped Honeyeater)			
912.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
913.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
<b>Menyanthaceae</b>				
914.	36178 <i>Liparophyllum lasiospermum</i>			
915.	36177 <i>Ornduffia albiflora</i>			
916.	36181 <i>Ornduffia parnassifolia</i>			
<b>Mesophelliaceae</b>				
917.	<i>Castoreum radicum</i>			
<b>Micropholcommatidae</b>				
918.	<i>Raveniella peckorum</i>			
919.	<i>Taphiassa robertsi</i>			
<b>Mimetidae</b>				
920.	<i>Australomimetes diabolicus</i>			
<b>Miturgidae</b>				
921.	<i>Mituliodon tarantulinus</i>			

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<b>Molidae</b>				
922.	<i>Ranzania laevis</i>			
<b>Molossidae</b>				
923.	24183 <i>Mormopterus loriae</i> (Little Northern Freetail-bat)			
<b>Monacanthidae</b>				
924.	<i>Acanthaluteres brownii</i>			
925.	<i>Acanthaluteres vittiger</i>			
926.	<i>Anacanthus barbatus</i>			
927.	<i>Brachaluteres jacksonianus</i>			
928.	<i>Cantheschenia longipinnis</i>			
929.	<i>Eubalichthys caeruleoguttatus</i>			
930.	<i>Eubalichthys cyanoura</i>			
931.	<i>Eubalichthys mosaicus</i>			
932.	<i>Meuschenia freycineti</i>			
933.	<i>Meuschenia galii</i>			
934.	<i>Meuschenia hippocrepis</i>			
935.	<i>Parika scaber</i>			
936.	<i>Scobinichthys granulatus</i>			
<b>Monoscutidae</b>				
937.	<i>Hypomegalopsalis tanisphyros</i>			
<b>Moridae</b>				
938.	<i>Lotella</i> sp.			Y
939.	<i>Pseudophycis barbata</i>			
<b>Motacillidae</b>				
940.	24599 <i>Anthus australis</i> subsp. <i>australis</i> (Australian Pipit)			
941.	24600 <i>Anthus cervinus</i> (Red-throated Pipit)			
<b>Mugilidae</b>				
942.	<i>Liza vaigiensis</i>			
<b>Mullidae</b>				
943.	<i>Upeneus tragula</i>			
<b>Muraenidae</b>				
944.	<i>Gymnothorax prasinus</i>			
945.	<i>Gymnothorax richardsoni</i>			
<b>Muridae</b>				
946.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
947.	24223 <i>Mus musculus</i> (House Mouse)	Y		
948.	24230 <i>Pseudomys albocinereus</i> (Ash-grey Mouse)			
949.	24243 <i>Rattus fuscipes</i> (Western Bush Rat)			
950.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
<b>Mycoblastaceae</b>				
951.	35477 <i>Tephromela alectoronica</i>			
952.	28068 <i>Tephromela atra</i>			
<b>Myobatrachidae</b>				
953.	25398 <i>Crinia georgiana</i> (Quacking Frog)			
954.	25399 <i>Crinia glauerti</i> (Clicking Frog)			
955.	25401 <i>Crinia pseudinsignifera</i> (Bleating Froglet)			
956.	25402 <i>Crinia subinsignifera</i> (South Coast Froglet)			
957.	25404 <i>Geocrinia leai</i> (Ticking Frog)			
958.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
<b>Myrtaceae</b>				
959.	5315 <i>Actinodium cunninghamii</i> (Albany Daisy)			
960.	5316 <i>Agonis flexuosa</i> (Peppermint, Wonil)			
961.	17202 <i>Agonis flexuosa</i> var. <i>flexuosa</i>			
962.	19789 <i>Agonis theiformis</i>			
963.	20361 <i>Astartea arbuscula</i> (Minute Astartea)			
964.	20125 <i>Astartea corniculata</i>			
965.	20127 <i>Astartea glomerulosa</i> (Early Astartea)			
966.	45213 <i>Astartea pulchella</i>			
967.	20283 <i>Astartea scoparia</i> (Common Astartea)			
968.	42820 <i>Astartea transversa</i>		P2	
969.	5364 <i>Baeckea pygmaea</i>			
970.	5376 <i>Beaufortia anisandra</i> (Dark Beaufortia)			
971.	5379 <i>Beaufortia cyrtodonta</i> (Stirling Range Bottlebrush, Stirling Range Beaufortia)			
972.	5381 <i>Beaufortia decussata</i> (Gravel Bottlebrush)			



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973.	5392 <i>Beaufortia sparsa</i> (Swamp Bottlebrush)			
974.	5394 <i>Callistemon glaucus</i>			
975.	5415 <i>Calothamnus lateralis</i>			
976.	5425 <i>Calothamnus preissii</i>			
977.	5430 <i>Calothamnus schaueri</i>			
978.	5440 <i>Calytrix asperula</i> (Brush Starflower)			
979.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
980.	48451 <i>Calytrix hirta</i>			
981.	5491 <i>Chamelaucium ciliatum</i>			
982.	5501 <i>Conothamnus neglectus</i>			
983.	17104 <i>Corymbia calophylla</i> (Marri)			
984.	5519 <i>Darwinia oederoides</i>			
985.	5533 <i>Darwinia vestita</i> (Pom-pom Darwinia)			
986.	45244 <i>Ericomyrtus serpyllifolia</i>			
987.	5550 <i>Eucalyptus angulosa</i> (Ridge-fruited Mallee, Kwararl)			
988.	5605 <i>Eucalyptus cornuta</i> (Yate, Yeid)			
989.	5616 <i>Eucalyptus decurva</i> (Slender Mallee)			
990.	5625 <i>Eucalyptus diversicolor</i> (Karri)			
991.	5627 <i>Eucalyptus doratoxylon</i> (Spearwood Mallee, Keidjgund)			
992.	5643 <i>Eucalyptus falcata</i> (Silver Mallet, Dulyumuk)			
993.	18216 <i>Eucalyptus globulus</i>	Y		
994.	11458 <i>Eucalyptus goniantha</i> subsp. <i>goniantha</i> (Jerdacuttup Mallee)			
995.	5704 <i>Eucalyptus macrandra</i> (Long-flowered Marlock, Dwed)			
996.	13547 <i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah)			
997.	5709 <i>Eucalyptus megacarpa</i> (Bullich, Pulidj)			
998.	42063 <i>Eucalyptus notactites</i>			
999.	5723 <i>Eucalyptus occidentalis</i> (Flat-topped Yate, Moidj)			
1000.	5739 <i>Eucalyptus patens</i> (Swan River Blackbutt, Dwuda)			
1001.	5776 <i>Eucalyptus staeri</i> (Albany Blackbutt)			
1002.	5816 <i>Homalospermum firmum</i>			
1003.	5817 <i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
1004.	5818 <i>Hypocalymma cordifolium</i>			
1005.	13106 <i>Hypocalymma scarosum</i>			
1006.	5827 <i>Hypocalymma strictum</i>			
1007.	44873 <i>Kunzea ambigua</i>	Y		
1008.	17512 <i>Kunzea clavata</i>			
1009.	5832 <i>Kunzea ericifolia</i> (Spearwood, Pondil)			
1010.	17506 <i>Kunzea ericifolia</i> subsp. <i>ericifolia</i>			
1011.	5835 <i>Kunzea micrantha</i>			
1012.	5841 <i>Kunzea recurva</i>			
1013.	5850 <i>Leptospermum laevigatum</i> (Coast Teatree)	Y		
1014.	5853 <i>Leptospermum oligandrum</i>			
1015.	18184 <i>Melaleuca croxfordiae</i>			
1016.	5902 <i>Melaleuca densa</i>			
1017.	5905 <i>Melaleuca diosmitolia</i>			
1018.	5938 <i>Melaleuca microphylla</i>			
1019.	5946 <i>Melaleuca pauciflora</i>			
1020.	5948 <i>Melaleuca pentagona</i>			
1021.	5952 <i>Melaleuca preissiana</i> (Moonah)			
1022.	13277 <i>Melaleuca ringens</i>		P3	
1023.	5968 <i>Melaleuca spathulata</i>			
1024.	5971 <i>Melaleuca striata</i>			
1025.	5980 <i>Melaleuca thymoides</i>			
1026.	5987 <i>Melaleuca viminea</i> (Mohan)			
1027.	11109 <i>Pericalymma crassipes</i>			
1028.	6006 <i>Pericalymma ellipticum</i> (Swamp Teatree)			
1029.	15501 <i>Pericalymma spongiocaula</i>			
1030.	6014 <i>Regelia inops</i>			
1031.	6027 <i>Rinzia schollerifolia</i> (Cranberry Rinzia)			
1032.	20100 <i>Taxandria angustifolia</i>			
1033.	20105 <i>Taxandria conspicua</i> subsp. <i>conspicua</i>			
1034.	20114 <i>Taxandria fragrans</i>			
1035.	20115 <i>Taxandria juniperina</i>			
1036.	20135 <i>Taxandria linearifolia</i>			
1037.	20134 <i>Taxandria marginata</i>			
1038.	20133 <i>Taxandria parviceps</i>			
1039.	12424 <i>Verticordia fimbripes</i> subsp. <i>australis</i>		T	
1040.	6084 <i>Verticordia habrantha</i> (Hidden Featherflower)			
1041.	15618 <i>Verticordia plumosa</i> var. <i>plumosa</i>			

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<b>Nannopercidae</b>				
1042.	<i>Edelia vittata</i>			
1043.	34033 <i>Nannatherina balstoni</i> (Balston's Pygmy Perch)		T	
<b>Nemesiidae</b>				
1044.	<i>Aname tepperi</i>			
<b>Neobalaenidae</b>				
1045.	24072 <i>Caperea marginata</i> (Pygmy Right Whale)			
<b>Neosebastidae</b>				
1046.	<i>Maxillcosta scabriceps</i>			
<b>Neositidae</b>				
1047.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
1048.	24606 <i>Daphoenositta chrysoptera subsp. pileata</i> (Varied Sittella, Black-capped Sittella)			
<b>Nomeidae</b>				
1049.	<i>Cubiceps cf. baxteri</i>			Y
<b>Notonectidae</b>				
1050.	<i>Notonectidae sp.</i>			
<b>Odacidae</b>				
1051.	<i>Odax acroptilus</i>			
1052.	<i>Odax cyanomelas</i>			
<b>Odontaspidae</b>				
1053.	34034 <i>Carcharias taurus</i> (Grey Nurse Shark)		T	
<b>Olacaceae</b>				
1054.	2365 <i>Olax benthamiana</i>			
1055.	2366 <i>Olax phyllanthi</i>			
<b>Oligochaeta</b>				
1056.	<i>Oligochaeta sp.</i>			
<b>Onagraceae</b>				
1057.	6133 <i>Epilobium hirtigerum</i> (Hairy Willow Herb)			
1058.	14292 <i>Oenothera stricta subsp. stricta</i>	Y		
<b>Ophichthidae</b>				
1059.	<i>Muraenichthys breviceps</i>			
1060.	<i>Ophisurus serpens</i>			
<b>Oplegnathidae</b>				
1061.	<i>Oplegnathus woodwardi</i>			
<b>Orchidaceae</b>				
1062.	1581 <i>Caladenia corynephora</i>			
1063.	10776 <i>Caladenia ensata</i>			
1064.	15348 <i>Caladenia flava subsp. flava</i>			
1065.	15350 <i>Caladenia flava subsp. sylvestris</i>			
1066.	15353 <i>Caladenia heberleana</i>			
1067.	15362 <i>Caladenia longicauda subsp. crassa</i>			
1068.	1603 <i>Caladenia longiclavata</i> (Clubbed Spider Orchid)			
1069.	15371 <i>Caladenia nana subsp. nana</i>			
1070.	15372 <i>Caladenia nana subsp. unita</i>			
1071.	1609 <i>Caladenia pectinata</i> (King Spider Orchid)			
1072.	15375 <i>Caladenia pholcoidea</i>			
1073.	1610 <i>Caladenia plicata</i> (Crab-lipped Spider Orchid)			
1074.	15379 <i>Caladenia serotina</i>			
1075.	1589 <i>Caladenia x ericksoniae</i>			
1076.	33160 <i>Calochilus uliginosus</i>			
1077.	12935 <i>Corybas abditus</i>		P3	
1078.	12946 <i>Corybas limpidus</i>		P4	
1079.	1627 <i>Cryptostylis ovata</i> (Slipper Orchid)			
1080.	15114 <i>Cyanicula gemmata</i>			
1081.	15404 <i>Cyanicula sericea</i>			
1082.	10964 <i>Cyrtostylis robusta</i>			
1083.	10942 <i>Cyrtostylis tenuissima</i>			
1084.	19649 <i>Disa bracteata</i>	Y		
1085.	1632 <i>Diuris emarginata</i> (Tall Donkey Orchid)			
1086.	1633 <i>Diuris laevis</i> (Nannygoat Orchid)			
1087.	46873 <i>Diuris littoralis</i>			
1088.	1640 <i>Drakaea glyptodon</i> (King-in-his-carriage)			
1089.	15406 <i>Drakaea gracilis</i>			

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1090.	11156 <i>Drakaea livida</i>			
1091.	1642 <i>Drakaea thynniphila</i>			
1092.	1643 <i>Elythranthera brunonis</i> (Purple Enamel Orchid)			
1093.	1644 <i>Elythranthera emarginata</i> (Pink Enamel Orchid)			
1094.	1645 <i>Epiblema grandiflorum</i> (Babe-in-a-cradle)			
1095.	1646 <i>Eriochilus dilatatus</i> (White Bunny Orchid)			
1096.	15412 <i>Eriochilus dilatatus</i> subsp. <i>multiflorus</i>			
1097.	15415 <i>Eriochilus scaber</i> subsp. <i>scaber</i>			
1098.	15416 <i>Eriochilus valens</i>			
1099.	12932 <i>Gastrodia lacista</i>			
1100.	1653 <i>Leporella fimbriata</i> (Hare Orchid)			
1101.	15418 <i>Leptoceras menziesii</i>			
1102.	1656 <i>Lyperanthus serratus</i> (Rattle Beak Orchid)			
1103.	1657 <i>Microtis alba</i> (White Mignonette Orchid)			
1104.	34158 <i>Microtis albobiridis</i>			
1105.	1658 <i>Microtis atrata</i> (Swamp Mignonette Orchid)			
1106.	8814 <i>Microtis brownii</i>			
1107.	12199 <i>Microtis familiaris</i>			
1108.	1659 <i>Microtis globula</i> (South-coast Mignonette Orchid)		T	
1109.	15419 <i>Microtis media</i> subsp. <i>media</i>			
1110.	1660 <i>Microtis orbicularis</i> (Dark Mignonette Orchid)			
1111.	1662 <i>Microtis pulchella</i> (Beautiful Mignonette Orchid)		P4	
1112.	23483 <i>Paracaleana brockmanii</i>			
1113.	23504 <i>Paracaleana disjuncta</i>			
1114.	23500 <i>Paracaleana hortiorum</i>			
1115.	1667 <i>Paracaleana nigrita</i> (Flying Duck Orchid)			
1116.	20460 <i>Pheleadenia deformis</i>			
1117.	15424 <i>Praecoxanthus aphyllus</i>			
1118.	1668 <i>Prasophyllum brownii</i>			
1119.	11066 <i>Prasophyllum cucullatum</i> (Hooded Leek Orchid)			
1120.	1671 <i>Prasophyllum elatum</i> (Tall Leek Orchid)			
1121.	1672 <i>Prasophyllum fimbria</i> (Fringed Leek Orchid)			
1122.	1674 <i>Prasophyllum giganteum</i> (Bronze Leek Orchid)			
1123.	16688 <i>Prasophyllum gracile</i>			
1124.	1676 <i>Prasophyllum hians</i> (Yawning Leek Orchid)			
1125.	1677 <i>Prasophyllum macrostachyum</i> (Laughing Leek Orchid)			
1126.	1680 <i>Prasophyllum parvifolium</i> (Autumn Leek Orchid)			
1127.	48478 <i>Prasophyllum paulinae</i> (Pauline's Laughing Leek Orchid)		P1	
1128.	1681 <i>Prasophyllum regium</i> (King Leek Orchid)			
1129.	44084 <i>Prasophyllum</i> sp. <i>early</i> (G. Brockman GBB 1626)			
1130.	1683 <i>Prasophyllum triangulare</i> (Dark Leek Orchid)			
1131.	17267 <i>Pterostylis brevisepala</i>			
1132.	48485 <i>Pterostylis heberlei</i>		P2	
1133.	44725 <i>Pterostylis microphylla</i>			
1134.	11118 <i>Pterostylis pyramidalis</i> (Snail Orchid)			
1135.	1694 <i>Pterostylis rogersii</i> (Curled-tongue Shell Orchid)			
1136.	<i>Pterostylis</i> sp.			
1137.	18655 <i>Pterostylis</i> sp. <i>crinkled leaf</i> (G.J. Keighery 13426)			
1138.	10998 <i>Pterostylis turfosa</i> (Bird Orchid)			
1139.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
1140.	16367 <i>Pyrorchis nigricans</i> (Red beaks, Elephants ears)			
1141.	10856 <i>Thelymitra benthamiana</i> (Leopard Orchid)			
1142.	1703 <i>Thelymitra canaliculata</i> (Blue Sun Orchid)			
1143.	1705 <i>Thelymitra crinita</i> (Blue Lady Orchid)			
1144.	1706 <i>Thelymitra cucullata</i> (Swamp Sun Orchid)			
1145.	1707 <i>Thelymitra flexuosa</i> (Twisted Sun Orchid)			
1146.	11143 <i>Thelymitra graminea</i>			
1147.	11053 <i>Thelymitra macrophylla</i>			
1148.	1710 <i>Thelymitra mucida</i> (Plum Orchid)			
1149.	1715 <i>Thelymitra spiralis</i> (Curlylocks)			
1150.	1716 <i>Thelymitra tigrina</i> (Tiger Orchid)			
1151.	20727 <i>Thelymitra uliginosa</i>			
1152.	1717 <i>Thelymitra variegata</i> (Queen of Sheba)		P2	
1153.	20737 <i>X Cyanthera glossodioides</i>			
<b>Orectolobidae</b>				
1154.	<i>Orectolobus hutchinsi</i>			
1155.	<i>Sutorectus tentaculatus</i>			
<b>Orobanchaceae</b>				
1156.	15037 <i>Bartsia trixago</i>	Y		



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1157.	7122 <i>Orobanche minor</i> (Lesser Broomrape)	Y		
1158.	7090 <i>Parentucellia viscosa</i> (Sticky Bartsia)	Y		
<b>Orsolobidae</b>				
1159.	<i>Australobus torbay</i>			
1160.	<i>Tasmanoonops mainae</i>			
<b>Orthotrichaceae</b>				
1161.	36218 <i>Zygodon menziesii</i>			
<b>Ostraciidae</b>				
1162.	<i>Lactoria concatenatus</i>			
<b>Otariidae</b>				
1163.	24208 <i>Arctocephalus forsteri</i> (New Zealand Fur Seal, long-nosed fur-seal)		S	
1164.	24209 <i>Arctocephalus tropicalis</i> (Subantarctic fur-seal)		T	
1165.	24210 <i>Neophoca cinerea</i> (Australian Sea-lion)		T	
<b>Otididae</b>				
1166.	24610 <i>Ardeotis australis</i> (Australian Bustard)			
<b>Oxalidaceae</b>				
1167.	4356 <i>Oxalis pes-caprae</i> (Soursob)	Y		
1168.	4358 <i>Oxalis purpurea</i> (Largeflower Wood Sorrel)	Y		
<b>Pachycephalidae</b>				
1169.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
1170.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
1171.	25677 <i>Falcunculus frontatus</i> (Crested Shrike-tit)			
1172.	24618 <i>Oreoica gutturalis</i> (Crested Bellbird)			
1173.	34011 <i>Oreoica gutturalis</i> subsp. <i>gutturalis</i> (Crested Bellbird (southern))			
1174.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
1175.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
<b>Palaemonidae</b>				
1176.	<i>Palaemonidae</i> sp.			
<b>Pannariaceae</b>				
1177.	18016 <i>Degelia flabellata</i>		P2	
1178.	27709 <i>Degelia subcrustata</i>			
<b>Papaveraceae</b>				
1179.	2969 <i>Fumaria capreolata</i> (Whiteflower Fumitory)	Y		
1180.	31532 <i>Fumaria muralis</i> subsp. <i>muralis</i>	Y		
<b>Paradoxosomatidae</b>				
1181.	<i>Akamptogonus novarae</i>			
<b>Pararchaeidae</b>				
1182.	<i>Ozarchaea westraliensis</i>			
<b>Parascylliidae</b>				
1183.	<i>Parascyllum variolatum</i>			
<b>Parastacidae</b>				
1184.	33939 <i>Cherax cainii</i> (Marron)			
1185.	<i>Cherax destructor</i>			
1186.	<i>Cherax preissii</i>			
1187.	<i>Parastacidae</i> sp.			
<b>Pardalotidae</b>				
1188.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
1189.	24625 <i>Pardalotus punctatus</i> subsp. <i>punctatus</i> (Spotted Pardalote)			
1190.	24626 <i>Pardalotus punctatus</i> subsp. <i>xanthopyge</i> (Yellow-rumped Pardalote)			
1191.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
<b>Parmeliaceae</b>				
1192.	27743 <i>Flavoparmelia diffracta</i>			
1193.	27748 <i>Flavoparmelia rutidota</i>			
1194.	27787 <i>Hypogymnia subphysodes</i>			
1195.	28218 <i>Hypogymnia subphysodes</i> var. <i>austerodioides</i>			
1196.	28219 <i>Hypogymnia subphysodes</i> var. <i>subphysodes</i>			
1197.	27852 <i>Menegazzia caesiopruinosa</i>			
1198.	27855 <i>Menegazzia subpertusa</i>			
1199.	27919 <i>Parmelinopsis minarum</i>			
1200.	27923 <i>Parmotrema cooperi</i>			
1201.	30458 <i>Parmotrema reticulatum</i>			
1202.	29035 <i>Xanthoparmelia atobarbatia</i>			

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1203.	28107 <i>Xanthoparmelia australasica</i>			
1204.	28110 <i>Xanthoparmelia burmeisteri</i>			
1205.	28122 <i>Xanthoparmelia dichotoma</i>			
1206.	29033 <i>Xanthoparmelia glabrans</i>			
1207.	28151 <i>Xanthoparmelia mexicana</i>			
1208.	28155 <i>Xanthoparmelia mougeotina</i>			
1209.	29036 <i>Xanthoparmelia pulla</i>			
1210.	<i>Xanthoparmelia</i> sp.			
1211.	28330 <i>Xanthoparmelia subprolixa</i>			
1212.	28181 <i>Xanthoparmelia taractica</i>			
1213.	28182 <i>Xanthoparmelia tasmanica</i>			
1214.	28191 <i>Xanthoparmelia xanthomelaena</i>			
<b>Passeridae</b>				
1215.	24642 <i>Passer montanus</i> (Eurasian Tree Sparrow)	Y		
<b>Pataecidae</b>				
1216.	<i>Neopataecus waterhousii</i>			
<b>Pegasidae</b>				
1217.	<i>Pegasus lancifer</i>			
<b>Pelecanidae</b>				
1218.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
<b>Pelecanoididae</b>				
1219.	24649 <i>Pelecanoides urinatrix</i> subsp. <i>exsul</i> (Common Diving Petrel)			
<b>Pempheridae</b>				
1220.	<i>Pempheris multiradiata</i>			
<b>Pentacerotidae</b>				
1221.	<i>Paristiopterus gallipavo</i>			
<b>Peramelidae</b>				
1222.	48588 <i>Isoodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
<b>Percichthyidae</b>				
1223.	<i>Bostockia porosa</i>			
1224.	<i>Maccullochella peelii</i>			Y
1225.	<i>Nannoperca vittata</i>			
1226.	<i>Polyprion americanus</i>			Y
<b>Percidae</b>				
1227.	<i>Perca fluviatilis</i>			
<b>Peronosporaceae</b>				
1228.	<i>Phytophthora cinnamomi</i>			
<b>Perthidae</b>				
1229.	<i>Perthiidae</i> sp.			
<b>Pertusariaceae</b>				
1230.	27949 <i>Pertusaria leucostomoides</i>			
<b>Petroicidae</b>				
1231.	24651 <i>Eopsaltria australis</i> subsp. <i>griseogularis</i> (Western Yellow Robin)			
1232.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
1233.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
1234.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
1235.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
<b>Phalacrocoracidae</b>				
1236.	<i>Microcarbo melanoleucos</i>			
1237.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
1238.	24666 <i>Phalacrocorax melanoleucos</i> subsp. <i>melanoleucos</i> (Little Pied Cormorant)			
1239.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
1240.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
<b>Phalangeridae</b>				
1241.	24158 <i>Trichosurus vulpecula</i> subsp. <i>vulpecula</i> (Common Brushtail Possum)			
<b>Phasianidae</b>				
1242.	24671 <i>Coturnix pectoralis</i> (Stubble Quail)			
1243.	25701 <i>Coturnix ypsilophora</i> (Brown Quail)			
1244.	24673 <i>Coturnix ypsilophora</i> subsp. <i>australis</i> (Brown Quail)			
1245.	24672 <i>Coturnix ypsilophora</i> subsp. <i>cervina</i> (Brown Quail)			
<b>Philydraceae</b>				

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1246.	1173 <i>Philydrella pygmaea</i> (Butterfly Flowers)			
<b>Phreatoicidae</b>				
1247.	<i>Phreatoicidae</i> sp.			
<b>Phyllanthaceae</b>				
1248.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
1249.	4689 <i>Poranthera ericoides</i> (Heath Poranthera)			
1250.	4690 <i>Poranthera huegelii</i>			
1251.	4691 <i>Poranthera microphylla</i> (Small Poranthera)			
<b>Physciaceae</b>				
1252.	27597 <i>Buellia disciformis</i>			
1253.	28308 <i>Pyxine fallax</i>			
<b>Physeteridae</b>				
1254.	24073 <i>Physeter macrocephalus</i> (Sperm Whale)			T
<b>Physidae</b>				
1255.	<i>Physidae</i> sp.			
<b>Phytolaccaceae</b>				
1256.	2793 <i>Phytolacca octandra</i> (Red Ink Plant)	Y		
<b>Pinguipedidae</b>				
1257.	<i>Parapercis haackei</i>			
<b>Pittosporaceae</b>				
1258.	3157 <i>Billardiera floribunda</i> (White-flowered Billardiera)			
1259.	25798 <i>Billardiera fusiformis</i> (Australian Bluebell)			
1260.	3159 <i>Billardiera laxiflora</i>			
1261.	3165 <i>Billardiera variifolia</i>			
1262.	25779 <i>Billardiera venusta</i>			
1263.	16322 <i>Pittosporum undulatum</i>	Y		
<b>Planorbidae</b>				
1264.	<i>Planorbidae</i> sp.			
<b>Plantaginaceae</b>				
1265.	4717 <i>Callitriche stagnalis</i> (Common Starwort)	Y		
1266.	19625 <i>Cymbalaria muralis</i> subsp. <i>muralis</i>	Y		
1267.	14282 <i>Gratiola pubescens</i>			
1268.	7303 <i>Plantago lanceolata</i> (Ribwort Plantain)	Y		
1269.	7108 <i>Veronica arvensis</i> (Wall Speedwell)	Y		
1270.	7110 <i>Veronica distans</i>			
1271.	7112 <i>Veronica plebeia</i> (Creeping Speedwell)			
<b>Platycephalidae</b>				
1272.	<i>Neoplatycephalus conatus</i>			
<b>Plesiopidae</b>				
1273.	<i>Paraplesiops meleagris</i>			
<b>Pleuronectidae</b>				
1274.	<i>Ammotretis rostratus</i>			
<b>Plotosidae</b>				
1275.	<i>Cnidoglanis macrocephalus</i>			
<b>Poaceae</b>				
1276.	185 <i>Aira cupaniana</i> (Silvery Hairgrass)	Y		
1277.	186 <i>Aira elegantissima</i>	Y		
1278.	187 <i>Aira praecox</i> (Early Hairgrass)	Y		
1279.	194 <i>Amphipogon amphipogonoides</i>			
1280.	195 <i>Amphipogon avenaceus</i>			
1281.	197 <i>Amphipogon debilis</i>			
1282.	20184 <i>Amphipogon laguroides</i> subsp. <i>laguroides</i>			
1283.	20196 <i>Amphipogon setaceus</i>			
1284.	200 <i>Amphipogon turbinatus</i>			
1285.	202 <i>Anthoxanthum odoratum</i> (Sweet Vernal Grass)	Y		
1286.	17233 <i>Austrostipa campylachne</i>			
1287.	17242 <i>Austrostipa juncifolia</i>			
1288.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
1289.	245 <i>Briza minor</i> (Shivery Grass)	Y		
1290.	248 <i>Bromus catharticus</i> (Prairie Grass)	Y		
1291.	249 <i>Bromus diandrus</i> (Great Brome)	Y		
1292.	250 <i>Bromus hordeaceus</i> (Soft Brome)	Y		
1293.	48259 <i>Cortaderia selloana</i> subsp. <i>selloana</i>			



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		Y		
1294.	287 <i>Dactylis glomerata</i> (Cocksfoot)	Y		
1295.	299 <i>Deyeuxia quadriseta</i> (Reed Bentgrass)			
1296.	306 <i>Dichelachne crinita</i> (Longhair Plumegrass)			
1297.	311 <i>Digitaria ciliaris</i> (Summer Grass)	Y		
1298.	11105 <i>Echinochloa crus-galli</i>	Y		
1299.	348 <i>Ehrharta erecta</i> (Panic Veldt Grass)	Y		
1300.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
1301.	353 <i>Eleusine indica</i> (Crowsfoot Grass)	Y		
1302.	373 <i>Eragrostis brownii</i> (Brown's Lovegrass)			
1303.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
1304.	17043 <i>Glyceria declinata</i>	Y		
1305.	444 <i>Holcus lanatus</i> (Yorkshire Fog)	Y		
1306.	449 <i>Hordeum leporinum</i> (Barley Grass)	Y		
1307.	20019 <i>Lachnagrostis filiformis</i>			
1308.	467 <i>Lagurus ovatus</i> (Hare's Tail Grass)	Y		
1309.	10957 <i>Lolium perenne x rigidum</i>	Y		
1310.	478 <i>Lolium rigidum</i> (Wimmera Ryegrass)	Y		
1311.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
1312.	492 <i>Neurachne alopecuroidea</i> (Foxtail Mulga Grass)			
1313.	516 <i>Parapholis incurva</i> (Coast Barbgrass)	Y		
1314.	527 <i>Paspalum dilatatum</i>	Y		
1315.	557 <i>Piptatherum miliaceum</i> (Rice Millet)	Y		
1316.	571 <i>Poa annua</i> (Winter Grass)	Y		
1317.	577 <i>Poa poliformis</i> (Coastal Poa)			
1318.	578 <i>Poa porphyroclados</i>			
1319.	40426 <i>Rytidosperma occidentale</i>			
1320.	40427 <i>Rytidosperma setaceum</i>			
1321.	19453 <i>Setaria parviflora</i>	Y		
1322.	613 <i>Setaria verticillata</i> (Whorled Pigeon Grass)	Y		
1323.	624 <i>Spinifex hirsutus</i> (Hairy Spinifex)			
1324.	8710 <i>Sporobolus africanus</i> (Parramatta Grass)	Y		
1325.	667 <i>Tetrarrhena laevis</i> (Forest Ricegrass)			
1326.	11137 <i>Vulpia fasciculata</i>	Y		
1327.	724 <i>Vulpia myuros</i> (Rat's Tail Fescue)	Y		
<b>Podargidae</b>				
1328.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
1329.	24679 <i>Podargus strigoides</i> subsp. <i>brachypterus</i> (Tawny Frogmouth)			
<b>Podicipedidae</b>				
1330.	25704 <i>Podiceps cristatus</i> (Great Crested Grebe)			
1331.	24680 <i>Podiceps cristatus</i> subsp. <i>australis</i> (Great Crested Grebe)			
1332.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
1333.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
<b>Poeciliidae</b>				
1334.	<i>Gambusia affinis</i>			
<b>Polycentropodidae</b>				
1335.	<i>Polycentropodidae</i> sp.			
<b>Polygalaceae</b>				
1336.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
1337.	4552 <i>Comesperma confertum</i>			
1338.	4554 <i>Comesperma flavum</i>			
1339.	4557 <i>Comesperma nudiusculum</i>			
1340.	4559 <i>Comesperma polygaloides</i> (Small Milkwort)			
1341.	4564 <i>Comesperma virgatum</i> (Milkwort)			
1342.	8395 <i>Polygala myrtifolia</i> (Myrtleleaf Milkwort)	Y		
1343.	4578 <i>Polygala virgata</i>	Y		
<b>Polygonaceae</b>				
1344.	13911 <i>Persicaria decipiens</i>			
1345.	2429 <i>Rumex acetosella</i> (Sorrel)	Y		
1346.	2430 <i>Rumex brownii</i> (Swamp Dock)	Y		
1347.	2432 <i>Rumex conglomeratus</i> (Clustered Dock)	Y		
1348.	17994 <i>Rumex obtusifolius</i> subsp. <i>obtusifolius</i>	Y		
1349.	12017 <i>Rumex pulcher</i> subsp. <i>pulcher</i> (Fiddle Dock)	Y		
<b>Pomatostomidae</b>				
1350.	24683 <i>Pomatostomus superciliosus</i> (White-browed Babbler)			
<b>Potamogetonaceae</b>				

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1351.	110 <i>Potamogeton drummondii</i>			
<b>Potoroidae</b>				
1352.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)		T	
<b>Pottiaceae</b>				
1353.	32315 <i>Barbula calycina</i>			
1354.	36137 <i>Pseudocrossidium crinitum</i>			
1355.	32451 <i>Triquetrella papillata</i>			
<b>Primulaceae</b>				
1356.	36375 <i>Lysimachia arvensis</i> (Pimpernel)	Y		
1357.	6483 <i>Samolus junceus</i>			
1358.	6484 <i>Samolus repens</i> (Creeping Brookweed)			
<b>Pristiophoridae</b>				
1359.	<i>Pristiophorus cirratus</i>			
<b>Procellariidae</b>				
1360.	41326 <i>Ardenna carneipes</i> (Flesh-footed Shearwater, Fleishy-footed Shearwater)		T	
1361.	24690 <i>Macronectes giganteus</i> (Southern Giant Petrel)		IA	
1362.	<i>Pterodroma macroptera</i> subsp. <i>macroptera</i>			
1363.	24711 <i>Puffinus assimilis</i> subsp. <i>assimilis</i> (Little Shearwater)			
<b>Prodidomidae</b>				
1364.	<i>Molycrta quadricauda</i>			
1365.	<i>Nomindra leeuweni</i>			
<b>Proteaceae</b>				
1366.	10824 <i>Acidonia microcarpa</i>			
1367.	1769 <i>Adenanthos apiculatus</i>			
1368.	1773 <i>Adenanthos cuneatus</i> (Coastal Jugflower)			
1369.	1791 <i>Adenanthos obovatus</i> (Basket Flower)			
1370.	1794 <i>Adenanthos sericeus</i> (Woolly Bush)			
1371.	11685 <i>Adenanthos sericeus</i> subsp. <i>sericeus</i> (Coastal Woollybush)			
1372.	16876 <i>Adenanthos x cunninghamii</i>		P4	
1373.	32684 <i>Banksia arctotidis</i>			
1374.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
1375.	32676 <i>Banksia biterax</i>			
1376.	1806 <i>Banksia brownii</i> (Feather-leaved Banksia)		T	
1377.	1811 <i>Banksia coccinea</i> (Scarlet Banksia)			
1378.	32616 <i>Banksia dallanneyi</i> subsp. <i>sylvestris</i>			
1379.	1814 <i>Banksia dryandroides</i> (Dryandra-leaved Banksia)			
1380.	32525 <i>Banksia formosa</i> (Showy Dryandra)			
1381.	1817 <i>Banksia gardneri</i> (Prostrate Banksia)			
1382.	11764 <i>Banksia gardneri</i> var. <i>brevidentata</i>			
1383.	11532 <i>Banksia gardneri</i> var. <i>gardneri</i>			
1384.	1818 <i>Banksia goodii</i> (Good's Banksia)		T	
1385.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
1386.	1822 <i>Banksia ilicifolia</i> (Holly-leaved Banksia)			
1387.	1830 <i>Banksia littoralis</i> (Swamp Banksia, Pungura)			
1388.	<i>Banksia marginata</i>			
1389.	32207 <i>Banksia mucronulata</i> (Swordfish Dryandra)			
1390.	32202 <i>Banksia nivea</i> (Honeypot Dryandra, Pudjam)			
1391.	11941 <i>Banksia nutans</i> var. <i>cernuella</i>			
1392.	1837 <i>Banksia occidentalis</i> (Red Swamp Banksia)			
1393.	1841 <i>Banksia praemorsa</i> (Cut-leaf Banksia)			
1394.	1844 <i>Banksia quercifolia</i> (Oak-leaved Banksia)			
1395.	32085 <i>Banksia seneciifolia</i>		P4	
1396.	32084 <i>Banksia serra</i> (Serrate-leaved Dryandra)		P4	
1397.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
1398.	1851 <i>Banksia sphaerocarpa</i> (Round-fruit Banksia)			
1399.	12111 <i>Banksia sphaerocarpa</i> var. <i>sphaerocarpa</i> (Fox Banksia)			
1400.	32044 <i>Banksia squarrosa</i> (Pingle)			
1401.	32045 <i>Banksia squarrosa</i> subsp. <i>squarrosa</i>			
1402.	1854 <i>Banksia verticillata</i> (Albany Banksia)		T	
1403.	1862 <i>Conospermum caeruleum</i> (Blue Brother)			
1404.	15610 <i>Conospermum caeruleum</i> subsp. <i>caeruleum</i>			
1405.	1863 <i>Conospermum capitatum</i>			
1406.	14723 <i>Conospermum coeruleascens</i> subsp. <i>adpressum</i>			
1407.	1872 <i>Conospermum flexuosum</i> (Tangled Smokebush)			
1408.	17109 <i>Conospermum flexuosum</i> subsp. <i>flexuosum</i>			
1409.	1873 <i>Conospermum floribundum</i>			
1410.	1879 <i>Conospermum petiolare</i>			

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1411.	1883 <i>Conospermum teretifolium</i> (Spider Smokebush)			
1412.	1944 <i>Franklandia fucifolia</i> (Lanoline Bush)			
1413.	1987 <i>Grevillea depauperata</i>			
1414.	2005 <i>Grevillea fasciculata</i>			
1415.	2052 <i>Grevillea occidentalis</i>			
1416.	2078 <i>Grevillea pulchella</i> (Beautiful Grevillea)			
1417.	15991 <i>Grevillea pulchella</i> subsp. <i>pulchella</i>			
1418.	2112 <i>Grevillea trifida</i>			
1419.	2115 <i>Grevillea umbellulata</i>			
1420.	2128 <i>Hakea amplexicaulis</i> (Prickly Hakea)			
1421.	2137 <i>Hakea ceratophylla</i> (Horned Leaf Hakea)			
1422.	2150 <i>Hakea cucullata</i> (Hood Leaved Hakea)			
1423.	12227 <i>Hakea drupacea</i>			
1424.	2160 <i>Hakea ferruginea</i>			
1425.	2162 <i>Hakea florida</i>			
1426.	2169 <i>Hakea lasiantha</i> (Woolly Flowered Hakea)			
1427.	2174 <i>Hakea linearis</i>			
1428.	2191 <i>Hakea oleifolia</i> (Dungyn)			
1429.	2197 <i>Hakea prostrata</i> (Harsh Hakea)			
1430.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
1431.	2212 <i>Hakea sulcata</i> (Furrowed Hakea)			
1432.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
1433.	16640 <i>Hakea tuberculata</i>			
1434.	2215 <i>Hakea undulata</i> (Wavy-leaved Hakea)			
1435.	2216 <i>Hakea varia</i> (Variable-leaved Hakea)			
1436.	2222 <i>Isopogon attenuatus</i>			
1437.	2223 <i>Isopogon axillaris</i>			
1438.	12908 <i>Isopogon buxifolius</i> var. <i>buxifolius</i>		P2	
1439.	2226 <i>Isopogon cuneatus</i> (Coneflower)			
1440.	16880 <i>Isopogon formosus</i> subsp. <i>formosus</i>			
1441.	2233 <i>Isopogon longifolius</i>			
1442.	2237 <i>Isopogon sphaerocephalus</i> (Drumstick Isopogon)			
1443.	2238 <i>Isopogon teretifolius</i> (Nodding Coneflower)			
1444.	2242 <i>Isopogon uncinatus</i>		T	
1445.	14878 <i>Lambertia echinata</i> subsp. <i>citrina</i>			
1446.	2248 <i>Lambertia inermis</i> (Chittick, Djidiok)			
1447.	2250 <i>Lambertia orbifolia</i> (Round-leaf Honeysuckle)			Y
1448.	19187 <i>Lambertia orbifolia</i> subsp. <i>orbifolia</i>		T	
1449.	2253 <i>Lambertia uniflora</i>			
1450.	2262 <i>Persoonia elliptica</i> (Spreading Snottygobble)			
1451.	2264 <i>Persoonia graminea</i>			
1452.	2267 <i>Persoonia longifolia</i> (Snottygobble)			
1453.	2282 <i>Petrophile acicularis</i>			
1454.	2292 <i>Petrophile divaricata</i>			
1455.	2293 <i>Petrophile diversifolia</i>			
1456.	2300 <i>Petrophile longifolia</i> (Long Leaved Cone Bush)			
1457.	2302 <i>Petrophile media</i>			
1458.	2306 <i>Petrophile rigida</i>			
1459.	17765 <i>Petrophile squamata</i> subsp. <i>squamata</i>			
1460.	12910 <i>Stirlingia seselifolia</i>			
1461.	2318 <i>Stirlingia tenuifolia</i>			
1462.	2322 <i>Synaphea favosa</i>			
1463.	2323 <i>Synaphea gracillima</i>			
1464.	16859 <i>Synaphea incurva</i>		P1	
1465.	16866 <i>Synaphea intricata</i>		P3	
1466.	12911 <i>Synaphea obtusata</i>			
1467.	2324 <i>Synaphea petiolaris</i> (Synaphea)			
1468.	16864 <i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>			
1469.	2326 <i>Synaphea polymorpha</i> (Albany Synaphea, Pinda)			
1470.	2327 <i>Synaphea preissii</i>		P3	
<b>Pseudocheiridae</b>				
1471.	24166 <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum, ngwayir)		T	
<b>Psittacidae</b>				
1472.	<i>Barnardius zonarius</i>			
1473.	25713 <i>Cacatua galerita</i> (Sulphur-crested Cockatoo)			
1474.	24725 <i>Cacatua roseicapilla</i> subsp. <i>assimilis</i> (Galah)			
1475.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
1476.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black Cockatoo)		T	
1477.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black)			



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	<i>Cockatoo</i>		T	
1478.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
1479.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
1480.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
1481.	24739 <i>Neophema petrophila</i> (Rock Parrot)			
1482.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
1483.	24745 <i>Platycercus icterotis</i> subsp. <i>icterotis</i> (Western Rosella)			
1484.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
1485.	25722 <i>Polytelis anthopeplus</i> (Regent Parrot)			
1486.	<i>Purpureicephalus spurius</i>			
<b>Psittaculidae</b>				
1487.	48085 <i>Psittacula krameri</i> (Indian Ringnecked Parrot, Rose-ringed Parakeet)	Y		
<b>Pteridaceae</b>				
1488.	31 <i>Cheilanthes austrotenuifolia</i>			
<b>Pygopodidae</b>				
1489.	24994 <i>Aprasia striolata</i> (Lined Worm-lizard)			
1490.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
<b>Pyralidae</b>				
1491.	<i>Pyralidae</i> sp.			
<b>Racopilaceae</b>				
1492.	32480 <i>Racopilum cuspidigerum</i> var. <i>convolutaceum</i>			
<b>Rajidae</b>				
1493.	<i>Raja</i> sp.			
<b>Rallidae</b>				
1494.	25727 <i>Fulica atra</i> (Eurasian Coot)			
1495.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
1496.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
1497.	25730 <i>Gallirallus philippensis</i> (Buff-banded Rail)			
1498.	24765 <i>Gallirallus philippensis</i> subsp. <i>mellori</i> (Buff-banded Rail)			
1499.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
1500.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
1501.	24769 <i>Porzana fluminea</i> (Australian Spotted Crane)			
1502.	25732 <i>Porzana pusilla</i> (Baillon's Crane)			
1503.	24771 <i>Porzana tabuensis</i> (Spotless Crane)			
1504.	48141 <i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
<b>Ramalinaceae</b>				
1505.	27653 <i>Catnaria atropurpurea</i>			
1506.	28030 <i>Ramalina glaucescens</i>			
<b>Ranunculaceae</b>				
1507.	2929 <i>Clematis pubescens</i> (Common Clematis)			
1508.	2933 <i>Ranunculus muricatus</i> (Sharp Buttercup)	Y		
<b>Recurvirostridae</b>				
1509.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
1510.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
1511.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
<b>Resedaceae</b>				
1512.	3084 <i>Reseda lutea</i> (Cutleaf Mingnonette)	Y		
<b>Restionaceae</b>				
1513.	17685 <i>Chaetanthus aristatus</i>			
1514.	1065 <i>Chaetanthus leptocarpoides</i>			
1515.	17687 <i>Chaetanthus tenellus</i>			
1516.	17705 <i>Chordifex abortivus</i>		T	
1517.	17828 <i>Chordifex isomorphus</i>			
1518.	17689 <i>Chordifex laxus</i>			
1519.	46358 <i>Desmocladius confertospicatus</i>			
1520.	17691 <i>Desmocladius fasciculatus</i>			
1521.	16595 <i>Desmocladius flexuosus</i>			
1522.	1067 <i>Empodisma gracillimum</i>			
1523.	1070 <i>Hypolaena exsulca</i>			
1524.	1071 <i>Hypolaena fastigiata</i>			
1525.	19918 <i>Hypolaena grandiuscula</i>			
1526.	17054 <i>Leptocarpus crassipes</i>		P3	
1527.	46381 <i>Leptocarpus crebriculmis</i>			

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1528.	46375 <i>Leptocarpus decipiens</i>			
1529.	46376 <i>Leptocarpus denmarkicus</i>			
1530.	46380 <i>Leptocarpus kraussii</i>			
1531.	19833 <i>Leptocarpus laxus</i>			
1532.	1080 <i>Leptocarpus scariosus</i>			
1533.	46377 <i>Leptocarpus scoparius</i>			
1534.	1082 <i>Leptocarpus tenax</i> (Slender Twine Rush)			
1535.	46383 <i>Leptocarpus tephrius</i>			
1536.	46379 <i>Leptocarpus thysananthus</i>			
1537.	1084 <i>Lepyrodia drummondiana</i>			
1538.	1087 <i>Lepyrodia hermaphrodita</i>			
1539.	1089 <i>Lepyrodia monoica</i>			
1540.	1092 <i>Loxocarya cinerea</i>			
1541.	17682 <i>Melanostachya ustulata</i>			
1542.	14915 <i>Sporadanthus strictus</i>			
1543.	17684 <i>Tremulina tremula</i>			
<b>Rhamnaceae</b>				
1544.	4828 <i>Spyridium globulosum</i> (Basket Bush)			
1545.	14355 <i>Spyridium majoranifolium</i>			
1546.	4833 <i>Spyridium spadiceum</i>		P4	
1547.	33438 <i>Trymalium odoratissimum</i> subsp. <i>trifidum</i>			
<b>Rhinobatidae</b>				
1548.	<i>Trygonorrhina fasciata</i>			
<b>Rhizocarpaceae</b>				
1549.	28041 <i>Rhizocarpon polycarpum</i>			
<b>Rosaceae</b>				
1550.	18320 <i>Cotoneaster pannosus</i>	Y		
1551.	20506 <i>Rubus anglocandicans</i>	Y		
<b>Rubiaceae</b>				
1552.	7348 <i>Opercularia hispidula</i> (Hispid Stinkweed)			
1553.	18255 <i>Opercularia vaginata</i> (Dog Weed)			
<b>Russulaceae</b>				
1554.	<i>Cystangium pisiglarea</i>			
<b>Rutaceae</b>				
1555.	4403 <i>Boronia alata</i> (Winged Boronia)			
1556.	4412 <i>Boronia crassipes</i>		P3	
1557.	4413 <i>Boronia crenulata</i> (Aniseed Boronia)			
1558.	29274 <i>Boronia crenulata</i> subsp. <i>crenulata</i>			
1559.	11503 <i>Boronia crenulata</i> var. <i>crenulata</i>			
1560.	4416 <i>Boronia denticulata</i>			
1561.	4423 <i>Boronia heterophylla</i> (Kalgan Boronia)			
1562.	4426 <i>Boronia juncea</i>			
1563.	16630 <i>Boronia juncea</i> subsp. <i>laniflora</i>			
1564.	16631 <i>Boronia juncea</i> subsp. <i>micrantha</i>			
1565.	16632 <i>Boronia juncea</i> subsp. <i>minima</i>			
1566.	4428 <i>Boronia megastigma</i> (Scented Boronia)			
1567.	4429 <i>Boronia molloyae</i> (Tall Boronia)			
1568.	4441 <i>Boronia spathulata</i> (Boronia)			
1569.	4442 <i>Boronia stricta</i>			
1570.	4443 <i>Boronia subsessilis</i>			
1571.	4447 <i>Boronia virgata</i>		P4	
1572.	4448 <i>Chorilaena quercifolia</i> (Chorilaena)			
1573.	4451 <i>Crowea angustifolia</i> (Crowea)			
1574.	17729 <i>Crowea angustifolia</i> var. <i>platyphylla</i>			
1575.	18547 <i>Rhadinothamnus anceps</i>			
<b>Santalaceae</b>				
1576.	2335 <i>Choretrum lateriflorum</i> (Dwarf Sour Bush)			
1577.	10907 <i>Exocarpos odoratus</i> (Scented Ballart)			
1578.	10765 <i>Exocarpos sparteus</i> (Broom Ballart, Djuk)			
1579.	17703 <i>Leptomeria ellytes</i>			
1580.	2345 <i>Leptomeria ericoides</i>			
1581.	2347 <i>Leptomeria lehmannii</i>			
1582.	2350 <i>Leptomeria pauciflora</i> (Sparse-flowered Currant Bush)			
1583.	2353 <i>Leptomeria scrobiculata</i>			
1584.	2355 <i>Leptomeria squarrolosa</i>			

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<b>Sapindaceae</b>				
1585.	4757 <i>Dodonaea ceratocarpa</i>			
<b>Scincidae</b>				
1586.	25027 <i>Ctenotus australis</i>			
1587.	25031 <i>Ctenotus catenifer</i>			
1588.	25049 <i>Ctenotus labillardieri</i>			
1589.	25096 <i>Egernia kingii (King's Skink)</i>			
1590.	25100 <i>Egernia napoleonis</i>			
1591.	30919 <i>Hemiergis gracilipes (skink)</i>			
1592.	25117 <i>Hemiergis peronii subsp. peronii</i>			
1593.	41416 <i>Liopholis pulchra subsp. pulchra (South-western Rock Skink, Spectacled Rock Skink)</i>			
1594.	42413 <i>Lissolepis luctuosa (Western Swamp Skink)</i>			
1595.	25203 <i>Tiliqua occipitalis (Western Bluetongue)</i>			
1596.	25207 <i>Tiliqua rugosa subsp. rugosa</i>			
<b>Sciomyzidae</b>				
1597.	<i>Sciomyzidae sp.</i>			
<b>Scolopacidae</b>				
1598.	41323 <i>Actitis hypoleucos (Common Sandpiper)</i>		IA	
1599.	24780 <i>Calidris alba (Sanderling)</i>		IA	
1600.	25738 <i>Calidris canutus (Red Knot, knot)</i>		IA	
1601.	24784 <i>Calidris ferruginea (Curlew Sandpiper)</i>		T	
1602.	24788 <i>Calidris ruficollis (Red-necked Stint)</i>		IA	
1603.	24790 <i>Calidris tenuirostris (Great Knot)</i>		T	
1604.	30932 <i>Limosa lapponica (Bar-tailed Godwit)</i>		IA	
1605.	24802 <i>Philomachus pugnax (Ruff, reeve)</i>		IA	
1606.	24806 <i>Tringa glareola (Wood Sandpiper)</i>		IA	
1607.	24808 <i>Tringa nebularia (Common Greenshank, greenshank)</i>		IA	
<b>Scolopendridae</b>				
1608.	<i>Cormocephalus aurantiipes</i>			
1609.	<i>Cormocephalus michaelsoni</i>			
<b>Scomberesocidae</b>				
1610.	<i>Scomberesox saurus</i>			
<b>Scombridae</b>				
1611.	<i>Auxis thazard</i>			
1612.	<i>Thunnus alalunga</i>			
1613.	<i>Thunnus maccoyii</i>			
<b>Scorpididae</b>				
1614.	<i>Tilodon sexfasciatum</i>			
<b>Scrophulariaceae</b>				
1615.	7292 <i>Myoporum oppositifolium (Twin-leaf Myoporum)</i>			
<b>Scyliorhinidae</b>				
1616.	<i>Aulohaelurus labiosus</i>			
1617.	<i>Aulohaelurus labiosus?</i>			
<b>Sebastidae</b>				
1618.	<i>Helicolenus percoides</i>			
<b>Selaginellaceae</b>				
1619.	6 <i>Selaginella gracillima (Tiny Clubmoss)</i>			
<b>Sematophyllaceae</b>				
1620.	32483 <i>Sematophyllum subhumile var. contiguum</i>			
<b>Serranidae</b>				
1621.	<i>Acanthistius serratus</i>			
1622.	<i>Caesiooperca rasor</i>			
1623.	<i>Caesiocorpsis theagenes</i>			
1624.	<i>Epinephelides armatus</i>			
<b>Sillaginidae</b>				
1625.	<i>Sillaginodes punctata</i>			
1626.	<i>Sillago bassensis</i>			
<b>Simuliidae</b>				
1627.	<i>Simuliidae sp.</i>			
<b>Siphonocladaceae</b>				
1628.	26770 <i>Dictyosphaeria sericea</i>			



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<b>Siphonotidae</b>				
1629.	<i>Siphonotus flavomarginatus</i>			
<b>Solanaceae</b>				
1630.	6950 <i>Anthocercis viscosa</i> (Sticky Tailflower)			
1631.	11505 <i>Anthocercis viscosa</i> subsp. <i>viscosa</i>			
1632.	7017 <i>Solanum laciniatum</i> (Kangaroo Apple)	Y		
1633.	7022 <i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
<b>Soleidae</b>				
1634.	<i>Aseraggodes haackeanus</i>			
1635.	<i>Synaptura hediste</i>			
1636.	<i>Zebrias cancellatus</i>			
<b>Sparassidae</b>				
1637.	<i>Isopeda leishmanni</i>			
1638.	<i>Isopedella cana</i>			
<b>Sphaeriidae</b>				
1639.	<i>Sphaeriidae</i> sp.			
<b>Spheniscidae</b>				
1640.	24818 <i>Eudyptula minor</i> subsp. <i>novaehollandiae</i> (Little Penguin)			
<b>Sphyraenidae</b>				
1641.	<i>Sphyraena barracuda</i>			
<b>Sphyrnidae</b>				
1642.	<i>Sphyrna lewini</i>			
<b>Stereocaulaceae</b>				
1643.	41263 <i>Lepraria squamatica</i>			
<b>Stratiomyidae</b>				
1644.	<i>Stratiomyidae</i> sp.			
<b>Sturnidae</b>				
1645.	25752 <i>Sturnus vulgaris</i> (Common Starling)	Y		
1646.	24824 <i>Sturnus vulgaris</i> subsp. <i>vulgaris</i> (Common Starling)	Y		
<b>Stylidiaceae</b>				
1647.	7673 <i>Levenhookia pauciflora</i> (Deceptive Stylewort)			
1648.	7676 <i>Levenhookia pusilla</i> (Midget Stylewort)			
1649.	39881 <i>Stylidium acuminatum</i> subsp. <i>meridionale</i>			
1650.	7684 <i>Stylidium amoenum</i> (Lovely Triggerplant)			
1651.	39880 <i>Stylidium angustifolium</i> subsp. <i>glaucofolium</i>			
1652.	7687 <i>Stylidium assimile</i> (Bronze-leaved Triggerplant)			
1653.	7689 <i>Stylidium beauleholei</i>			
1654.	7695 <i>Stylidium caespitosum</i> (Fly-away Triggerplant)			
1655.	7696 <i>Stylidium calcaratum</i> (Book Triggerplant)			
1656.	7708 <i>Stylidium crassifolium</i> (Thick-leaved Triggerplant)			
1657.	7712 <i>Stylidium despectum</i> (Dwarf Triggerplant)			
1658.	31355 <i>Stylidium diademum</i>			
1659.	7718 <i>Stylidium diversifolium</i> (Touch-me-not)			
1660.	7724 <i>Stylidium falcatum</i> (Slender Beaked Triggerplant)		P1	
1661.	7725 <i>Stylidium fasciculatum</i> (Pale Beaked Triggerplant)			
1662.	20691 <i>Stylidium gloeophyllum</i>		P4	
1663.	7734 <i>Stylidium guttatum</i> (Dotted Triggerplant)			
1664.	7735 <i>Stylidium hirsutum</i> (Hairy Triggerplant)			
1665.	7738 <i>Stylidium imbricatum</i> (Tile Leaved Triggerplant)			
1666.	7742 <i>Stylidium inundatum</i> (Hundreds and Thousands)			
1667.	7745 <i>Stylidium junceum</i> (Reed Triggerplant)			
1668.	7757 <i>Stylidium luteum</i> (Yellow Triggerplant)			
1669.	25851 <i>Stylidium nymphaeum</i>			
1670.	7774 <i>Stylidium piliferum</i> (Common Butterfly Triggerplant)			
1671.	7776 <i>Stylidium plantagineum</i> (Plantagenet Triggerplant)			
1672.	7778 <i>Stylidium pritzelianum</i> (Royal Triggerplant)			
1673.	7782 <i>Stylidium pulchellum</i> (Thumbelina Triggerplant)			
1674.	7784 <i>Stylidium pygmaeum</i> (Pygmy Triggerplant)			
1675.	7785 <i>Stylidium repens</i> (Matted Triggerplant)			
1676.	7796 <i>Stylidium scandens</i> (Climbing Triggerplant)			
1677.	7798 <i>Stylidium schoenoides</i> (Cow Kicks)			
1678.	<i>Stylidium</i> sp.			
1679.	7799 <i>Stylidium spathulatum</i> (Creamy Triggerplant)			
1680.	7800 <i>Stylidium spinulosum</i> (Topsy-turvy Triggerplant)			
1681.	11223 <i>Stylidium spinulosum</i> subsp. <i>spinulosum</i>			

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1682.	7802 <i>Stylidium squamosotuberosum</i> (Fleshy-rhizomed Trigger Plant)			
1683.	25804 <i>Stylidium thryonides</i>			
1684.	7808 <i>Stylidium violaceum</i> (Violet Triggerplant)			
<b>Sulidae</b>				
1685.	48008 <i>Morus serrator</i> (Australasian Gannet)			
<b>Sylviidae</b>				
1686.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
1687.	24831 <i>Acrocephalus australis</i> subsp. <i>gouldi</i> (Australian Reed Warbler)			
1688.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
1689.	24838 <i>Megalurus gramineus</i> subsp. <i>gramineus</i> (Little Grassbird)			
<b>Syngnathidae</b>				
1690.	<i>Leptoichthys fistularius</i>			
1691.	34039 <i>Phycodurus eques</i> (Leafy Sea Dragon)		P2	
1692.	<i>Phyllopteryx taeniolatus</i>			
1693.	<i>Solegnathus lettiensis</i>			
1694.	<i>Stigmatopora argus</i>			
1695.	<i>Vanacampus philippi</i>			
1696.	<i>Vanacampus poecilolaemus</i>			
<b>Synodontidae</b>				
1697.	<i>Saurida grandisquamis</i>			
1698.	<i>Saurida undosquamis</i>			
<b>Synthemistidae</b>				
1699.	<i>Synthemistidae</i> sp.			
<b>Talitridae</b>				
1700.	<i>Talitridae</i> sp.			
<b>Tarsipedidae</b>				
1701.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
<b>Telephlebiidae</b>				
1702.	<i>Telephlebiidae</i> sp.			
<b>Teloschistaceae</b>				
1703.	27625 <i>Caloplaca cinnabarina</i>			
1704.	27638 <i>Caloplaca marina</i>			
1705.	<i>Caloplaca</i> sp.			
1706.	45301 <i>Jackelixia ligulata</i>			
1707.	28065 <i>Teloschistes chrysophthalmus</i>			
1708.	44996 <i>Xanthoria coomae</i>			
1709.	28194 <i>Xanthoria parietina</i>			
<b>Tetragnathidae</b>				
1710.	<i>Pinkfloydia harveii</i>			
1711.	<i>Tetragnatha caudifera</i>			Y
<b>Tetraodontidae</b>				
1712.	<i>Contusus brevicaudus</i>			
1713.	<i>Omegophora armilla</i>			
1714.	<i>Torquigener vicinus</i>			
<b>Tetrarogidae</b>				
1715.	<i>Gymnapistes marmoratus</i>			
<b>Threskiornithidae</b>				
1716.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
1717.	24843 <i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
1718.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
<b>Thuidiaceae</b>				
1719.	32442 <i>Thuidium sparsum</i>			
1720.	32486 <i>Thuidium sparsum</i> var. <i>hastatum</i>			
<b>Thylacomyidae</b>				
1721.	24168 <i>Macrotis lagotis</i> (Bilby, Dalgyte, Ninu)		T	
<b>Thymelaeaceae</b>				
1722.	5231 <i>Pimelea angustifolia</i> (Narrow-leaved Pimelea)			
1723.	11928 <i>Pimelea ciliata</i> subsp. <i>ciliata</i>			
1724.	5239 <i>Pimelea clavata</i>			
1725.	5243 <i>Pimelea ferruginea</i>			
1726.	5249 <i>Pimelea hispida</i> (Bristly Pimelea)			
1727.	5251 <i>Pimelea imbricata</i>			

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1728.	11533 <i>Pimelea imbricata</i> var. <i>imbricata</i>			
1729.	11472 <i>Pimelea lehmanniana</i> subsp. <i>lehmanniana</i>			
1730.	5255 <i>Pimelea longiflora</i>			
1731.	18115 <i>Pimelea rosea</i> subsp. <i>annelsii</i>		P3	
1732.	18117 <i>Pimelea rosea</i> subsp. <i>rosea</i>			
1733.	5270 <i>Pimelea tinctoria</i>			
<b>Tipulidae</b>				
1734.	<i>Tipulidae</i> sp.			
<b>Triakidae</b>				
1735.	<i>Furgaleus macki</i>			
1736.	<i>Galeorhinus galeus</i>			
1737.	<i>Mustelus antarcticus</i>			
<b>Triglidae</b>				
1738.	<i>Lepidotrigla papiio</i>			
1739.	<i>Pterygotrigla polyommata</i>			
<b>Tripterygiidae</b>				
1740.	<i>Lepidoblennius marmoratus</i>			
<b>Trombidiformes</b>				
1741.	<i>Acariformes</i> sp.			
<b>Turnicidae</b>				
1742.	48147 <i>Turnix varius</i> (Painted Button-quail)			
1743.	24851 <i>Turnix velox</i> (Little Button-quail)			
<b>Tytonidae</b>				
1744.	25762 <i>Tyto alba</i> (Barn Owl)			
1745.	24852 <i>Tyto alba</i> subsp. <i>delicatula</i> (Barn Owl)			
1746.	24855 <i>Tyto novaehollandiae</i> subsp. <i>novaehollandiae</i> (Masked Owl (southwest))		P3	
<b>Uranoscopidae</b>				
1747.	<i>Kathetostoma laeve</i>			
1748.	<i>Kathetostoma nigrofasciatum</i>			
<b>Urodacidae</b>				
1749.	<i>Urodacus novaehollandiae</i>			
<b>Urolophidae</b>				
1750.	<i>Trygonoptera mucosa</i>			
1751.	<i>Urolophus gigas</i>			
1752.	<i>Urolophus paucimaculatus</i>			
1753.	<i>Urolophus</i> sp.			
<b>Usneaceae</b>				
1754.	28086 <i>Usnea dasaea</i>			
1755.	28087 <i>Usnea inermis</i>			
1756.	28088 <i>Usnea maculata</i>			
1757.	18015 <i>Usnea pulvinata</i>		P1	
<b>Varanidae</b>				
1758.	25225 <i>Varanus rosenbergi</i> (Heath Monitor)			
<b>Veliferidae</b>				
1759.	<i>Metavelifer multiradiatus</i>			
<b>Veliidae</b>				
1760.	<i>Veliidae</i> sp.			
<b>Verbenaceae</b>				
1761.	6733 <i>Lantana camara</i> (Common Lantana)	Y		
<b>Vespertilionidae</b>				
1762.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
1763.	24187 <i>Chalinolobus morio</i> (Chocolate Wattled Bat)			
1764.	24189 <i>Falsistrellus mackenziei</i> (Western False Pipistrelle, Western Falsistrelle)		P4	
1765.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
1766.	24206 <i>Vespadelus regulus</i> (Southern Forest Bat)			
<b>Xanthorrhoeaceae</b>				
1767.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
1768.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			
<b>Xyridaceae</b>				
1769.	1144 <i>Xyris flexifolia</i>			
1770.	1149 <i>Xyris lacera</i>			



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1771.	1150 <i>Xyris lanata</i>			
<b>Zamiaceae</b>				
1772.	85 <i>Macrozamia riedlei</i> ( <i>Zamia</i> , <i>Djiridji</i> )			
<b>Zeidae</b>				
1773.	<i>Zeus faber</i>			
<b>Ziphiidae</b>				
1774.	24080 <i>Mesoplodon layardii</i> ( <i>Strap-toothed Beaked Whale</i> )			
<b>Zodariidae</b>				
1775.	<i>Holasteron reinholdae</i>			Y
1776.	<i>Storosa tetrica</i>			
<b>Zoridae</b>				
1777.	<i>Argoctenus bidentatus</i>			
<b>Zosteropidae</b>				
1778.	25765 <i>Zosterops lateralis</i> ( <i>Grey-breasted White-eye</i> , <i>Silvereye</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.

# NatureMap Fauna Species Report 15Km

Created By Guest user on 19/10/2018

**Kingdom** Animalia  
**Current Names Only** Yes  
**Core Datasets Only** Yes  
**Method** 'By Line'  
**Vertices** 34° 55' 54" S,117° 43' 56" E 34° 55' 28" S,117° 45' 08" E 34° 56' 06" S,117° 45' 09" E 34° 56'  
**Group By** 22° S,117° 43' 39" E 34° 56' 06" S,117° 43' 28" E 34° 55' 54" S,117° 43' 58" E  
 Family

Family	Species	Records
Acanthizidae	8	1520
Accipitridae	14	376
Actinopodidae	4	20
Aegothelidae	1	9
Aeshnidae	1	2
Agamidae	1	1
Amphisopodidae	1	1
Anapidae	1	2
Anatidae	13	836
Ancylidae	1	3
Anhingidae	1	14
Apodidae	1	2
Aracnidae	3	3
Araneidae	6	55
Archaeidae	1	20
Ardeidae	7	285
Argiolestidae	1	2
Arkyidae	2	3
Artamidae	2	105
Atherinidae	2	2
Atrichornithidae	1	1
Baetidae	1	2
Balaenopteridae	1	1
Bathysauridae	1	5
Belonidae	1	15
Berycidae	1	1
Boidae	1	4
Bothriuridae	1	3
Burramyidae	1	5
Cacatuidae	1	112
Caddidae	1	3
Caenidae	1	15
Callanthiidae	1	2
Callionymidae	1	1
Campephagidae	1	236
Canidae	1	1
Caprimulgidae	1	1
Carangidae	3	5
Carcharhinidae	2	2
Casuariidae	1	6
Ceinidae	1	10
Ceratiidae	1	1
Ceratopogonidae	1	9
Charadriidae	8	82
Cheilodactylidae	1	1
Cheloniidae	1	1
Cheluidae	1	5
Chernetidae	1	1
Chironemidae	2	2
Chironomidae	3	67
Clinidae	3	5
Clupeidae	2	7
Coenagrionidae	1	5
Columbidae	5	515
Congiopodidae	1	1
Congridae	1	1
Corduliidae	1	1
Corixidae	1	7
Corvidae	2	553
Cracticidae	4	690
Cuculidae	4	158
Culicidae	1	3
Cypridae	2	5
Cypridopsidae	1	4
Dasyatidae	1	1
Dasyornithidae	1	1
Dasyuridae	5	27
Delphinidae	2	4
Desidae	3	4
Dicaeidae	1	1
Dicruridae	4	1299
Dinolestidae	1	2
Diodontidae	2	4
Diomedidae	2	2
Dugesidae	1	1

Dytiscidae	1	17
Echeneidae	1	1
Ecnomidae	1	14
Elapidae	7	23
Elopidae	1	1
Empididae	1	1
Engraulidae	1	7
Ephyridae	1	1
Estrilidae	1	295
Exocoetidae	1	1
Falconidae	8	116
Galaxiidae	4	28
Garypidae	1	1
Garypinidae	1	1
Gekkonidae	1	23
Gelastocoridae	1	2
Gempylidae	1	1
Geotriidae	1	3
Gerreidae	1	2
Girellidae	1	1
Glossiphoniidae	1	3
Gnaphosidae	1	1
Gnathanacanthidae	1	1
Gobiidae	3	7
Gomphidae	1	4
Gordiidae	1	1
Gripopterygidae	1	4
Gyrinidae	1	2
Haematopodidae	2	22
Halcyonidae	3	468
Hebridae	1	1
Hemicorduliidae	1	5
Heterodontidae	1	3
Hirundinidae	3	527
Hydraenidae	1	1
Hydrobiosidae	1	1
Hydrometridae	1	3
Hydrophilidae	1	12
Hydropsychidae	1	8
Hydroptilidae	1	3
Hylidae	2	8
Hypnidae	1	2
Hyriidae	1	1
Idiopidae	1	4
Istiophoridae	1	1
Iulomorphidae	2	19
Ixodidae	1	1
Kyphosidae	1	1
Labridae	5	13
Lamnidae	1	1
Lamponidae	5	12
Laridae	6	158
Lepidogalaxiidae	1	1
Leporidae	1	1
Leptoceridae	1	16
Leptophlebiidae	1	3
Libellulidae	1	2
Limnodynastidae	2	59
Lophotidae	1	1
Lycosidae	5	30
Macropodidae	3	9
Maluridae	5	961
Melanostomiidae	1	1
Meliphagidae	12	1735
Micropholcommatidae	2	3
Mimetidae	1	1
Miturgidae	1	1
Molidae	1	6
Molossidae	1	1
Monacanthidae	13	23
Monoscutidae	1	3
Moridae	2	3
Motacillidae	2	4
Mugilidae	1	1
Mullidae	1	1
Muraenidae	2	2
Muridae	5	75
Myobatrachidae	6	75
Nannoperidae	2	22
Nemesiidae	1	84
Neobalaenidae	1	1
Neosebastidae	1	2
Neosittidae	2	22
Nomeidae	1	1
Notonectidae	1	2
Odacidae	2	2
Odontaspidae	1	1
Oligochaeta	1	22
Ophichthidae	2	8
Oplegnathidae	1	1
Orectolobidae	2	2
Orsolobidae	2	48
Ostraciidae	1	1
Otariidae	3	4
Otididae	1	4
Pachycephalidae	7	395
Palaemonidae	1	7
Paradoxosomatidae	1	9
Pararchaeidae	1	1
Parascylliidae	1	1
Parastacidae	4	34
Pardalotidae	4	182
Passeridae	1	7
Pataecidae	1	1
Pegasidae	1	2



Pelecanidae	1	150
Pelecanoididae	1	1
Pempheridae	1	1
Pentacerotidae	1	1
Peramelidae	1	35
Percichthyidae	4	43
Percidae	1	1
Perthidae	1	11
Petroicidae	5	372
Phalacrocoracidae	5	193
Phalangeridae	1	3
Phasianidae	4	37
Phreatoicidae	1	1
Physeteridae	1	6
Physidae	1	3
Pinguipedidae	1	1
Planorbidae	1	2
Platycephalidae	1	1
Plesiopidae	1	1
Pleuronectidae	1	1
Plotosidae	1	1
Podargidae	2	18
Podicipedidae	4	68
Poeciliidae	1	2
Polycentropodidae	1	1
Pomatomidae	1	1
Potoroidae	1	3
Pristiophoridae	1	1
Procellariidae	4	6
Prodidomidae	2	3
Pseudocheiridae	1	177
Psittacidae	15	1700
Psittaculidae	1	1
Pygopodidae	2	5
Pyrallidae	1	1
Rajidae	1	1
Rallidae	11	213
Recurvirostridae	3	28
Rhinobatidae	1	1
Scincidae	11	69
Sciomyzidae	1	1
Scolopacidae	10	44
Scolopendridae	2	10
Scomberesocidae	1	1
Scombridae	3	3
Scorpididae	1	2
Scyliorhinidae	2	3
Sebastidae	1	1
Serranidae	4	6
Sillaginidae	2	31
Simuliidae	1	14
Siphonotidae	1	1
Soleidae	3	3
Sparassidae	2	5
Sphaeriidae	1	1
Spheniscidae	1	19
Sphyraenidae	1	1
Sphyrnidae	1	1
Stratiomyidae	1	2
Sturnidae	2	5
Sulidae	1	6
Sylviidae	4	51
Syngnathidae	7	36
Synodontidae	2	2
Synthemistidae	1	2
Talitridae	1	1
Tarsipedidae	1	64
Telephlebiidae	1	5
Tetragrathidae	2	2
Tetraodontidae	3	3
Tetrarogidae	1	2
Threskiornithidae	3	239
Thylacomyidae	1	1
Tipulidae	1	10
Triakidae	3	5
Triglidae	2	7
Tripterygiidae	1	6
Trombidiformes	1	12
Turnicidae	2	15
Tytonidae	3	11
Uranoscopidae	2	4
Urodacidae	1	4
Urolophidae	4	10
Varanidae	1	1
Veliiferidae	1	1
Veliidae	1	10
Vespertilionidae	5	17
Zeidae	1	5
Ziphiidae	1	1
Zodariidae	2	16
Zoridae	1	1
Zosteropidae	1	496
<b>TOTAL</b>	<b>578</b>	<b>17247</b>

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Acanthizidae</b>				
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
5.	24271 <i>Gerygone fusca</i> subsp. <i>fusca</i> (Western Gerygone)			
6.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
7.	24279 <i>Sericornis frontalis</i> subsp. <i>maculatus</i> (White-browed Scrubwren)			
8.	30948 <i>Smicronis brevirostris</i> (Weebill)			
<b>Accipitridae</b>				
9.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
10.	24281 <i>Accipiter cirrocephalus</i> subsp. <i>cirrocephalus</i> (Collared Sparrowhawk)			
11.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
12.	24282 <i>Accipiter fasciatus</i> subsp. <i>fasciatus</i> (Brown Goshawk)			
13.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
14.	24288 <i>Circus approximans</i> (Swamp Harrier)			
15.	24289 <i>Circus assimilis</i> (Spotted Harrier)			
16.	<i>Elanus axillaris</i>			
17.	24290 <i>Elanus caeruleus</i> subsp. <i>axillaris</i> (Australian Black-shouldered Kite)			
18.	24293 <i>Haliaeetus leucogaster</i> (White-bellied Sea-Eagle)			
19.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
20.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
21.	<i>Lophoictinia isura</i>			
22.	48591 <i>Pandion cristatus</i> (Osprey, Eastern Osprey)		IA	
<b>Actinopodidae</b>				
23.	<i>Missulena granulosa</i>			
24.	<i>Missulena hoggi</i>			
25.	<i>Missulena occatoria</i>			
26.	<i>Missulena torbayensis</i>			
<b>Aegothelidae</b>				
27.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			
<b>Aeshnidae</b>				
28.	<i>Aeshnidae</i> sp.			
<b>Agamidae</b>				
29.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
<b>Amphisopodidae</b>				
30.	<i>Amphisopodidae</i> sp.			
<b>Anapidae</b>				
31.	<i>Chasmocephalon flinders</i>			
<b>Anatidae</b>				
32.	24310 <i>Anas castanea</i> (Chestnut Teal)			
33.	24312 <i>Anas gracilis</i> (Grey Teal)			
34.	24313 <i>Anas platyrhynchos</i> (Mallard)			
35.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
36.	25550 <i>Anas rhynchotis</i> subsp. <i>rhynchotis</i> (Australasian Shoveler)			
37.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
38.	24318 <i>Aythya australis</i> (Hardhead)			
39.	24319 <i>Biziura lobata</i> (Musk Duck)			
40.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
41.	24322 <i>Cygnus atratus</i> (Black Swan)			
42.	24326 <i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
43.	24328 <i>Oxyura australis</i> (Blue-billed Duck)		P4	
44.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
<b>Ancylidae</b>				
45.	<i>Ancylidae</i> sp.			
<b>Anhingidae</b>				
46.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
<b>Apodidae</b>				
47.	25554 <i>Apus pacificus</i> (Fork-tailed Swift, Pacific Swift)		IA	
<b>Arcanidae</b>				
48.	<i>Arcana aurita</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
49.	<i>Caprichthys gymnura</i>			
50.	<i>Capropygia unistriata</i>			
<b>Araneidae</b>				
51.	<i>Arachnura higginsi</i>			
52.	<i>Araneus cyphoxis</i>			
53.	<i>Araneus senicaudatus</i>			
54.	<i>Austracantha minax</i>			
55.	<i>Backobourkia heroine</i>			
56.	<i>Nephila edulis</i>			
<b>Archaeidae</b>				
57.	42361 <i>Zephyrarchaea mainae</i> (Main's assassin spider)		T	
<b>Ardeidae</b>				
58.	25558 <i>Ardea ibis</i> (Cattle Egret)			
59.	41324 <i>Ardea modesta</i> (great egret, white egret)			
60.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
61.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
62.	24345 <i>Botaurus poiciloptilus</i> (Australasian Bittern)		T	
63.	<i>Egretta novaehollandiae</i>			
64.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
<b>Argiolestidae</b>				
65.	<i>Megapodagrionidae</i> sp.			
<b>Arkyidae</b>				
66.	<i>Arkys alticephala</i>			
67.	<i>Arkys walckenaeri</i>			
<b>Artamidae</b>				
68.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
69.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
<b>Atherinidae</b>				
70.	<i>Atherinosoma</i> sp.			
71.	<i>Atherinosoma wallacei</i>			
<b>Atrichornithidae</b>				
72.	24358 <i>Atrichornis clamosus</i> (Noisy Scrub-bird, tjimiluk)		T	
<b>Baetidae</b>				
73.	<i>Baetidae</i> sp.			
<b>Balaenopteridae</b>				
74.	24048 <i>Balaenoptera musculus</i> subsp. <i>brevicauda</i> (Pygmy Blue Whale)		T	
<b>Bathysauridae</b>				
75.	<i>Saurida tumbil</i>			
<b>Belonidae</b>				
76.	??			
<b>Berycidae</b>				
77.	<i>Centroberyx gerrardi</i>			
<b>Boidae</b>				
78.	25240 <i>Morelia spilota</i> subsp. <i>imbricata</i> (Carpet Python)			
<b>Bothriuridae</b>				
79.	<i>Cercophonius sulcatus</i>			
<b>Burramyidae</b>				
80.	24086 <i>Cercartetus concinnus</i> (Western Pygmy-possum, Mundarda)			
<b>Cacatuidae</b>				
81.	<i>Eolophus roseicapillus</i>			
<b>Caddidae</b>				
82.	<i>Hesperopilio mainae</i>			
<b>Caenidae</b>				
83.	<i>Caenidae</i> sp.			
<b>Callanthiidae</b>				
84.	<i>Callanthias australis</i>			
<b>Callionymidae</b>				
85.	<i>Foetorepus calaupomus</i>			
<b>Campephagidae</b>				



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
86.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
<b>Canidae</b>				
87.	24040 <i>Vulpes vulpes</i> (Red Fox)	Y		
<b>Caprimulgidae</b>				
88.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
<b>Carangidae</b>				
89.	<i>Naucrates ductor</i>			
90.	<i>Seriola lalandi</i>			
91.	<i>Trachurus declivis</i>			
<b>Carcharhinidae</b>				
92.	<i>Carcharhinus obscurus</i>			
93.	<i>Prionace glauca</i>			
<b>Casuariidae</b>				
94.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
<b>Ceinidae</b>				
95.	<i>Ceinidae</i> sp.			
<b>Ceratiidae</b>				
96.	<i>Ceratias tentaculatus</i>			
<b>Ceratopogonidae</b>				
97.	<i>Ceratopogonidae</i> sp.			
<b>Charadriidae</b>				
98.	25575 <i>Charadrius leschenaultii</i> (Greater Sand Plover)		IA	
99.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
100.	47937 <i>Eiseyornis melanops</i> (Black-fronted Dotterel)			
101.	24379 <i>Erythrogonys cinctus</i> (Red-kneed Dotterel)			
102.	24382 <i>Pluvialis fulva</i> (Pacific Golden Plover)		IA	
103.	24383 <i>Pluvialis squatarola</i> (Grey Plover)		IA	
104.	48135 <i>Thinornis rubricollis</i> (Hooded Plover, Hooded Dotterel)		P4	
105.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
<b>Cheilodactylidae</b>				
106.	<i>Nemadactylus macropterus</i>			
<b>Cheloniidae</b>				
107.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
<b>Cheluidae</b>				
108.	43380 <i>Chelodina colliei</i> (South-western Snake-necked Turtle)			
<b>Chernetidae</b>				
109.	<i>Nesidiochernes slateri</i>			
<b>Chironemidae</b>				
110.	<i>Chironemus georgianus</i>			
111.	<i>Threpterus maculosus</i>			
<b>Chironomidae</b>				
112.	<i>Chironominae</i> sp.			
113.	<i>Orthoclaadiinae</i> sp.			
114.	<i>Tanypodinae</i> sp.			
<b>Clinidae</b>				
115.	<i>Cristiceps aurantiacus</i>			
116.	<i>Cristiceps australis</i>			
117.	<i>Heteroclinus roseus</i>			
<b>Clupeidae</b>				
118.	<i>Sardinella lemuru</i> ?			
119.	<i>Sardinops neopilchardus</i>			
<b>Coenagrionidae</b>				
120.	<i>Coenagrionidae</i> sp.			
<b>Columbidae</b>				
121.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
122.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
123.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
124.	25587 <i>Phaps elegans</i> (Brush Bronzewing)			
125.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
<b>Congiopodidae</b>				

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
126.	<i>Perryena leucometopon</i>			
<b>Congridae</b>				
127.	<i>Scalanago lateralis</i>			
<b>Corduliidae</b>				
128.	<i>Corduliidae sp.</i>			
<b>Corixidae</b>				
129.	<i>Corixidae sp.</i>			
<b>Corvidae</b>				
130.	25592 <i>Corvus coronoides</i> (Australian Raven)			
131.	24417 <i>Corvus coronoides subsp. perplexus</i> (Australian Raven)			
<b>Cracticidae</b>				
132.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
133.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
134.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
135.	24426 <i>Strepera versicolor subsp. plumbea</i> (Grey Currawong)			
<b>Cuculidae</b>				
136.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
137.	24427 <i>Cacomantis flabelliformis subsp. flabelliformis</i> (Fan-tailed Cuckoo)			
138.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
139.	24432 <i>Chrysococcyx lucidus subsp. plagosus</i> (Shining Bronze Cuckoo)			
<b>Culicidae</b>				
140.	<i>Culicidae sp.</i>			
<b>Cyprididae</b>				
141.	<i>Candonocypris novaezelandiae</i>			
142.	<i>Ilyodromus ellipticus</i>			
<b>Cypridopsidae</b>				
143.	<i>Sarscypridopsis aculeata</i>			
<b>Dasyatidae</b>				
144.	<i>Dasyatis brevicaudata</i>			
<b>Dasyornithidae</b>				
145.	24440 <i>Dasyornis longirostris</i> (Western Bristlebird)		T	
<b>Dasyuridae</b>				
146.	24088 <i>Antechinus flavipes subsp. leucogaster</i> (Yellow-footed Antechinus, Mardo)			
147.	24092 <i>Dasyurus geoffroii</i> (Chuditch, Western Quoll)		T	
148.	24111 <i>Sminthopsis gilberti</i> (Gilbert's Dunnart)			
149.	25515 <i>Sminthopsis griseoventer</i> (Grey-bellied Dunnart)			
150.	<i>Sminthopsis murina</i>			
<b>Delphinidae</b>				
151.	24052 <i>Delphinus delphis</i> (Common Dolphin)			
152.	30954 <i>Tursiops aduncus</i> (Indo-Pacific Bottlenose Dolphin)			
<b>Desidae</b>				
153.	<i>Badumna microps</i>			
154.	<i>Baiami torbayensis</i>			
155.	<i>Desis hartmeyerii</i>			Y
<b>Dicaeidae</b>				
156.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
<b>Dicruridae</b>				
157.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
158.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
159.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
160.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
<b>Dinolestidae</b>				
161.	<i>Dinolestes lewini</i>			
<b>Diodontidae</b>				
162.	<i>Allomycterus pilatus</i>			
163.	<i>Diodon nichthemerus</i>			
<b>Diomedaeidae</b>				
164.	30836 <i>Diomedea exulans subsp. exulans</i> (Snowy Albatross)		T	
165.	34007 <i>Thalassarche chlororhynchos</i> (Atlantic Yellow-nosed Albatross)		T	
<b>Dugesidae</b>				

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
166.	<i>Dugesiidae sp.</i>			
<b>Dytiscidae</b>				
167.	<i>Dytiscidae sp.</i>			
<b>Echeneidae</b>				
168.	<i>Remora remora</i>			
<b>Ecnomidae</b>				
169.	<i>Ecnomidae sp.</i>			
<b>Elapidae</b>				
170.	25251 <i>Echiopsis curta</i> (Bardick)			
171.	25250 <i>Elapognathus coronatus</i> (Crowned Snake)			
172.	43384 <i>Hydrophis platurus</i> (Yellow-bellied Seasnake)			
173.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
174.	25255 <i>Parasuta nigriceps</i>			
175.	25259 <i>Pseudonaja affinis subsp. affinis</i> (Dugite)			
176.	30818 <i>Rhinoplocephalus bicolor</i> (Square-nosed Snake)			
<b>Elopidae</b>				
177.	<i>Elops hawaiiensis</i>			
<b>Empididae</b>				
178.	<i>Empididae sp.</i>			
<b>Engraulidae</b>				
179.	<i>Engraulis australis</i>			
<b>Ephydriidae</b>				
180.	<i>Ephydriidae sp.</i>			
<b>Estrilidae</b>				
181.	24645 <i>Stagonopleura oculata</i> (Red-eared Firetail)			
<b>Exocoetidae</b>				
182.	<i>Cypselurus sp.</i>			
<b>Falconidae</b>				
183.	25621 <i>Falco berigora</i> (Brown Falcon)			
184.	24471 <i>Falco berigora subsp. berigora</i> (Brown Falcon)			
185.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
186.	24472 <i>Falco cenchroides subsp. cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
187.	25623 <i>Falco longipennis</i> (Australian Hobby)			
188.	24474 <i>Falco longipennis subsp. longipennis</i> (Australian Hobby)			
189.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
190.	24475 <i>Falco peregrinus subsp. macropus</i> (Australian Peregrine Falcon)		S	
<b>Galaxiidae</b>				
191.	<i>Galaxias maculatus</i>			
192.	34028 <i>Galaxias occidentalis</i> (Western Minnow)			
193.	34026 <i>Galaxiella munda</i> (mud minnow, western dwarf galaxias)			T
194.	34027 <i>Galaxiella nigrostriata</i> (Black-stripe Minnow, black-striped dwarf galaxias)			T
<b>Garypidae</b>				
195.	<i>Synsphyronus magnus</i>			
<b>Garypinidae</b>				
196.	<i>Protogarypinus giganteus</i>			
<b>Gekkonidae</b>				
197.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
<b>Gelastocoridae</b>				
198.	<i>Gelastocoridae sp.</i>			
<b>Gempylidae</b>				
199.	<i>Thyrsites atun</i>			
<b>Geotriidae</b>				
200.	34030 <i>Geotria australis</i> (Pouched Lamprey)		P1	
<b>Gerreidae</b>				
201.	<i>Parequula melbournensis</i>			
<b>Girellidae</b>				
202.	<i>Girella zebra</i>			
<b>Glossiphoniidae</b>				
203.	<i>Glossiphoniidae sp.</i>			



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<b>Gnaphosidae</b>				
204.	<i>Megamyrmecon penicillatum</i>			Y
<b>Gnathanacanthidae</b>				
205.	<i>Gnathanacanthus goetzei</i>			
<b>Gobiidae</b>				
206.	<i>Callogobius mucosus</i>			
207.	<i>Favonigobius lateralis</i>			
208.	<i>Pseudogobius olorum</i>			
<b>Gomphidae</b>				
209.	<i>Gomphidae sp.</i>			
<b>Gordiidae</b>				
210.	<i>Gordiidae sp.</i>			
<b>Gripopterygidae</b>				
211.	<i>Gripopterygidae sp.</i>			
<b>Gyrinidae</b>				
212.	<i>Gyrinidae sp.</i>			
<b>Haematopodidae</b>				
213.	25627 <i>Haematopus fuliginosus</i> (Sooty Oystercatcher)			
214.	24487 <i>Haematopus longirostris</i> (Pied Oystercatcher)			
<b>Halcyonidae</b>				
215.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
216.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
217.	24309 <i>Todiramphus sanctus subsp. sanctus</i> (Sacred Kingfisher)			
<b>Hebridae</b>				
218.	<i>Hebridae sp.</i>			
<b>Hemicorduliidae</b>				
219.	<i>Hemicorduliidae sp.</i>			
<b>Heterodontidae</b>				
220.	<i>Heterodontus portusjacksoni</i>			
<b>Hirundinidae</b>				
221.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
222.	48060 <i>Petrochelidon ariel</i> (Fairy Martin)			
223.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
<b>Hydraenidae</b>				
224.	<i>Hydraenidae sp.</i>			
<b>Hydrobiosidae</b>				
225.	<i>Hydrobiosidae sp.</i>			
<b>Hydrometridae</b>				
226.	<i>Hydrometridae sp.</i>			
<b>Hydrophilidae</b>				
227.	<i>Hydrophilidae sp.</i>			
<b>Hydropsychidae</b>				
228.	<i>Hydropsychidae sp.</i>			
<b>Hydroptilidae</b>				
229.	<i>Hydroptilidae sp.</i>			
<b>Hylidae</b>				
230.	25378 <i>Litoria adelaidensis</i> (Slender Tree Frog)			
231.	25388 <i>Litoria moorei</i> (Motorbike Frog)			
<b>Hypnidae</b>				
232.	<i>Hypnos monopterygium</i>			
<b>Hyriidae</b>				
233.	<i>Hyriidae sp.</i>			
<b>Idiopidae</b>				
234.	<i>Aganippe raphiduca</i>			
<b>Istiophoridae</b>				
235.	<i>Makaira indica</i>			
<b>Iulomorphidae</b>				
236.	<i>Atelomastix mainae</i>			

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237.	<i>Samichus decoratus</i>			
<b>Ixodidae</b>				
238.	<i>Ixodes australiensis</i>			
<b>Kyphosidae</b>				
239.	<i>Kyphosus gladius MS</i>			
<b>Labridae</b>				
240.	<i>Achoerodus gouldii</i>			
241.	<i>Austrolabrus maculatus</i>			
242.	<i>Haletta semifasciata</i>			
243.	<i>Ophthalmolepis lineolatus</i>			
244.	<i>Siphonognathus argyrophanes</i>			
<b>Lamnidae</b>				
245.	34031 <i>Carcharodon carcharias</i> (Great White Shark)		T	
<b>Lamponidae</b>				
246.	<i>Lampona cylindrata</i>			
247.	<i>Lampona foliifera</i>			
248.	<i>Lampona punctigera</i>			
249.	<i>Lampona torbay</i>			Y
250.	<i>Prionosternum scutatum</i>			
<b>Laridae</b>				
251.	<i>Chroicocephalus novaehollandiae</i>			
252.	48587 <i>Hydroprogne caspia</i> (Caspian Tern)		IA	
253.	24511 <i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Silver Gull)			
254.	25638 <i>Larus pacificus</i> (Pacific Gull)			
255.	24522 <i>Sterna bergii</i> (Crested Tern)			
256.	48597 <i>Thalasseus bergii</i> (Crested Tern)		IA	
<b>Lepidogalaxiidae</b>				
257.	47983 <i>Lepidogalaxias salamandroides</i> (Salamanderfish)		T	
<b>Leporidae</b>				
258.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
<b>Leptoceridae</b>				
259.	<i>Leptoceridae</i> sp.			
<b>Leptophlebiidae</b>				
260.	<i>Leptophlebiidae</i> sp.			
<b>Libellulidae</b>				
261.	<i>Libellulidae</i> sp.			
<b>Limnodynastidae</b>				
262.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
263.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
<b>Lophotidae</b>				
264.	<i>Eumecichthys fiski</i>			Y
<b>Lycosidae</b>				
265.	<i>Arteria cingulipes</i>			
266.	<i>Arteria flavimana</i>			
267.	<i>Artoniopsis eccentrica</i>			
268.	<i>Tasmanicosa leuckartii</i>			
269.	<i>Venatrix pullastra</i>			
<b>Macropodidae</b>				
270.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
271.	48022 <i>Notamacropus irma</i> (Western Brush Wallaby)		P4	
272.	24145 <i>Setonix brachyurus</i> (Quokka)		T	
<b>Maluridae</b>				
273.	25650 <i>Malurus elegans</i> (Red-winged Fairy-wren)			
274.	24551 <i>Malurus pulcherrimus</i> (Blue-breasted Fairy-wren)			
275.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
276.	25655 <i>Stipiturus malachurus</i> (Southern Emu-wren)			
277.	24554 <i>Stipiturus malachurus</i> subsp. <i>westernensis</i> (Southern Emu-wren)			
<b>Melanostomiidae</b>				
278.	<i>Opostomias micripnus</i>			Y
<b>Meliphagidae</b>				
279.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			

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280.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
281.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
282.	24567 <i>Epthianura albiglans</i> (White-fronted Chat)			
283.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
284.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
285.	24582 <i>Lichmera indistincta</i> subsp. <i>indistincta</i> (Brown Honeyeater)			
286.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
287.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
288.	24587 <i>Melithreptus chloropsis</i> (Western White-naped Honeyeater)			
289.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
290.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
<b>Micropholcommatidae</b>				
291.	<i>Raveniella peckorum</i>			
292.	<i>Taphiassa robertsi</i>			
<b>Mimetidae</b>				
293.	<i>Australomimetes diabolicus</i>			
<b>Miturgidae</b>				
294.	<i>Mituliodon tarantulinus</i>			
<b>Molidae</b>				
295.	<i>Ranzania laevis</i>			
<b>Molossidae</b>				
296.	24183 <i>Mormopterus loriae</i> (Little Northern Freetail-bat)			
<b>Monacanthidae</b>				
297.	<i>Acanthaluteres brownii</i>			
298.	<i>Acanthaluteres vittiger</i>			
299.	<i>Anacanthus barbatus</i>			
300.	<i>Brachaluteres jacksonianus</i>			
301.	<i>Cantheschenia longipinnis</i>			
302.	<i>Eubalichthys caeruleoguttatus</i>			
303.	<i>Eubalichthys cyanoura</i>			
304.	<i>Eubalichthys mosaicus</i>			
305.	<i>Meuschenia freycineti</i>			
306.	<i>Meuschenia galii</i>			
307.	<i>Meuschenia hippocrepis</i>			
308.	<i>Parika scaber</i>			
309.	<i>Scobinichthys granulatus</i>			
<b>Monoscutidae</b>				
310.	<i>Hypomegalopsalis tanisphyros</i>			
<b>Moridae</b>				
311.	<i>Lotella</i> sp.			Y
312.	<i>Pseudophycis barbata</i>			
<b>Motacillidae</b>				
313.	24599 <i>Anthus australis</i> subsp. <i>australis</i> (Australian Pipit)			
314.	24600 <i>Anthus cervinus</i> (Red-throated Pipit)			
<b>Mugilidae</b>				
315.	<i>Liza vaigiensis</i>			
<b>Mullidae</b>				
316.	<i>Upeneus tragula</i>			
<b>Muraenidae</b>				
317.	<i>Gymnothorax prasinus</i>			
318.	<i>Gymnothorax richardsoni</i>			
<b>Muridae</b>				
319.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
320.	24223 <i>Mus musculus</i> (House Mouse)	Y		
321.	24230 <i>Pseudomys albocinereus</i> (Ash-grey Mouse)			
322.	24243 <i>Rattus fuscipes</i> (Western Bush Rat)			
323.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
<b>Myobatrachidae</b>				
324.	25398 <i>Crinia georgiana</i> (Quacking Frog)			
325.	25399 <i>Crinia glauerti</i> (Clicking Frog)			
326.	25401 <i>Crinia pseudinsignifera</i> (Bleating Froglet)			
327.	25402 <i>Crinia subinsignifera</i> (South Coast Froglet)			
328.	25404 <i>Geocrinia leai</i> (Ticking Frog)			



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329.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
<b>Nannopercidae</b>				
330.	<i>Edelia vittata</i>			
331.	34033 <i>Nannatherina balstoni</i> (Balston's Pygmy Perch)		T	
<b>Nemesiidae</b>				
332.	<i>Aname tepperi</i>			
<b>Neobalaenidae</b>				
333.	24072 <i>Caperea marginata</i> (Pygmy Right Whale)			
<b>Neosebastidae</b>				
334.	<i>Maxillcosta scabriceps</i>			
<b>Neosittidae</b>				
335.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
336.	24606 <i>Daphoenositta chrysoptera</i> subsp. <i>pileata</i> (Varied Sittella, Black-capped Sittella)			
<b>Nomeidae</b>				
337.	<i>Cubiceps cf. baxteri</i>			Y
<b>Notonectidae</b>				
338.	<i>Notonectidae</i> sp.			
<b>Odacidae</b>				
339.	<i>Odax acroptilus</i>			
340.	<i>Odax cyanomelas</i>			
<b>Odontaspidae</b>				
341.	34034 <i>Carcharias taurus</i> (Grey Nurse Shark)		T	
<b>Oligochaeta</b>				
342.	<i>Oligochaeta</i> sp.			
<b>Ophichthidae</b>				
343.	<i>Muraenichthys breviceps</i>			
344.	<i>Ophisurus serpens</i>			
<b>Oplegnathidae</b>				
345.	<i>Oplegnathus woodwardi</i>			
<b>Orectolobidae</b>				
346.	<i>Orectolobus hutchinsi</i>			
347.	<i>Sutorectus tentaculatus</i>			
<b>Orsolobidae</b>				
348.	<i>Australobus torbay</i>			
349.	<i>Tasmanoonops mainae</i>			
<b>Ostraciidae</b>				
350.	<i>Lactoria concatenatus</i>			
<b>Otariidae</b>				
351.	24208 <i>Arctocephalus forsteri</i> (New Zealand Fur Seal, long-nosed fur-seal)		S	
352.	24209 <i>Arctocephalus tropicalis</i> (Subantarctic fur-seal)		T	
353.	24210 <i>Neophoca cinerea</i> (Australian Sea-lion)		T	
<b>Otididae</b>				
354.	24610 <i>Ardeotis australis</i> (Australian Bustard)			
<b>Pachycephalidae</b>				
355.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
356.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
357.	25677 <i>Falcunculus frontatus</i> (Crested Shrike-tit)			
358.	24618 <i>Oreoica gutturalis</i> (Crested Bellbird)			
359.	34011 <i>Oreoica gutturalis</i> subsp. <i>gutturalis</i> (Crested Bellbird (southern))			
360.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
361.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
<b>Palaemonidae</b>				
362.	<i>Palaemonidae</i> sp.			
<b>Paradoxosomatidae</b>				
363.	<i>Akamptogonus novarae</i>			
<b>Pararchaeidae</b>				
364.	<i>Ozarchaea westraliensis</i>			
<b>Parascylliidae</b>				
365.	<i>Parascyllium variolatum</i>			

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<b>Parastacidae</b>				
366.	33939 <i>Cherax cainii</i> (Marron)			
367.	<i>Cherax destructor</i>			
368.	<i>Cherax preissii</i>			
369.	<i>Parastacidae</i> sp.			
<b>Pardalotidae</b>				
370.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
371.	24625 <i>Pardalotus punctatus</i> subsp. <i>punctatus</i> (Spotted Pardalote)			
372.	24626 <i>Pardalotus punctatus</i> subsp. <i>xanthopyge</i> (Yellow-rumped Pardalote)			
373.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
<b>Passeridae</b>				
374.	24642 <i>Passer montanus</i> (Eurasian Tree Sparrow)	Y		
<b>Pataecidae</b>				
375.	<i>Neopataecus waterhousii</i>			
<b>Pegasidae</b>				
376.	<i>Pegasus lancifer</i>			
<b>Pelecanidae</b>				
377.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
<b>Pelecanoididae</b>				
378.	24649 <i>Pelecanoides urinatrix</i> subsp. <i>exsul</i> (Common Diving Petrel)			
<b>Pempheridae</b>				
379.	<i>Pempheris multiradiata</i>			
<b>Pentacerotidae</b>				
380.	<i>Paristiopterus gallipavo</i>			
<b>Peramelidae</b>				
381.	48588 <i>Isoodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
<b>Percichthyidae</b>				
382.	<i>Bostockia porosa</i>			
383.	<i>Maccullochella peelii</i>			Y
384.	<i>Nannoperca vittata</i>			
385.	<i>Polyprion americanus</i>			Y
<b>Percidae</b>				
386.	<i>Perca fluviatilis</i>			
<b>Perthidae</b>				
387.	<i>Perthiidae</i> sp.			
<b>Petroicidae</b>				
388.	24651 <i>Eopsaltria australis</i> subsp. <i>griseogularis</i> (Western Yellow Robin)			
389.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
390.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
391.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
392.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
<b>Phalacrocoracidae</b>				
393.	<i>Microcarbo melanoleucos</i>			
394.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
395.	24666 <i>Phalacrocorax melanoleucos</i> subsp. <i>melanoleucos</i> (Little Pied Cormorant)			
396.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
397.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
<b>Phalangeridae</b>				
398.	24158 <i>Trichosurus vulpecula</i> subsp. <i>vulpecula</i> (Common Brushtail Possum)			
<b>Phasianidae</b>				
399.	24671 <i>Coturnix pectoralis</i> (Stubble Quail)			
400.	25701 <i>Coturnix ypsilophora</i> (Brown Quail)			
401.	24673 <i>Coturnix ypsilophora</i> subsp. <i>australis</i> (Brown Quail)			
402.	24672 <i>Coturnix ypsilophora</i> subsp. <i>cervina</i> (Brown Quail)			
<b>Phreatoicidae</b>				
403.	<i>Phreatoicidae</i> sp.			
<b>Physeteridae</b>				
404.	24073 <i>Physeter macrocephalus</i> (Sperm Whale)		T	
<b>Physidae</b>				
405.	<i>Physidae</i> sp.			

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<b>Pinguipedidae</b>				
406.	<i>Parapercis haackei</i>			
<b>Planorbidae</b>				
407.	<i>Planorbidae</i> sp.			
<b>Platycephalidae</b>				
408.	<i>Neoplatycephalus conatus</i>			
<b>Plesiopidae</b>				
409.	<i>Paraplesiops meleagris</i>			
<b>Pleuronectidae</b>				
410.	<i>Ammotretis rostratus</i>			
<b>Plotosidae</b>				
411.	<i>Cnidoglanis macrocephalus</i>			
<b>Podargidae</b>				
412.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
413.	24679 <i>Podargus strigoides</i> subsp. <i>brachypterus</i> (Tawny Frogmouth)			
<b>Podicipedidae</b>				
414.	25704 <i>Podiceps cristatus</i> (Great Crested Grebe)			
415.	24680 <i>Podiceps cristatus</i> subsp. <i>australis</i> (Great Crested Grebe)			
416.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
417.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
<b>Poeciliidae</b>				
418.	<i>Gambusia affinis</i>			
<b>Polycentropodidae</b>				
419.	<i>Polycentropodidae</i> sp.			
<b>Pomatostomidae</b>				
420.	24683 <i>Pomatostomus superciliosus</i> (White-browed Babbler)			
<b>Potoroidae</b>				
421.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)			T
<b>Pristiophoridae</b>				
422.	<i>Pristiophorus cirratus</i>			
<b>Procellariidae</b>				
423.	41326 <i>Ardenna carneipes</i> (Flesh-footed Shearwater, Fleshy-footed Shearwater)			T
424.	24690 <i>Macronectes giganteus</i> (Southern Giant Petrel)			IA
425.	<i>Pterodroma macroptera</i> subsp. <i>macroptera</i>			
426.	24711 <i>Puffinus assimilis</i> subsp. <i>assimilis</i> (Little Shearwater)			
<b>Prodidomidae</b>				
427.	<i>Molycra quadricauda</i>			
428.	<i>Nomindra leeuweni</i>			
<b>Pseudocheiridae</b>				
429.	24166 <i>Pseudocheirus occidentalis</i> (Western Ringtail Possum, ngwayir)			T
<b>Psittacidae</b>				
430.	<i>Barnardius zonarius</i>			
431.	25713 <i>Cacatua galerita</i> (Sulphur-crested Cockatoo)			
432.	24725 <i>Cacatua roseicapilla</i> subsp. <i>assimilis</i> (Galah)			
433.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
434.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black Cockatoo)			T
435.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)			T
436.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)			T
437.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)			T
438.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
439.	24739 <i>Neophema petrophila</i> (Rock Parrot)			
440.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
441.	24745 <i>Platycercus icterotis</i> subsp. <i>icterotis</i> (Western Rosella)			
442.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
443.	25722 <i>Polytelis anthopeplus</i> (Regent Parrot)			
444.	<i>Purpureicephalus spurius</i>			
<b>Psittaculidae</b>				
445.	48085 <i>Psittacula krameri</i> (Indian Ringnecked Parrot, Rose-ringed Parakeet)	Y		



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Pygopodidae</b>				
446.	24994 <i>Aprasia striolata</i> (Lined Worm-lizard)			
447.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
<b>Pyralidae</b>				
448.	<i>Pyralidae</i> sp.			
<b>Rajidae</b>				
449.	<i>Raja</i> sp.			
<b>Rallidae</b>				
450.	25727 <i>Fulica atra</i> (Eurasian Coot)			
451.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
452.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
453.	25730 <i>Gallirallus philippensis</i> (Buff-banded Rail)			
454.	24765 <i>Gallirallus philippensis</i> subsp. <i>mellori</i> (Buff-banded Rail)			
455.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
456.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
457.	24769 <i>Porzana fluminea</i> (Australian Spotted Crake)			
458.	25732 <i>Porzana pusilla</i> (Baillon's Crake)			
459.	24771 <i>Porzana tabuensis</i> (Spotless Crake)			
460.	48141 <i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
<b>Recurvirostridae</b>				
461.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
462.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
463.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
<b>Rhinobatidae</b>				
464.	<i>Trygonorrhina fasciata</i>			
<b>Scincidae</b>				
465.	25027 <i>Ctenotus australis</i>			
466.	25031 <i>Ctenotus catenifer</i>			
467.	25049 <i>Ctenotus labillardieri</i>			
468.	25096 <i>Egernia kingii</i> (King's Skink)			
469.	25100 <i>Egernia napoleonis</i>			
470.	30919 <i>Hemiergis gracilipes</i> (skink)			
471.	25117 <i>Hemiergis peronii</i> subsp. <i>peronii</i>			
472.	41416 <i>Liopholis pulchra</i> subsp. <i>pulchra</i> (South-western Rock Skink, Spectacled Rock Skink)			
473.	42413 <i>Lissolepis luctuosa</i> (Western Swamp Skink)			
474.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
475.	25207 <i>Tiliqua rugosa</i> subsp. <i>rugosa</i>			
<b>Sciomyzidae</b>				
476.	<i>Sciomyzidae</i> sp.			
<b>Scolopacidae</b>				
477.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
478.	24780 <i>Calidris alba</i> (Sanderling)		IA	
479.	25738 <i>Calidris canutus</i> (Red Knot, knot)		IA	
480.	24784 <i>Calidris ferruginea</i> (Curlew Sandpiper)		T	
481.	24788 <i>Calidris ruficollis</i> (Red-necked Stint)		IA	
482.	24790 <i>Calidris tenuirostris</i> (Great Knot)		T	
483.	30932 <i>Limosa lapponica</i> (Bar-tailed Godwit)		IA	
484.	24802 <i>Philomachus pugnax</i> (Ruff, reeve)		IA	
485.	24806 <i>Tringa glareola</i> (Wood Sandpiper)		IA	
486.	24808 <i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
<b>Scolopendridae</b>				
487.	<i>Cormocephalus aurantiipes</i>			
488.	<i>Cormocephalus michaelsoni</i>			
<b>Scomberesocidae</b>				
489.	<i>Scomberesox saurus</i>			
<b>Scombridae</b>				
490.	<i>Auxis thazard</i>			
491.	<i>Thunnus alalunga</i>			
492.	<i>Thunnus maccoyii</i>			
<b>Scorpididae</b>				
493.	<i>Tilodon sexfasciatum</i>			
<b>Scyliorhinidae</b>				
494.	<i>Aulohaelurus labiosus</i>			
495.	<i>Aulohaelurus labiosus?</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Sebastidae</b>				
496.	<i>Helicolenus percoides</i>			
<b>Serranidae</b>				
497.	<i>Acanthistius serratus</i>			
498.	<i>Caesiooperca rasor</i>			
499.	<i>Caesioscorpis theagenes</i>			
500.	<i>Epinephelides armatus</i>			
<b>Sillaginidae</b>				
501.	<i>Sillaginodes punctata</i>			
502.	<i>Sillago bassensis</i>			
<b>Simuliidae</b>				
503.	<i>Simuliidae sp.</i>			
<b>Siphonotidae</b>				
504.	<i>Siphonotus flavomarginatus</i>			
<b>Soleidae</b>				
505.	<i>Aseraggodes haackeanus</i>			
506.	<i>Synaptura hediste</i>			
507.	<i>Zebrias cancellatus</i>			
<b>Sparassidae</b>				
508.	<i>Isopeda leishmanni</i>			
509.	<i>Isopedella cana</i>			
<b>Sphaeriidae</b>				
510.	<i>Sphaeriidae sp.</i>			
<b>Spheniscidae</b>				
511.	24818 <i>Eudyptula minor subsp. novaehollandiae</i> (Little Penguin)			
<b>Sphyraenidae</b>				
512.	<i>Sphyraena barracuda</i>			
<b>Sphyrnidae</b>				
513.	<i>Sphyrna lewini</i>			
<b>Stratiomyidae</b>				
514.	<i>Stratiomyidae sp.</i>			
<b>Sturnidae</b>				
515.	25752 <i>Sturnus vulgaris</i> (Common Starling)	Y		
516.	24824 <i>Sturnus vulgaris subsp. vulgaris</i> (Common Starling)	Y		
<b>Sulidae</b>				
517.	48008 <i>Morus serrator</i> (Australasian Gannet)			
<b>Sylviidae</b>				
518.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
519.	24831 <i>Acrocephalus australis subsp. gouldi</i> (Australian Reed Warbler)			
520.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
521.	24838 <i>Megalurus gramineus subsp. gramineus</i> (Little Grassbird)			
<b>Syngnathidae</b>				
522.	<i>Leptoichthys fistularius</i>			
523.	34039 <i>Phycodurus eques</i> (Leafy Sea Dragon)		P2	
524.	<i>Phyllopteryx taeniolatus</i>			
525.	<i>Solegnathus lettiensis</i>			
526.	<i>Stigmatopora argus</i>			
527.	<i>Vanacampus phillipi</i>			
528.	<i>Vanacampus poecilolaemus</i>			
<b>Synodontidae</b>				
529.	<i>Saurida grandisquamis</i>			
530.	<i>Saurida undosquamis</i>			
<b>Synthemistidae</b>				
531.	<i>Synthemistidae sp.</i>			
<b>Talitridae</b>				
532.	<i>Talitridae sp.</i>			
<b>Tarsipedidae</b>				
533.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
<b>Telephlebiidae</b>				
534.	<i>Telephlebiidae sp.</i>			

Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Tetragnathidae</b>				
535.	<i>Pinkfloydia harveii</i>			
536.	<i>Tetragnatha caudifera</i>			Y
<b>Tetraodontidae</b>				
537.	<i>Contusus brevicaudus</i>			
538.	<i>Omegophora armilla</i>			
539.	<i>Torquigener vicinus</i>			
<b>Tetrarogidae</b>				
540.	<i>Gymnapistes marmoratus</i>			
<b>Threskiornithidae</b>				
541.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
542.	24843 <i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
543.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
<b>Thylacomyidae</b>				
544.	24168 <i>Macrotis lagotis</i> (Bilby, Dalgyte, Ninu)		T	
<b>Tipulidae</b>				
545.	<i>Tipulidae</i> sp.			
<b>Triakidae</b>				
546.	<i>Furgaleus macki</i>			
547.	<i>Galeorhinus galeus</i>			
548.	<i>Mustelus antarcticus</i>			
<b>Triglidae</b>				
549.	<i>Lepidotrigla papilio</i>			
550.	<i>Pterygotrigla polyommata</i>			
<b>Tripterygiidae</b>				
551.	<i>Lepidoblennius marmoratus</i>			
<b>Trombidiformes</b>				
552.	<i>Acariformes</i> sp.			
<b>Turnicidae</b>				
553.	48147 <i>Turnix varius</i> (Painted Button-quail)			
554.	24851 <i>Turnix velox</i> (Little Button-quail)			
<b>Tytonidae</b>				
555.	25762 <i>Tyto alba</i> (Barn Owl)			
556.	24852 <i>Tyto alba</i> subsp. <i>delicatula</i> (Barn Owl)			
557.	24855 <i>Tyto novaehollandiae</i> subsp. <i>novaehollandiae</i> (Masked Owl (southwest))		P3	
<b>Uranoscopidae</b>				
558.	<i>Kathetostoma laeue</i>			
559.	<i>Kathetostoma nigrofasciatum</i>			
<b>Urodacidae</b>				
560.	<i>Urodacus novaehollandiae</i>			
<b>Urolophidae</b>				
561.	<i>Trygonoptera mucosa</i>			
562.	<i>Urolophus gigas</i>			
563.	<i>Urolophus paucimaculatus</i>			
564.	<i>Urolophus</i> sp.			
<b>Varanidae</b>				
565.	25225 <i>Varanus rosenbergi</i> (Heath Monitor)			
<b>Veliferidae</b>				
566.	<i>Metavelifer multiradiatus</i>			
<b>Veliidae</b>				
567.	<i>Veliidae</i> sp.			
<b>Vespertilionidae</b>				
568.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
569.	24187 <i>Chalinolobus morio</i> (Chocolate Wattled Bat)			
570.	24189 <i>Falsistrellus mackenziei</i> (Western False Pipistrelle, Western Falsistrelle)		P4	
571.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
572.	24206 <i>Vespadelus regulus</i> (Southern Forest Bat)			
<b>Zeidae</b>				
573.	<i>Zeus faber</i>			



Name ID	Species Name	Naturalised	Conservation Code	<sup>1</sup> Endemic To Query Area
<b>Ziphiidae</b>				
574.	24080 <i>Mesoplodon layardii</i> (Strap-toothed Beaked Whale)			
<b>Zodariidae</b>				
575.	<i>Holasteron reinholdae</i>			Y
576.	<i>Storosa tetrica</i>			
<b>Zoridae</b>				
577.	<i>Argoctenus bidentatus</i>			
<b>Zosteropidae</b>				
578.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

**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.



# 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: 19/10/18 18:23:43

[Summary](#)

[Details](#)

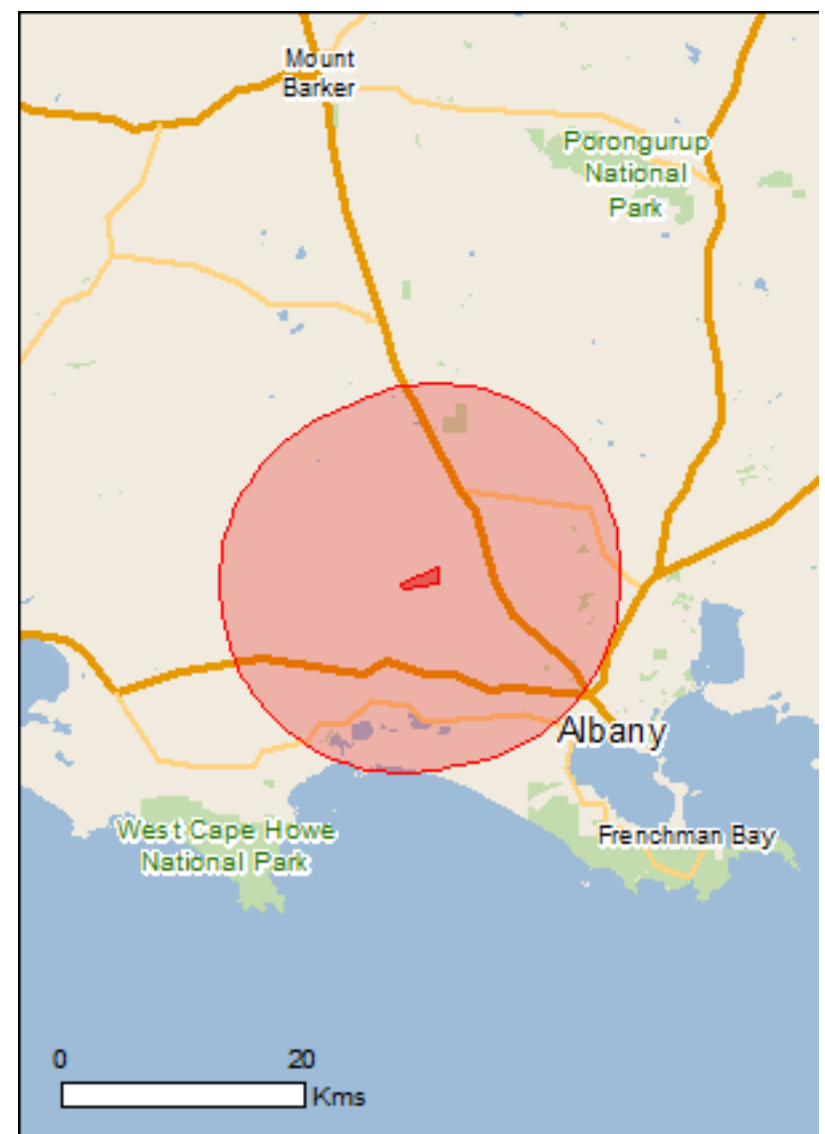
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

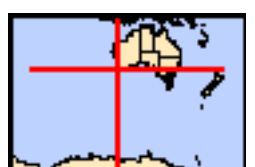
[Acknowledgements](#)



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[Coordinates](#)

[Buffer: 15.0Km](#)



# 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>	2
<a href="#">Listed Threatened Species:</a>	58
<a href="#">Listed Migratory Species:</a>	41

## 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>	65
<a href="#">Whales and Other Cetaceans:</a>	12
<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>	11
<a href="#">Regional Forest Agreements:</a>	1
<a href="#">Invasive Species:</a>	26
<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="#">Proteaceae Dominated Kwongkan Shrublands of the Southeast Coastal Floristic Province of Western Australia</a>	Endangered	Community may occur within area
<a href="#">Subtropical and Temperate Coastal Saltmarsh</a>	Vulnerable	Community likely to occur within area

### Listed Threatened Species

[\[ Resource Information \]](#)

Name	Status	Type of Presence
<b>Birds</b>		
<a href="#">Botaurus poiciloptilus</a> Australasian Bittern [1001]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to 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	Breeding 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="#">Cereopsis novaehollandiae grisea</a> Cape Barren Goose (south-western), Recherche Cape Barren Goose [25978]	Vulnerable	Species or species habitat may occur within area
<a href="#">Dasyornis longirostris</a> Western Bristlebird [515]	Endangered	Species or species habitat likely to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea dabbenena</a> Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area

Name	Status	Type of Presence
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Halobaena caerulea</a> Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
<a href="#">Limosa lapponica baueri</a> Bar-tailed Godwit (baueri), Western Alaskan Bar-tailed Godwit [86380]	Vulnerable	Species or species habitat may occur within area
<a href="#">Limosa lapponica menzbieri</a> Northern Siberian Bar-tailed Godwit, Bar-tailed Godwit (menzbieri) [86432]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	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="#">Pachyptila turtur subantarctica</a> Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Phoebastria fusca</a> Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area
<a href="#">Sternula nereis nereis</a> Australian Fairy Tern [82950]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
<a href="#">Thalassarche cauta cauta</a> Shy Albatross, Tasmanian Shy Albatross [82345]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche cauta steadi</a> White-capped Albatross [82344]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area

Fish

Name	Status	Type of Presence
<a href="#">Nannatherina balstoni</a> Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat likely to occur within area
<b>Mammals</b>		
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
<a href="#">Dasyurus geoffroii</a> Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Breeding known to occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat may occur within area
<a href="#">Parantechinus apicalis</a> Dibbler [313]	Endangered	Species or species habitat likely to occur within area
<a href="#">Pseudocheirus occidentalis</a> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area
<b>Other</b>		
<a href="#">Westralunio carteri</a> Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat likely to occur within area
<b>Plants</b>		
<a href="#">Banksia brownii</a> Brown's Banksia, Feather-leaved Banksia [8277]	Endangered	Species or species habitat known to occur within area
<a href="#">Banksia goodii</a> Good's Banksia [16727]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Banksia verticillata</a> Granite Banksia, Albany Banksia, River Banksia [8333]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Caladenia granitora</a> [65292]	Endangered	Species or species habitat may occur within area
<a href="#">Caladenia harringtoniae</a> Harrington's Spider-orchid, Pink Spider-orchid [56786]	Vulnerable	Species or species habitat may occur within area
<a href="#">Calectasia cyanea</a> Blue Tinsel Lily [7669]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Chordifex abortivus</a> Manypeaks Rush [64868]	Endangered	Species or species habitat likely to occur within area
<a href="#">Conostylis misera</a> Grass Conostylis [21320]	Endangered	Species or species habitat known to occur within area
<a href="#">Diuris drummondii</a> Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat likely to occur



Name	Status	Type of Presence within area
<a href="#">Drakaea micrantha</a> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Isopogon uncinatus</a> Albany Cone Bush, Hook-leaf Isopogon [20871]	Endangered	Species or species habitat known to occur within area
<a href="#">Kennedia glabrata</a> Northcliffe Kennedia [16452]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Sphenotoma drummondii</a> Mountain Paper-heath [21160]	Endangered	Species or species habitat may occur within area
<a href="#">Verticordia apecta</a> Hay River Featherflower, Scruffy Verticordia [65545]	Critically Endangered	Species or species habitat may occur within area
<a href="#">Verticordia fimbrilepis subsp. australis</a> Southern Shy Featherflower [24630]	Vulnerable	Species or species habitat known to occur within area

## Reptiles

<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Breeding likely to occur within area
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area

## Sharks

<a href="#">Carcharias taurus (west coast population)</a> Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area

## Listed Migratory Species

[ [Resource Information](#) ]

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

Name	Threatened	Type of Presence
<b>Migratory Marine Birds</b>		
<a href="#">Apus pacificus</a> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
<a href="#">Ardenna carneipes</a> Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Breeding known to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea dabbenena</a> Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

Name	Threatened	Type of Presence
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Hydroprogne caspia</a> Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#">Phoebastria fusca</a> Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or related behaviour may occur within area
<a href="#">Thalassarche cauta</a> Tasmanian Shy Albatross [89224]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<b>Migratory Marine Species</b>		
<a href="#">Balaena glacialis australis</a> Southern Right Whale [75529]	Endangered*	Breeding known to occur within area
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur within area
<a href="#">Caperea marginata</a> Pygmy Right Whale [39]		Species or species habitat may occur within area
<a href="#">Carcharodon carcharias</a> White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Breeding likely to occur within area
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area

Name	Threatened	Type of Presence
<a href="#">Lagenorhynchus obscurus</a> Dusky Dolphin [43]		Species or species habitat may occur within area
<a href="#">Lamna nasus</a> Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area
<a href="#">Manta alfredi</a> Reef Manta Ray, Coastal Manta Ray, Inshore Manta Ray, Prince Alfred's Ray, Resident Manta Ray [84994]		Species or species habitat may occur within area
<a href="#">Manta birostris</a> Giant Manta Ray, Chevron Manta Ray, Pacific Manta Ray, Pelagic Manta Ray, Oceanic Manta Ray [84995]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Rhincodon typus</a> Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area
<b>Migratory Terrestrial Species</b>		
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		Species or species habitat may occur within area
<b>Migratory Wetlands Species</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known to occur within area
<a href="#">Calidris acuminata</a> Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known 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="#">Pandion haliaetus</a> Osprey [952]		Species or species habitat known 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

[\[ Resource Information \]](#)

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

#### Name

Commonwealth Land -

### Listed Marine Species

[\[ Resource Information \]](#)

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

Name	Threatened	Type of Presence
<b>Birds</b>		
<a href="#">Actitis hypoleucos</a> Common Sandpiper [59309]		Species or species habitat known 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 known 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 likely to occur within area
<a href="#">Calidris canutus</a> Red Knot, Knot [855]	Endangered	Species or species habitat known to occur within area
<a href="#">Calidris ferruginea</a> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat known to occur within area
<a href="#">Calidris melanotos</a> Pectoral Sandpiper [858]		Species or species habitat likely to occur within area
<a href="#">Catharacta skua</a> Great Skua [59472]		Species or species habitat may occur within area
<a href="#">Cereopsis novaehollandiae grisea</a> Cape Barren Goose (south-western), Recherche Cape Barren Goose [25978]	Vulnerable	Species or species habitat may occur within area
<a href="#">Chrysococcyx osculans</a> Black-eared Cuckoo [705]		Species or species habitat likely to occur within area
<a href="#">Diomedea antipodensis</a> Antipodean Albatross [64458]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea dabbenena</a> Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area
<a href="#">Diomedea epomophora</a> Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area

Name	Threatened	Type of Presence
<a href="#">Diomedea exulans</a> Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Diomedea sanfordi</a> Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Haliaeetus leucogaster</a> White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area
<a href="#">Halobaena caerulea</a> Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area
<a href="#">Larus pacificus</a> Pacific Gull [811]		Foraging, feeding or related behaviour known to occur within area
<a href="#">Limosa lapponica</a> Bar-tailed Godwit [844]		Species or species habitat known to occur within area
<a href="#">Macronectes giganteus</a> Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area
<a href="#">Macronectes halli</a> Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area
<a href="#">Merops ornatus</a> Rainbow Bee-eater [670]		Species or species habitat may occur within area
<a href="#">Motacilla cinerea</a> Grey Wagtail [642]		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="#">Pachyptila turtur</a> Fairy Prion [1066]		Species or species habitat likely to occur within area
<a href="#">Pandion haliaetus</a> Osprey [952]		Species or species habitat known to occur within area
<a href="#">Phoebastria fusca</a> Sooty Albatross [1075]	Vulnerable	Species or species habitat likely to occur within area
<a href="#">Pterodroma mollis</a> Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area
<a href="#">Puffinus assimilis</a> Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area
<a href="#">Puffinus carneipes</a> Flesh-footed Shearwater, Fleshy-footed Shearwater [1043]		Breeding known to occur within area
<a href="#">Sterna caspia</a> Caspian Tern [59467]		Foraging, feeding or related behaviour known to occur within area
<a href="#">Thalassarche carteri</a> Indian Yellow-nosed Albatross [64464]	Vulnerable	Foraging, feeding or

Name	Threatened	Type of Presence
<a href="#">Thalassarche cauta</a> Tasmanian Shy Albatross [89224]	Vulnerable*	related behaviour may occur within area Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thalassarche impavida</a> Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche melanophris</a> Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area
<a href="#">Thalassarche steadi</a> White-capped Albatross [64462]	Vulnerable*	Foraging, feeding or related behaviour likely to occur within area
<a href="#">Thinornis rubricollis</a> Hooded Plover [59510]		Species or species habitat known to occur within area
<a href="#">Tringa nebularia</a> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area
<b>Fish</b>		
<a href="#">Acentronura australe</a> Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area
<a href="#">Campichthys galei</a> Gale's Pipefish [66191]		Species or species habitat may occur within area
<a href="#">Heraldia nocturna</a> Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area
<a href="#">Hippocampus breviceps</a> Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area
<a href="#">Histiogamphelus cristatus</a> Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area
<a href="#">Leptoichthys fistularius</a> Brushtail Pipefish [66248]		Species or species habitat may occur within area
<a href="#">Lissocampus caudalis</a> Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area
<a href="#">Lissocampus runa</a> Javelin Pipefish [66251]		Species or species habitat may occur within area
<a href="#">Maroubra perserrata</a> Sawtooth Pipefish [66252]		Species or species habitat may occur within area
<a href="#">Nannocampus subosseus</a> Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area
<a href="#">Notiocampus ruber</a> Red Pipefish [66265]		Species or species habitat may occur within area
<a href="#">Phycodurus eques</a> Leafy Seadragon [66267]		Species or species



Name	Threatened	Type of Presence
<a href="#">Phyllopteryx taeniolatus</a> Common Seadragon, Weedy Seadragon [66268]		habitat may occur within area  Species or species habitat may occur within area
<a href="#">Pugnaso curtirostris</a> Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area
<a href="#">Solegnathus lettiensis</a> Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area
<a href="#">Stigmatopora argus</a> Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area
<a href="#">Stigmatopora nigra</a> Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area
<a href="#">Urocampus carinirostris</a> Hairy Pipefish [66282]		Species or species habitat may occur within area
<a href="#">Vanacampus margaritifer</a> Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area
<a href="#">Vanacampus phillipi</a> Port Phillip Pipefish [66284]		Species or species habitat may occur within area
<a href="#">Vanacampus poecilolaemus</a> Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area
<b>Mammals</b>		
<a href="#">Arctocephalus forsteri</a> Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat likely to occur within area
<a href="#">Neophoca cinerea</a> Australian Sea-lion, Australian Sea Lion [22]	Vulnerable	Species or species habitat may occur within area
<b>Reptiles</b>		
<a href="#">Caretta caretta</a> Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area
<a href="#">Chelonia mydas</a> Green Turtle [1765]	Vulnerable	Breeding likely to occur within area
<a href="#">Dermochelys coriacea</a> Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area
<b>Whales and other Cetaceans</b>		
		<a href="#">[ Resource Information ]</a>
Name	Status	Type of Presence
<b>Mammals</b>		
<a href="#">Balaenoptera acutorostrata</a> Minke Whale [33]		Species or species habitat may occur within area
<a href="#">Balaenoptera edeni</a> Bryde's Whale [35]		Species or species habitat may occur within area
<a href="#">Balaenoptera musculus</a> Blue Whale [36]	Endangered	Species or species habitat likely to occur

Name	Status	Type of Presence within area
<a href="#">Caperea marginata</a> Pygmy Right Whale [39]		Species or species habitat may occur within area
<a href="#">Delphinus delphis</a> Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area
<a href="#">Eubalaena australis</a> Southern Right Whale [40]	Endangered	Breeding known to occur within area
<a href="#">Grampus griseus</a> Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area
<a href="#">Lagenorhynchus obscurus</a> Dusky Dolphin [43]		Species or species habitat may occur within area
<a href="#">Megaptera novaeangliae</a> Humpback Whale [38]	Vulnerable	Species or species habitat known to occur within area
<a href="#">Orcinus orca</a> Killer Whale, Orca [46]		Species or species habitat may occur within area
<a href="#">Tursiops aduncus</a> Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area
<a href="#">Tursiops truncatus s. str.</a> Bottlenose Dolphin [68417]		Species or species habitat may occur within area

## Extra Information

State and Territory Reserves	[ <a href="#">Resource Information</a> ]
Name	State
Down Road	WA
Gledhow	WA
Lake Powell	WA
Marbelup	WA
Mill Brook	WA
Phillips Brook	WA
Shelter Island	WA
Sleeman Creek	WA
Unnamed WA01998	WA
Unnamed WA23088	WA
Unnamed WA23923	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 Resources Audit, 2001.

Name	Status	Type of Presence
<b>Birds</b>		
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
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
<b>Mammals</b>		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Feral deer Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
<b>Plants</b>		
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Asparagus scandens Asparagus Fern, Climbing Asparagus Fern [23255]		Species or species habitat likely to occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		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,		Species or species



Name	Status	Type of Presence
Common Broom, French Broom, Soft Broom [20126]		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]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to 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
Ulex europaeus Gorse, Furze [7693]		Species or species habitat likely to occur within area

# Caveat

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

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

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

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

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

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

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

- migratory and
- marine

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

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

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

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

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

# Coordinates

-34.929797 117.739282,-34.924801 117.752156,-34.934934 117.752242,-34.939296 117.727952,-34.93803 117.727008,-34.934512 117.726407,-34.929727 117.739282,-34.929797 117.739282

# Acknowledgements

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- [-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.





# CONSERVATION CODES

## For Western Australian Flora and Fauna

Threatened, Extinct and Specially Protected fauna or flora<sup>1</sup> are species<sup>2</sup> which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such.

**The *Wildlife Conservation (Specially Protected Fauna) Notice 2018* and the *Wildlife Conservation (Rare Flora) Notice 2018* have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018* to be the lists of Threatened, Extinct and Specially Protected species under Part 2 of the *Biodiversity Conservation Act 2016*.**

Categories of Threatened, Extinct and Specially Protected fauna and flora are:

### **T**     **Threatened species**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

**Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

**Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

### **CR**     **Critically endangered species**

Threatened species considered to be "*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

### **EN**     **Endangered species**

Threatened species considered to be "*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

### **VU**     **Vulnerable species**

Threatened species considered to be "*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

## **Extinct species**

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

### **EX Extinct species**

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

### **EW Extinct in the wild species**

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

## **Specially protected species**

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

### **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; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

### **CD Species of special conservation interest (conservation dependent fauna)**

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

### **OS Other specially protected species**

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

**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.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

**1** **Priority 1: 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, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

**2** **Priority 2: 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, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

**3** **Priority 3: 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. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

**4** **Priority 4: Rare, Near Threatened and other species in need of monitoring**

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

<sup>1</sup> The definition of flora includes algae, fungi and lichens

<sup>2</sup> Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).