



Moora Grain Receival Site, Moora

Biological Assessment

Prepared for

Co-operative Bulk Handling Pty

December 2019

● people ● planet ● professional

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Executive Summary

Co-operative Bulk Handling Pty commissioned 360 Environmental Pty Ltd to undertake a biological (flora, vegetation and fauna) survey and black cockatoo assessment to support State and Federal approvals for proposed clearing of native vegetation to allow for the widening of the existing road and installation of a weighbridge. The assessment was completed within the defined area of Lot 4300 adjacent to their existing Moora Grain Receiving Site, totalling 7.73 hectares, referred to as the Survey Area.

Flora and Vegetation

The desktop assessment identified 80 flora species of conservation significance as potentially occurring within 20 kilometres of the Survey Area. A likelihood of occurrence assessment was undertaken and determined eight species as having a high likelihood of occurrence, 22 species as having a medium likelihood of occurrence, 50 species as having a low likelihood of occurrence. No conservation significant species have previously been recorded within the Survey Area.

The detailed flora and vegetation survey recorded the floristic composition and vegetation types from three quadrats and additional mapping notes. The survey recorded a total of 53 taxa from 36 genera across 16 families.

No Threatened flora species pursuant to the Environment Protection and Biodiversity Conservation Act 1999 and/or gazetted as Threatened/Declared Rare Flora pursuant to the Biodiversity Conservation Act 2016 were recorded during the survey.

One vegetation type was mapped across the Survey Area with the remaining areas being unvegetated or cleared tracks. Vegetation type **EIHp** is described as a York Gum Woodland and comprised 7.35 ha of the Survey Area. The vegetation type **EIHp** is considered to be representative of the *Eucalypt Woodlands of the Western Australian Wheatbelt* Threatened Ecological Community under the Environment Protection and Biodiversity Conservation Act 1999.

Vegetation condition within the Survey Area ranged from Very Good to Completely Degraded. Disturbances included litter, weeds, firewood collection and uncontrolled fill. In summary, condition across the Survey Area consisted of:

- Very Good: 4.75 ha, 61%
- Good: 2.39 ha, 31%
- Degraded: 0.21 ha, 3%
- Completely Degraded (cleared areas): 0.38 ha, 5%.

Vertebrate Fauna

A total of 489 vertebrate fauna species were retrieved from the database searches. Of these, 37 are conservation significant vertebrate fauna species (including Priority species). Five species

listed solely as Marine have been excluded as there is no marine habitat present within the Survey Area.

A total of 29 terrestrial vertebrate fauna species from 22 families were recorded during the field survey and comprised of:

- 22 bird species from 17 families
- Four mammal species from four families
- Three reptiles from one family.

One fauna species of conservation significance, the Carnaby's Black Cockatoo was recorded within the Survey Area.

A total of eight fauna habitat assessments were undertaken during the field survey, with two fauna habitat types being identified as York Gum Woodland and Cleared/Completely Degraded.

The results from the post field survey identified the likelihood of occurrence assessment as:

- One fauna species of conservation significance recorded within the Survey Area
- One fauna species of conservation significance is considered to have a high likelihood of occurrence within the Survey Area
- One conservation significant fauna species is considered to have a medium likelihood of occurrence within the Survey Area
- The remaining 29 conservation significant species are considered to have a low likelihood of occurrence.

The York Gum Woodland fauna habitat offers foraging and nesting opportunities for birds, small reptiles and small mammal species. The hollow forming *Eucalyptus* trees (Wandoo and York Gum) provide important refuge and breeding opportunities to many species, particularly potential breeding opportunities for Black Cockatoo species.

Black Cockatoo Habitat Assessment

The following conclusions can be drawn from the Black Cockatoo Habitat Assessment:

- The Survey Area occurs outside the Forest Red-tailed Black Cockatoos and the Baudin's Black Cockatoo breeding range therefore these species are considered unlikely to occur within the Survey Area
- Two Carnaby's Black Cockatoos were recorded within the Survey Area. The individuals landed within a York Gum, rested briefly before leaving the Survey Area. No foraging was observed
- Direct evidence of Black Cockatoo breeding was not observed. 21 trees were identified as potential breeding trees for Black Cockatoos, of which one contained hollows that may be suitable for Black Cockatoo breeding
- 7.35 ha of Black Cockatoo low quality foraging habitat was recorded in the Survey Area, suitable for foraging by Carnaby's Black Cockatoo.

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1 Introduction

1.1 The Project

Co-operative Bulk Handling Pty (CBH) commissioned 360 Environmental Pty Ltd (360 Environmental) to undertake a biological (flora, vegetation, fauna and Black Cockatoo) survey to support State and Federal approvals for clearing of native vegetation to allow for the widening of an existing road and installation of a weighbridge. The assessment was completed within the defined area of Lot 4300 adjacent to their existing Moora Grain Receiving Site, Moora (referred to as the Survey Area), totalling 7.73 hectares (ha) (Figure 1).

1.2 Objectives and Scope

The biological assessment included a Detailed Flora and Vegetation Survey, Level 1 Vertebrate Fauna Survey and Black Cockatoo Habitat Assessment within the Survey Area to identify potential environmental sensitivities that may impact the Project.

The scope of works includes:

- Desktop Assessment
- Field Survey
- Post Survey Debrief Email
- Biological Report
- GIS Spatial Data.

2 Background

2.1 Protection of Flora, Vegetation and Fauna

Western Australian flora and fauna is protected formally and informally by legislative and non-legislative measures, which are as follows:

Legislative measures:

- Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) (Department of the Environment and Energy, 2015)
- WA *Biodiversity Conservation Act 2016* (BC Act)
- WA *Environmental Protection Act 1986* (EP Act)
- WA *Biosecurity and Agriculture Management Act 2007* (BAM Act).

Non-legislative measures:

- WA Department of Biodiversity Conservation and Attractions (DBCA) Priority lists for fauna, flora and ecological communities
- Weeds of National Significance (WoNS) and
- Recognition of locally significant populations by DBCA.

2.2 Biophysical Environment

2.2.1 Climate

The closest long-term Bureau of Meteorology (BoM) weather station with a complete dataset is Walebing (Station 8151), located approximately 11 kilometres (km) east of the Survey Area.

The long-term mean minimum temperature for Moora ranges from 5.4°C (July) to 16.9°C (February) (1884 to 2019) and the long-term mean maximum temperature ranges from 16.1°C (July) to 33.9°C (January) (1884 to 2019) (Figure 2) (Bureau of Meteorology, 2019). The long-term annual average rainfall is 468.2 millimetres (mm) (1884 to 2019) (Bureau of Meteorology, 2019).

The Walebing weather station recorded 276.2 mm of rainfall in the 12 months prior to the survey (September 2018 to August 2019), which is 192.0 mm below the long-term average of 468.2 mm for the same time period (Bureau of Meteorology, 2019). In the three months prior to the survey (June 2019 to August 2019), 205.8 mm of rainfall was recorded, which is 39.1 mm below the long-term average of 244.9 mm for the same time period (1894 to 2019) (Bureau of Meteorology, 2019).

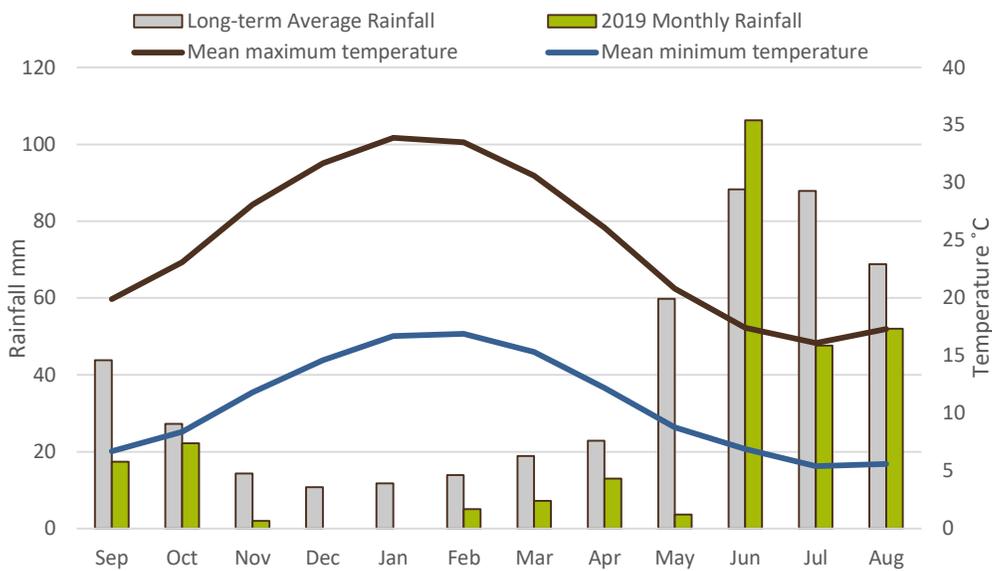


Figure 2: Long-term Average and Monthly Total Rainfall, Maximum and Minimum Temperatures for Walebing (8151) (Bureau of Meteorology, 2019)

2.2.2 Interim Biogeographic Regionalisation of Australia

The Interim Biogeographic Regionalisation of Australia (IBRA) divides Australia into 89 bioregions based on major biological, geographical and geological attributes. These bioregions are subdivided into 419 subregions as part of a refinement of the IBRA framework (Department of the Environment and Energy, 2016). The Survey Area occurs within the Avon Wheatbelt bioregion and the Katanning (AVW02) subregion.

The Katanning subregion is characterised as an area of active drainage dissecting a tertiary plateau in the Yilgarn Craton (Beecham, 2001). The subregion has a gently undulating landscape of low relief (Beecham, 2001). Proteaceous scrub-heaths, rich in endemics, on residual lateritic uplands and derived sandplains. Vegetation includes mixed eucalypts, *Allocasuarina huegeliana* and Jam-York Gum woodlands on Quaternary alluvials and eluvials (Beecham, 2001). The Katanning subregion is an ancient peneplain with low relief, gently undulating landscape. With no connected drainage, salt-lake chains occur as remnants of ancient drainage systems that now only function in very wet years (Beecham, 2001).

2.2.3 Soil Landscape and Land Systems

Soil landscapes and land system mapping of Western Australia describes broad soil and landscape characteristics from regional to local scales, and has been captured at scales ranging from 1:20,000 to 1:250,000 (Department of Agriculture and Food WA, 2012). The Survey Area occurs within the Ranfurly System and the Ranfurly 1 Subsystem described as an alluvial plain of Moore river comprising loamy earths, clays and minor sandy earths, displayed in Figure 3 (Department of Agriculture and Food WA, 2012).

The surface geology of the Survey Area is mapped entirely as Alluvium 38485 (Geoscience Australia, 2008) and is described as a channel and flood plain alluvium comprising of gravel, sand, silt, clay and calcrete.

2.2.4 Hydrology and Wetlands

The Survey Area does not intersect any major watercourses or water bodies (Department of Water and Environmental Regulation, 2016). The closest watercourse to the Survey Area is the Yadgena Brook, a minor river located approximately 350 m north of the Survey Area (Figure 4). The Yadgena Brook meets the Moore River, approximately 3 km to the west of the Survey Area.

No geomorphic wetlands are identified within the Survey Area or within 5 km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2017).

2.3 Biological Environment

2.3.1 Broad Vegetation Types

Mapping of pre-European broad vegetation within Western Australia was completed on a broad scale (1:1,000,000) by (Beard, 1976). These vegetation types were later re-assessed by Shepherd et. al (2002) with some larger vegetation units divided into smaller units. Together, this pre-European database contains a total of 819 vegetation types within Western Australia.

The Survey Area is mapped in entirety of one broad vegetation type. Victoria Plains 142 is described in the wheatbelt as York gum (*Eucalyptus loxophleba*) and salmon gum (*E. salmonophloia*). Its representation at a state, regional and local level is shown in Table 1.

Table 1: Broad Vegetation Types within the State, Regional and Local Representation (Department of Biodiversity Conservation and Attractions, 2019a)

Vegetation Type	Pre-European Extent (ha)	Current Extent (ha)	Remaining (%)	Current Extent Managed in DBCA Lands (%)
Representation across Western Australia				
Victoria Plains 142	787,948.47	208,347.17	26.44	1.04
Representation across the Avon Wheatbelt Bioregion				
Victoria Plains 142	637,707.53	79,309.95	12.44	0.37
Representation across the Katanning Subregion				
Victoria Plains 142	224,265.61	16,054.81	7.16	0.16
Representation across the Shire of Moora				
Victoria Plains 142	164,556.36	12,666.00	7.70	0.11

2.3.2 Environmentally Sensitive Areas

Environmentally Sensitive Areas (ESAs) are declared to prevent degradation of important environmental values such as Threatened flora, Threatened Ecological Communities (TECs) or significant wetlands. Exemptions contained in the *Environmental Protection (Clearing of Native vegetation) Regulations 2004* for low impact land clearing do not apply in ESAs and a clearing permit is required.

The Survey Area is not mapped within an ESA (Figure 5). There are two ESAs identified within a 5 km radius of the Survey Area. The closest ESA is identified approximately 1.9 km to the north of the Survey Area and the other located approximately 3 km to the south of the Survey Area.

2.3.3 Conservation Areas

The Survey Area is not mapped within any conservation areas (Figure 5). The closest Conservation Area is an unnamed Nature Reserve located approximately 250 m to the northwest of the Survey Area. This Nature Reserve is located on the road verge of Bindoon Moora Road for the purpose of flora conservation vested by the Conservation Commission of WA.

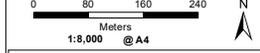


Legend

- Survey
- Soil and Land Systems**
- Coorow System
- Ranfurly System
- Local Road

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
 - LOCALITY MAP SOURCED LANDGATE 2017
 - OTHER DATA SOURCED LANDGATE 2018
 - AERIAL PHOTOGRAPHY SOURCED LANDGATE 2018
 © Western Australian Land Information Authority 2019

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PROJECT ID	DATE
3255	01/11/2019

HORIZONTAL DATUM AND PROJECTION
 GDA 1994 MGA Zone 50

CREATED	CHECKED	APPROVED	REVISION
LF	CM	CM	0

CBH Group
Lot 4300 Moora

Biological Survey

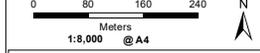
Figure 3 Soil and Land Systems



- Legend**
- Survey Area
 - Local Road
 - Watercourse - minor, non-perennial
 - Earth Dam

NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
 LOCALITY MAP SOURCED LANDGATE 2017
 OTHER DATA SOURCED LANDGATE 2018
 AERIAL PHOTOGRAPHY SOURCED LANDGATE 2018
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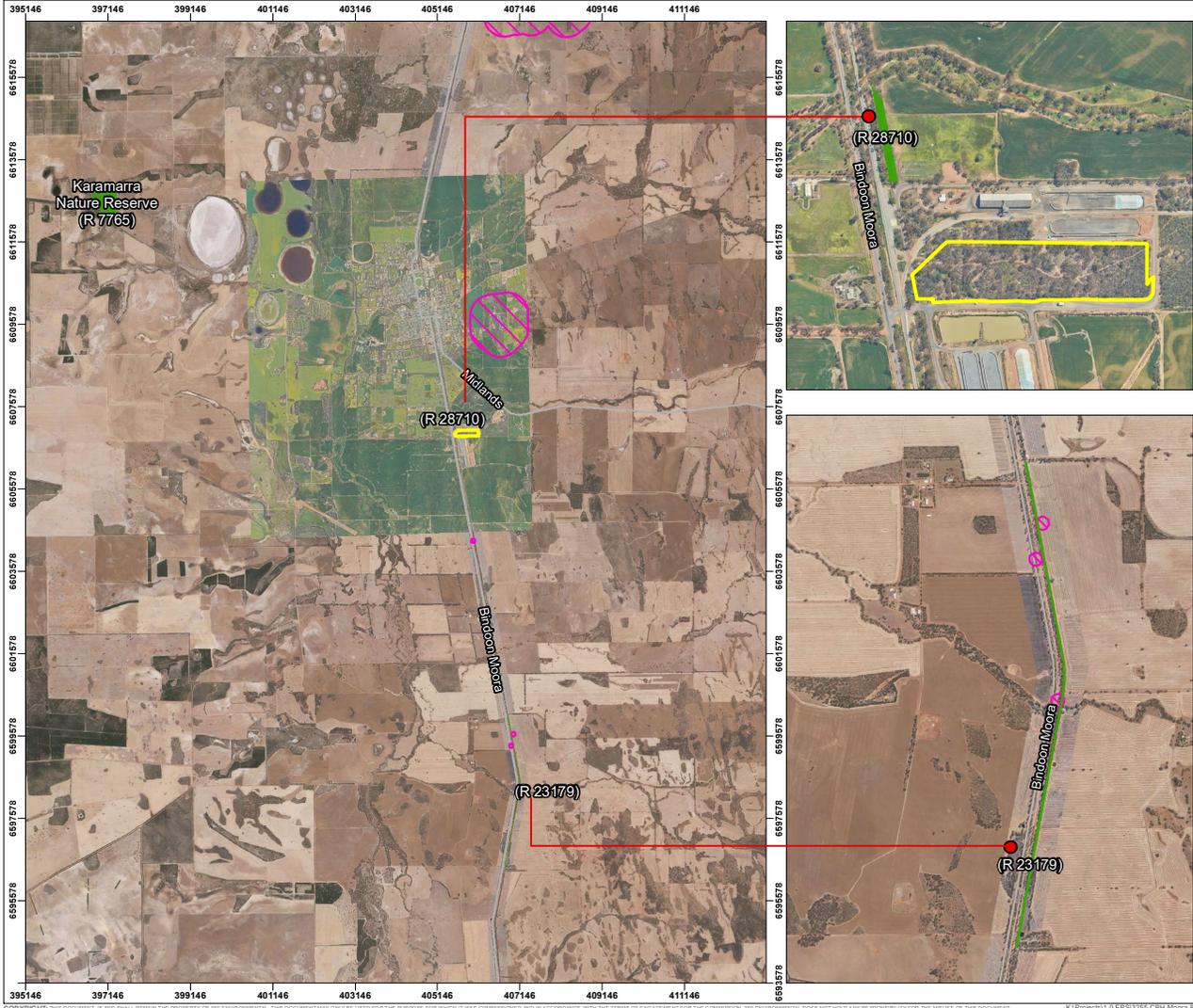
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HORIZONTAL DATUM AND PROJECTION
 GDA 1994 MGA Zone 50

CREATED	CHECKED	APPROVED	REVISION
LF	CM	CM	0

CBH Group
Lot 4300 Moora
Biological Survey

Figure 4
Hydrology and Wetlands



Legend

Survey Area
 Survey Area

DBCA Managed Lands and Waters
 DBCA Managed Land

Environmentally Sensitive Areas
 Environmentally Sensitive Areas

State Road
 State Road

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
 - LOCALITY MAP SOURCED LANDGATE 2017
 - OTHER DATA SOURCED LANDGATE 2018
 - AERIAL PHOTOGRAPHY SOURCED LANDGATE 2018
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0 1,200 2,400 3,600
 Meters
 1:125,000 @ A4

LOCALITY MAP

PROJECT ID	DATE
3255	06/11/2019

HORIZONTAL DATUM AND PROJECTION
 GDA 1994 MGA Zone 50

CREATED	CHECKED	APPROVED	REVISION
LF	CM	CM	0

CBH Group
Lot 4300 Moora

Biological Survey

Figure 5 Conservation and Environmentally Sensitive Areas

3 Methods

3.1 Requirements for Flora and Fauna Surveys

This survey has been carried out as per the EPA requirements for environmental surveying and reporting of flora and fauna surveys in Western Australia where relevant, and as documented in:

Western Australia

- Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (Environmental Protection Authority, 2016a)
- Technical Guidance – Sampling Methods for Terrestrial Vertebrate Fauna (Environmental Protection Authority, 2016b)
- Technical Guidance – Terrestrial Fauna Surveys (Environmental Protection Authority, 2016c).

Federal

- Matters of National Environmental Significance Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999 (Department of the Environment, 2013)
- EPBC Act referral guidelines for three threatened black cockatoo species (Department of Sustainability Environment Water Population and Communities, 2012)
- Survey Guidelines for Australia's threatened mammals (Department of Sustainability Environment Water Population and Communities, 2011)
- Survey guidelines for Australia's threatened birds Guidelines for detecting birds listed as threatened under the Environment Protection and Biodiversity Conservation Act 1999 (Department of the Environment Water Heritage and the Arts, 2010).

3.2 Desktop Assessment

3.2.1 Database Searches

Database searches were undertaken to identify potential conservation significant flora and fauna taxa and Ecological Communities within or surrounding the Survey Area (Study Area). Database search details are outlined in Table 2. The search buffer ranges from 15 km to 50 km as recommended by DBCA.

Priority Ecological Communities (PEC) and Threatened Ecological Communities (TEC) within the Avon Wheatbelt bioregion were examined to determine if any corresponded with the Survey Area (Appendix A). In addition, an EPBC Protected Matters Search (PMST) was undertaken to identify the potential for Matters of National Environmental Significance (MNES) to occur within or surrounding the Survey Area (Department of the Environment and Energy, 2019).

Table 2: Database Searches of the Study Area

Database Name	Date Received	Search Target	Search Area
Threatened and Priority Ecological Communities database (Department of Biodiversity Conservation and Attractions, 2019d)	25 September 2019	Listed TECs and PECs	15 km radius (DBCA recommended buffer)
Threatened and Priority Flora Database (TPFL) (Department of Biodiversity Conservation and Attractions, 2019f)	18 September 2019	Threatened and Priority Flora	20 km radius (DBCA recommended buffer)
Western Australian Herbarium flora (Department of Biodiversity Conservation and Attractions, 2019g)	18 September 2019		20 km radius (DBCA recommended buffer)
DBCA Threatened and Priority Fauna List (Department of Biodiversity Conservation and Attractions, 2019e)	16 September 2019	Threatened and Priority Fauna	50 km radius (DBCA recommended buffer)
NatureMap (Department of Biodiversity Conservation and Attractions, 2019c)	22 October 2019	Threatened and Priority Flora	20 km radius
NatureMap (Department of Biodiversity Conservation and Attractions, 2019c)	22 October 2019	Threatened and Priority Fauna	40 km radius (maximum buffer)
Protected Matters Search Tool (PMST) (Department of the Environment and Energy, 2019)	22 October 2019	Threatened and Priority Flora and Fauna	20 km radius

3.2.2 Likelihood of Occurrence

Conservation significant flora and fauna species identified from the desktop assessment were further examined to determine a likelihood of occurrence both prior and post field survey. The assessment was completed based on the likelihood of occurrence criteria presented in Table 3. Only species either recorded within the Survey Area or considered as having a high or medium likelihood of occurrence will be discussed in detail. Species classified as having a low likelihood of occurrence based on the below criteria will not be discussed unless a justification for this classification is required.

Table 3: Likelihood of Occurrence Criteria

Likelihood	Flora	Fauna
Recorded	Flora and fauna species recorded within the Survey Area during the field survey	
High	Previously recorded within the Survey Area or within 10 km and suitable habitat potentially occurs in the Survey Area	Preferred habitat is present in the Survey Area and known species distribution has been recorded on more than one occasion within 50 km of the Survey Area in the last 15 years

Likelihood	Flora	Fauna
Medium	Previously recorded within 10 to 20 km of the Survey Area and/or suitable habitat potentially occurs in the Survey Area	The species has been recorded on more than one occasion within 50 km of the Survey Area in the last 15 years, but limited appropriate habitat occurs in the Survey Area; or the High likelihood of occurrence criteria has not been met, however the species is known from the general area and has good dispersal abilities; or preferred habitat for the species occurs in the Survey Area but the species has not been recorded within 50 km in the last 15 years
Low	No suitable habitat appears to be present in the Survey Area and records are greater than 20 km	No suitable habitat is present within the Survey Area or outside the species known distribution; or the species is known from the general area but has poor dispersal abilities

3.2.3 Literature Review

A literature review was undertaken to identify any previously completed surveys within the general region. This includes reviewing all publicly available reports to assist with understanding any key biological findings nearby.

3.3 Flora and Vegetation

3.3.1 Field Survey

A detailed single season flora and vegetation survey was undertaken by Ecologist Colleen McDonald (Flora Licence FB 2000148/TFL69-1920) on the 3rd of September 2019. The field survey included an assessment of three quadrats, mapping notes, vegetation condition notes, opportunistic flora collections, observations and a targeted Priority flora search. The Survey effort and quadrat locations are shown in Figure 6.

A minimum of three quadrats of 10 x 10 m, with a 20 x 20 m overstorey were installed in representative vegetation types. Each quadrat was accurately measured using measuring tapes, and the northwest corner was demarcated with a steel fence dropper. At the NW corner of each quadrat, the location was recorded using a handheld Garmin GPS unit, and Fulcrum mobile data collection device with a photograph.

At each quadrat, the following data was recorded:

- Site code – a unique identifier allocated to each quadrat
- Date and recorder – a record of the date of quadrat sample and a list of the personnel involved in sampling the quadrat
- Location – GPS coordinates (MGA94) measured from the north west corner of the quadrat
- Dimensions – the size and shape of the quadrat
- Landform and soil description – a description of the quadrat habitat

- Additional site descriptors – location information that might be useful in vegetation classification including, slope, aspect, litter cover, bare ground cover and fire history
- Species list – a comprehensive vascular flora species list
- Foliar cover – the estimated total percentage foliar cover for each species recorded
- Height – the average height (in metres) of each species recorded
- Vegetation description – a description of the vegetation according to the National Vegetation Information System (NVIS), Level 5. According to this level, vegetation is classified to ‘association’, where the dominant growth form, height, cover and species (three species) for the three traditional strata (upper, mid and ground) are described
- Vegetation condition – assessed according to the vegetation condition scale (Environmental Protection Authority, 2016a) and
- Photographs – a photograph from the north west corner looking toward the south east corner was taken.

3.3.2 Flora of Conservation Significance

The Survey Area was traversed on foot and opportunistic collections were made to identify flora of conservation significance which were listed in the Desktop Assessment.

Specimens were collected for identification and lodgement at the Western Australian Herbarium (WAH).

3.3.3 Taxonomy and Nomenclature

Where field identification of plant taxa was not possible, specimens were collected systematically for later identification using resources of the WAH. Taxonomy was completed by experienced Taxonomist Frank Obbens at the WAH.

The finalised species list was checked against FloraBase (Department of Biodiversity Conservation and Attractions, 2019b) to determine the species’ conservation status and known distribution. Introduced species were compared against the BAM Act Declared Plants list the WONS list to determine their status (Thorp and Lynch, 2000; Department of Environment and Energy, 2018).

3.4 Vertebrate Fauna

3.4.1 Field Survey

A level 1 vertebrate fauna survey was undertaken on the 3rd of September by qualified Senior Zoologist Andrew Hide. The purpose of the field survey was to verify the accuracy of the desktop assessment and to further delineate and characterize the fauna assemblages and fauna habitat in the Survey Area. The field survey consisted primarily of fauna habitat assessments, systematic bird searches and opportunistic fauna observations. The survey effort is shown in Figure 6.

3.4.2 Fauna Habitat Assessment

Vegetation types and distinctive landforms were used to identify the broad faunal habitats in the Survey Area. These fauna habitats were then assessed for their potential to support species of conservation significance and the quality of habitat they provide to a wider suite of fauna.

A total of eight individual fauna habitat assessments were undertaken throughout the Survey Area. Each fauna habitat assessment recorded the following information which was used in conjunction with aerial imagery to identify and map fauna habitat types:

- Location within the Survey Area (GPS co-ordinate)
- Condition was assessed at the assessment site using the (Environmental Protection Authority, 2016b) vegetation condition scale
- Dominant vegetation and structure (e.g. number of vegetation strata)
- Hollow-bearing trees and dead stags (e.g. average size and abundance of hollows)
- Description of any rock and rocky outcrops
- Logs (e.g. abundance and size)
- Substrate (e.g. leaf litter)
- Wetlands, creeks, rivers, dams and other water bodies
- Description of any observed nests and roosts (if present)
- Subterranean roosts (e.g. caves, disused mineshafts and/or adits)
- Associated fauna species observed using the habitat
- Disturbance (e.g. cattle grazing, fire)
- Photo showing a typical example of the broad fauna habitat type.

3.4.3 Taxonomy

Where there was doubt on species names identified in the desktop and field assessment (through subsequent name changes or taxonomic reviews), an effort was made to determine the current scientific name for each taxon. Taxonomy and nomenclature in this report follows the WA Museum checklist 2019 (Western Australian Museum, 2019) where relevant.

3.5 Black Cockatoo Habitat Assessment

3.5.1 Field Survey

A Black Cockatoo habitat assessment was undertaken alongside the vertebrate fauna survey by Senior Zoologist Andrew Hide and involved traversing the Survey Area by foot. The survey was conducted in accordance with the Department of Environment and Energy's (2012) EPBC Act referral guidelines for three threatened black cockatoo species: Carnaby's Cockatoo (*Calyptorhynchus latirostris*), Baudin's Cockatoo (*Calyptorhynchus baudinii*) and Forest Red-tailed Black Cockatoo (*Calyptorhynchus banksii naso*) (Department of Sustainability Environment Water Population and Communities, 2012).

3.5.2 Breeding Habitat

Any trees meeting each of the following criteria for potential breeding were recorded with a mobile GPS Fulcrum application:

- Native trees (e.g. Jarrah, Tuart, Marri, Wandoo and Salmon Gum)
- Diameter at Breast Height (DBH @ 1.3 m) \geq 500 mm (\geq 300 mm for Wandoo and Salmon Gum) regardless of the presence or absence of hollows
- All hollows observed within trees were recorded and categorised as follows:
 - Hollows: Total number of hollows observed within the tree, or 'no' if none are observed and
 - Hollows > 12 cm diameter = Number hollows within the tree that are observed to contain an opening diameter > 12 cm, which has the potential of being utilised by Black Cockatoo species (Department of Environment Conservation, 2010; Saunders, Mawson and Dawson, 2014). This also included recording any evidence of chewing around the hollow opening.

Trees with multiple stems, swellings or forking/branching at breast height were measured dependent on the form to ensure accurate measurement. When this occurred, the diameter was measured just above or below breast height to gain a more accurate measurement of diameter and only the largest forking branch was recorded if this occurred below breast height.

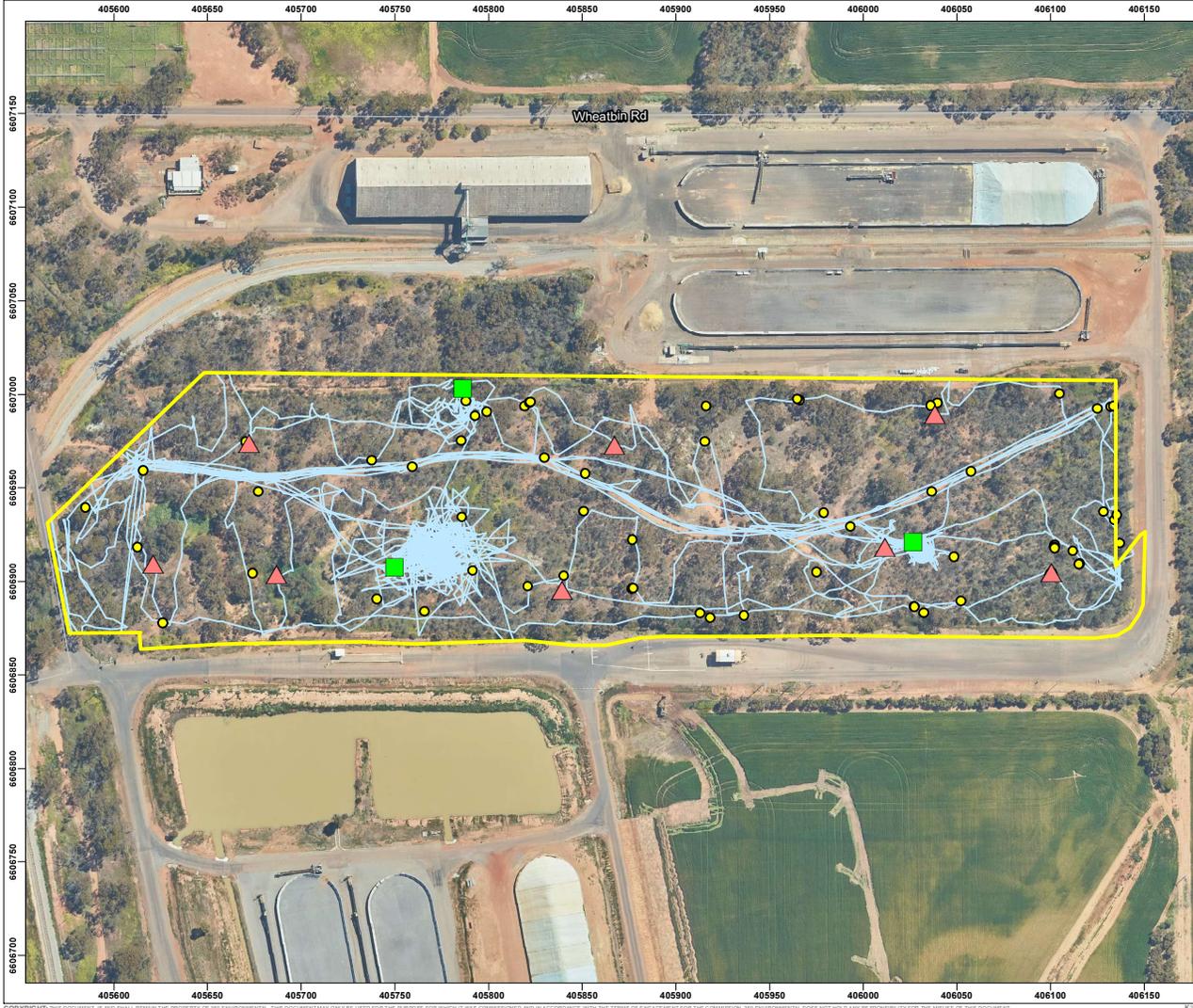
3.5.3 Foraging Habitat

The Black Cockatoo assessment involved assessing the habitat for tree and shrub species known to be important dietary items e.g. Marri and *Banksia* sp. as outlined within the referral and revised draft referral guidelines (Department of Sustainability Environment Water Population and Communities, 2012; Department of the Environment and Energy, 2017). It also included looking for:

- Evidence of feeding (chewed cones, seed and nut material)
- Opportunistic observations of Black Cockatoos foraging or utilising the Survey Area.

3.5.4 Roosting Habitat

While undertaking the assessment any evidence of roosting or areas identified as having high roosting potential were identified, recorded and mapped.



- Legend**
- Survey Area
 - Local Road
 - Flora Quadrat Locations
 - ▲ Fauna Habitat Assessment Locations
 - Opportunistic Fauna Locations
 - GPS Tracks

NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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 OTHER DATA SOURCED LANDGATE 2018
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Lot 4300 Moora

Biological Survey

Figure 6 Survey Effort

4 Results

4.1 Limitations

Variable	Degree of Limitation	Potential Constraints on Survey Outcomes
Access and Survey Intensity	Not a limitation	The Survey Area was able to be accessed by vehicle and on foot and was sufficiently traversed. The survey effort is displayed in Figure 6.
Availability of Data	Not a limitation	All data required to complete the scope of works including regional and local contextual information was available
Experience	Not a limitation	<p>The flora and vegetation survey was undertaken by Ecologist Colleen McDonald. Colleen has worked as an environmental consultant for two years and has completed flora, vegetation and fauna surveys state-wide.</p> <p>The fauna survey and black cockatoo habitat assessment was undertaken by Senior Zoologist Andrew Hide. Andrew has over 12 years' experience conducting fauna surveys of similar scope throughout Western Australia.</p> <p>Taxonomy was undertaken by experienced Taxonomist Frank Obbens at the WA herbarium.</p>
Timing, weather, season	Moderate limitation	<p>The survey was undertaken in September, within the recommended primary survey period for the South-West Botanical Province (September - November).</p> <p>Despite being able to complete the survey during a recommended primary survey period the region still received below average rainfall for the period leading up to the survey. The nearest weather station recorded 276.2 mm of rainfall 12 months prior to the survey which is 192 mm below the long-term average for the same time period. In the three months prior to the survey 205.8 mm of rainfall was recorded, which is 39.1 mm below the long-term average for the same time period.</p> <p>Due to the below average rainfall for the region, this is considered a moderate limitation of the survey.</p>
Life forms sampled	Moderate limitation	<p>The Survey Area was traversed by foot and all remnant vegetation was surveyed. All dominant flora species were recorded within the vegetation units. Of the 53 flora taxa collected, eight (15%), were unable to be identified to species level due to the absence of identifiable features such as fruit and flowers. Therefore, this is considered a moderate limitation of the survey.</p> <p>All observable fauna species were identified and recorded, and adequate fauna habitat assessments were completed for the size of the Survey Area.</p>
Completeness	Not a limitation	The survey was considered complete for a detailed flora and vegetation survey, all vegetation types were surveyed and delineated within the Survey Area and a minimum of three quadrats was surveyed for each vegetation type.

Variable	Degree of Limitation	Potential Constraints on Survey Outcomes
		<p>The survey was considered complete for a level 1 vertebrate fauna survey, with fauna habitat assessments being completed throughout the Survey Area, adequate records of opportunistic fauna, and sampling effort for any potential conservation significant fauna species that may occur within the Survey Area.</p> <p>The survey was considered complete for a black cockatoo habitat assessment with all potential breeding trees recorded within the Survey Area.</p>

4.2 Literature Review

The following reports were reviewed as part of the Literature Review.

Flora and Vegetation Lot 4300 Moora (Bennett Environmental Consulting Pty Ltd, 2006)

Bennett Environmental Consulting was commissioned by CBH to undertake a flora and vegetation survey of Lot 4300, Moora. The main findings of this report were:

- No Declared Rare or Priority Flora were recorded
- Two quadrats were recorded, and two vegetation types observed
 - Ah: Low forest of *Allocasuarina huegeliana* woodland and *Acacia acuminata*
 - El: Low woodland of *Eucalyptus loxophleba* subsp. *loxophleba*
- Vegetation condition of the survey ranged from good to degraded.

Fauna Assessment Moora Grain Receiving Site (Harewood, 2019)

A fauna habitat assessment was undertaken within the proposed development footprint of Lot 4300, Moora in August 2019. The main findings were:

- 38 native fauna species were observed (combined with a previous survey undertaken in 2007)
- Habitats present were Existing Cleared Areas, Low Eucalypt Woodland and Low Sheoak/ Acacia Forest
- Two Potential Black Cockatoo breeding trees were present, none of which had hollows
- Two conservation significant species were considered possible to occur
 - Carnaby Black Cockatoo (*Calyptorhynchus latirostris*)
 - Peregrine Falcon (*Falco peregrinus*).

4.3 Flora and Vegetation

4.3.1 Desktop Assessment

The desktop assessment identified 80 conservation significant species occurring within 20 km of the Survey Area. This included:

- 32 Threatened species
- Six Priority 1 species
- Nine Priority 2 species
- 25 Priority 3 species
- Eight Priority 4 species.

A full description of all conservation significant species identified in the Desktop Assessment is provided in Appendix A and DBCA records are mapped in Figure 7.

One Threatened Ecological Community (TEC) and two Priority Ecological Communities (PEC's) listed by the State were identified as occurring within a 15 km radius of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019d; Department of the Environment and Energy, 2019) (Figure 8). Both PECs are listed as TECs under the EPBC Act.

- Vegetation alliances on ridges and slopes of the chert hills of the Coomberdale Floristic Region (Endangered [BC Act]). This ecological community has 39 records within 15 km of the Survey Area
- Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region (Priority 3 [BC Act], Endangered [EPBC Act]). This ecological community has 96 records within 15 km of the Survey Area
- Eucalypt woodlands of the Western Australian Wheatbelt (Priority 3 [BC Act], critically Endangered [EPBC Act]). This ecological community has 1412 records within 15 km of the Survey Area.

4.3.2 Likelihood of Occurrence

The conservation significant species identified in the Desktop Assessment were reviewed for their likelihood of occurrence within the Survey Area based on the criteria outlined in Table 3. Of the 80 species identified in the desktop assessment, no species were recorded within the Survey Area, eight species are considered to have a high likelihood of occurrence, 22 are considered to have a medium likelihood of occurrence and 50 are considered to have a low likelihood of occurrence. The likelihood assessment is displayed in Appendix B.

Conservation significant species identified as having a high likelihood of occurrence in the Survey Area include:

- *Acacia cochlocarpa* subsp. *cochlocarpa* (T, EN)
- *Hemiandra gardneri* (T, EN)
- *Calytrix ecalycata* subsp. *pubescens* (P1)
- *Stylidium* sp. *Moora* (P2)
- *Gastrolobium rotundifolium* (P3)
- *Leucopogon tamminensis* var. *tamminensis* (P3)

- *Melaleuca sclerophylla* (P3)
- *Eucalyptus x carnabyi* (P4).

Conservation significant species identified as having a medium likelihood of occurrence in the Survey Area include:

- *Acacia aristulata* (T, EN)
- *Acacia cochlocarpa* subsp. *velutinos*a (T, CR)
- *Banksia serratuloides* subsp. *serratuloides* (T, VU)
- *Chorizema humile* (T, EN)
- *Conospermum densiflorum* subsp. *unicephalatum* (T, EN)
- *Darwinia acerosa* (T, EN)
- *Dasymalla axillaris* (T, CR)
- *Daviesia dielsii* (T, EN)
- *Gastrolobium hamulosum* (T, VU)
- *Grevillea christineae* (T, EN)
- *Grevillea pythara* (T, EN)
- *Haloragis platycarpa* (T, CR)
- *Caladenia dundasiae* (P1)
- *Bossiaea moylei* (P2)
- *Synaphea rangiferops* (P2)
- *Babingtonia cherticola* (P3)
- *Blackallia nudiflora* (P3)
- *Guichenotia tuberculata* (P3)
- *Stylidium periscelanthum* (P3)
- *Stylidium sacculatum* (P3)
- *Verticordia huegelii* var. *tridens* (P3)
- *Calothamnus accedens* (P4).

The remaining 50 species were considered to have a low likelihood of occurrence in the Survey Area due to the absence of suitable habitat.



Legend

- Survey Area
- *Acacia cochlocarpa* subsp. *cochlocarpa*, T
- *Acacia cummingiana*, 3
- *Anigozanthos humilis* subsp. *Badgingarra* (S.D. Hopper 7114), 2
- *Banksia dallanneyi* subsp. *pollosta*, 3
- *Diuris recurva*, 4
- *Eremophila scaberula*, T
- *Eucalyptus x carnabyi*, 4
- *Hemiandra gardneri*, T
- *Hemigenia curvifolia*, 2
- *Isotropis cunelifolia* subsp. *glabra*, 3
- *Leucopogon allittii*, 3
- *Leucopogon taminensis* var. *taminensis*, 3
- *Petrophile biternata*, 3
- *Verticordia insignis* subsp. *eomagis*, 3

NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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 OTHER DATA SOURCED LANDGATE 2018
 AERIAL PHOTOGRAPHY SOURCED LANDGATE 2018
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CBH Group
Lot 4300 Moora

Biological Survey

Figure 7 DBCA Threatened and Priority Flora Locations



Legend

- Survey Area
- State Road

TEC/PEC Search Results

- Coomberdale chert hills, Endangered
- Wheatbelt Woodlands, Critically Endangered, Priority 3

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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Biological Survey

Figure 8 DBCA Threatened and Priority Ecological Communities

4.3.3 Flora

The field survey recorded a total of 53 taxa from 36 genera across 16 families. The most dominant families were Asteraceae (ten species), Poaceae (ten species) and Fabaceae (eight species). The most dominant genera were *Acacia* (eight species). A full species inventory is detailed in Appendix C.

A specimen was collected for all species recorded within the Survey Area, eight taxa (15%), were unable to be identified confidently to species level. This was mainly due to the specimens being sterile with no flowering material or fruit present.

4.3.4 Flora of Conservation Significance

No Threatened flora species pursuant to the EPBC Act 1999 and/or gazetted as Threatened/Declared Rare Flora pursuant to the BC Act 2016 were recorded during the survey.

No Priority Flora species as listed by DBCA under the BC Act were recorded within the Survey Area.

4.3.5 Introduced Flora

A total of nine introduced species were recorded within the Survey Area, representing 17% of the total taxa recorded (Table 4). No introduced species were identified as WONS or Declared Pests (Department of Environment and Energy, 2018; Department of Primary Industries and Regional Development, 2018).

Table 4: Introduced Flora Species within the Survey Area

Species	Common Name	Status Under BAM Act	WONS
* <i>Arctotheca calendula</i>	Cape Weed	Permitted – s11	No
* <i>Briza maxima</i>	Blowfly Grass	Permitted - s11	No
* <i>Ehrharta longiflora</i>	Annual Veldt Grass	Permitted - s11	No
* <i>Eragrostis curvula</i>	African Lovegrass	Permitted - s11	No
* <i>Gorteria personata</i>	Gorteria	Permitted - s11	No
* <i>Lysimachia arvensis</i>	Pimpernel	Permitted - s11	No
* <i>Monoculus monstrosus</i>	-	Permitted - s11	No
* <i>Romulea rosea</i>	Guildford Grass	Permitted - s11	No
* <i>Ursinia anthemoides</i>	Ursinia	Permitted - s11	No

4.3.6 Vegetation Type

One vegetation type was mapped within the Survey Area. **ElHp** is described as a York Gum woodland and totalled 7.35 ha. The remaining 0.38 ha of the Survey Area did not have vegetation and were cleared tracks. The vegetation type is described in Table 5 and mapped in Figure 9. A full description of all quadrat information is provided in Appendix D.

4.3.7 Vegetation Condition

Vegetation condition within the Survey Area ranged from Very Good to Completely Degraded. The majority of the Survey Area was in Very Good condition (61%). Disturbances included litter, weeds, firewood collection, motorcycles and uncontrolled fill. Condition across the Survey Area consisted of:

- Very Good: 4.75 ha, 61%
- Good: 2.39 ha, 31%
- Degraded: 0.21 ha, 3%
- Completely Degraded (cleared areas): 0.38 ha, 5%

The vegetation condition is mapped in Figure 10.

Table 5: Vegetation Types

Broad Floristic Formation	Vegetation Unit	Sites	Photograph
Eucalypt Woodland	EIHp Tall woodland of <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> and <i>Allocasuarina huegeliana</i> over tall shrubland of <i>Hakea preissi</i> , <i>Acacia lineolata</i> subsp. <i>lineolata</i> , <i>Grevillea biternata</i> over open forbland of * <i>Briza maxima</i> , * <i>Monoculus monstrosus</i> and <i>Podolepis lessonii</i> .	MQ01, MQ02, MQ03	 A photograph showing a tall woodland area. The foreground features a young, thin tree trunk with a pink ribbon tied around it. Yellow caution tape is strung across the ground in an 'X' shape. The background is filled with dense, tall shrubs and trees under a blue sky with light clouds.



Legend

- Survey Area
- Local Road
- Flora Quadrat/Releve Locations

Vegetation Types

- No Vegetation
- El Hp

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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CBH Group
Lot 4300 Moora
Biological Survey

Figure 9
Vegetation Types



Legend

- Survey Area
- Local Road

Vegetation Condition

- Completely Degraded
- Degraded
- Good
- Very Good

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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Figure 10
Vegetation Condition

4.3.8 Threatened and Priority Ecological Communities

For the Survey Area to be considered as part of the *Eucalypt Woodlands of the Western Australian Wheatbelt* the following key elements are required as specified by the Approved Conservation Advice (Department of the Environment, 2015):

- Distribution lies within the following sub regions: AVW1, AVW2, MAL02, JAF01, JAF02
- Structure of ecological community is a woodland with the minimum crown cover of the tree canopy is 10 %
- Key species of tree canopy are species of *Eucalyptus* and specified in Table 2a of the Conservation Advice
- A native understorey is present
- Meet the condition thresholds of:
 - A minimum patch size of 2 ha is required for areas where:
 - A high-quality native understorey remains – i.e. no more than 30% total vegetation cover of exotic plant species; OR
 - Exotic plant species account for over 30 to 50 % total vegetation understorey cover AND mature trees are present, with at least 5 such trees per half hectare. Mature trees have a diameter at breast height of 30 cm or more, and often contain hollows.
 - A minimum patch size of 5 ha is required for areas where:
 - Vegetation patches where exotic plant species account for up to or over 50% total vegetation understorey cover, where there are no less than 5 mature trees per half hectare; OR
 - Exotic plant species account for over 50 – 70% total vegetation understorey cover AND mature trees are present, with at least 5 such trees per half hectare.

Based on examination of the database searches, and the known characteristics of the *Eucalypt Woodlands of the Western Australian Wheatbelt* as listed in (Department of the Environment, 2015), it has been concluded that the Vegetation Type **EIHp** is representative of the *Eucalypt Woodlands of the Western Australian Wheatbelt* TEC/PEC. This conclusion has been drawn based on the following:

- Survey Area is located with the Katanning (AVW1) subregion
- Woodland structure across the Survey Area was greater than 10%
- The dominant canopy tree species within the Survey Area is *Eucalyptus loxophleba* subsp. *loxophleba*
- Native understorey species are present across the Survey Area and consistent with those specified in the Conservation Advice such as *Allocasuarina huegeliana*, *Hakea preissii* and *Podolepis lessonii*.
- The patch size of **EIHp** is 7.73 ha of which 4.75 ha is in Very Good Condition and 2.98 ha is in good condition.

4.3.9 Regional Representation

Vegetation mapping units described in the Survey Area were correlated with the Beard (1976) and Shepherd et al. (2002) broad vegetation types by examining similarities in vegetation descriptions. Differences exist with the terminology used in the descriptions as they are based on different methods of categorising and characterising vegetation types, and the different spatial scale of the analysis (i.e. region vs. local scale). Vegetation type **EIHp** is representative of the Victoria Plains 142 vegetation type which includes 95% of the Survey Area.

4.4 Vertebrate Fauna Results

4.4.1 Desktop Assessment

A total of 489 vertebrate fauna species were retrieved from the database searches. Of these, 37 are conservation significant vertebrate fauna species (including Priority species).

The results of the DBCA fauna database search are displayed in Figure 11 and the results of all database searches are presented in Appendix A.

Five species listed as Marine only under the EPBC Act, such as the Black-faced Cuckoo-shrike (*Coracina novaehollandiae*), Rainbow Bee-eater (*Merops ornatus*), White-bellied Sea Eagle (*Haliaeetus leucogaster*) etc, as well as marine dependent species such as the Osprey (*Pandion haliaetus*). These species have been excluded from the likelihood of occurrence list as the Survey Area doesn't occur within a Commonwealth Marine Area (EPBC Act s248), and the species are commonly recorded.

4.4.2 Field Survey

A total of 29 terrestrial vertebrate fauna species from 22 families were recorded during the field survey, comprised of:

- 22 bird species from 17 families
- Four mammal species from four families
- Three reptiles from one family.

A fauna species list is presented below in Table 6, which provides the total count of species records (providing a rough indication of abundance) and conservation status.

Three introduced fauna species were recorded within the Survey Area. Two Marine listed species were recorded.

Table 6: Fauna Species Recorded During the Field Survey

Family	Scientific Name	Common Name	Conservation Status		Count
			State	Federal	
Aves					
Acanthizidae	<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill	-	-	8
Acanthizidae	<i>Gerygone fusca</i>	Western Gerygone	-	-	3
Accipitridae	<i>Accipiter cirrocephalus</i>	Collared Sparrowhawk	-	-	1
Accipitridae	<i>Haliastur sphenurus</i>	Whistling Kite	-	-	1 #
Alcedinidae	<i>Dacelo novaeguineae</i> *	Laughing Kookaburra*	-	-	1
Anatidae	<i>Tadorna tadornoides</i>	Australian Shelduck	-	-	12 #
Cacatuidae	<i>Cacatua roseicapilla</i>	Galah	-	-	5, 50 #
Cacatuidae	<i>Cacatua sanguinea</i>	Little Corella	-	-	10
Cacatuidae	<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo	EN	EN	2
Campephagidae	<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike	-	MA	2
Columbidae	<i>Ocyphaps lophotes</i>	Crested Pigeon	-	-	2
Corvidae	<i>Corvus coronoides</i>	Australian Raven	-	-	1
Cracticidae	<i>Cracticus tibicen</i>	Australian Magpie	-	-	1
Hirundinidae	<i>Petrochelidon nigricans</i>	Tree Martin	-	MA	3
Meliphagidae	<i>Gavicalis virescens</i>	Singing Honeyeater	-	-	9
Meliphagidae	<i>Lichmera indistincta</i>	Brown Honeyeater	-	-	16
Pachycephalidae	<i>Pachycephala rufiventris</i>	Rufous Whistler	-	-	3
Pardalotidae	<i>Pardalotus striatus</i>	Striated Pardalote	-	-	2
Petroicidae	<i>Petroica goodenovii</i>	Red-capped Robin	-	-	2
Psittacidae	<i>Platycercus zonarius</i>	Australian Ringneck	-	-	1
Rhipiduridae	<i>Rhipidura albiscapa</i>	Grey Fantail	-	-	1
Turnicidae	<i>Turnix velox</i>	Little Button-quail	-	-	1
Canidae	<i>Vulpes vulpes</i> *	Red Fox *	-	-	3
Equidae	<i>Equus caballus</i>	Horse	-	-	1
Leporidae	<i>Oryctolagus cuniculus</i>	Rabbit*	-	-	15
Macropodidae	<i>Macropus fuliginosus melanops</i>	Western Grey Kangaroo	-	-	1
Scincidae	<i>Cryptoblepharus buchananii</i>	Buchanan's Snake-Eyed Skink	-	-	1

Family	Scientific Name	Common Name	Conservation Status		Count
			State	Federal	
Scincidae	<i>Menetia greyii</i>	Common Dwarf Skink	-	-	1
Scincidae	<i>Tiliqua rugosa</i>	Bobtail	-	-	1

* Introduced species EN = Endangered, MA = Marine listed species # denotes species observed outside of the Survey Area

4.4.3 Fauna Habitat

Eight fauna habitat assessments were undertaken during the field survey, with two fauna habitat types identified and mapped in Figure 12 and Appendix E. Fauna habitats identified include York Gum Woodland and Cleared/Completely Degraded. It should be noted that there are varying densities of Allocasuarina thickets and Hakea, mixed throughout the woodland. The extent of fauna habitats within the Survey Area are presented in Table 7 and a description and photo for each are presented in Table 8.

Table 7: Fauna Habitat and Extent within the Survey Area

Fauna Habitat	Extent within Survey Area	
	Area (ha)	Area (%)
York Gum Woodland	7.35	95.0
Cleared / Completely Degraded	0.38	5.0
Total	7.73	100

Table 8: Fauna Habitat Type Descriptions within the Survey Area

Fauna Habitat	Vegetation Type Code	Fauna Habitat Description and Fauna Value	Representative Photo
York Gum Woodland	ElHp	<p>Dominant species include <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>, <i>Hakea preissii</i> and <i>Daviesia benthamii</i>.</p> <p>Provides valuable refuge and breeding opportunities for several species due to the density of hollows occurring within the York Gum trees.</p>	
Cleared / Completely Degraded	-	<p>This fauna habitat type contains limited vegetation and has recently or previously been cleared or heavily disturbed.</p> <p>Provides low to no fauna value.</p>	

4.4.4 Conservation Significant Fauna

One fauna species of conservation significance was recorded within the Survey Area.

Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) – Endangered

Two Carnaby's Black Cockatoos were recorded within the Survey Area. The individuals landed briefly within a York Gum, rested briefly before leaving the Survey Area. No foraging was observed.

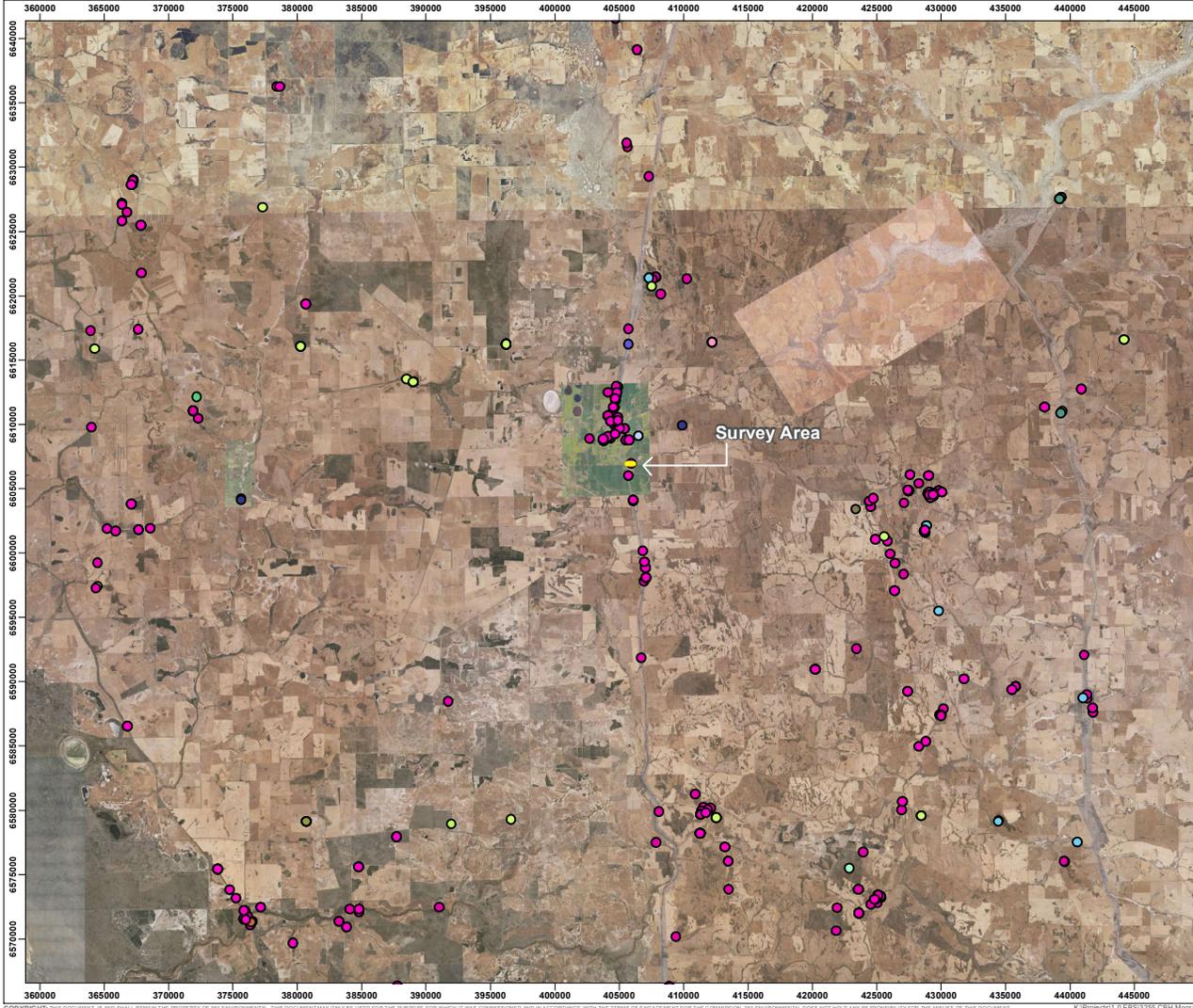
Two Marine listed species, the Tree Martin (*Petrochelidon nigricans*) and the Black-faced Cuckoo-shrike (*Coracina novaehollandiae*) were recorded within the Survey Area.

4.4.5 Post-field Survey Likelihood of Occurrence

The 32 conservation significant fauna species identified from the desktop assessment were further assessed for their likelihood of occurrence after the completion of the field survey (Table 9). The results determined that:

- One conservation significant fauna species was recorded, and includes:
 - Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) – Endangered
- One conservation significant fauna species are considered to have a high likelihood of occurrence within the Survey Area, and includes:
 - Peregrine Falcon (*Falco peregrinus*) – Other specially protected fauna
- One conservation significant fauna species are considered to have a medium likelihood of occurrence within the Survey Area.
 - Pacific Swift (*Apus pacificus*) – Migratory/Marine.

The remaining 29 conservation significant species are considered to have a low likelihood of occurrence.



Legend

- Survey Area
- Australian painted snipe, EN
- Blue-billed Duck, P4
- Carnaby's cockatoo, EN
- Common Sandpiper, IA
- Curlew sandpiper, CR & IA
- Dibbler, EN
- Forest red-tailed black cockatoo, VU
- Glossy ibis, IA
- Malleefowl, VU
- Pectoral sandpiper, IA
- Peregrine falcon, OS
- Red-necked stint, IA
- Sharp-tailed sandpiper, IA
- Western brush wallaby, P4
- Western rosella (inland), P4
- Western spiny-tailed skink, VU
- White-tailed black cockatoo, EN
- Woma (southwest subpop.), P1
- Wood sandpiper, IA

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CBH Group
Lot 4300 Moora

Biological Survey

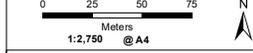
Figure 11 DBCA Threatened and Priority Fauna Records



Legend

- Survey Area
- Fauna Habitat**
- Cleared/Completely Degraded
- York Gum Woodland
- ▲ Fauna Habitat Assessment Locations

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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Figure 12
Habitat Assessment

Table 9: Fauna Likelihood

Key: STATE = Wildlife Conservation Act 1950 or Department of Biodiversity, Conservation and Attractions Conservation Code, EPBC = Environmental Protection and Biodiversity Conservation Act 1999, A = DBCA Threatened and Priority Fauna Search, B = Listed in Naturemap Search, C = EPBC Protected Matters Search, # = Number of DBCA Records in Past 15 years

CR = Critically Endangered, EN = Listed as Endangered, VU = Listed as Vulnerable, IA = International Agreement, MI = Listed as Migratory, CD = Conservation dependent fauna, OS = Other specially protected fauna, Ma = Listed as Marine under the EPBC Act, P = Listed as Priority by the DBCA.

FAMILY	SCIENTIFIC NAME	COMMON NAME	CONSERVATION CODES				HABITAT PREFERENCE	LIKELIHOOD OF OCCURRENCE		
			STATE	EPBC	A	B			C	#
AVIAN										
Anatidae	<i>Oxyura australis</i>	Blue-billed Duck	P4		X	X		4	Breeds in deep permanent, densely vegetated freshwater lakes, swamps and dams; winters on more open waters ²	Low
Apodidae	<i>Apus pacificus</i>	Pacific Swift (Fork-tailed Swift)	IA	MI & MA			X	-	Low to very high airspace over varied habitat, rainforest to semi-desert ¹	Medium
Cacatuidae	<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black Cockatoo	VU	VU	X			0	Tall eucalypt forest, woodland, feeds on seeds of large-fruited eucalypts ¹	Low
Cacatuidae	<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo	EN	EN	X	X	X	179	Forests, woodlands, heathlands, farms; feeds on banksias hakeas, dryandras - often on ground; also exploits pine plantations ²	Recorded
Charadriidae	<i>Thinomis cucullatus</i>	Hooded Plover (Hooded Dotterel)	P4	MA	X			0	Ocean beaches and margins of inland salt lakes ¹	Low
Falconidae	<i>Falco peregrinus</i>	Peregrine Falcon	OS		X	X		4	Most environments with suitable nest sites; cliff faces preferred, including man-made ones, commonly uses stick nests built by other species ¹	High
Megapodiidae	<i>Leipoa ocellata</i>	Malleefowl	VU	VU	X	X		2	Unburned mallee and woodland with abundant litter and low scrub ²	Low
Motacillidae	<i>Motacilla cinerea</i>	Grey Wagtail	IA	MI & MA			X	-	Usually near fresh sandy or rocky streams, but also on mown grass, ploughed land, sewage ponds ²	Low
Psittacidae	<i>Pezoporus occidentalis</i>	Night Parrot	CR	EN			X	-	Appears often to have been associated with spinifex, or among samphire bushes on margins of salt lakes ²	Low
Psittacidae	<i>Pezoporus wallicus flaviventris</i>	Western Ground Parrot	CR	CR			X	-	Confined to dense heathland in Fitzgerald Reserve and Cape Arid National Parks in the south west of Western Australia ¹	Low
Psittacidae	<i>Platyercus icterotus xanthogenys</i>	Western Rosella (Inland)	P4		X	X		0	Diverse, from tall wet karri to dry woodland well inland towards the Nullabor. Most common in woodlands of salmon gum and wandoo, farmlands; less common in heavy wet karri and jarrah; scarce on most sandy west coastal plain ¹	Low
Rostratulidae	<i>Rostratula benghalensis australis</i>	Australian Painted Snipe	EN	EN & MA	X		X	0	Surrounds and shallows of wetlands that are well vegetated with dense low cover ²	Low
Scolopacidae	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	IA	MI & MA	X	X	X	0	Fresh or salt wetlands - muddy edges of lagoons, swamps, lakes, dams, soaks, sewage farms, temporary floodwaters ²	Low
Scolopacidae	<i>Calidris ferruginea</i>	Curlew Sandpiper	VU & IA	CR, MI & MA	X		X	0	Inter-tidal mudflats of estuaries, lagoons, mangrove channels; around lakes, dams, floodwaters, flooded saltbush surrounds of inland lakes ²	Low
Scolopacidae	<i>Calidris melanotos</i>	Pectoral Sandpiper	IA	MI & MA	X	X	X	0	Usually coastal wetlands, both fresh and saline, but also inland on permanent and temporary wetlands. Uses sites with mudflats, fringing vegetation, swamps with heavy overgrowth of vegetation ²	Low
Scolopacidae	<i>Calidris ruficollis</i>	Red-necked Stint	IA	MI & MA	X			0	Diverse - tidal and inland on mudflats, salt marshes, beaches, salt fields, temporary floodwaters ²	Low
Scolopacidae	<i>Numenius madagascariensis</i>	Far Eastern Curlew (Eastern Curlew)	VU & IA	CR, MI & MA			X	-	Widespread but patchily distributed along coast, most numerous at sites with extensive tidal flats ¹	Low
Scolopacidae	<i>Tringa glareola</i>	Wood Sandpiper	IA		X			0	Uses freshwater wetlands, especially those with emergent sedges and taller fringing vegetation ¹	Low
Scolopacidae	<i>Tringa hypoleucos</i>	Common Sandpiper	IA	MI & MA	X	X	X	0	Varied coastal and interior wetlands - narrow muddy edges of billabongs, river pools, mangroves, among rocks and snags, reefs or rocky beaches; avoids wide open mudflats. Perches on branches, posts, boats ²	Low
Scolopacidae	<i>Tringa nebularia</i>	Common Greenshank	IA	MI & MA	X		X	0	Diverse inland and coastal spots. Away from the coast - uses both permanent and temporary wetlands - billabongs, swamps, lakes, floodplains, sewage farms and salt works ponds, flooded irrigated crops. On the coast - uses sheltered estuaries and bays with extensive mudflats, mangrove swamps, muddy shallows of harbours and lagoons, occasionally rocky tidal ledges. Prefers wet and flooded mud and clay rather than sand ²	Low
Threskiornithidae	<i>Plegadis falcinellus</i>	Glossy Ibis	IA	MI & MA	X			0	Shallow, fresh water, occasionally estuarine waters or dry grasslands ²	Low
MAMMALIAN										
Dasyuridae	<i>Dasyurus geoffroi fortis</i>	Western Quoll, Chuditch	VU	VU	X	X	X	0	Areas dominated by sclerophyll forest or drier woodland, heath and mallee shrubland ¹	Low
Dasyuridae	<i>Parantechinus apicalis</i>	Dibbler	EN	EN	X	X	X	0	Mature mallee heath on mainland; low heath and scrubland on islands ¹	Low
Dasyuridae	<i>Phascogale calura</i>	Red-tailed Phascogale	CD	EN			X	0	Denser and taller climax vegetation communities within Wandoo and Rock Sheoak alliances ¹	Low
Dasyuridae	<i>Phascogale tapoatafa wambenger</i>	Wambenger Brush-tailed Phascogale	CD		X			0	Arboreal, forages on mature rough-barked trees, large logs and dead standing trees ¹	Low
Macropodidae	<i>Notamacropus irma</i>	Western Brush Wallaby	P4		X			0	Open forest or woodland, open seasonally wet flats ¹	Low
Muridae	<i>Hydromys chrysogaster</i>	Water-rat	P4		X	X		0	Vicinity of permanent fresh or brackish water bodies ¹	Low
Peramelidae	<i>Isodon fusciventer</i>	Quenda	P4		X			1	Sandy soils with dense heathy vegetation ¹	Low
Thylacomyidae	<i>Macrotis lagotis</i>	Bilby, Dalgyte	VU	VU	X			0	Variety of inland habitats including Mitchell Grass and stony downs country of cracking clays, desert sandplains and dune fields sometimes containing laterite, with hummock grassland and massive red earths with Acacia shrubland ¹	Low
REPTILIAN										
Cheloniidae	<i>Pseudemura umbrina</i>	Western Swamp Turtle	CR	CR	X			0	Restricted to small clay-based temporary swamps at Bullsbrook, Perth ³	Low
Pythonidae	<i>Aspidites ramsayi</i>	Woma (southwest populat			X			0	Woodlands, heaths and shrublands, often with spinifex ³	Low
Scincidae	<i>Egernia stokesii badia</i>	Western Spiny-tailed Skink	VU	EN	X	X	X	0	Occupies rock crevices and hollow timber in sw. Interior of WA and on Dirk Hartog Is., Shark Bay ²	Low

¹ = (Menkhorst et al., 2017), ² = (Morcombe, 2003), ³ = (Wilson and Swan, 2017), ⁴ = (Van Dyck and Strahan, 2008)

4.5 Black Cockatoo Habitat Assessment

4.5.1 Desktop Assessment

The Survey Area occurs within the known breeding distribution of the Carnaby's Black Cockatoo (Department of Sustainability Environment Water Population and Communities, 2012; Department of the Environment and Energy, 2017). The DBCA database search returned 176 records of the species within a 50 km radius of the Survey Area, of which 102 occurred within the last ten years (Department of Biodiversity Conservation and Attractions, 2019e). The Survey Area is located in the centre of a confirmed breeding area (Department of Biodiversity Conservation and Attractions, 2019e).

The Forest Red-tailed Black Cockatoo is not considered likely to occur within the Survey Area based on modelled distribution (Department of Sustainability Environment Water Population and Communities, 2012; Department of the Environment and Energy, 2017). The DBCA database search returned one record of the species within a 50 km radius of the Survey Area, which occurred in 1966 (Department of Biodiversity Conservation and Attractions, 2019e).

The Survey Area is well outside of the Baudin's Black Cockatoo known or predicted distribution (Department of Sustainability Environment Water Population and Communities, 2012; Department of the Environment and Energy, 2017). The DBCA database search did not return any records for this species (Department of Biodiversity Conservation and Attractions, 2019e).

The results of the desktop assessment are displayed in Figure 13.

4.5.2 Field Survey

Two Carnaby's Black Cockatoos were recorded within the Survey Area. The individuals landed within a York Gum, rested briefly before leaving the Survey Area. No foraging was observed (Figure 14).

4.5.3 Breeding Habitat

The Black Cockatoo habitat assessment identified 21 Black Cockatoo potential breeding trees containing a Diameter at Breast Height (DBH) ≥ 500 mm (for York Gum) and ≥ 300 mm (for Wandoo) within the Survey Area (Figure 14 and Appendix F). The trees comprised of York Gum (12 trees), and Wandoo (9 trees). Nine of the identified potential breeding trees contained hollows, and one of these trees contained a hollow with an opening diameter greater than 12 cm.

No evidence of Black Cockatoo breeding, including observations of birds or chew marks around hollows, was observed within the Survey Area.

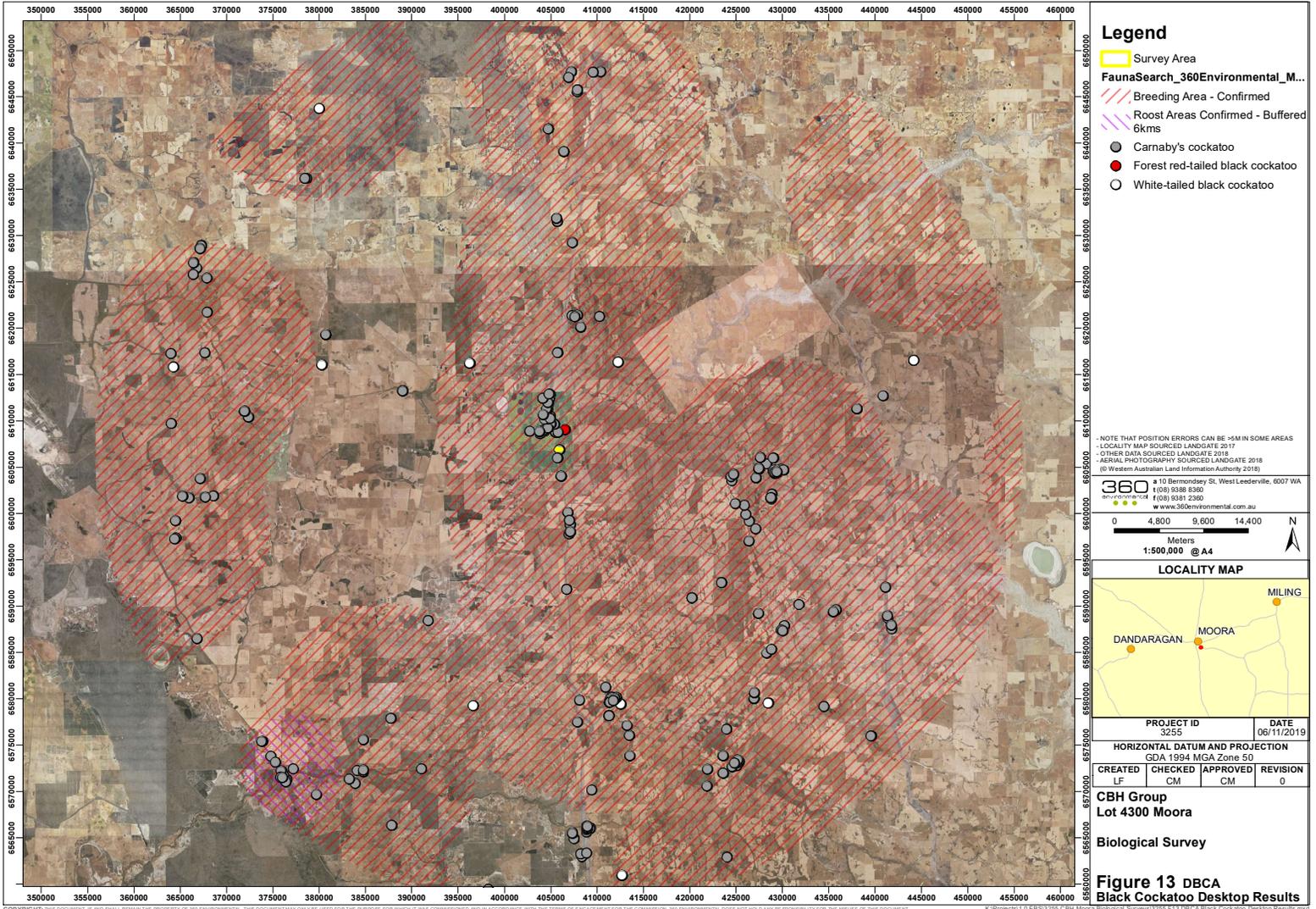
4.5.4 Foraging Habitat

The dominant flora species recorded within the Survey Area are known and are likely to be used as foraging species for the Carnaby Black Cockatoos. These include York Gum (*Eucalyptus loxophleba* subsp. *loxophleba*), Needle Tree (*Hakea preissii*), and *Grevillea biternata*. These

species are considered low quality compared to more favourable plant species such as Marri and *Banksia* species. The entire York Gum Woodland habitat (7.73 ha) is considered low quality foraging habitat.

4.5.5 Roosting Habitat

No evidence of Black Cockatoo roosting was observed within the Survey Area.



- Legend**
- Survey Area
 - FaunaSearch_360Environmental_M...
Breeding Area - Confirmed
 - Roost Areas Confirmed - Buffered 6kms
 - Carnaby's cockatoo
 - Forest red-tailed black cockatoo
 - White-tailed black cockatoo

NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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 OTHER DATA SOURCED LANDGATE 2018
 AERIAL PHOTOGRAPHY SOURCED LANDGATE 2018
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Figure 13 DBCA
Black Cockatoo Desktop Results



Legend

- Survey Area
- BC Foraging Evidence**
- Carnaby's Black Cockatoo
- BC Foraging Habitat**
- Cleared/Completely Degraded
- York Gum Woodland
- BC Significant Trees**
- Salmon gum
- Salmon gum with hollows
- York Gum
- York Gum with hollows
- ⊗ Trees with hollows >12cm

- NOTE THAT POSITION ERRORS CAN BE >5M IN SOME AREAS
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Biological Survey
Figure 14
Black Cockatoo Foraging Habitat and Significant Trees

5 Discussion

5.1 Flora and Vegetation

5.1.1 Flora

The suite of flora taxa recorded during the survey is considered typical for the respective areas (Beard 1976) and aligns with the database search results obtained. Despite the below-average rainfall recorded for the three months prior to completing the survey, the floristic diversity was considered within the expected range for the bioregion; however, it is likely the limited rainfall has resulted in lower herbaceous and annual species richness. In addition to rainfall, the disturbances across the Survey Area have likely contributed to the high proportion of weeds existent across the Survey Area which may also impact native species diversity.

The dominant flora species recorded: *Eucalyptus loxophleba* subsp. *loxophleba*, *Allocasuarina huegeliana*, *Hakea preissii* and *Daviesia benthamii* and high weed densities are consistent with the previous survey undertaken in 2006 (Bennett Environmental Consulting Pty Ltd, 2006). The Survey Area has one vegetation type with varying degrees of *Allocasuarina* densities, which is not considered to warrant the delineation of a second vegetation type.

5.1.2 Flora of Conservation Significance

No Threatened flora species pursuant to the EPBC Act 1999 and/or gazetted as Threatened/Declared Rare Flora pursuant to the BC Act 2016 were recorded during the survey.

Based on the habitat type present and known distribution, eight species have a high likelihood of occurrence within the Survey Area, these are as follows:

- *Acacia cochlocarpa* subsp. *cochlocarpa* (T, EN) is described as a glabrous, sprawling shrub, ranging between 0.3 and 1.5 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow; however, the flowering period of this species is relatively unknown. There is one record of the species within 20km, located approximately 3 km from the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f). Although the flowering period is relatively unknown, it is considered that due to its perennial and distinct nature as an *Acacia* species it is considered that if the species were to occur it would have likely been identified during the survey.
- *Hemiandra gardneri* (T, EN) is a prostrate, pungent shrub, ranging 0.1 to 0.2 m high and 1 m wide (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are red to pink-red and occur between August to October (Department of Biodiversity Conservation and Attractions, 2019b). As the survey was undertaken within the flowering period of the species and due to the distinct nature of the species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.

- *Calytrix ecalycata* subsp. *pubescens* (P1) is a shrub ranging up to 0.6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowering information is relatively unknown although individual records validate yellow flowers occurring in September (Department of Biodiversity Conservation and Attractions, 2019b). There are three records of the species within 20 km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f). Although the survey was undertaken within the suspected flowering period, due to the limited available information regarding this species it is considered to still have the potential to occur across the Survey Area.
- *Stylidium sp. Moora* (P2) is described as a stilted perennial herb species ranging up to 0.15 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are pink and have been recorded to occur during September to November (Department of Biodiversity Conservation and Attractions, 2019b). There are ten records of the species within 20 km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f). Although the survey was undertaken during the flowering period of the species, due to the limited rainfall experiences in the region in the three months prior to the survey and the nature of herb species it is considered that the species may still have the potential to occur across the Survey Area.
- *Gastrolobium rotundifolium* (P3) is described as an erect, bushy shrub ranging up to 0.8 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are orange, yellow and red and occur August to September (Department of Biodiversity Conservation and Attractions, 2019b). There are three records of the species within 20 km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f). As the survey was undertaken within the flowering period of the species and due to its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Leucopogon tamminensis* var. *tamminensis* (P3) is an open, erect, spreading shrub ranging between 0.3 to 0.8 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are white and occur from June through to October (Department of Biodiversity Conservation and Attractions, 2019b). There is one record of the species located 3 km from the Survey Area identified in 1945 (Department of Biodiversity Conservation and Attractions, 2019g). As the survey has undertaken within the flowering period of the species and the perennial nature of the species, it is considered that if the species were to occur within the Survey Area it would have likely been identified during the survey.
- *Melaleuca sclerophylla* (P3) is an erect, spreading to prostrate shrub ranging up to 0.9 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are purple-pink and occur from June to September (Department of Biodiversity Conservation and Attractions, 2019b). There are four records of the species within 20 km from the Survey Area (Department of Biodiversity Conservation and Attractions, 2019g, 2019f). As the survey was undertaken within the flowering period of the species

and its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.

- *Eucalyptus x carnabyi* (P4) is a mallee tree species ranging from 1.5 to 6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are pink-cream and occur October to November (Department of Biodiversity Conservation and Attractions, 2019b). There are two records of the species within 20 km from the Survey Area and were recorded in 1937 and 1986 (Department of Biodiversity Conservation and Attractions, 2019g, 2019f). Although the survey was undertaken outside of the flowering period of the species due to the distinct nature of Eucalypt species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.

Based on the habitat type present and known distribution, 22 species have a medium likelihood of occurrence within the Survey Area, these are as follows:

- *Acacia aristulata* (T, EN) is an erect or scrambling shrub ranging 0.25 to 1 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are cream-white and occur September to December (Department of Biodiversity Conservation and Attractions, 2019b). There are 22 records of the species within 20 km from the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g) of which the closest is 10.3 km from the Survey Area. As the survey has undertaken within the flowering period of the species and its distinct nature as an *Acacia*, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Acacia cochlocarpa* subsp. *velutinosa* (T, CR) is a velutinous, sprawling shrub ranging between 0.3 to 1.5 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow however flowering period is relatively unknown but has been recorded between July to November. There are no DBCA records of the species within 20km of the Survey Area. Although there is limited available information of flowering times and nearby records, due to its perennial and distinct nature as an *Acacia* species it is considered that if the species were to occur it would have likely been identified during the survey.
- *Banksia serratuloides* subsp. *serratuloides* (T, VU) is a low, bushy, lignotuberous shrub ranging from 0.3 to 1 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow and occur July to September (Department of Biodiversity Conservation and Attractions, 2019b). There are no DBCA records of the species within 20km of the Survey Area. As the survey was undertaken within the flowering period of the species, its distinct nature as a *Banksia* species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Chorizema humile* (T, EN) is a sprawling, prostrate or decumbent shrub (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow and red-brown

and occur July to September (Department of Biodiversity Conservation and Attractions, 2019b). There are no DBCA records of the species within 20km of the Survey Area. As the survey was undertaken during the flowering period, and the absence of any records it is considered that if the species were to occur within the Survey Area it would have likely been identified during the survey.

- *Conospermum densiflorum* subsp. *unicephalatum* (T, EN) is an erect, much-branched shrub ranging 0.3 to 0.6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers occur cream-white and blue and occur, September to November (Department of Biodiversity Conservation and Attractions, 2019b). There are two DBCA records of the species within 20km of the Survey Area. As the survey was undertaken within the flowering period of the species and its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Darwinia acerosa* (T, EN) is a spreading, compact shrub ranging 0.2 to 0.6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are green, red and purple and occur September to November (Department of Biodiversity Conservation and Attractions, 2019b). There are three DBCA records of the species within 20 km of the Survey Area, the closest of which is 16.1 km from the Survey Area (Department of Biodiversity Conservation and Attractions, 2019b). As the survey has undertaken within the flowering period of the species and its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Dasymalla axillaris* (T, CR) is a an erect shrub ranging up to 2 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are pale red in colour and although flowering information is limited it has been recorded to occur between July and December (Department of Biodiversity Conservation and Attractions, 2019b). There are no DBCA records of the species within 20km of the Survey Area. As the survey was undertaken within the suspected flowering period of the species, the absence of any nearby by records and its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Daviesia dielsii* (T, EN) is a divaricate shrub ranging from 0.5 to 0.9 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are orange and red and occur in July (Department of Biodiversity Conservation and Attractions, 2019b). There are no DBCA records within 20 km of the Survey Area. As the survey was undertaken within the suspected flowering period of the species, the absence of any nearby by records and the perennial nature of the species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Gastrolobium hamulosum* (T, VU) is a low shrub ranging 0.2 to 0.45 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow, orange, red and purple and occur between August to October (Department of Biodiversity

Conservation and Attractions, 2019b). There are no DBCA records within 20 km of the Survey Area. As the survey was undertaken within the suspected flowering period of the species, the absence of any nearby records and its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.

- *Grevillea christineae* (T, EN) is an erect wiry shrub ranging 0.5 to 0.6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are white-cream and occur August to September (Department of Biodiversity Conservation and Attractions, 2019b). There are two DBCA records of the species within 20km of the Survey Area. As the survey has undertaken within the flowering period of the species and the distinct nature of *Grevillea* species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Grevillea pythara* (T, EN) is a suckering shrub ranging 0.06 to 0.3 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are orange, red and blue and occur May to October (although have been recorded year round) (Department of Biodiversity Conservation and Attractions, 2019b). There are no DBCA records within 20 km of the Survey Area. As the survey was undertaken within the suspected flowering period of the species, the absence of nearby records and the distinct nature of *Grevillea* species it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Haloragis platycarpa* (T, CR) is an annual herb ranging up to 0.3 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are small and are green and white in colour, occurring September to December (Department of Biodiversity Conservation and Attractions, 2019b). Although the survey was undertaken within the suspected flowering period of the species, due the limited rainfall experienced prior to the survey and the nature of herb species, it is considered that the species still has the potential to occur within the Survey Area.
- *Caladenia dundasiae* (P1) is a herb ranging 0.15 to 0.35 m high (Department of Biodiversity Conservation and Attractions, 2019b). The species is poorly known species and appears to be confined to the Watheroo area within the Shire of Moora. Flowers are red/cream-yellow and occur July to August (Department of Biodiversity Conservation and Attractions, 2019b). There are two records of the species located 13.4 and 15 km from the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f). As the survey was undertaken outside of the known flowering period of the species, the indistinct nature of herb species and the significantly low rainfall prior to the survey, it is considered that the species still has the potential to occur across the Survey Area.
- *Bossiaea moylei* (P2) is a woody shrub ranging up to 2 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow and although flowering information is limited have been observed to occur September to November

(Department of Biodiversity Conservation and Attractions, 2019b). There are eight DBCA records within 20 km of the Survey Area. As the survey was undertaken within the suspected flowering period of the species and the perennial nature of the species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.

- *Synaphea rangiferops* (P2) is a shrub ranging up to 0.3 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are yellow and occur July to September (Department of Biodiversity Conservation and Attractions, 2019b). There is one DBCA record within 20 km of the Survey Area. As the survey was undertaken within the flowering period of the species and due to its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Babingtonia cherticola* (P3) is a shrub ranging up to 1.5 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are white to pale pink and occur December to March (Department of Biodiversity Conservation and Attractions, 2019b). There are 11 DBCA records within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken outside the flowering period of the species, it is considered that the species still has the potential to occur within the Survey Area.
- *Blackallia nudiflora* (P3) is a shrub ranging from 0.3 to 1 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are white-pale pink and have been recorded occurring in August and September (Department of Biodiversity Conservation and Attractions, 2019b). There is one DBCA record of the species within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken within the suspected flowering period of the species and due to its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Guichenotia tuberculata* (P3) is an erect, open shrub ranging from 0.25 to 0.9 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are purple and pink and occur August to October (Department of Biodiversity Conservation and Attractions, 2019b). There is one DBCA record within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken within the suspected flowering period of the species and due to its perennial nature, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Stylidium periscelanthum* (P3) is a perennial herb ranging 0.07 to 0.15 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are pink and occur September to October (Department of Biodiversity Conservation and Attractions, 2019b). There is one DBCA record within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). Although the survey was

undertaken within the flowering period of the species due to the nature of herb species and the limited rainfall experienced prior to the survey being undertaken it is considered that if the species still has the potential to occur within the Survey Area.

- *Stylidium sacculatum* (P3) is a creeping, perennial herb ranging 0.05 to 0.15 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are white-pink and occur October to November (Department of Biodiversity Conservation and Attractions, 2019b). There is no DBCA records of the species within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken outside of the species flowering period, the nature of herb species and the limited rainfall experienced prior to the survey being undertaken it is considered that if the species still has the potential to occur within the Survey Area.
- *Verticordia huegelii* var. *tridens* (P3) is a shrub ranging 0.15 to 0.6 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are green-yellow and red and occur September to November. There is one DBCA record of the species within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken within the suspected flowering period of the species and the perennial nature of the species, it is considered that if the species were to exist within the Survey Area it would have likely been identified during the survey.
- *Calothamnus accedens* (P4) is an erect slender shrub ranging up to 1.8 m high (Department of Biodiversity Conservation and Attractions, 2019b). Flowers are pink-red and have been observed to occur from September to January, although the flowering period is not well known (Department of Biodiversity Conservation and Attractions, 2019b). There are four DBCA records of the species within 20km of the Survey Area (Department of Biodiversity Conservation and Attractions, 2019f, 2019g). As the survey was undertaken within the suspected flowering period of the species and the perennial nature of the species, it is considered that if the species were to exist within the Survey Area it would have likely been identified.

5.1.3 Vegetation Types

Due to the small sample size of quadrats (n=3) and the relatively small Survey Area (7.73 ha) statistical analysis was not relied upon for delineating vegetation types. Due to the consistency in dominant species observed across all strata levels for each of the quadrats within the of the Survey Area, one vegetation type was delineated to occur across most of the Survey Area.

5.1.4 Vegetation of Conservation Significance.

In 2015 the *Eucalypt woodlands of the Western Australian Wheatbelt* was listed as Critically Endangered under the EPBC Act. This Community is also listed as a Priority 3 Ecological Community at the state level. This ecological community has 1412 records within 15 km of the Survey Area, with several buffers intersecting the Survey Area.

Vegetation type **EIHp** meets all diagnostic criteria of the *Eucalypt woodlands of the Western Australian Wheatbelt* Approved Conservation Advice and is therefore considered to be representative of this TEC.

5.2 Vertebrate Fauna

5.2.1 Fauna Habitat

The fauna habitat identified during the survey is common throughout the surrounding area and common throughout the overall Katanning (AW2) subregion.

The York Gum Woodland fauna habitat offers foraging and nesting opportunities for birds, small reptiles and small mammal species. The hollow forming *Eucalyptus* trees (Wandoo and York Gum) provide important refuge and breeding opportunities to many species, particularly Black Cockatoo species.

5.2.2 Species Recorded within the Survey Area

One species of conservation significance was recorded during the Survey Area. Two individual Carnaby's Black Cockatoos landed briefly within a York Gum, rested briefly before leaving the Survey Area. No foraging was observed.

This species is further discussed below in the Black Cockatoo Assessment.

5.2.3 Species Considered to have a High Likelihood of Occurrence

One species of conservation significance are considered to have a high likelihood of occurrence based on the post-field survey results.

Peregrine Falcon (*Falco peregrinus*) – Other Specially Protected (BC Act)

The Peregrine Falcon is listed as Other Specially Protected fauna under the BC Act and is an uncommon but wide-ranging bird across Australia (Barrett *et al.*, 2003). It occurs mainly along rivers and ranges as well as wooded watercourses and lakes and nests primarily on cliffs, granite outcrops and quarries. The diet of the Peregrine Falcon has been well studied and primarily includes flocking species such as parrots, pigeons and on the east coast European Starlings (Olsen and Fuentes, 2008).

Both the DBCA Threatened and Priority Search and NatureMap Search indicated the species had been recorded in the vicinity of the Survey Area. The species distribution is widespread, and it has the ability to inhabit most environments, therefore it is likely the species will occupy the Survey Area at some point. While the Survey Area does not contain preferred breeding habitat for the species, which are cliffs the species is known to occupy existing raptor and corvid stick nests (Menkhorst *et al.*, 2017), which may occur in scattered Eucalypts. The species is unlikely to rely on habitat types identified within the Survey Area and has good dispersal abilities unless nesting, therefore disturbance within the Survey Area is unlikely to impact the species.

5.2.4 Species Considered to have a Medium Likelihood of Occurrence

One species of conservation significance is considered to have a medium likelihood of occurrence within the Survey Area. Each are discussed below.

Pacific Swift (*Apus Pacificus*) – Migratory and Marine under the EPBC Act

The Pacific Swift is almost exclusively aerial, flying from less than 1 m to at least 300 m above ground and probably much higher. The Pacific Swift occupies a large airspace range (i.e. low to very high) over varied habitats, ranging from rainforests to semi-deserts (Morcombe, 2003). Although the species has the potential to occur in the airspace above the Survey Area, it will not be reliant on the habitats of the Survey Area. In addition, it has not been recorded within 10 km of the Survey Area in the last 15 years.

It is therefore concluded that the species will not be depend on the terrestrial habitat identified within the Survey Area and disturbance within the Survey Area is unlikely to impact the species.

5.3 Black Cockatoo Habitat Assessment

The Survey Area contains 21 native trees that meet the criteria to be considered potential breeding trees, one of which contains a hollow of a suitable size to be used for breeding by Black Cockatoo species. The potential breeding trees which do not currently contain suitable hollows may develop them in the future. Maintaining the long-term supply of trees of a certain size with suitable nest hollows is crucial in woodland stands that are known to support Black Cockatoo breeding (DSEWPaC, 2012).

Evidence of Black Cockatoo breeding was not recorded during the field survey, however the Survey Area occurs within the known breeding range of the Carnaby's Black Cockatoo (DSEWPaC, 2012; DoEE, 2017) and may be used for breeding in future. The Survey Area occurs outside the Forest Red-tailed Black Cockatoo and the Baudin's Black Cockatoo breeding range (DSEWPaC, 2012; DoEE, 2017), therefore these species are unlikely to breed within the Survey Area.

The dominant flora species recorded within the Survey Area are likely to be used as foraging species for the Carnaby Black Cockatoo. These include York Gum (*Eucalyptus loxophleba* subsp. *loxophleba*), Needle Tree (*Hakea preissii*) and *Grevillea biternata*. These species are considered low quality compared to more favourable plant species such as Marri and Banksia species. The total York Gum Woodland habitat (7.73 ha) is considered low quality foraging habitat.

Two Carnaby's Black Cockatoos were recorded within the Survey Area. The individuals landed within a York Gum, rested briefly before leaving the Survey Area. No foraging was observed.

Although no evidence of roosting was observed within the Survey Area, both York Gum and Wandoo species have the potential to be used for roosting by Black Cockatoos.

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Appendices

Appendix A

Database Searches

FID	Popid	Nameid	Taxon	Cons Status	WARank	Pop Number	Sub Pop Code	Location	District	Vesting	Purpose1	CountDate	Method	Mature Count	JuvenileC	SeedlingC	LiveTotal	Area	InFlower	Pop
212	102398	14051	Acacia aristulata	T	EN	1	A	Private Property, Lot 51 (68 Kiaka Road), E side of The Midlands Road, 15km N of Moora. Roadside quarry. Site R96/01, W end of rehabilitated block. Moora. Mining tenement M7000191.	MOORA	PRI	QUA	04/11/2000 0:00	ESTMT	1			1		N	
213	102399	14051	Acacia aristulata	T	EN	1	B	Private Property, Lot 51 (68 Kiaka Road), E side of The Midlands Road, 14km N of Moora. Roadside quarry. W most ridge of mine, site WOR005/6, ca. 350m ENE of entry to Goonderoo farm. Moora. Mining tenement M7000191.	MOORA	PRI	QUA	22/10/2000 0:00		0			0		N	
214	91637	14051	Acacia aristulata	T	EN	2		Unnamed NR (Cairn Hill) R 47694. E side of the Midlands Road, 10km N of Riley rd in moora. Go E 500m towards phone/radio tower, then turn S into gravel pit. Pop on E side of pit (Plants also on track going to pit).	MOORA	CC	CFF	22/09/2008 0:00	ACT_IND	33			0	35000	N	
215	91638	14051	Acacia aristulata	T	EN	3		Unnamed NR (Cairn Hill) R 47694. [Population extension 600m S of original Population 3 location] 10km North of Moora, turn east of Midlands rd. After 50m turn S at the fork, drive approx 700-900m to the eastern side of the gravel pit.	MOORA	CC	CFF	02/10/2008 0:00	ESTMT	50			0	50000	N	MODERATE
217	91640	14051	Acacia aristulata	T	EN	5		Dalaroo East Road, N & S verges. 1.2-1.4km east of the Midlands Road. Moora.	MOORA	LGA	VER	22/09/2008 0:00	ACT_IND	25			0	12000	N	
218	91641	14051	Acacia aristulata	T	EN	6		Dalaroo East Road, road verge. 3.7km east of the Midlands Road. Moora.	MOORA	LGA	VER	22/09/2009 0:00	ACT_IND	0		1	0	1000	N	
472	91711	14064	Acacia congesta subsp. cliffoniana			1	6	Crown Reserve 47693, ca 11 km north of Moora, on east side of Millendon Junction Nargulou Railway, at beginning of track to Cairn Hill Railway Station.	MOORA	RAJ	RRE	29/11/1999 0:00		0			1		N	
501	91722	14066	Acacia cummingiana			3	2	12.8 kilometres west of Barberton, Moora District. (Assumed to be on Wandawallah Road, awaiting confirmation).	MOORA	UNKNOW	UNKNOW	26/09/1971 0:00		0			0		N	
504	91725	14066	Acacia cummingiana			3	5	3.3 kilometres west of Barberton West Road on Wandawallah Road. Turnoff about 8 km west of Bindoon-Moora Road, just north of Barberton.	MOORA	LGA	VER	16/10/2003 0:00		0			0		Y	
2684	95085	45402	Babingtonia urbana			3	3	N side of Four Wheel Dr, ca. 0.7 km W of the junction with Prices Rd.	MOORA	PRI	UNKNOW	15/11/1988 0:00		0			0		N	
3005	96412	32696	Banksia dallanneyi subsp. polioستا			3	6	Just west of Moora cemetery.	MOORA	UNKNOW	UNKNOW	09/08/1993 0:00		0			0		N	
4377	94314	18039	Caladenia dundasiae			1	3	974 Balamong Road, Barberton (Crown Lease 123418; Expl. Lic. 7003007, Bauxite Resources), north of Barberton East Road, (ca 10 km east from Bindoon Moora Road).	MOORA	PLB	PAS	07/09/2007 0:00		0			0		Y	
4979	99332	5396	Calothamnus accedens			4	1	Approximately 50m south of Wass Road, on the eastern road verge of Wirrida Road, south of Moora. Plants have also previously occurred at the junction of Wirrida Road and Wass Road.	MOORA	LGA	VER	22/02/2005 0:00		7			7		Y	
4980	99333	5396	Calothamnus accedens			4	1	Location No. 3525, Lease No. P-781, Wass Rd/Wirrida Rd, Koojan. Approx 50m S of Wass Rd, along Wirrida Rd, adjacent to population 1A, within 1m of the fence line (on eastern side of Wirrida Rd).	MOORA	PRI		22/02/2005 0:00	ACT_IND	3			4		Y	
5151	94958	19977	Calytrix calycata subsp. pubescens			1	1	Crown Reserve 10006, [Capitela Road, 3.1 km south of] Barberton West Road, [23.5 km] SW of Moora.	MOORA	LGA	WAT	29/09/1988 0:00		0			0		N	
6445	87745	5504	Darwinia acerosa	T	EN	8		Bulbarret rd, 5.3km East of the Midlands rd (Really Bindoon-Moora rd) on both sides of road, with majority on the south side.	MOORA	LGA	VER	12/09/2012 0:00	ACT_IND	0			0			
6713	86659	3806	Daviesia dielsii	T	EN	3		Unnamed (Cairn Hill) NR (R 47694). 10km N of Riley Rd along the Midlands Rd, on E side. Turn S at fork in roads, go 600m to E edge of gravel pit. Pop is a further 200m E, plants also to N of gravel pit along tracks. Moora.	MOORA	CC	CFF	24/09/2008 0:00	ESTMT	350			350		N	
6719	86665	3806	Daviesia dielsii	T	EN	9		Unnamed (Cairn Hill) NR (R 47694). 10km N of Riley Rd along the Midlands Rd entry on E side. Go E 500m towards phone tower & turn S into gravel pit. Pop is on E side, also along track to phone pole (350-900m E of Midlands Rd). Moora.	MOORA	CC	CFF	22/09/2008 0:00	ACT_IND	3			3		N	
6720	86650	3806	Daviesia dielsii	T	EN	10		Prices Road, on E verge in gravel pit, & on W verge. Ca. 4.7-5.1km south from Coombesdale West Road. Moora.	MOORA	LGA	VER	02/10/2008 0:00	ESTMT	9			9		N	
6724	86654	3806	Daviesia dielsii	T	EN	14		Private Property Lot 201 (previously M578). N side of Dalaroo East Road, ca 8km NNE of Moora.	MOORA	PRI		30/11/1999 0:00	ACT_IND	2			2		N	
6726	86556	3806	Daviesia dielsii	T	EN	16		Private Property, Lot 51 (68 Kiaka Rd). East side of the railway reserve/The Midlands Road, adjacent to Cairn Hill Siding. Ca. 650m E of entry to Goonderoo farm from the Midlands Rd. Moora. Mining tenement M7000191.	MOORA	PRI	QUA	22/10/2000 0:00					0		N	
7229	90600	12936	Diuris recurva			4	5	In Shire res on NE side of Geraldton Hwy, On NW side of res.	MOORA	LGA		27/06/1991 0:00	ESTMT	0			10		N	
7632	95588	28242	Eremaea sp. Cairn Hill (B. Morgan 532)			2	1	Lot M575, Moora (P. & J. Gardiner). Adjacent to SE corner of un-named Nature Reserve, 4 km SSE of Cairn Hill, (ca 1.6 km east of The Midlands Road), ca 15 km north of Moora (Expl. Lic. 7002750, Simcoa Operations).	MOORA	PRI	UNKNOW	12/12/2004 0:00	ACT_IND	0			2		N	
7980	100332	7266	Eremophila scaberula	T	CR	1	A	Road Reserve. Bindoon-Moora Road, 9.1-10.4km south of Drummond Street (Moora Townsite), west side road, ca 400m south of entrance to Rainfurly Park.	MOORA	MRD	VER	17/06/2010 0:00	ESTMT	37			0		N	MODERATE

FID	Popid	NameId	Taxon	Cons Status	WARank	Pop Number	Sub Pop Code	Location	District	Vesting	Purpose1	CountDate	Method	Mature Count	JuvenileC	SeedlingC	LiveTotal	Area	InFlower	Pop
7981	100333	7266	Eremophila scaberula	T	CR	1	B	Railway Reserve. Bindoon-Moora Road, 9.6-10km S of Drummond Street (Moora Townsite). E side road between telephone poles 140/12 & 140/03, opposite to Ranfurly Park entrance, on both sides of railway line and extends to S side of Barberton East Road.	MOORA	RAI	RRE	22/10/2015 0:00	ACT_IND	199			0		Y	HEALTHY
7982	100334	7266	Eremophila scaberula	T	CR	1	C	Nature Rese No. 23179, Bindoon-Moora Road, 11km south of Drummond Street (Moora Townsite), east side road, with railway reserve bisecting reserve.	MOORA	CC	CFF	19/11/1996 0:00		0			0		N	
7983	100336	7266	Eremophila scaberula	T	CR	2	A	Road Reserve. Bindoon-Moora Road, 4.65-5.63km south of Drummond Street (Moora Townsite), east side of road, on both sides of the railway line.	MOORA	MRD	VER	17/06/2010 0:00	ESTMT	41			0		N	MODERATE
7984	100337	7266	Eremophila scaberula	T	CR	2	B	Railway Reserve. Bindoon-Moora Road, 4.65-5.63km south of Drummond Street (Moora Townsite), east side of road between telephone poles 136/02 and 135/01, on both sides of the railway line and railway service road.	MOORA	RAI	RRE	22/10/2015 0:00	ACT_IND	187			0		Y	HEALTHY
7985	100339	7266	Eremophila scaberula	T	CR	3	A	Road reserve. Bindoon-Moora Road east side, 20.1-22.5km south from Drummond Street in the Moora Townsite, either side of a farmers gate to Location No. M98.	MOORA	MRD	VER	17/06/2010 0:00	ESTMT	71			0		N	MODERATE
7986	100340	7266	Eremophila scaberula	T	CR	3	B	Railway Reserve. East side between telephone poles 125/01 to 124/04, Bindoon-Moora Road, 20.1-22.5km south from Drummond Street in the Moora Townsite, either side of a farmers track/gate to Location No. M98.	MOORA	RAI	RRE	23/10/2015 0:00	ACT_IND	251			0		Y	HEALTHY
7987	116429	7266	Eremophila scaberula	T	CR	4		Road Reserve. Continuation of Fry Street road reserve, Moora. Pop is ~55m W of the Long Street and Fry Street intersection.	MOORA	LGA	VER	25/08/2017 0:00	ACT_IND	9			0	40	Y	HEALTHY
8171	90776	13093	Eucalyptus absita	T	CR	8		North West Road, ca. 5km NW from the intersection with Dandaragan Road, west of Moora. Herbarium Collection.	MOORA	LGA	VER	10/05/1999 0:00	ACT_IND	32			32		Y	
9190	93631	16944	Eucalyptus x carnabyi			4	3	SW corner of Melbourne Location 3553. At the end of the track which runs W of Boundary Rd at 1.8 km S of the junction with Barberton Rd. (2.4 km W of Boundary Rd and 2.8 km S of Barberton Rd).	MOORA	PRI		19/07/1986 0:00	ACT_IND	15			15		N	
9605	86830	3922	Gastrolobium rotundifolium			3	10	Bubberton East Rd, ca. 2.2km E from junction of Bindoon-Moora Rd (both sides).	MOORA	LGA	VER	21/11/2006 0:00	ACT_IND	54		20	74		N	
9775	89121	7491	Goodenia arthrotricha	T	EN	1		Private Property, Lot.52, The Midlands rd, Kiaka Rd., ca.15km N of Moora. Site CHN, RFS, Chert Ridge (CHN).	MOORA	PRI		01/09/2006 0:00	ACT_IND	4			4		N	
11376	106561	6177	Haloragis platycarpa	T	CR	2		Railway Reserve. Koojan siding is 18 km south of Moora and Moora to Bindoon Road. Population is along road/rail verge on eastern side of Moora to Bindoon road on both sides of rail line.	MOORA	RAI	RRE	04/10/2011 0:00	EXT_TRNS	230	320	1100	0			HEALTHY
13365	88193	5963	Mela-leuca sclerophylla			3	2	Cattady Rd, at 0.35 km N of the junction with Dalaroo Rd.	MOORA	LGA		07/11/1990 0:00		0			0		N	
13518	92712	14726	Micromyrtus rogeri			1	1	Lot M49A, Koojan. [3.9 km east of] Bindoon Moora Road, [3 km south of Bulbarret Road].	MOORA	PRI		13/11/1990 0:00		0			0		N	
14218	94998	20167	Pertusaria trachyspora			2	4	Railway Reserve [Millendon Junction to Narngulu Railway]. 35km S [713km S] of Koojan. [Railway adjacent to Bindoon-Moora Rd]. Shire of Moora.	MOORA	RAI	RRE	03/01/2004 0:00		0			0		N	
14219	94999	20167	Pertusaria trachyspora			2	5	Dalaroo Rd [Dalaroo East Rd]. N of Moora along Midlands Rd, [360m NE of Dalaroo]. Shire of Moora.	MOORA	LGA	VER	04/01/2004 0:00		0			0		N	
14965	99838	6015	Regelia megacephala			4	1	Reserve 47694. 0.5 km E of The Midlands Rd (Geraldton Highway), at ca 3.5 to 4.5 km S of Kiaka Rd. Lot M574, Mel Loc 909.	MOORA	CC	CFF	23/11/1982 0:00	ESTMT	0			7350		Y	
14966	99839	6015	Regelia megacephala			4	1	0.5 km E of The Midlands Rd (Geraldton Highway), at ca 1.8 to 3.2 km S of Kiaka Rd. Lot PM573, Mel Loc 909.	MOORA	PRI	QUA	23/11/1982 0:00	ESTMT	0			7350		Y	
14967	88206	6015	Regelia megacephala			4	2	0.8 km E of The Midlands Rd (Geraldton Highway), at ca 5.3 km S of Kiaka Rd. Lot M577, Mel Loc 909.	MOORA	PRI		24/11/1982 0:00	ESTMT	0			5750		Y	
14968	88207	6015	Regelia megacephala			4	3	0.15 km NE of Dalaroo East Rd, at ca 3.2 km E of the junction with The Midlands Rd (Geraldton Highway). Lot M579, Mel Loc 909.	MOORA	PRI		24/11/1982 0:00	ESTMT	0			1650		Y	
14969	88208	6015	Regelia megacephala			4	4	0.6 km E of The Midlands Rd (Geraldton Highway), at ca 1 km S of the junction with Kiaka Rd. Lot PM573, Mel Loc 909.	MOORA	PRI		25/11/1982 0:00	ESTMT	0			2050		Y	
14970	99841	6015	Regelia megacephala			4	5	1.5 km E of The Midlands Rd (Geraldton Highway), at 1 to 2.5 km N of Kiaka Rd. E boundary of Lot 1, Mel Loc 909.	MOORA	PRI		25/11/1982 0:00	ESTMT	18		30	48		N	
14971	99842	6015	Regelia megacephala			4	5	1.5 km E of The Midlands Rd (Geraldton Highway), from 1 to 2.5 km N of Kiaka Rd. W boundary of Lot PM572, Mel Loc 909.	MOORA	PRI		25/11/1982 0:00	ACT_IND	18		30	48		N	
16006	93310	16374	Synaphea quartzitica	T	EN	1		'Cairn Hill' (47694). Radio Tower on 'Cairn Hill', 10.9km north of Moora River Bridge on the Midlands Road, then 1.2km east of Midlands Road, on Location No. M574. Follow track from base of radio tower down hill through clump of wandoo.	MOORA	CC	CFF	09/04/2001 0:00	ACT_IND	91		6	91		N	
16945	90037	12431	Verticordia huegelii var. tridens			3	5	Gravel Reserve No. 25256. Barberton West Road approximately 500 metres south of Wandawallah Road junction.	MOORA	NON	GRA	17/10/1992 0:00	ACT_IND	0			15		N	
16964	90053	12434	Verticordia insignis subsp. eomagis			3	9	Verge of Barberton West Rd, ca. 5.7 km SW from the junction with Wandawallah Rd.	MOORA	LGA	VER	14/09/1988 0:00		0			0		N	
16968	90046	12434	Verticordia insignis subsp. eomagis			3	13	Gravel Reserve 15918. Wandawallah Rd, 5 km W of Barberton West Rd.	MOORA	LGA	GRA	03/11/1992 0:00		0			0		Y	

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
14051	<i>Acacia aristulata</i>	T	Erect compact shrub 27 cm high, spreading 1 m.	Red clayey sand.	Open scrub to shrubland.		Abundance: frequent	11 km N of Moora along Midlands road	MAN	0	16/10/1991
14051	<i>Acacia aristulata</i>	T	Low sub shrub. Flowering pale yellow, pale green foliage.	Hill top, dry stoney, brown clayey sand, chert.	Open Tree mallee over Dense Heath A, Allocasuarina.		Abundance: patchy	100 m before radio tower 'Cairn Hill', ca 0.9-1.1 km from road, ca 12 km N of Moora.	GPS	1	04/11/1997
14051	<i>Acacia aristulata</i>	T	Low spreading shrub to 60 cm with cream yellow flowers.	Rocky rise. Pale brown sandy clay over chert.	Weedy road verge with Allocasuarina huegelliana, Isopogon sp., Xanthorrhoea sp., Hibbertia sp.			Dallaroo Road, 1.2-1.4 km E of Midlands Road	GPS	1	11/11/1997
14051	<i>Acacia aristulata</i>	T	Sprawling, untidy shrub 80 cm high. Pale yellow flowers. Bright pale green foliage, quite soft.	Slight hill, dry stony brown sandy clay, chert.	Scrub, Allocasuarina sp., Melaleuca sp.		Abundance: patchy.	1.2-1.4 km E of Midlands Road on Dalaroo East Road, N of Moora, N road verge.	GPS	1	04/11/1997
14051	<i>Acacia aristulata</i>	T	Erect (to 0.4 m tall) to diffusely spreading or scrambling shrub, stems slender and white (orange-brown with age). Stipules light brown, persistent and evident (to unaided eye) on branchlets. Phyllodes erect, light green. Flower-heads creamy white, 9 mm	Southern slope of low rocky hill, (slopes above quarry).	Open low woodland of Allocasuarina huegelliana with open shrubland of Dryandra sessilis, Allocasuarina campestris and low shrubs of Baeckea sp. Moora.	uncommon (ca 10 plants seen) and very localized.		14 km N of Moora, then 1 km E of Midlands Road	MAN	3	01/12/1986
14051	<i>Acacia aristulata</i>	T		W slope. Pale yellow brown clay loam and chert.	Open low woodland of Allocasuarina huegelliana with open shrubland of Dryandra sessilis, Allocasuarina campestris and low shrubs of Baeckea sp. Moora.	10+ mature plants, flowers, immature fruit and fruit dehisced.		Cairn Hill, lower slopes beside railway (E side) at ca 11 km N of Moora	GPS	1	29/11/1999
14051	<i>Acacia aristulata</i>	T	Erect, open shrub .7 m high x 1 m wide. Not flowering.	Breakaway, ridge, chert. Dry, grey, rocky.	Low shrubland. Allocasuarina sp., Acacia sp., Xanthorrhoea sp., Banksia sp.	21-50 plants.	Adult population. Percentage of population fruiting 50%.	1.4 km E of Midlands Road along the Dalaroo East Road, N and S verge	GPS	1	22/09/2008
14051	<i>Acacia aristulata</i>	T	Prostrate, open shrub 0.4 m high x 1.2 m wide.	Hillside. Chert gravel pit. Dry, grey-brown rocky. Cairn hill.	Tall shrubland. Banksia sp., Melaleuca sp., Acacia sp., Allocasuarina sp., Calytrix sp., Hibbertia sp.	21-50 plants.	Adult population, fruiting.	Cairn Hill Reserve, 10 km N of Riley Road (Moora) along Midlands Road. E side drive in 500 m towards telephone tower and then S into gravel pit on E side	GPS	1	22/09/2008
14051	<i>Acacia aristulata</i>	T	Prostrate shrub 0.2 m high x 0.15 m wide. Not flowering.	Breakaway, hillside. White-brown clay, rocky. Gravel pit.	Tall shrubland. Banksia sp., Allocasuarina sp., Calytrix sp., Daviesia dielsii, Acacia sp.	6-20 plants.		Cairn Hill turning S at fork in the tracks, drive 600 m to E edge of gravel pit, then 200 m E, Moora	GPS	2	24/09/2008
14051	<i>Acacia aristulata</i>	T	Domed shrub 0.4 m tall and 1 m diameter. Branches not rigid. Branchlets whitish grey. Phyllodes erect, mid-green. Heads cream 10 mm diameter, mostly in bud (with bracteoles exerted).	Edge of track above disused quarry. Rocky ground on lower slopes of low hill.	Low Scrub A over Heath B over Dwarf Scrub D (Scheme of Muir 1977): Allocasuarina campestris, Dryandra sessilis, Dibbertia subvaginata, Loxocarya flexuosa.			11 km N of Moora on the Midlands Road then 0.5 km E	MAN	0	16/09/1987
14051	<i>Acacia aristulata</i>	T	Recumbent shrub.	Low ridge, well drained; brown loamy sand, very rocky; chert (Quartzite).	Low Scrub A over Heath B over Dwarf Scrub D (Scheme of Muir 1977): Allocasuarina campestris, Dryandra sessilis, Dibbertia subvaginata, Loxocarya flexuosa.		Abundance: common.	Road Verge, Dalaroo East Road, 1.3km E of Midlands Road, N of Moora	MAN	1	08/11/1990
14051	<i>Acacia aristulata</i>	T		Gentle mid-slope on E side of ridge, close to cleared area. Gravelly, pebbly grey-brown (some humus) silt/fine sand between cobbles and boulders. Has a thin litter layer. Burnt > 10-15 years ago.	Allocasuarina huegelliana scattered low tree to low open woodland over Dryandra sessilis var. sessilis, Xanthorrhoea drummondii scattered tall shrubs over Kunzea preatensis high open shrubland to high shrubland over Hibbertia subvaginata open heath over D			Site WOR006, ca 15 km N of Moora. The westernmost ridge of the mine. This site is towards the southern end of the ridge, ca 500 m SNE of the entry to Goonderoo farm from the Midlands Road	GPS	1	22/10/2000
14051	<i>Acacia aristulata</i>	T	One shrub in rehab. plot, 40 cm high.	Lower slope, north-facing, of waste dump. Gravelly, fine silty pale brown sand with quartz boulders. Topsoil thinly returned over mine waste.	Regelia megacephala closed to open scrub over Trifolium spp., Bromus diandrus, Pentaschistis airoides open herb/grassland. Acacia aristulata, Allocasuarina campestris, Austroanthonia acerosa, Austrostipa tenuifolia, Avena barbata, Briza maxima, Bromus d		Regelia cover is ca 90% in lower half of plot, 50-70% in upper half. Plants also greener and taller. Yellow and under stress midslope. 1 x Allocasuarina present, 1 x Acacia aristulata present	Site No. R96/01. Ca 15 km N of Moora. W end of 1996 rehabilitation block	GPS	1	04/11/2000

14051	<i>Acacia aristulata</i>	T	Low shrub 50 cm high.	Gentle mid-slope. Brown fine sand/silt. Good mulch cover.	Allocasuarina huegeliana and <i>Acacia acuminata</i> subsp. <i>acuminata</i> scattered low trees over <i>Dryandra sessilis</i> var. <i>sessilis</i> scattered tall shrubs over <i>Kunzea praestans</i> closed heath to closed scrub over <i>Melaleuca calyptroides</i> , <i>Calothamnus sanguineus</i> , <i>Calytrix</i>			Site No. CAH005. Cairn Hill Westrail Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is on the slope to the N side of the track from the gravel pits to the radio tower, approx. 600 m east of the Midlands Road	GPS	1	23/10/2000
14051	<i>Acacia aristulata</i>	T		Western slope of N-S ridge, towards S end (breakaway). Grey fine sand.	<i>Regelia megacephala</i> open scrub over <i>Hibbertia subvaginata</i> open shrubland to low open shrubland over <i>Burchardia umbellata</i> , <i>Trifolium arvense</i> var. <i>arvense</i> / <i>Austrodanthonia acerosa</i> , <i>Vulpia myuros</i> var. <i>hirsuta</i> very open herb/grassland. Species list: <i>Acacia</i> st			Site No. WOR005. About 15 km north of Moora. The western most ridge of the mine. This site is towards the southern end of the ridge, approximately 350 m ENE of the entry to Gooneroo farm from the Midlands Road	GPS	1	22/10/2000
14051	<i>Acacia aristulata</i>	T		Gently sloping upper hillside. Gravelly, pebbly siliceous silt/fine sand. Some litter. Fire age: 5-10 years ago.	<i>Eucalyptus eudesmioides</i> subsp. <i>eudesmioides</i> low mallee open woodland to woodland over <i>Regelia megacephala</i> open to closed scrub over <i>Kunzea praestans</i> , <i>Xanthorrhoea drummondii</i> scattered shrubs over <i>Allocasuarina campestris</i> shrubland to open heath, over Mel			Site No. CAH005. Cairn Hill Westrail Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is ca 200 m NNW of the radio tower	GPS	1	23/10/2000
14062	<i>Acacia cochlocarpa</i> subsp. <i>cochlocarpa</i>	T									
14064	<i>Acacia congesta</i> subsp. <i>cliftoniana</i>	1		Slope W aspect, yellow brown clay loam.	Open low woodland of <i>Allocasuarina campestris</i> over shrubs with <i>Dryandra sessilis</i> , <i>Baeckea</i> sp. Moora and <i>Acacia congesta</i> subsp. <i>congesta</i> .	1 mature plant, vegetative.		Westward from Moora Ca 11 km N of Moora E side of railway line at beginning of track to Cairn Hill	MAN	0	29/11/1999
14066	<i>Acacia cummingiana</i>	3		Grey sand/yellow, broad upland.	Heath.			Farm N of North West Road, W of Moora AMG 50/LM872202 (Lake Dalaroo 1:50,000 sheet).	MAN	0	13/09/1988
14066	<i>Acacia cummingiana</i>	3	Leafless subshrub.	In gravelly soil.				8 miles W of Barberton, Moora district 3.3 km W of Barberton West Road on Wandawulla Road. Turnoff about 8 km W of Moora - Nugumber Road at Barberton	AUTO	3	26/09/1971
14066	<i>Acacia cummingiana</i>	3	Sprawling open bush 0.3 m high. Flowers yellow.	On yellow sand.	In low open woodland/heath with <i>Eucalyptus todtiana</i> and <i>Banksia prionotes</i> .	Fairly uncommon.		c. 440 - 1.4 km along Minyulo road from Moora - Caro road, ENE road verge and adjoining private land	AUTO	3	08/06/1984
29437	<i>Anigazanthos humilis</i> subsp. <i>Bodjingarra</i> [S.D. Hopper 7114]	2		Riverbank/low plain. Sand, white-grey, moist.	Woodland of Marri over <i>Thryptomene</i> , sparse low scrub A over dense low grass. <i>Eucalyptus calophylla</i> , <i>Xanthorrhoea</i> , <i>Macrozamia</i> , <i>Pimela</i> , <i>Thryptomene</i> , <i>Hibbertia</i> .	Abundance: 200 plants		Cairn Hill Westrail Reserve, ca 11 km N of Moora on the Midlands Road. The plot is on the E side of track to the radio tower towards the top of the hill, ca 700 m along the track from the Midlands Road.	GPS	1	23/10/2000
19959	<i>Aurostipa</i> sp. <i>Cairn Hill</i> [M.E. Trudgen 21176]	3		Gentle upper slope to NW. Whitish grey, gravelly siliceous silt/fine sand. Litter under <i>Allocasuarina campestris</i> .	<i>Allocasuarina huegeliana</i> scattered low trees over <i>Dryandra sessilis</i> var. <i>sessilis</i> , <i>Xanthorrhoea drummondii</i> scattered tall shrubs over <i>Allocasuarina campestris</i> shrubland to open heath over <i>Melaleuca calyptroides</i> scattered shrubs to shrubland over <i>Borya</i> sp	>10 (>15?) years since burnt.		Gravel pit, c. 10-15 km N of Moora	GPS	1	25/02/1997
45397	<i>Babingtonia cherticola</i>	3	Open shrub 50 cm high x 70 cm wide. Sweet strong smell. Grey fissured bark. Leaves aromatic, oil glands.	Hill, gravelly, stony, bare, brown clay over dolerite.	Woodland. (Muir. LA/LBr/KTL/Sc_SA/SBc/Sci/SDI/GTI/VT/Xr.)	frequent.		Gravel pit, 15 km N of Moora	AUTO	3	15/12/1990
45397	<i>Babingtonia cherticola</i>	3	Pink/white flowers.	Hills in examined area, red sand over quartz rock.	Scrub.	frequent.		Fresh material taken for Barbara Rye.	UNK	2	20/12/2004
45397	<i>Babingtonia cherticola</i>	3	Spindly shrub to 1.5 m. White to pale pink flowers.	Flat below hill. Brown, rocky sand loam.	<i>Acacia acanthoclada</i> subsp. <i>glaucescens</i> , <i>Allocasuarina</i> sp., <i>Dryandra sessilis</i> .			Cairn Hill, growing alongside track just E of the railway crossing			

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
45397	<i>Bobingtonia cherticola</i>	3	Open spreading shrub to 1-1.5 x 1-1.5 m; pale pink buds, white flowers with pink centre; flowers at end of branches.	W slope. Dry pale red/brown sandy loam and chert gravel scree.	Open low woodland of <i>Allocasuarina huegeliana</i> and tall open shrubland with <i>A. campestris</i> , <i>Dryandra sessilis</i> and <i>Regelia megalcephala</i> .	estimated 1000	mature plants, flower buds and flowers.	Cairn Hill, E side of Midlands Road, ca 12 km N of Moora.	GPS	1	29/11/1999
45397	<i>Bobingtonia cherticola</i>	3						Site CHN.RFS. Chert ridge CHN, ca 15 km N of Moora	MAN	3	26/11/2000
45397	<i>Bobingtonia cherticola</i>	3	Spindly plant, 1-2 m tall; in flower.	Gravel soil. Hillslope.				Cairn Hill, 12 km N of Moora on the Midlands Highway, on the edge of a gravel track leading to a Telecom tower, on E side of railway line	AUTO	3	17/12/1993
45397	<i>Bobingtonia cherticola</i>	3	Spreading shrub.	Low rise, well drained, shallow grey sandy quartz gravel, much outcropping chert; Noonidine Chert.	Low Scrub A over Heath B over Dwarf Scrub C (Scheme of Muir 1977); <i>Regelia megalcephala</i> , <i>Allocasuarina campestris</i> , <i>Hibbertia subvagnata</i> .	common.		Private Property, 12.5km at 10degrees from Moora	MAN	1	27/11/1990
45397	<i>Bobingtonia cherticola</i>	3		S facing moderate slope below crest of hill. Dark grey silty loam. Good litter layer.	<i>Eucalyptus eudesmioides</i> subsp. <i>eudesmioides</i> scattered low trees over <i>Regelia megalcephala</i> open to closed scrub over <i>Kunzea praestans</i> and <i>Melaleuca calyptroides</i> shrubland over <i>Xanthosia fruticulosa</i> open low shrubland over <i>Desmodadus flexuosus</i> open sedgela			Site No. CAH002. Cairn Hill Westral Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is on the slope to the N side of the track from the gravel pits to the radio tower, approx. 500 m east of the Midlands Road.	GPS	1	22/10/2000
45397	<i>Bobingtonia cherticola</i>	3		Gentle midslope. Brown fine sand-silt. Good mulch cover.	<i>Allocasuarina huegeliana</i> and <i>Acacia acuminata</i> subsp. <i>acuminata</i> scattered low trees over <i>Dryandra sessilis</i> var. <i>sessilis</i> scattered tall shrubs over <i>Kunzea praestans</i> closed heath to closed scrub over <i>Melaleuca calyptroides</i> , <i>Calothamnus sanguineus</i> , <i>Calytrix</i>			Site No. CAH005. Cairn Hill Westral Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is on the slope to the N side of the track from the gravel pits to the radio tower, approx. 600 m east of the Midlands Road.	GPS	1	23/10/2000
45397	<i>Bobingtonia cherticola</i>	3		Ridge top. Grey loamy sand.	<i>Allocasuarina huegeliana</i> , <i>Acacia acuminata</i> subsp. <i>acuminata</i> scattered low trees over <i>Kunzea praestans</i> open heath over <i>Hibbertia subvagnata</i> low open shrubland over <i>Neurachne alopecuroides</i> , <i>Aurostria variabilis</i> , <i>Aurostria setacea</i> very open grass			Site No. CHN006. About 15 km north of Moora. Cairn Hill North is the ridge of Cairn Hill extending north on to Goonderoo farm. The plot is on top of the ridge, approximately 100 m south of CHN005.	GPS	1	26/10/2000
45397	<i>Bobingtonia cherticola</i>	3		Landform: lower slope, Slope - 2x; Soil: chert brown sandy gravel / chert; Drainage: good.	Structure (Muir 1977): Open Low Woodland B / Heath A / Low Heath C / Dwarf Scrub D / Open Herbs; Major spp: <i>Allocasuarina campestris</i> , <i>Melaleuca radula</i> ; long unburnt.			AMG-Zone 50 406959mE 8621292m N. Railway land, W of Midlands Rd, S of Coomberdale (N of Moora).	MAN	0	/11/1991
32696	<i>Bankia dallanmey subsp. pallista</i>	3	In dense clumps, stems underground, style pale maroon.	In sand.	In <i>Bankia prionotes</i> low woodland with <i>Eremaea</i> , <i>Acacia</i> , <i>Stirlingia</i> .			Just W of Moora cemetery 116 mile peg on Eneabba road [ca 15 km N of Moora on Geraldton Highway]	MAN	0	09/08/1993
5377	<i>Beaufortia bicolor</i>	3	Compact low shrub 2 ft, flower in heads red and yellow.	Gravel pit.					AUTO	3	19/11/1968
31606	<i>Blackallia nudiflora</i>	3	Flowers white pink.					S of Moora, near Koojan	MAN	3	09/09/1969
4418	<i>Baronia ericifolia</i>	2	2.5 ft high.	In yellow sand.				8 miles W of Moora.	MAN	3	01/09/1965
4418	<i>Baronia ericifolia</i>	2						Rowes road W of Moora.	MAN	4	06/09/1966
48779	<i>Bassiaea moylei</i>	2	Erect to spreading shrub, 50 cm x 50 cm. Flowers standard yellow, eye yellow, halo red, wings ends yellow, keel red. In late flower.	Mid steep slope with brown pebbly silt over Proterozoic chert.	Shrubland of <i>Kunzea praestans</i> / <i>Dryandra sessilis</i> / <i>Allocasuarina campestris</i> / <i>Regelia megalcephala</i> .	locally common.		Cairn Hill Nature Reserve, 11 km N of Moora	UNK	2	18/09/2008

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
48779	<i>Bossiaea moylei</i>	2		Landform: hill-steep slope (mud-to upper). Soil surface: gravel and chert. Soil colour: grey. Underlying geology: Moora group of Proterozoic rocks.	Heath. Characteristic sp.: <i>Kunzea praestans</i> and <i>Dryandra sessilis</i> .			Cairn Hill, 10 km N of Moora	GPS	1	27/09/2000
48779	<i>Bossiaea moylei</i>	2		Crest of north-south orientated low ridge. To west, moderate-steep slope. To east, gentle slope. Near the high point of the ridge. Light grey fine silty sand.	<i>Regelia megacephala</i> open scrub over <i>Hibbertia subvaginata</i> low shrubland to open heath. <i>Acacia congesta</i> subsp. <i>congesta</i> , <i>Acacia stenoptera</i> , <i>Amphipogon</i> sp., <i>Austrodanthonia setacea</i> , <i>Bossiaea eriocarpa</i> ssp. Cairn Hill (M. Henson 2-28), <i>Briza maxima</i> , <i>Burchard</i>		Gridlines along north and south plot boundaries, some disturbance. Other earthworks south side.	Site No. WOR001. About 15 km north of Moora. The western most ridge of the mine area. The site is approximately 500 m ENE of the entry to Goonderoo farm from the Midlands Road	GPS	1	21/10/2000
48779	<i>Bossiaea moylei</i>	2		Midslope of a lower ridge on lower part of outcrop zone. Light grey silt/silty fine sand, gravely amongst cobbles (boulders and outcrop), 50-60% cover. Fire age: > 15 to 20 years.	<i>Allocasuarina huegeliana</i> scattered low trees to low open woodland over <i>Dryandra sessilis</i> var. <i>sessilis</i> , <i>Kunzea praestans</i> , <i>Xanthorrhoea drummondii</i> scattered tall shrubs over <i>Hibbertia subvaginata</i> shrubland to open heath over <i>Neurachne alopecuroides</i> , Austr			Site No. WOR003. About 15 km north of Moora. The westernmost ridge of the mine. This site is on the lower western slope, near the N-S centre, approximately 450 m ENE from the entry to Goonderoo farm from the Midlands Road.	GPS	1	21/10/2000
48779	<i>Bossiaea moylei</i>	2		Crest of north-south orientated low ridge. To west, moderate-steep slope. To east, gentle slope. Near the high point of the ridge. Light grey fine silty sand.	<i>Regelia megacephala</i> open scrub over <i>Hibbertia subvaginata</i> low shrubland to open heath. <i>Acacia congesta</i> subsp. <i>congesta</i> , <i>Acacia stenoptera</i> , <i>Amphipogon</i> sp., <i>Austrodanthonia setacea</i> , <i>Bossiaea eriocarpa</i> ssp. Cairn Hill (M. Henson 2-28), <i>Briza maxima</i> , <i>Burchard</i>		Gridlines along north and south plot boundaries, some disturbance. Other earthworks south side.	Site No. WOR001. About 15 km north of Moora. The western most ridge of the mine area. The site is approximately 500 m ENE of the entry to Goonderoo farm from the Midlands Road	GPS	1	21/10/2000
48779	<i>Bossiaea moylei</i>	2	Woody shrub, divaricate branching.	Gentle mid-slope on E side of ridge, close to cleared area. Gravelly, pebbly grey-brown (some humus) silt/fine sand between cobbles and boulders. Has a thin litter layer. Burnt > 10-15 years ago.	<i>Allocasuarina huegeliana</i> scattered low tree to low open woodland over <i>Dryandra sessilis</i> var. <i>sessilis</i> , <i>Xanthorrhoea drummondii</i> scattered tall shrubs over <i>Kunzea praestans</i> high open shrubland to high shrubland over <i>Hibbertia subvaginata</i> open heath over D			Site WOR006-6, ca 15 km N of Moora. The westernmost ridge of the mine. This site is towards the southern end of the ridge, ca 500 m ENE of the entry to Goonderoo farm from the Midlands Road	GPS	1	22/10/2000
48779	<i>Bossiaea moylei</i>	2	Shrub to 1 m tall. Differs from <i>Bossiaea eriocarpa</i> in that leaves are hirsute.	South-facing moderate slope below crest of hill. Dark grey silty loam. Good litter layer.	<i>Eucalyptus eudesmioides</i> subsp. <i>eudesmioides</i> scattered low trees over <i>Regelia megacephala</i> open to closed scrub over <i>Kunzea praestans</i> and <i>Melaleuca calyptroides</i> shrubland over <i>Xanthosia fruticulosa</i> open low shrubland over <i>Desmodadus flexuosus</i> open sedgela		Locally moderately common, but geographically restricted and therefore reasonably rare.	Site No. CAH002. Cairn Hill Westrail Reserve. Approximately 11 km north of Moora on the Midlands Road. The plot is on the slope to the N side of the track from the gravel pits to the radio tower, approx. 500 m east of the Midlands Road	GPS	1	22/10/2000
48779	<i>Bossiaea moylei</i>	2		Gentle mid-slope on E side of ridge, close to cleared area. Gravelly, pebbly grey-brown (some humus) silt/fine sand between cobbles and boulders. Has a thin litter layer. Burnt > 10-15 years ago.	<i>Allocasuarina huegeliana</i> scattered low tree to low open woodland over <i>Dryandra sessilis</i> var. <i>sessilis</i> , <i>Xanthorrhoea drummondii</i> scattered tall shrubs over <i>Kunzea praestans</i> high open shrubland to high shrubland over <i>Hibbertia subvaginata</i> open heath over D			Site WOR006, ca 15 km N of Moora. The westernmost ridge of the mine. This site is towards the southern end of the ridge, ca 500 m ENE of the entry to Goonderoo farm from the Midlands Road	GPS	1	22/10/2000
18039	<i>Caladenia dundasiae</i>	1	Perennial herb 10 cm high x 5 cm wide. Pink and white flowers.	Hill. Gravelly brown sandy loam over laterite.	Open low woodland A over dense shrubs. With <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> , <i>E. wandoo</i> , <i>Dryandra hewardiana</i> , <i>Hypocalymma angustifolium</i> .	occasional.		Site 195. Property of G. Joyce, N of Barberton East Road between Balarong Road and Wasis Roads, S of Moora	GPS	1	07/09/2007

18039	<i>Caladenia dundasiae</i>	1		Slope from a lateritic ridge. Brown loam.	Upslope open Eucalyptus wandoo woodland.	c. 25 flowering plants.	Some in fresh flower, some pollinated a couple of weeks ago.	0.6 km N of Bulbarnet Road on a track running through Bulbarnet Nature Reserve	GPS	1	17/08/2017
5396	<i>Calothamnus accedens</i>	4	Bushy shrub to 1 m tall.	Brown loam.	Weedy open low scrub.		6	100 m S of the intersection of Wirrida Road and Wass Road, eastern road verge	GPS	1	07/10/2004
5396	<i>Calothamnus accedens</i>	4	Bushy shrub ca 1 m tall; stamens red.	In granitic loam, on road verge.				Junction of Wirrida Road and Wass Road, S of Moora	MAN	0	09/08/1993
5421	<i>Calothamnus pachystachyus</i>	4	Dense shrub, 2 m tall with long hirsute leaves, flowers faded.	Flat top of breakaway, lateritic gravel over red brown loam on surface and at depth, well drained.	Dense shrubland 1-2 m tall with occasional <i>Allocasuarina campestris</i> above, with diverse extensive herb and grass layer below. Site is inaccessible and its condition is pristine.	occasional.		Remnant bushland surrounded by farmland on S side of Bulbarnet Road, c. 5 km E of the Bindoon-Moora Road. Access is through farm property. Quadrat site 3 is located in the SE section of the remnant, 750 m S of the dam on the W side of the track and at th	GPS	1	03/11/2005
19980	<i>Calytrix ecalycata</i> subsp. <i>brevis</i>	3	Upright shrub 0.5 m, flowers lemon yellow.	Flat, pale yellow sand.	Open scrub to 2 m, <i>Hakea</i> sp., <i>Daviesia</i> sp., <i>Calothamnus</i> sp., <i>Actinostrobilus</i> sp.	uncommon.		Warro Road	MAN	3	12/09/1993
19977	<i>Calytrix ecalycata</i> subsp. <i>pubescens</i>	1	Shrub 60 cm.	Brown loamy clay, upper slope.	Forest with <i>Eucalyptus wandoo</i> .			Roadverge, Barberton West Road, SW of Moora AMG 50JMM012008 (Lake Dalaroo 1:50,000 sheet)	MAN	0	29/09/1988
19977	<i>Calytrix ecalycata</i> subsp. <i>pubescens</i>	1	Shrub to 1.5 m tall.	Brown loam.				Road verge, Barberton West Road, SW of Moora	GPS	1	28/09/2007
14000	<i>Conospermum densiflorum</i> subsp. <i>unicephalatum</i>	T	Sprawling shrub 30 cm tall x 80 cm wide with upright flower stalk. Dirty white flowers. Very hairy leaves.	Flat. Gravelly brown clay over laterite.	Heathland. Associated species: <i>Dryandra</i> spp., <i>Allocasuarina</i> , <i>Melaleuca</i> sp., weeds, grasses, <i>Ptilotus</i> .	150+ plants.		2.3 km N of Gillingarra school on W side of Bindoon - Moora Road, between rail and road reserve,	GPS	1	12/12/2000
14000	<i>Conospermum densiflorum</i> subsp. <i>unicephalatum</i>	T	Sprawling shrub 30 cm tall x 80 cm wide with upright flower stalk. Dirty white flowers. Very hairy leaves.	Flat. Gravelly brown clay over laterite.	Heathland. Associated species: <i>Dryandra</i> spp., <i>Allocasuarina</i> , <i>Melaleuca</i> sp., weeds, grasses, <i>Ptilotus</i> .	60+ plants.		3.8 km N of Gillingarra school on W side of Bindoon - Moora Road, between rail and road reserve,	GPS	1	12/12/2000
5504	<i>Darwinia acerosa</i>	T	Dwarf shrub to 500 mm high and 1000 mm high. Full flowers - green.	Slope and dry soil.		more than 3 plants.	Opportunistic survey. South side of road. 7 x 110. Bindoon - Moora road verge.	Approx. 2 km E along Bulbarnet Road from Bindoon - Moora Road, 20 km S of Moora	MAN	3	23/08/1995
5504	<i>Darwinia acerosa</i>	T	Dome-shaped shrub to 30 cm. Leaves bright green.	Orange-brown clay loam over granite.	With <i>Acacia</i> sp., <i>Eucalyptus</i> spp., <i>Allocasuarina</i> sp., <i>Glychrocanyon</i> sp., weeds and grasses.			5.3 km E of Midlands Highway on Bulbarnet Road, plants on N and S road verge (mainly S verge)	GPS	1	22/11/1995
11963	<i>Daviesia debilliar</i> subsp. <i>sinuans</i>	3	Rambling prickly leafless shrub with triangular shaped fruits.	Flat top of breakaway, lateritic gravel over red brown loam on surface and at depth, well drained.	Dense shrubland 1-2 m tall with occasional <i>Allocasuarina campestris</i> above, with diverse extensive herb and grass layer below.			Remnant bushland surrounded by farmland on S side of Bulbarnet Road, c. 5 km E of the Bindoon-Moora Road. Access is through farm property. Quadrat site 3 is located in the SE section of the remnant, 750 m S of the dam on the W side of the track and at th	GPS	1	03/11/2005

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
3806	<i>Daviesia dielsii</i>	T		Landform: hill-steep (upperslope-upland). Soil surface: sand. Soil colour: grey. Soil type: sand over chert. Underlying geology: Moora group of Proterozoic rocks.	Heath. Characteristic sp.: <i>Regelia megacephala</i> .			Cairn Hill, 10 km N of Moora	GPS	1	27/09/2000
3806	<i>Daviesia dielsii</i>	T	Many stemmed shrub to 1 m, standard deep red turning orange with red margins outside; inside orange with red eye turning golden; keel and wings deep red.	On rocky (chert) hill.	In tall shrubland of Casuarina, <i>Dryandra sessilis</i> , <i>Kunzea</i> .			Cairn Hill, N of Moora	MAN	0	13/08/1993
3806	<i>Daviesia dielsii</i>	T	Diffuse shrub c. 1 m high. Flowers with dark red keel and dark orange standard having a dark red base.		In dense Casuarina-Acacia <i>multispicata</i> scrub.			Porter's Farm, 6.3 miles (10 km) N of Moora on Geraldton Highway	MAN	3	/08/1973
3806	<i>Daviesia dielsii</i>	T	Open shrub 120 cm high x 120 cm wide. Rough grey bark. Deep, tight barked tap root.	Hill, gravely, stony, bare, brown clay over dolerite.	Woodland. (Muir. LALLBr.KTI.Sc.SA.SBc.Sci.SDI.GTI.VT.Xr.)	occasional.		Gravel pit, c. 10-15 km N of Moora	GPS	1	25/02/1997
3806	<i>Daviesia dielsii</i>	T		Moderate, west-facing midslope. Gravely (quartz) sandy clay.	<i>Allocasuarina huegelliana</i> low woodland over <i>Allocasuarina campestris</i> shrubland over <i>Schoenus clandestinus</i> , <i>Bony sphaerocephala</i> /Austrostipa tenuifolia, <i>Austrodanthonia acerosa</i> open sedge/grassland. <i>Allocasuarina campestris</i> , <i>Allocasuarina huegelliana</i> , Austr		Fairly open section of sheoak low woodland, several dead sheoak trunks in area.	Site No. WDM002. About 15 km north of Moora. This area is a proposed wasteredump extension to the south of the mine. This site was approx. 650 m east of the entry to Goorderoo farm from the Midlands Road and 200 m north of the farm track	GPS	1	22/10/2000
3806	<i>Daviesia dielsii</i>	T	Low, untidy shrub 30 cm high x 60 cm wide. Flowering.	Plain, dry brown laterite.	Cleared.	rare.	This area has been cleared in the past following road alignment. Weedy.	Prices Road, 5 km S from Coomberdale West Road, NW of Moora	GPS	1	07/08/1997
3806	<i>Daviesia dielsii</i>	T		NW facing slope. Grey clayey loam and Noonline chert.	Tall shrubland with <i>Melaleuca radula</i> , <i>Kunzea praetans</i> , <i>Calothamnus quadrifidus</i> , <i>C.</i> and <i>Hibbertia</i> spp.	2 mature plants over 5 x 5 m area.		Ca 8 km NNE of Moora, N side of Dalaroo East Road	MAN	0	30/11/1999
3806	<i>Daviesia dielsii</i>	T	Erect, open, 0.6 m high x 0.4 m wide. Not flowering.	Breakaway hillside. White-brown clay-rock.	Gravel pit revegetation. Tall shrubland. <i>Banksia</i> sp., <i>Calytrix</i> sp., <i>Acacia</i> sp., <i>Allocasuarina</i> sp., <i>Acacia aristata</i> .	over 50 plants.	Immature-adult population. Percentage of population fruiting 40%	Cairn Hill Reserve, turning S of fork in the track, drive 600 m to E edge of gravel pit, walk another 200 m E, Moora	GPS	1	24/09/2008
3806	<i>Daviesia dielsii</i>	T	Erect, open shrub 0.9 m high x 0.7 m wide. Not flowering.	Breakaway, hillside. White-brown, rocky. Cairn Hill.	Tall shrubland. <i>Banksia</i> sp., <i>Acacia</i> sp., <i>Allocasuarina</i> sp., <i>Melaleuca</i> sp., <i>Acacia aristulata</i> , <i>Calytrix</i> sp.	2-5 plants.	Adult population. Percentage of population fruiting 100%.	Cairn Hill Reserve, gravel pit, from Midlands Road drive in 500 m turn S and on E side of pit	GPS	0	24/09/2008
3806	<i>Daviesia dielsii</i>	T	Erect compact shrub 70 cm high, in fruit.	Red clayey sand.	Open scrub to shrubland.	frequent.		11 km N of Moora along Midlands road	MAN	0	16/10/1991
3806	<i>Daviesia dielsii</i>	T	Spreading shrub, 90cm x 180cm diameter.	Upland, well drained; shallow brown humic loam; Noonline Chert.	Dense Heath A over Low Scrub C over Open Herbs (Scheme of Muir 1977); <i>Allocasuarina campestris</i> .	occasional.		E of railway line, 11.5 km at 10degrees from centre of Moora	MAN	1	15/08/1990
3806	<i>Daviesia dielsii</i>	T	Shrub to 1 m.	Flat & hill side. Rocky brown sandy loam. Growing along track running parallel to the railway line. Also growing along side track to radio tower.	<i>Allocasuarina</i> thicket. <i>Acacia acanthoclada</i> subsp. <i>glaucescens</i> , <i>Acacia</i> sp., <i>Allocasuarina</i> sp., <i>Dryandra sessilis</i> .	at least 30.	Population 3.	S of the track to Cairn Hill	UNK	2	20/12/2004
15828	<i>Desmodium elongatum</i>	4		Sandy soil.				N of Perth, between Watheroo and Moore River	AUTO	4	19/09/1958
12936	<i>Diuris recurva</i>	4			Tall Eucalypt woodland.	common throughout reserve.		Reserve on Midlands Road, outskirts of Moora, E side	GPS	1	09/08/2003
12936	<i>Diuris recurva</i>	4		Railway reserve.	Heath, introduced grass in scattered wandoo.	colonies of 50-60 plants.		Bindoon Moore Road, 80 m N of Crystal Brook Road	GPS	1	07/08/2005
12936	<i>Diuris recurva</i>	4		Alluvial area, poorly drained; brown sand ? over clay.	Very Open Tree Mallee over Heath A over Herbs over Low Sedges (Scheme of Muir 1977); <i>E. loxophleba</i> , <i>Allocasuarina campestris</i> , <i>Melaleuca adnata</i> , <i>Lepidodermis angustata</i> , <i>Neurachne alopecuroides</i> .	rare.		E side rail verge, 4.5 km at 5degrees from centre of Moora, just S of road to private property	MAN	1	14/08/1990
17605	<i>Eleocharis keigheryi</i>	T	Rhizomatous herb, 30 cm x 50 cm. inflorescence green.	Claypan with brown mud.	<i>Amphibromus</i> grassland.	uncommon.		100 m NE Koojan; 18 km S of Moora	UNK	2	04/10/2009

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
28242	<i>Eremaea</i> sp. <i>Cairn Hill</i> (B. Morgan 532)	2	Erect shrub 1.5 m high and 0.8 m wide. Flowers orange.	Shallow valley, dry white sand over laterite.	<i>Banksia</i> prionotes, <i>Kunzea</i> praestans, <i>Calothamnus</i> quadrifidus, <i>Xanthorrhoea</i> drummondii.	1 plant seen.		Private property (Kardella - Kewarra), near Cairn Hill, c. 11 km NNE of Moora	GPS	1	15/11/2018
28242	<i>Eremaea</i> sp. <i>Cairn Hill</i> (B. Morgan 532)	2	Shrub, old and collapsed (partly), 1.8 m tall. Bark grey, stringy.	Aspect S; hills, small valley between two low ridges; stony (quartzite) grey sand.	Semi-cleared tall shrubland, long-unburned with <i>Allocasuarina</i> campestris, <i>Kunzea</i> , <i>Xanthorrhoea</i> , <i>Hakea</i> and exotic annual grasses.	rare, 1 plant.		Cairn Hill area, c. 1 km E of the Midlands Road from c. 11.5 km N of Moora; on semi cleared farm	GPS	1	22/09/2012
28242	<i>Eremaea</i> sp. <i>Cairn Hill</i> (B. Morgan 532)	2	Shrub 2 to 2.3 m.	Very gently, S facing slope of gully floor between low ridges. Pale grey sand. Fire age > 10 years.	<i>Banksia</i> prionotes (few), <i>Acacia</i> acuminata subsp. acuminata scattered low trees over <i>Dryandra</i> sessilis var. sessilis scattered tall shrubs to high open shrubland over <i>Xanthorrhoea</i> drummondii, <i>Allocasuarina</i> campestris, <i>Calothamnus</i> aff. quadrifidus Moora-Wa	2 plants present.		ca 15 km N of Moora, adjacent to the SE corner of the CALM Cairn Hill Reserve on the property of P. & J. Gardiner	GPS	1	12/12/2004
17150	<i>Eremophila glabra</i> subsp. <i>chiarella</i>	T	Shrub 0.5 x 3 m. Leaves imbricate, erect; corolla green. Tallest plant in population 0.8 m.	On roadside.	Under <i>Eucalyptus</i> / <i>Acacia</i> low woodland.	2 plants. Few scattered plenty on roadside.		14.9 km S of Moora, Austin Botanical District	GPS	1	19/10/1993
17150	<i>Eremophila glabra</i> subsp. <i>chiarella</i>	T	Bush 1 m. Flowers green.	Disturbed area.		uncommon.		4 miles W of Moora	AUTO	3	05/09/1981
7266	<i>Eremophila scaberula</i>	T	Flowers mauve pinkish, rather than blue, 2/3 m and spindly, climbing through bush. Rather twiggy in upper parts, only 1/3 m spread.	Laterite soil.				E side of highway, 10 km S of Drummond Street, Moora,	MAN	0	15/10/1994
7266	<i>Eremophila scaberula</i>	T		Flat, brown loam-clay. Inundated.	Open woodland over low shrubs and grasses. With <i>Eucalyptus</i> salmonophloia, <i>E. wandoo</i> , <i>E. loxophleba</i> , <i>Santalum</i> sp., <i>Acacia</i> spp., <i>Scaevola</i> spinescens, <i>Melaleuca</i> .			9.8 km S of Moora along Bindoon - Moora road, opposite Ranfurly, E and W side of road,	GPS	1	31/07/1996
7266	<i>Eremophila scaberula</i>	T	Prostrate 20 cm high x 2 m wide.	Plain. Red/brown clay.	Salmon gum woodland.		Abundance: occasional.	Ca 21 km S of Drummond Street, (Moora township) on Moora-Mogumber Road, East Road reserve between road and railway line	MAN	0	03/12/1997
7266	<i>Eremophila scaberula</i>	T	Low prostrate shrub 0.3 m tall, 1 m wide; flowers blue.					5.1 km S of Drummond Street, Moora, road verge on Midlands Road	MAN	0	15/10/1994
7266	<i>Eremophila scaberula</i>	T	A low growing, almost procumbent heath-like shrub, the branches with raised decurrent lines from each leaf-stalk and along with the foliage scaberulous and scarcely viscid. Leaves rather crowded, spreading or incurved, linear or almost subulate, obtuse.	Growing in clay or rich loam in flat country.				Moora	MAN	3	10/1903
7266	<i>Eremophila scaberula</i>	T	Low compact to sprawling shrubs 300 cm high up to 1500 cm. Purple flowers. Appears in full flower.	Plain, moist brown sandy clay.	Low Scrub B with Open Woodland.		Abundance: occasional. Up to 80 plants. Occur in area c. 700 m x 100 m. Fence line to fence line (inclusive of Mogumber road and railway line).	10 km S of Moora on Moora - Mogumber road, both side of road and E side of railway line	GPS	1	22/08/1995
7266	<i>Eremophila scaberula</i>	T	Low compact to sprawling shrubs 300 cm high up to 1500 cm. Purple flowers. Appears in full flower.	Plain, moist brown sandy clay.	Low Scrub B with Open Woodland.		Abundance: occasional. Up to 80 plants. Occur in area c. 700 m x 100 m. Fence line to fence line (inclusive of Mogumber road and railway line).	10 km S of Moora on Moora - Mogumber road, both side of road and E side of railway line	GPS	1	22/08/1995
7266	<i>Eremophila scaberula</i>	T	Heath-like shrub <1 m high x ca 1 m wide. Purple flowers.	Low flat plain. Dry lateritic brown loam.	Low forest A, low shrub B with <i>Eucalyptus</i> salmonophloia, <i>Eucalyptus</i> wandoo.			20.8 km S of Drummond Road, S of Moora, railway reserve between the Midlands Road and the railway line and in between line and adjacent property	GPS	1	26/11/1996

7266	<i>Eremophila scaberula</i>	T	Low sprawling shrub 400 cm high, up to 1.2 m wide. Full flower.	Plain. Moist brown clay.	Low scrub 8 under Open Woodland with <i>Acacia lineolata</i> , <i>A. erinacea</i> , <i>A. hemiteles</i> , <i>A. bidentata</i> , <i>Melaleuca adnata</i> , <i>Grevillea</i> , <i>Chenopods</i> . Weedy species: wild oats, Guildford grass and <i>Briza</i> sp.		Abundance: 90 plants. Small population occurring when density of vegetation increases. Occurring both sides of railway line.	5.1 km S Moora-Mogumber Road	GPS	1	22/08/1995
7266	<i>Eremophila scaberula</i>	T	Rounded shrub to 1.5 m.	Low plain. Brown loam over laterite.	Low woodland with <i>Eucalyptus salmonophloia</i> , low scrub, grasses.		Abundance: 132 plants.	9.1-10.4 km S of Moora on Moora-Mogumber Road, both sides of railway line	GPS	1	12/12/1996
7266	<i>Eremophila scaberula</i>	T	Most plants: 1/4 m high x 1 m spreading, but one grew taller to 2/3 m and was fairly bushy, and another was growing up through a bush, very spindly to 2/3 m. The flowers of this one were more mauve-pinkish than blue.	On both side of highway, with a few plants across railway line at one point.			Abundance: only 7 or 8 plants at this site.	5.1 km S of Drummond Street, Moora. Between highway and railway line.	MAN	2	15/10/1994
7266	<i>Eremophila scaberula</i>	T	Rounded shrub to 1.5 m.	Low plain. Brown loam over laterite.	Low woodland with <i>Eucalyptus salmonophloia</i> , low scrub, grasses.		Abundance: 200 plants.	20.8 km S of Moora on Moora-Mogumber Road, both sides of railway line	GPS	1	12/12/1996
7266	<i>Eremophila scaberula</i>	T		Plain. Brown loam.	<i>Eucalypt</i> woodland with open shrubland to 1.5 m.	50+ plants.	Abundance: locally frequent.	Bindoon - Moora Road, ca 21 km S of Moora, eastern side of road	GPS	1	27/11/2007
7266	<i>Eremophila scaberula</i>	T	Low-radial shrub. 40 cm high x 1.0 m wide. Bright pale purple flowers.	Plain. Winter wet in areas. Brown clayey sand.	Open woodland.		Abundance: 50+ mature plants with late flowers & fruit.	Midlands Road, ca 21 km S of Moora	GPS	1	03/10/1996
7266	<i>Eremophila scaberula</i>	T		Flat, yellow brown sandy loam.	Open low woodland of <i>Eucalyptus salmonophloia</i> , <i>E. wandoo</i> , <i>E. loxophleba</i> with open low scrub to 1 & 2 m assoc. with <i>Acacia</i> sp., <i>Scaevola spinescens</i> .			S of Moora at 400 m S of entrance to Runfurley property on E side of Moora-Mogumber Road	GPS	1	27/10/1994
7266	<i>Eremophila scaberula</i>	T	Low shrub, 30 cm high x 40 cm wide. Flowers purple.	Plain. Light brown loamy soils.	Tall <i>Eucalyptus</i> woodland over scattered <i>Acacia</i> shrubs over mixed grasses.	common in small area.		Moora townsite	GPS	1	22/09/2016
13093	<i>Eucalyptus absita</i>	T			Coppice.			3.2 km SE of Badgingarra - Moora road on Dandargan road [Ca 8 km WNW of Moora]	MAN	3	10/06/1986
13093	<i>Eucalyptus absita</i>	T	Mallee 3 m tall with light yellowish grey-brown rough bark to 1 m, grey over greenish smooth above.					3.2 km SE of Badgingarra - Moora road on Dandargan road [Ca 8 km WNW of Moora]	MAN	3	10/06/1986
16944	<i>Eucalyptus x carnabyi</i>	4	10 ft high. Highly decorative red flower, old flower all dark salmon red.				Abundance: scarce.	Near Moora (Barberton district)	MAN	4	03/1937
3922	<i>Gastrolobium rotundifolium</i>	3	Compact shrub 0.6 m high x 1.2 m wide.	Towards top of hill. Dry, brown-red ironstone gravel. Shire road verge.	Muir - open woodland. <i>Eucalyptus wandoo</i> .	ca 54 plants.		Babberton East Road, 2.2 km E from Junction of Bindoon Moora Road	GPS	1	21/01/2006
3922	<i>Gastrolobium rotundifolium</i>	3	Compact shrub 80 cm tall x 1.8 m wide.	Brown gravelly loam. E-facing slope near top of hill.	Open woodland on road verge. With <i>Eucalyptus wandoo</i> .	at least 50 plants.		Babberton East Road, ca 2.1 km E of the Bindoon-Moora Road (Pop B. Todd 011) (S of Moora)	GPS	1	13/11/2007
7491	<i>Goodenia arthrotricha</i>	T						Site No. Simcoa, Moora. Chert ridge ca 15 km N of Moora	MAN	3	11/2000
7491	<i>Goodenia arthrotricha</i>	T						Site CHN RFS. Chert ridge (CHN) ca 15 km N of Moora	GPS	1	26/11/2000
2087	<i>Grevillea saccata</i>	4	2'.	Yellow sand.				8 miles W of Moora	MAN	3	01/09/1965
2087	<i>Grevillea saccata</i>	4		Hilltop. Concretionary gravel.	Heath to 1 m, <i>Calothamnus</i> and <i>Dryandra</i> spp.	1 mature plant.		Road verge at 5.8 km on Boundary Road from intersection with Koojan West Road	MAN	0	29/11/1999
16952	<i>Guichenotia tuberculata</i>	3	Low shrub.					Mogumber and N to Moora	AUTO	4	25/09/1954

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
6177	<i>Holoragis platycarpa</i>	T	Perennial much branched herb, 40 cm x 60 cm.	Loamy clay.	Open Eucalyptus woodland (W3.1V) over sparse shrubland (W3.OV). Associated species: Eucalyptus salmophloia, Eucalyptus loxophleba, Eremophila spp., Hyphaerhena sp.	c. 1650 plants.	New population: Population 2. Population starts c. 500 m N of Bulbarret Road and extends for up to 1.4 km N of Bulbarret (more survey work needed) or alternatively, in rail reserve opposite Koojan Salmon Gum Reserve c. 500 m N of Bulbarret Road on the Mo	Shire of Moora, C. 20 km S of Moora townsite (Drummond Street) on Moora - Bindoon Road on E road verge and extending to both sides of rail reserve	GPS	1	13/12/2012
6177	<i>Holoragis platycarpa</i>	T	Perennial much branched herb, 40 cm x 60 cm.	Loamy clay.	Open Eucalyptus woodland (W3.1V) over sparse shrubland (W3.OV) of Eremophila sp., Hakea sp., Grevillea sp.	c. 1650 plants.	New population: Population 2. Population starts c. 500 m N of Bulbarret Road and extends for up to 1.4 km N of Bulbarret (more survey work needed) or alternatively, in rail reserve opposite Koojan Salmon Gum Reserve c. 500 m N of Bulbarret Road on the Mo	Shire of Moora, C. 20 km S of Moora townsite (Drummond Street) on Moora - Bindoon Road on E road verge and extending to both sides of rail reserve	GPS	1	13/12/2012
6177	<i>Holoragis platycarpa</i>	T	Tall herb, multi-branched from base, with red ridged stems and mostly green leaves, red flowers, immature fruit.	Rail reserve, margins of wetland, standing water.	With Avena sp., Cotula sp., Hakea sp., Ptilotus sp., weedy grasses and composites.	occasional.		Rail-line, 50 m E from Bindoon-Moora Road, 1 km N from Koojan West Road, across from old Koojan rail station parking area	GPS	1	15/09/2010
6177	<i>Holoragis platycarpa</i>	T	Erect, multistemmed, perennial sub-shrub. 30/40 cm high x 30 cm wide. In flower and fruit.	Claypan. Red-brown cracking clay.	Amphibromus neesii tall grassland.	common around edges of claypan.		100 m NE Koojan, 18 km S of Moora	GPS	1	17/11/2009
6177	<i>Holoragis platycarpa</i>	T	Multistemmed perennial herb, 30/40 cm high x 30 cm wide. In flower.	Claypan - winter damp. Cracking brown clay.	Eucalyptus loxophleba very open woodland with scattered Acacia acuminata.	scattered.		100 m E of Koojan Siding; 18 km S	GPS	1	04/10/2009
6177	<i>Holoragis platycarpa</i>	T	Annual herb to 2 m, multi-stemmed branching from base, stems red to green, 4-angled, inflorescence branching, flowers green/white, early fruit.	Rail reserve, margins of wetland, some standing water. Disturbed site.	Avena sp. Cotula sp., Hakea sp., Ptilotus sp., weedy grasses and composites.	occasional. >50% weed infestations over most of site, plants occasion for ca 100 along rails.		Rail-line, 50 m E from Bindoon-Moora Road, 1 km N from Koojan West Road across from old Koojan railstation parking area	GPS	1	03/10/2010
6835	<i>Hemiantra gairdneri</i>	T						Moora district.	MAN	4	09/1972
6847	<i>Hemigenia curvifolia</i>	2	Shrub 70 cm.	Yellow sand, yellow upper slope.	Low open woodland/heath. Banksia prinotes, Adenanthos cygnorum, Banksia leptophylla, Leptospermum oligandrum, Mesomelaena stygia.			AMG 501L957960 (Capitella 1:50,000 sheet), roadverge Barbeton West Road, W of Moora	MAN	4	02/10/1988
6847	<i>Hemigenia curvifolia</i>	2	Small woody plant, flowers bluish.		On sandheath.			Moora-Badgingarra	MAN	4	23/09/1962
6847	<i>Hemigenia curvifolia</i>	2						Moora, N Watheroo Road	MAN	3	10/09/1971
6847	<i>Hemigenia curvifolia</i>	2						Moora	MAN	3	09/1947
6847	<i>Hemigenia curvifolia</i>	2	Spralling [sprawling] shrub 20 cm.	Grey sand/yellow broad upland.	Low open woodland/heath. Euc. toditiana, Melaleuca scabra.			AMG 501L964209 (Lake Dalaroo 1:50,000 sheet) farm N of North West Road W of Moora, [Moora-Badgingarra Road]	MAN	4	13/09/1988

5145	<i>Hibbertia miniata</i>	4					Checked in W.E. Blackall's collecting book. Not recorded. M.A. Lewington 27.11.2015.	Near Mogumber and Moora	MAN	4	09/1934
29775	<i>Isopogon drummondii</i>	3	Erect open pungent shrub 1 m high.	White to grey lateritic sand.	Open scrub over open shrubland.	occasional.		Intersection of Capitella road and Barberton West road	MAN	0	15/10/1991
16317	<i>Isotropis cuneifolia</i> subsp. <i>glabra</i>	3						Moora	AUTO	3	16/09/1927
6354	<i>Leucopogon allittii</i>	3						Moora, N Watheroo Road	AUTO	3	10/09/1971
19363	<i>Leucopogon taminensis</i> var. <i>taminensis</i>	3	Flowers white; small undershrub 12-18 inches tall.	In sandy soil.				N of Moora	AUTO	3	11/12/1945
33638	<i>Meionectes tenuifolia</i>	3	Slender erect annual herb.	Winter wet flats, grey sand over clay.	Dominated by <i>Banksia telmatiaea</i> .	common locally.		8 km W on Wolkra road from Cooljarloo road AMG 50 JLM382040 Wedge Island 1:100,000	TOPO	3	16/10/1990
5963	<i>Melaleuca sclerophylla</i>	3	Shrub to 1.5 m tall. Leaves light green, bark light brown.	Sandplain at base of chert ridges. Lower lying.	Largely cleared for agriculture. Grazed <i>Eucalyptus salmonopholia</i> woodland surrounding.			The <i>Melaleuca</i> forms quite a dense heath in what is probably a seasonal dampland at the base of rocky chert ridges.	MAN	3	20/02/2001
5963	<i>Melaleuca sclerophylla</i>	3	Shrub <1 m with woody fruit, no flower.	Gently sloping to the north, well drained, soil is a pink beige loam with small areas of exposed laterite rock, sub-surface soil is pink sandy clay.	<i>Dryandra</i> <i>Melaleuca</i> shrubland with occasional small mallees over mixed low shrubs and herbs, in pristine condition.			ca 2 km E on Dalaroo Road East from the Midlands Road. 10 km N of Moora. Avon	MAN	3	20/02/2001
5963	<i>Melaleuca sclerophylla</i>	3		Landform: local rise, Slope - 1; Soil: brown gravelly loam; Drainage: good.	Structure (Muir 1977): Low Woodland A/ Low Scrub B/ Dwarf Scrub D; Major spp. <i>Eucalyptus wandoo</i> ssp. <i>wandoo</i> , <i>Melaleuca scabra</i> , <i>Daviesia divaricata</i> ; long unburnt.			Remnant bushland surrounded by farmland on S side of Bulbarnet Road, c. 5 km E of the Bindoon-Moora Road. Access is through farm property. Quadrat site 1 is located 150 m from the gate in the SE corner of the remnant on the W side of the diagonal track	GPS	1	02/11/2005
14726	<i>Micromyrtus rogeri</i>	1	Multistemmed shrub, 40cm.	Upper breakaway slope, moderately drained; lateritic gravel, red loamy matrix.	Very Open Shrub Mallee over Open Low Scrub B over Low Heath D (Scheme of Muir 1977); <i>Eucalyptus arachne</i> , E. aff. <i>rocktoniana</i> , <i>Micromyrtus</i> , <i>Melaleuca coroncarpa</i> , M. <i>uncinata</i> .			AAFG-Zone 50 410124mE 6614575m N, .	MAN	0	07/11/1990
20167	<i>Pertusaria trachyspora</i>	2	Thallus crustose K-, C-. Dormant.	On sheltered dry bank. Plain with bare to gravelly dry brown sandy clay.	Open woodland associated with <i>Eucalyptus wandoo</i> , <i>Acacia acuminata</i> and <i>Santalum</i> sp. Weeds common, Life form classes 3-4, HVD 100 m and floristic richness of 21-50 species.	frequent on site and occasional in area.	Associated with <i>Ochrolechia</i> sp. (K-y-o).	Private Property 4.5 km at 115degrees from junction of West Koojan Road and Midlands Road	MAN	1	13/11/1990
20167	<i>Pertusaria trachyspora</i>	2	Thallus crustose, dormant.	On sheltered wood in shrub level. Plain with littered dry semi saline brown clay.	Open woodland associated with <i>Eucalyptus loxophleba</i> , <i>Atriplex palulosa</i> , <i>Hakea pretisii</i> and <i>Scaevola spinescens</i> . Weeds common, Life form classes 3-4, HVD 50 m and floristic richness of 51-100 species.	frequent on site and occasional in area.		Railway Reserve, 35 km S of Koojan	GPS	1	03/01/2004
2285	<i>Petrophile biternata</i>	3						Dalaroo Road, N of Moora along Midlands Road	GPS	1	04/01/2004
6015	<i>Regelia megapcephala</i>	4						Moora.	MAN	3	30/09/1946
6015	<i>Regelia megapcephala</i>	4	Shrub 5 m high, cerise flowers, fruit present.	Hill, ex mined area, red sand over quartz rock.				Quartz hill range N of Moora	MAN	0	06/08/1996
6015	<i>Regelia megapcephala</i>	4						15 km N of Moora, Gravel pit	AUTO	3	15/12/1990
6015	<i>Regelia megapcephala</i>	4		Hill crowns in wheat fields. Quartz rock and gravel. Land status: Private.	Open low Woodland on Heath A and B.	ca 5750 plants.	Grazing evident.	6.6 miles N of Moora, 0.5 miles E of Geraldton Highway	MAN	3	24/11/1982
6015	<i>Regelia megapcephala</i>	4		Hill crown. Quartz rock and gravel. Land status: Private.	Heath A and thicket.	ca 2000 plants.	Signs of recent fire.	9.75 miles N of Moora, 0.4 miles E of Geraldton Highway	MAN	3	25/11/1982
6015	<i>Regelia megapcephala</i>	4	Erect shrub 140 cm high x 130 cm wide, fertile, faint sweet smell. Rough grey bark. Leaves aromatic, oil glands. Deep tap roots, papery bark texture.	Hill. Gravelly/stony/bare brown clay over dolerite.	Woodland.		Abundance: occasional.	Gravel pit, ca 10-15 km N of Moora	GPS	1	25/02/1997

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
6015	<i>Regelia megecephala</i>	4	Erect, slender shrub to 2 m tall with faint sweet smell. Rough grey bark, leaves aromatic. Flowers purple. Decussate and verticillate leaves.	Hill. Rocky, gravelly sand over chert/quartzite.	Shrubland. Associated species: <i>Daviesia dielsii</i> , <i>Acacia aristulata</i> , <i>Calothamnus</i> sp., <i>Allocasuarina huegeliana</i> , <i>A. campestris</i> , <i>Baekkea</i> sp.			Cairn Hill, mostly on rocky slopes, 11 km N of Moora,	MAN	0	24/11/2000
6015	<i>Regelia megecephala</i>	4	Erect slender shrub to 2.5 m; flowers purple.	W steep slopes, yellow brown sandy loam.	Open low woodland of <i>Allocasuarina huegeliana</i> over shrubland with <i>A. campestris</i> and <i>Baekkea</i> sp. Moora.	estimated 50+ mature plants with fruit, over 100 x 100 m area.		Ca 11 km N of Moora, Cairn Hill, mid-slopes on W side along track to summit	GPS	1	29/11/1999
6015	<i>Regelia megecephala</i>	4		Rocky hillside in quartz hill range. Quartz rock and gravel. Land status: private.	Open Low Woodland (<i>Eucalyptus</i> , <i>Casuarina</i>) on thicket and Dense Heath A & B.		Abundance: About 12700 plants. Occurs 1.5 m and 0.5 m S of quarry.	7.6 miles N of Moora, 0.5 miles E of Geraldton Highway, on track through quarry	MAN	3	23/11/1982
30715	<i>Stylidium carnosum</i> subsp. <i>Narrow leaves</i> (J.A. Wege 490)	1		Gravelly grey sand, lateritic gravel upland.	Heath <i>Dryandra kippistiana</i> , <i>D. carlinoides</i> .			AMG 501L 946954 (Capitella 1-50,000 sheet) road verge Barberton W Road, W of Moora	MAN	3	14/09/1988
7771	<i>Stylidium perisclanthum</i>	3		In moist soil in pockets on low granitic hill.				Ca 7 m [miles] NE Moora	AUTO	3	26/09/1973
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2	Prostrate herb, 0.07 m high x 0.2 m wide. Flowers pink. Reproductive method: seeds.	Open flat area with some drainage, low lying areas. Road verge. Brown clay.	Tall trees. Wandoo Woodland - open with scattered annuals and grasses. With <i>Eucalyptus</i> wandoo, <i>Calytrix ecalycata</i> subsp. pubescens.	21-50 plants.	Population structure: adult, 100% flowering.	5.5 km W of Midlands Road on Barberton West Road	GPS	1	09/09/2008
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2	Flowers pink.					Cairn Hill [N of Moora]	MAN	3	02/10/1968
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2		Landform: hill-gentle (mid to upper slope). Soil surface: sand. Soil colour: grey. Soil type: sand/gravel. Underlying geology: Moora groups of Protozoic rocks.	Heath. Characteristic sp.: <i>Kunzea praestans</i> , <i>Dryandra sessilis</i> and <i>Allocasuarina campestris</i> .			Cairn Hill, 10 km N of Moora	GPS	1	27/09/2000
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2		Landform: hill-steep (upper-slope-upland). Soil surface: sand. Soil colour: grey. Soil type: sand over chert. Underlying geology: Moora group of Protozoic rocks.	Heath. Characteristic sp.: <i>Regelia megecephala</i> .			Cairn Hill, 10 km N of Moora	GPS	1	27/09/2000
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2	Stilted perennial herb, 10 cm high x 30 cm wide. Flowers pink, in full flower.	Slopes. 5-10 cm needles - skeletal sand over chert.	<i>Eucalyptus</i> wandoo low woodland over <i>Allocasuarina campestris</i> shrubland.	locally common.		Cairn Hill; 20 km N of Moora	GPS	1	08/10/2005
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2		Gentle upper slope to NW. Whitish grey, gravelly siliceous silt/fine sand. Litter under <i>Allocasuarina campestris</i> . >10 (>15) years since burnt.	<i>Allocasuarina huegeliana</i> scattered low trees over <i>Dryandra sessilis</i> var. <i>sessilis</i> , <i>Xanthorrhoea drummondii</i> scattered tall shrubs over <i>Allocasuarina campestris</i> shrubland to open heath over <i>Melaleuca calyptroides</i> scattered shrubs to shrubland over <i>Borya</i> sp			Site. CAH003. Cairn Hill Westrail Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is on the E side of track to the radio tower towards the top of the hill, approximately 700 m along the track from the Midlands Road.	GPS	1	23/10/2000
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2		Midslope, NW facing. Gravelly, grey sandy loam. Very rocky. >10 years unburnt.	<i>Regelia megecephala</i> open scrub over <i>Allocasuarina campestris</i> , <i>Kunzea praestans</i> open shrubland. Very little understorey. <i>Allocasuarina campestris</i> , <i>Austrodracopis setacea</i> , <i>Austrostipa variabilis</i> , <i>Borya sphaerocephala</i> , <i>Bryza maxima</i> , <i>Burchardia umbellata</i> , <i>C</i>			Site No. CHN004. About 15 km north of Moora. Cairn Hill North is the ridge of Cairn Hill extending north on to Goenderoo farm. The plot is, approximately 1.1 km SSE of the entry to Goenderoo farm from the Midlands Road on a NW facing slope.	GPS	1	26/10/2000
33081	<i>Stylidium</i> sp. <i>Moora</i> (J.A. Wege 713)	2		Gently sloping upper hillslope. Gravelly, pebbly siliceous silt/fine sand. Some litter. Fire age: 5-10 years ago.	<i>Eucalyptus eudesmioides</i> subsp. <i>eudesmioides</i> low mallee open woodland to woodland over <i>Regelia megecephala</i> open to closed scrub over <i>Kunzea praestans</i> , <i>Xanthorrhoea drummondii</i> scattered shrubs over <i>Allocasuarina campestris</i> shrubland to open heath, over Mel			Site no. CAH006. Cairn Hill Westrail Reserve, approximately 11 km north of Moora on the Midlands Road. The plot is ca 200 m NNW of the radio tower	GPS	1	23/10/2000

NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Meth	Precision	Date
33081	<i>Stylidium sp. Moora (I.A. Wege 713)</i>	2		Ridge top. Grey loamy sand.	Allocasuarina huegeliana, Acacia acuminata subsp. acuminata scattered low trees over Kunzea praestans open heath over Hibbertia subvaginata low open shrubland over Neurachne alopecuroidea, Austrostipa variabilis, Austrodanthonia setacea very open grassie			Site No. CHN006. About 15 km north of Moora. Cairn Hill North is the ridge of Cairn Hill extending north on to Goonderoo farm. The plot is on top of the ridge, approximately 100 m south of CHN005.	TOPO	1	26/10/2000
33081	<i>Stylidium sp. Moora (I.A. Wege 713)</i>	2	Stilted trigger plant. Pink flowers.	Hilltop and hillside. SW aspect. Pale brown gravelly clay loam.	Allocasuarina shrubland. With Acacia sp., Allocasuarina campestris, Eucalyptus wandoo.	>=100.		Summit of Cairn Hill, N of Moora	GPS	1	13/11/2014
16374	<i>Synophea quartzitica</i>	T	Low, somewhat sprawling shrub. 25 cm high x 15 cm wide. Flowering.	Hill slope. Stony clay chert.	Scrub/Thicket with Allocasuarina, Xanthorrhoea, Calytrix.		Abundance: one plant only - rare. Plant appears to occur within and on the edge of taller Allocasuarina thicket. All plants on SSW - W aspect.	Ca 100-150 m N of southern boundary on W slope of hill	GPS	1	04/09/1997
16374	<i>Synophea quartzitica</i>	T	Shrub. Flowering nearing end. Long trailing racemes.	Hill slope, dry, rocky brown-grey clayey sand.	Thicket.	Infrequent.		Radio tower area. Cairn Hill (1.2 km E of Midlands Road), 11 km N of Moora	GPS	1	05/09/1996
16374	<i>Synophea quartzitica</i>	T	Small tufted shrub, flowers bright yellow, no scent.	In rocky, quartzite gully.	In shrubland with Casuarina, Melaleuca radula, Kunzea etc.			Cairn Hill, N of Moora,	MAN	0	13/08/1993
16374	<i>Synophea quartzitica</i>	T	Prostrate/spreading subshrub. 10-15 cm tall. Peduncle and rachis green.	Moderately steeply sloping. Grey clay over quartzite.	Shrubland: Sparse tall Allocasuarina and open Allocasuarina shrubs with Calytrix, Xanthorrhoea, Stylidium, Lamnaria, Myrtaceae shrubs.	occasional.		5 slope of Cairn Hill, ca 12 km NNE of Moora along The Midlands Road. Follow track through Eucalyptus accedens woodland ca 20 m into shrubland	GPS	1	30/08/1997
16374	<i>Synophea quartzitica</i>	T	Small tufted shrub, flowers bright yellow, no scent.	In rocky, quartzite gully.	In shrubland with Casuarina, Melaleuca radula, Kunzea etc.			Cairn Hill, N of Moora,	MAN	0	13/08/1993
16773	<i>Synophea rangiferops</i>	2	Caespitose shrub 40 cm high x 50 cm wide. Active growth phase. Flowers yellow.	Plain. Brown, gravelly sandy clay.		occasional.	50% of population flowering.	24 km S of Moora on Midlands Road,	GPS	1	17/10/1999
29458	<i>Tricoryne sp. Wongan Hills (B.H. Smith 794)</i>	2	15 cm high.	Moderate, west-facing mid-slope. Gravelly (quartz) sandy clay.	Allocasuarina huegeliana low woodland over Allocasuarina campestris shrubland over Schoenus clandestinus, Borya sphaerocephala/Austrostipa tenuifolia, Austrodanthonia acerosa open sedge/grassland. Allocasuarina campestris, Allocasuarina huegeliana, Austr		Fairly open section of sheoak low woodland, several dead sheoak trunks in area.	Site No. WDM002. About 15 km north of Moora. This area is a proposed wastedump extension to the south of the mine. This site was approx. 650 m east of the entry to Goonderoo farm from the Midlands Road and 200 m north of the farm track	GPS	1	22/10/2000
12410	<i>Verticordia dasystylis subsp. oestopala</i>	1		Slope. Brown clayey loam and sheet granite. Possibly grazed in paddock on S side.	Open mallee woodland and scrub to 3 m with low scrub beneath with Allocasuarina campestris, Borya sp., Melaleuca radula, Melaleuca sp., Thryptomena sp., Dodonaea sp.		Abundance: 12-13 plants on N side of road, a few seen in paddock on S side but not surveyed. Area occupied: 10 x 10 m on N side.	17.6 km W of Burjil on N and S sides of Road No. 2 at bend in road to E	MAN	0	09/11/1991
12410	<i>Verticordia dasystylis subsp. oestopala</i>	1		Grey brown clayey loam. Winter wet and sheet granite.	Open scrub to 3 m with Acacia uncinata, Dodonaea sp., Daviesia sp., Mibella ramulosa, Glicochocaryon aureum, Grevillea sp., Scaevola sp., Darwinia sp., Verticordia monadelpha.		Abundance: 130+ plants.	13 km W of Burjil on road No. 2 to Carnamah on bend to N	MAN	0	09/11/1991
12434	<i>Verticordia insignis subsp. eomagnis</i>	3	Erect open shrub 50 cm high, flowers white centres red.	Lateritic soil.	Open scrub.			Gazetted Reserve 2425 Wandawulla road, 5 km W of Barberton West road	MAN	0	03/11/1992
12434	<i>Verticordia insignis subsp. eomagnis</i>	3	Shrub 30 cm.	Gravelly grey sand, lateritic gravel upland. Roadverge.	Heath, Dryandra kippistiana, D. carlinoides.			AMG 5011.946954 (Capitella 1:50,000 sheet) roadverge Barberton West Road, W of Moora	AUTO	3	14/09/1988

NatureMap Species Report

Created By Colleen McDonald on 22/10/2019

Kingdom Plantae
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 116° 01' 03" E, 30° 39' 59" S
Buffer 20km
Group By Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	707	1498
Priority 1	6	14
Priority 2	9	34
Priority 3	25	58
Priority 4	8	35
Rare or likely to become extinct	13	110
TOTAL	768	1749

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Rare or likely to become extinct				
1.	14051 <i>Acacia aristulata</i>		T	
2.	14062 <i>Acacia cochlocarpa</i> subsp. <i>cochlocarpa</i>		T	
3.	14000 <i>Conospermum densiflorum</i> subsp. <i>unicephalum</i>		T	
4.	5504 <i>Darwinia acerosa</i> (Fine-leaved Darwinia)		T	
5.	3806 <i>Daviesia dielsii</i>		T	
6.	17605 <i>Eleocharis keigheryi</i>		T	
7.	17150 <i>Eremophila glabra</i> subsp. <i>chlorella</i>		T	
8.	7266 <i>Eremophila scaberula</i>		T	Y
9.	13093 <i>Eucalyptus absita</i> (Badgingarra Box)		T	
10.	7491 <i>Goodenia arthrotricha</i>		T	
11.	6177 <i>Haloragis platycarpa</i>		T	
12.	6835 <i>Hemiandra gardneri</i> (Red Snakebush)		T	
13.	16374 <i>Synaphea quartzitica</i>		T	
Priority 1				
14.	14064 <i>Acacia congesta</i> subsp. <i>cliftoniana</i>		P1	
15.	18039 <i>Caladenia dundasiae</i>		P1	
16.	19977 <i>Calytrix ecalycata</i> subsp. <i>pubescens</i>		P1	
17.	14726 <i>Micromyrtus rogeri</i>		P1	
18.	30715 <i>Stylidium carnosum</i> subsp. <i>Narrow leaves</i> (J.A. Wege 490)		P1	
19.	12410 <i>Verticordia dasystylis</i> subsp. <i>oestopoia</i>		P1	
Priority 2				
20.	29437 <i>Anigozanthos humilis</i> subsp. <i>Badgingarra</i> (S.D. Hopper 7114)		P2	
21.	4418 <i>Boronia ericifolia</i>		P2	
22.	48779 <i>Bossiaea moylei</i>		P2	
23.	28242 <i>Eremaea</i> sp. <i>Cairn Hill</i> (B. Morgan 532)		P2	
24.	23492 <i>Gompholobium roseum</i>		P2	
25.	6847 <i>Hemigenia curvifolia</i>		P2	
26.	33081 <i>Stylidium</i> sp. <i>Moorra</i> (J.A. Wege 713)		P2	
27.	16773 <i>Synaphea rangiferops</i>		P2	
28.	29458 <i>Tricoryne</i> sp. <i>Wongah Hills</i> (B.H. Smith 794)		P2	
Priority 3				
29.	14066 <i>Acacia cummingiana</i>		P3	
30.	3460 <i>Acacia nodiflora</i>		P3	
31.	19959 <i>Austrostipa</i> sp. <i>Cairn Hill</i> (M.E. Trudgen 21176)		P3	
32.	45397 <i>Babingtonia cherticola</i>		P3	
33.	45402 <i>Babingtonia urbana</i> (Coastal Plain Babingtonia)		P3	
34.	32696 <i>Banksia dallanneyi</i> subsp. <i>pollosta</i>		P3	
35.	5377 <i>Beaufortia bicolor</i> (Badgingarra Beaufortia)		P3	
36.	5384 <i>Beaufortia eriocephala</i> (Woolly Bottlebrush, Woolly Beaufortia)		P3	

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
37.	31606 <i>Blackallia nudiflora</i> (Wedge-leaved Cryptandra)		P3	
38.	19980 <i>Calytrix ecalycata</i> subsp. <i>brevis</i>		P3	
39.	11963 <i>Daviesia debilior</i> subsp. <i>sinuans</i>		P3	
40.	16887 <i>Eucalyptus macrocarpa</i> x <i>pyriformis</i>		P3	
41.	3922 <i>Gastrolobium rotundifolium</i> (Gilbernine Poison)		P3	
42.	16952 <i>Guichenotia tuberculata</i>		P3	
43.	29775 <i>Isopogon drummondii</i>		P3	
44.	16317 <i>Isotropis cuneifolia</i> subsp. <i>glabra</i>		P3	
45.	6354 <i>Leucopogon allittii</i>		P3	
46.	19363 <i>Leucopogon tamminensis</i> var. <i>tamminensis</i>		P3	
47.	33638 <i>Meioneetes tenuifolia</i>		P3	
48.	5963 <i>Melaleuca sclerophylla</i>		P3	
49.	2285 <i>Petrophile biternata</i>		P3	
50.	7771 <i>Stylidium periscelianthum</i> (Pantaloons Triggerplant)		P3	
51.	19260 <i>Stylidium sacculatum</i>		P3	
52.	12431 <i>Verticordia huegelii</i> var. <i>tridens</i>		P3	
53.	12434 <i>Verticordia insignis</i> subsp. <i>eomagis</i>		P3	
Priority 4				
54.	5396 <i>Calothamnus accedens</i>		P4	
55.	5421 <i>Calothamnus pachystachyus</i>		P4	
56.	15828 <i>Desmocladius elongatus</i>		P4	
57.	12936 <i>Diuris recurva</i>		P4	
58.	16944 <i>Eucalyptus</i> x <i>carnabyi</i>		P4	
59.	2087 <i>Grevillea saccata</i> (Pouched Grevillea)		P4	
60.	5145 <i>Hibbertia miniata</i> (Orange Hibbertia)		P4	
61.	6015 <i>Regelia megagephala</i>		P4	
Non-conservation taxon				
62.	4902 <i>Abutilon oxycarpum</i> (Flannel Weed)			
63.	15460 <i>Acacia aculeiformis</i>			
64.	3200 <i>Acacia acuminata</i> (Jam, Mangard)			
65.	3206 <i>Acacia aestivalis</i>			
66.	3231 <i>Acacia auronitens</i>			
67.	3235 <i>Acacia baxteri</i> (Baxter's Wattle)			
68.	3238 <i>Acacia bidentata</i>			
69.	15471 <i>Acacia brumalis</i>			
70.	15473 <i>Acacia congesta</i> subsp. <i>congesta</i>			
71.	3271 <i>Acacia costata</i>			
72.	20435 <i>Acacia daphnifolia</i>			
73.	11661 <i>Acacia drummondii</i> subsp. <i>drummondii</i>			
74.	18194 <i>Acacia ericksoniae</i>			
75.	3324 <i>Acacia erinacea</i>			
76.	3366 <i>Acacia hermiteles</i>			
77.	3376 <i>Acacia idiomorpha</i>			
78.	3391 <i>Acacia jacksonioides</i>			
79.	11519 <i>Acacia lasiocarpa</i> var. <i>bracteolata</i>			
80.	11611 <i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
81.	15721 <i>Acacia lasiocarpa</i> var. <i>sedifolia</i>			
82.	3412 <i>Acacia latipes</i>			
83.	11448 <i>Acacia leptospermoides</i> subsp. <i>leptospermoides</i>			
84.	3420 <i>Acacia ligustrina</i>			
85.	15477 <i>Acacia lineolata</i> subsp. <i>lineolata</i>			
86.	3442 <i>Acacia microbotrya</i> (Manna Wattle, Kalyang)			
87.	3451 <i>Acacia multispicata</i>			
88.	3474 <i>Acacia oxyclada</i>			
89.	15481 <i>Acacia pulchella</i> var. <i>glaberrima</i>			
90.	15482 <i>Acacia pulchella</i> var. <i>goadbyi</i>			
91.	15483 <i>Acacia pulchella</i> var. <i>pulchella</i>			
92.	15480 <i>Acacia pulchella</i> var. <i>reflexa</i>			
93.	30033 <i>Acacia saligna</i> subsp. <i>lindleyi</i>			
94.	3528 <i>Acacia saxatilis</i>			
95.	3532 <i>Acacia scirpifolia</i>			
96.	3541 <i>Acacia sessilis</i>			
97.	3543 <i>Acacia shuttleworthii</i>			
98.	15484 <i>Acacia sphacelata</i> subsp. <i>sphacelata</i>			
99.	3557 <i>Acacia stenoptera</i> (Narrow Winged Wattle)			
100.	3587 <i>Acacia ulicina</i>			
101.	1205 <i>Acanthocarpus canaliculatus</i>			
102.	7817 <i>Actinobole uliginosum</i> (Flannel Cudweed)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
103.	11837 <i>Adenanthos cygnorum</i> subsp. <i>cygnorum</i> (Common Woollybush)			
104.	1779 <i>Adenanthos drummondii</i>			
105.	186 <i>Aira elegantissima</i>	Y		
106.	1721 <i>Allocasuarina campestris</i>			
107.	1732 <i>Allocasuarina humilis</i> (Dwarf Sheoak)			
108.	1734 <i>Allocasuarina microstachya</i>			
109.	2648 <i>Alternanthera denticulata</i> (Lesser Joyweed)			
110.	2653 <i>Alternanthera pungens</i> (Khaki Weed)	Y		
111.	4905 <i>Alyogyne hakeifolia</i>			
112.	43023 <i>Alyogyne</i> sp. <i>Hutt River</i> (B.J. Lepschi & T.R. Lally 2310)			
113.	13380 <i>Amphibromus nervosus</i>			
114.	196 <i>Amphipogon caricinus</i> (Long Greybeard Grass)			
115.	12025 <i>Amphipogon caricinus</i> var. <i>caricinus</i>			
116.	2380 <i>Amyema miquelii</i> (Stalked Mistletoe)			
117.	13266 <i>Amyema miraculosa</i> subsp. <i>miraculosa</i>			
118.	2383 <i>Amyema preissii</i> (Wireleaf Mistletoe)			
119.	6311 <i>Andersonia heterophylla</i>			
120.	1409 <i>Anigozanthos humilis</i> (Catspaw)			
121.	11434 <i>Anigozanthos humilis</i> subsp. <i>humilis</i>			
122.	11566 <i>Anigozanthos viridis</i> subsp. <i>viridis</i>			
123.	6949 <i>Anthocercis littorea</i> (Yellow Tailflower)			
124.	6210 <i>Apium annuum</i>			
125.	7838 <i>Arctotheca calendula</i> (Cape Weed, African Marigold)	Y		
126.	207 <i>Aristida contorta</i> (Bunched Kerosene Grass)			
127.	210 <i>Aristida holathera</i>			
128.	1266 <i>Arthropodium dyeri</i>			
129.	6328 <i>Astroloma glaucescens</i>			
130.	6332 <i>Astroloma microdonta</i> (Sandplain Cranberry)			
131.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
132.	6336 <i>Astroloma serratifolium</i> (Kondrung)			
133.	6339 <i>Astroloma xerophyllum</i>			
134.	2457 <i>Atriplex exilifolia</i>			
135.	12042 <i>Atriplex lindleyi</i> subsp. <i>inflata</i>			
136.	17238 <i>Austrostipa eremophila</i>			
137.	37421 <i>Austrostipa</i> sp. <i>Marchagee</i> (B.R. Maslin 1407)			
138.	17257 <i>Austrostipa variabilis</i>			
139.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
140.	234 <i>Avena fatua</i> (Wild Oat)	Y		
141.	45398 <i>Babingtonia erecta</i>			
142.	5351 <i>Baeckea grandis</i>			
143.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
144.	32623 <i>Banksia carlinoides</i> (Pink Dryandra)			
145.	32521 <i>Banksia fraseri</i>			
146.	32523 <i>Banksia fraseri</i> var. <i>fraseri</i>			
147.	32518 <i>Banksia hewardiana</i>			
148.	32215 <i>Banksia kippistiana</i> var. <i>kippistiana</i>			
149.	11714 <i>Banksia leptophylla</i> var. <i>leptophylla</i>			
150.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
151.	32200 <i>Banksia nobilis</i> subsp. <i>nobilis</i>			
152.	32159 <i>Banksia polycephala</i> (Many-headed Dryandra)			
153.	1842 <i>Banksia prionotes</i> (Acorn Banksia)			
154.	32136 <i>Banksia purdieana</i>			
155.	32079 <i>Banksia sessilis</i> var. <i>flabellifolia</i>			
156.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
157.	32074 <i>Banksia shuttleworthiana</i> (Bearded Dryandra)			
158.	12111 <i>Banksia sphaerocarpa</i> var. <i>sphaerocarpa</i> (Fox Banksia)			
159.	46793 <i>Beaufortia kwongkanicola</i> (Lesueur Beaufortia)			
160.	7046 <i>Bellardia trixago</i> (Bellardia)	Y		
161.	3154 <i>Billardiera coriacea</i>			
162.	25798 <i>Billardiera fusiformis</i> (Australian Bluebell)			
163.	7856 <i>Blennospora drummondii</i>			
164.	2770 <i>Boerhavia coccinea</i> (Tar Vine, Wituka)			
165.	4409 <i>Boronia coerulescens</i>			
166.	11498 <i>Boronia coerulescens</i> subsp. <i>spicata</i>			
167.	11274 <i>Boronia coerulescens</i> subsp. <i>spinescens</i>			
168.	4438 <i>Boronia ramosa</i>			
169.	11381 <i>Boronia ramosa</i> subsp. <i>anethifolia</i>			
170.	16639 <i>Boronia scabra</i> subsp. <i>scabra</i>			
171.	1269 <i>Borya laciniata</i>			
172.	1273 <i>Borya sphaerocephala</i> (Pincushions)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
173.	6341 <i>Brachyloma preissii</i> (Globe Heath)			
174.	8661 <i>Brachypodium distachyon</i> (False Brome)	Y		
175.	7867 <i>Brachyscome bellidioides</i>			
176.	7878 <i>Brachyscome iberidifolia</i>			
177.	11187 <i>Brassica barrelieri</i> subsp. <i>oxyrrhina</i> (Smooth-stem Turnip)	Y		
178.	253 <i>Bromus rubens</i> (Red Brome)	Y		
179.	6675 <i>Buglossoides arvensis</i> (Corn Gromwell)	Y		
180.	1366 <i>Bulbine semibarbata</i> (Leek Lily)			
181.	12770 <i>Burchardia congesta</i>			
182.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
183.	29439 <i>Caesia</i> sp. <i>Wongan</i> (K.F. Kenneally 8820)			
184.	11136 <i>Caladenia denticulata</i>			
185.	18032 <i>Caladenia exilis</i> subsp. <i>vanleeuwenii</i>			
186.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
187.	15502 <i>Caladenia footeana</i>			
188.	15354 <i>Caladenia hirta</i> subsp. <i>hirta</i>			
189.	1602 <i>Caladenia longicauda</i> (Common White Spider Orchid)			
190.	15358 <i>Caladenia longicauda</i> subsp. <i>albella</i>			
191.	15363 <i>Caladenia longicauda</i> subsp. <i>eminens</i>			
192.	<i>Caladenia</i> sp.			
193.	2846 <i>Calandrinia calytrata</i> (Pink Purslane)			
194.	19312 <i>Calectasia hispida</i>			
195.	5395 <i>Callistemon phoeniceus</i> (Lesser Bottlebrush, Dubarda)			
196.	36560 <i>Callitris arenaria</i> (Sandplain Cypress)			
197.	92 <i>Callitris canescens</i>			
198.	5417 <i>Calothamnus longissimus</i>			
199.	35756 <i>Calothamnus quadrifidus</i> subsp. <i>angustifolius</i>			
200.	35816 <i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>			
201.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
202.	7903 <i>Calotis hispidula</i> (Bindy Eye)			
203.	13654 <i>Calytrix breviseta</i> subsp. <i>stipulosa</i>			
204.	48450 <i>Calytrix cravenii</i>			
205.	5450 <i>Calytrix depressa</i>			
206.	12771 <i>Calytrix ecalycata</i>			
207.	5460 <i>Calytrix fraseri</i> (Pink Summer Calytrix)			
208.	5461 <i>Calytrix glutinosa</i>			
209.	5462 <i>Calytrix gracilis</i>			
210.	5465 <i>Calytrix leschenaultii</i>			
211.	5476 <i>Calytrix sapphirina</i>			
212.	5479 <i>Calytrix strigosa</i>			
213.	32336 <i>Campylopus clavatus</i>			
214.	32338 <i>Campylopus introflexus</i>	Y		
215.	7911 <i>Carthamus lanatus</i> (Saffron Thistle)	Y		
216.	2956 <i>Cassytha pomiformis</i> (Dodder Laurel)			
217.	1742 <i>Casuarina obesa</i> (Swamp Sheoak, Kuli)			
218.	6542 <i>Centaurium tenuiflorum</i>	Y		
219.	1133 <i>Centrolepis pilosa</i>			
220.	7923 <i>Cephalosorus carpesioides</i>			
221.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
222.	11299 <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>			
223.	1281 <i>Chamaescilla spiralis</i>			
224.	8788 <i>Chamaescilla versicolor</i>			
225.	35656 <i>Chamelaucium drummondii</i> subsp. <i>Carnamah</i> (R.J.Cranfield & P.J. Spencer 7966)			
226.	14808 <i>Chamelaucium drummondii</i> subsp. <i>drummondii</i>			
227.	34 <i>Cheilanthes distans</i> (Bristly Cloak Fern)			
228.	2483 <i>Chenopodium album</i> (Fat Hen)	Y		
229.	2494 <i>Chenopodium murale</i> (Nettle-leaf Goosefoot)	Y		
230.	271 <i>Chloris truncata</i> (Windmill Grass)			
231.	13111 <i>Chorizema aciculare</i> subsp. <i>laxum</i>			
232.	13114 <i>Chorizema racemosum</i>			
233.	12974 <i>Chorizema rynchotropis</i>			
234.	2778 <i>Codonocarpus cotinifolius</i> (Native Poplar, Kundurangu)			
235.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
236.	4555 <i>Comesperma integerrimum</i>			
237.	4566 <i>Comesperma volubile</i> (Love Creeper)			
238.	15607 <i>Conospermum acerosum</i> subsp. <i>acerosum</i>			
239.	1859 <i>Conospermum brachyphyllum</i>			
240.	1864 <i>Conospermum crassinervium</i> (Summer Smokebush)			
241.	14876 <i>Conospermum densiflorum</i> subsp. <i>densiflorum</i>			
242.	15520 <i>Conospermum stoehadis</i> subsp. <i>sclerophyllum</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
243.	6347 <i>Conostephium minus</i> (Pink-tipped Pearl flower)			
244.	6349 <i>Conostephium preissii</i>			
245.	11552 <i>Conostylis aculeata</i> subsp. <i>bromelioides</i>			
246.	1420 <i>Conostylis androstemma</i> (Trumpets)			
247.	11438 <i>Conostylis candicans</i> subsp. <i>candicans</i>			
248.	48452 <i>Conostylis crassinerva</i> subsp. <i>absens</i>			
249.	11695 <i>Conostylis festucacea</i> subsp. <i>festucacea</i>			
250.	11640 <i>Conostylis festucacea</i> subsp. <i>filifolia</i>			
251.	1435 <i>Conostylis hiemalis</i>			
252.	1437 <i>Conostylis latens</i>			
253.	1446 <i>Conostylis prolifera</i> (Mat Cottonheads)			
254.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
255.	11870 <i>Conostylis teretifolia</i> subsp. <i>teretifolia</i>			
256.	1458 <i>Conostylis teretiuscula</i>			
257.	2891 <i>Corrigiola litoralis</i> (Strapwort)	Y		
258.	5503 <i>Corynanthera flava</i>			
259.	11834 <i>Corynotheca micrantha</i> var. <i>acanthoclada</i>			
260.	7944 <i>Cotula bipinnata</i> (Ferny Cotula)	Y		
261.	7946 <i>Cotula cotuloides</i> (Smooth Cotula)			
262.	3137 <i>Crassula colorata</i> (Dense Stonecrop)			
263.	11709 <i>Crassula colorata</i> var. <i>acuminata</i>			
264.	3142 <i>Crassula natans</i>	Y		
265.	15706 <i>Crassula natans</i> var. <i>minus</i>	Y		
266.	41203 <i>Croton setiger</i> (Doveweed)	Y		
267.	31571 <i>Cryptandra intermedia</i>			
268.	9076 <i>Cryptandra myriantha</i>			
269.	4804 <i>Cryptandra nutans</i>			
270.	4809 <i>Cryptandra pungens</i>			
271.	15114 <i>Cyanicula gemmata</i>			
272.	281 <i>Cymbopogon obtectus</i> (Silkyheads)			
273.	283 <i>Cynodon dactylon</i> (Couch)	Y		
274.	794 <i>Cyperus gymnocaulos</i> (Spiny Flat-sedge)			
275.	7451 <i>Dampiera lavandulacea</i>			
276.	7453 <i>Dampiera lindleyi</i>			
277.	7454 <i>Dampiera linearis</i> (Common Dampiera)			
278.	7459 <i>Dampiera oligophylla</i> (Sparse-leaved Dampiera)			
279.	7475 <i>Dampiera spicigera</i> (Spiked Dampiera)			
280.	7482 <i>Dampiera teres</i> (Terete-leaved Dampiera)			
281.	5518 <i>Darwinia neildiana</i> (Fringed Bell)			
282.	5526 <i>Darwinia purpurea</i> (Rose Darwinia)			
283.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
284.	3796 <i>Daviesia benthamii</i>			
285.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
286.	12326 <i>Daviesia hakeoides</i> subsp. <i>subnuda</i>			
287.	15505 <i>Daviesia incrassata</i> subsp. <i>incrassata</i>			
288.	15506 <i>Daviesia incrassata</i> subsp. <i>teres</i>			
289.	3835 <i>Daviesia preissii</i>			
290.	3845 <i>Daviesia triflora</i>			
291.	17663 <i>Desmocladius asper</i>			
292.	19246 <i>Desmocladius austrinus</i>			
293.	17712 <i>Desmocladius semiplanus</i>			
294.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
295.	1287 <i>Dichopogon capillipes</i>			
296.	1289 <i>Dichopogon preissii</i>			
297.	2498 <i>Didymanthus roei</i>			
298.	1509 <i>Dioscorea hastifolia</i> (Warrine, Waram)			
299.	4453 <i>Diplolaena angustifolia</i> (Yanchep Rose)			
300.	42228 <i>Diuris septentrionalis</i>			
301.	4775 <i>Dodonaea pinifolia</i>			
302.	48751 <i>Drosera drummondii</i>			
303.	3098 <i>Drosera glanduligera</i> (Pimpernel Sundew)			
304.	3101 <i>Drosera heterophylla</i> (Swamp Rainbow)			
305.	48768 <i>Drosera hirsuta</i>			
306.	3107 <i>Drosera macrophylla</i> (Showy Sundew)			
307.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
308.	49090 <i>Drosera</i> sp. <i>Branched styles</i> (S.C. Coffey 193)			
309.	13185 <i>Drosera spilos</i>			
310.	3133 <i>Drosera subhirtella</i> (Sunny Rainbow)			
311.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)			
312.	32351 <i>Eccremidium pulchellum</i>			

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313.	1066 <i>Ecdeiocolea monostachya</i>			
314.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
315.	822 <i>Eleocharis acuta</i> (Common Spikerush)			
316.	2510 <i>Enchylaena lanata</i>			
317.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
318.	13952 <i>Eremaea asterocarpa</i> subsp. <i>histoclada</i>			
319.	5537 <i>Eremaea beaufortioides</i>			
320.	13818 <i>Eremaea pauciflora</i> var. <i>lonchophylla</i>			
321.	36239 <i>Eremaea violacea</i> subsp. <i>violacea</i>			
322.	7215 <i>Eremophila glabra</i> (Tar Bush)			
323.	7231 <i>Eremophila lehmanniana</i>			
324.	20718 <i>Ericksonella saccharata</i>			
325.	45244 <i>Ericomyrtus serpyllifolia</i>			
326.	45215 <i>Ericomyrtus tenuior</i>			
327.	4335 <i>Erodium cygnorum</i> (Blue Heronsbill)			
328.	12740 <i>Erymophyllum tenellum</i>			
329.	12896 <i>Eucalyptus arachnaea</i> (Black-stemmed Mallee)			
330.	42020 <i>Eucalyptus armillata</i> (Red-flowered Mallee)			
331.	11978 <i>Eucalyptus celastroides</i> subsp. <i>virella</i>			
332.	5615 <i>Eucalyptus decipiens</i> (Limestone Marlock, Moit)			
333.	5628 <i>Eucalyptus drummondii</i> (Drummond's Gum)			
334.	5640 <i>Eucalyptus eudesmioides</i> (Malalie, Marlarli)			
335.	5643 <i>Eucalyptus falcata</i> (Silver Mallet, Dulyumuk)			
336.	5648 <i>Eucalyptus flocktoniae</i> (Merrit, Merid)			
337.	18521 <i>Eucalyptus flocktoniae</i> subsp. <i>flocktoniae</i>			
338.	5658 <i>Eucalyptus gittinsii</i> (Northern Sandplain Mallee)			
339.	18292 <i>Eucalyptus gittinsii</i> subsp. <i>illucida</i>			
340.	5673 <i>Eucalyptus horistes</i>			
341.	5701 <i>Eucalyptus longicornis</i> (Red Morrel, Moril)			
342.	11295 <i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i> (York Gum)			
343.	5722 <i>Eucalyptus obtusiflora</i> (Dongara Mallee)			
344.	19559 <i>Eucalyptus obtusiflora</i> subsp. <i>obtusiflora</i>			
345.	20047 <i>Eucalyptus orthostemon</i>			
346.	5761 <i>Eucalyptus rigidula</i> (Stiff-leaved Mallee)			
347.	5763 <i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
348.	5766 <i>Eucalyptus salmonophloia</i> (Salmon Gum, Wurak)			
349.	12883 <i>Eucalyptus subangusta</i> subsp. <i>subangusta</i>			
350.	5790 <i>Eucalyptus todtiana</i> (Coastal Blackbutt)			
351.	12905 <i>Eucalyptus wandoo</i> subsp. <i>pulverea</i>			
352.	12906 <i>Eucalyptus wandoo</i> subsp. <i>wandoo</i>			
353.	10765 <i>Exocarpos sparteus</i> (Broom Ballart, Djuk)			
354.	2969 <i>Fumaria capreolata</i> (Whiteflower Fumitory)	Y		
355.	434 <i>Gastridium phleoides</i> (Nitgrass)	Y		
356.	3887 <i>Gastrolobium acutum</i>			
357.	20515 <i>Gastrolobium axillare</i>			
358.	3894 <i>Gastrolobium callistachys</i> (Rock Poison)			
359.	3895 <i>Gastrolobium calycinum</i> (York Road Poison)			
360.	20516 <i>Gastrolobium cyanophyllum</i>			
361.	3906 <i>Gastrolobium ilicifolium</i>			
362.	3910 <i>Gastrolobium obovatum</i> (Boat-leaved Poison)			
363.	3912 <i>Gastrolobium oxylobioides</i> (Champion Bay Poison)			
364.	3916 <i>Gastrolobium polystachyum</i> (Horned Poison)			
365.	3924 <i>Gastrolobium spinosum</i> (Prickly Poison)			
366.	4483 <i>Geleznovia verrucosa</i>			
367.	12780 <i>Gilberta tenuifolia</i>			
368.	6143 <i>Glischrocaryon aureum</i> (Common Popflower)			
369.	6144 <i>Glischrocaryon flavescens</i>			
370.	19215 <i>Gompholobium glutinosum</i>			
371.	3951 <i>Gompholobium marginatum</i>			
372.	29267 <i>Gompholobium muticum</i>			
373.	6159 <i>Gonocarpus nodulosus</i>			
374.	7495 <i>Goodenia berardiana</i>			
375.	29362 <i>Goodenia coerulea</i>			
376.	12516 <i>Goodenia convexa</i>			
377.	7513 <i>Goodenia hassallii</i>			
378.	7541 <i>Goodenia pusilliflora</i> (Smallflower Goodenia)			
379.	8006 <i>Gorteria personata</i> (Gorteria)	Y		
380.	8828 <i>Grevillea biformis</i>			
381.	15763 <i>Grevillea biformis</i> subsp. <i>biformis</i>			
382.	1965 <i>Grevillea biternata</i>			

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383.	1966 <i>Grevillea brachystachya</i> (Short-spiked Grevillea)			
384.	1968 <i>Grevillea bracteosa</i> (Bracted Grevillea)			
385.	2001 <i>Grevillea eriostachya</i> (Flame Grevillea, Kaliny-kalinya)			
386.	2014 <i>Grevillea hakeoides</i>			
387.	13432 <i>Grevillea hakeoides</i> subsp. <i>hakeoides</i>			
388.	13430 <i>Grevillea hakeoides</i> subsp. <i>stenophylla</i>			
389.	19435 <i>Grevillea hookeriana</i> subsp. <i>hookeriana</i>			
390.	2018 <i>Grevillea huegelii</i>			
391.	2066 <i>Grevillea pilulifera</i> (Woolly-flowered Grevillea)			
392.	17745 <i>Grevillea shuttleworthiana</i> subsp. <i>canarina</i>			
393.	5013 <i>Guichenotia micrantha</i> (Small Flowered Guichenotia)			
394.	5014 <i>Guichenotia sarotes</i>			
395.	2783 <i>Gyrostemon racemiger</i>			
396.	2784 <i>Gyrostemon ramulosus</i> (Corkybark)			
397.	2788 <i>Gyrostemon subnudus</i>			
398.	1473 <i>Haemodorum simulans</i>			
399.	17670 <i>Hakea anadenia</i>			
400.	2131 <i>Hakea auriculata</i>			
401.	2136 <i>Hakea candolleana</i>			
402.	2142 <i>Hakea commutata</i>			
403.	2146 <i>Hakea costata</i> (Ribbed Hakea)			
404.	11924 <i>Hakea cygna</i> subsp. <i>cygna</i> (Swan Fruit Hakea)			
405.	2158 <i>Hakea erinacea</i> (Hedge-hog Hakea)			
406.	2164 <i>Hakea gilbertii</i>			
407.	2166 <i>Hakea incrassata</i> (Marble Hakea)			
408.	2175 <i>Hakea lissocarpha</i> (Honey Bush)			
409.	2179 <i>Hakea marginata</i>			
410.	45333 <i>Hakea neospathulata</i>			
411.	2196 <i>Hakea preissii</i> (Needle Tree, Dandjin)			
412.	12233 <i>Hakea psilorhyncha</i>			
413.	17557 <i>Hakea recurva</i> subsp. <i>recurva</i>			
414.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
415.	29716 <i>Halgania</i> sp. Wongan Hills (K.F. Kenneally 2393)			
416.	6836 <i>Hemiandra incana</i>			
417.	6838 <i>Hemiandra linearis</i> (Speckled Snakebush)			
418.	6839 <i>Hemiandra pungens</i> (Snakebush)			
419.	6851 <i>Hemigenia drummondii</i>			
420.	6856 <i>Hemigenia incana</i> (Silky Hemigenia)			
421.	1293 <i>Hensmania turbinata</i>			
422.	5108 <i>Hibbertia acerosa</i> (Needle Leaved Guinea Flower)			
423.	5116 <i>Hibbertia crassifolia</i>			
424.	5120 <i>Hibbertia desmophylla</i>			
425.	20051 <i>Hibbertia diamesogenos</i>			
426.	45534 <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			
427.	5139 <i>Hibbertia lasiopus</i> (Large Hibbertia)			
428.	5171 <i>Hibbertia spicata</i>			
429.	48381 <i>Hibbertia striata</i>			
430.	5173 <i>Hibbertia subvaginata</i>			
431.	449 <i>Hordeum leporinum</i> (Barley Grass)	Y		
432.	3967 <i>Hovea stricta</i>			
433.	12741 <i>Hyalosperma cotula</i>			
434.	12007 <i>Hybanthus floribundus</i> subsp. <i>floribundus</i>			
435.	6229 <i>Hydrocotyle diantha</i>			
436.	11546 <i>Hydrocotyle pilifera</i> var. <i>glabrata</i>			
437.	5817 <i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
438.	35074 <i>Hypocalymma angustifolium</i> subsp. <i>Dandaragan plateau</i> (S. Patrick 702A)			
439.	35070 <i>Hypocalymma angustifolium</i> subsp. <i>Swan Coastal Plain</i> (G.J. Keighery 16777)			
440.	8086 <i>Hypochaeris glabra</i> (Smooth Catsear)	Y		
441.	1070 <i>Hypolaena exsulca</i>			
442.	20200 <i>Isolepis cernua</i> var. <i>setiformis</i>			
443.	14540 <i>Isolepis hystrix</i>	Y		
444.	2219 <i>Isopogon adenanthoides</i> (Spider Coneflower)			
445.	2227 <i>Isopogon divergens</i> (Spreading Coneflower)			
446.	2229 <i>Isopogon dubius</i> (Pincushion Coneflower)			
447.	16873 <i>Isopogon inconspicuus</i>			
448.	2232 <i>Isopogon linearis</i>			
449.	3993 <i>Isotropis drummondii</i> (Lamb Poison)			
450.	3995 <i>Isotropis juncea</i> (Slender Lamb Poison)			
451.	14627 <i>Isotropis</i> sp. Shark Bay (M.E. Trudgen 7170)			
452.	4009 <i>Jacksonia eremodendron</i>			

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453.	13013 <i>Jacksonia fasciculata</i>			
454.	4011 <i>Jacksonia foliosa</i>			
455.	4015 <i>Jacksonia hakeoides</i>			
456.	4025 <i>Jacksonia restioides</i>			
457.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
458.	1178 <i>Juncus bufonius</i> (Toad Rush)	Y		
459.	1194 <i>Juncus radula</i>			
460.	1195 <i>Juncus subsecundus</i> (Finger Rush)			
461.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
462.	5835 <i>Kunzea micrantha</i>			
463.	17505 <i>Kunzea praestans</i>			
464.	13562 <i>Lachenalia aloides</i>	Y		
465.	6780 <i>Lachnostachys eriobotrya</i> (Lambswool)			
466.	6781 <i>Lachnostachys ferruginea</i> (Rusty Lambstail)			
467.	18585 <i>Lagenophora huegelii</i>			
468.	468 <i>Lamarckia aurea</i> (Goldentop)	Y		
469.	15528 <i>Lambertia multiflora</i> var. <i>multiflora</i>			
470.	45082 <i>Lasiopetalum glutinosum</i> subsp. <i>latifolium</i>			
471.	13284 <i>Lawrencella rosea</i>			
472.	1305 <i>Laxmannia omnifertilis</i>			
473.	7568 <i>Lechenaultia biloba</i> (Blue Leschenaultia)			
474.	7580 <i>Lechenaultia linarioides</i> (Yellow Leschenaultia)			
475.	7586 <i>Lechenaultia stenosepala</i> (Narrow-sepaled Leschenaultia)			
476.	7590 <i>Lechenaultia tubiflora</i> (Heath Leschenaultia)			
477.	44490 <i>Leontodon rhagadioloides</i>	Y		
478.	3018 <i>Lepidium africanum</i> (Rubble Peppercross)	Y		
479.	3021 <i>Lepidium bonariense</i> (Peppercross)	Y		
480.	1073 <i>Lepidobolus chaetocephalus</i> (Bristle-headed Chaff Rush)			
481.	1075 <i>Lepidobolus preissianus</i>			
482.	18109 <i>Lepidobolus preissianus</i> subsp. <i>volubilis</i>			
483.	42741 <i>Lepidosperma apricola</i>			
484.	936 <i>Lepidosperma leptostachyum</i>			
485.	939 <i>Lepidosperma pruinatum</i>			
486.	940 <i>Lepidosperma pubisquamatum</i>			
487.	944 <i>Lepidosperma scabrum</i>			
488.	<i>Lepidosperma</i> sp.			
489.	33279 <i>Lepidosperma</i> sp. <i>Bandalup Scabrid</i> (N. Eveleigh 10798)			
490.	16284 <i>Lepidosperma</i> sp. <i>P1 small head</i> (M.D. Tindale 166A)			
491.	947 <i>Lepidosperma tenue</i>			
492.	2344 <i>Leptomeria empetriformis</i>			
493.	5847 <i>Leptospermum erubescens</i> (Roadside Teatree)			
494.	5857 <i>Leptospermum spinescens</i>			
495.	6369 <i>Leucopogon cinereus</i>			
496.	6374 <i>Leucopogon conostephioides</i>			
497.	6401 <i>Leucopogon hamulosus</i>			
498.	6420 <i>Leucopogon oldfieldii</i>			
499.	6421 <i>Leucopogon oliganthus</i>			
500.	20086 <i>Leucopogon</i> sp. <i>Northern Scarp</i> (M. Hislop 2233)			
501.	6444 <i>Leucopogon sprengelioides</i>			
502.	7671 <i>Levenhookia leptantha</i> (Trumpet Stylewort)			
503.	478 <i>Lolium rigidum</i> (<i>Wimmera Ryegrass</i>)	Y		
504.	<i>Lolium</i> sp.			
505.	1224 <i>Lomandra collina</i> (Pale Mat Rush)			
506.	1226 <i>Lomandra effusa</i> (Scented Matrush)			
507.	1227 <i>Lomandra hastilis</i>			
508.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
509.	1235 <i>Lomandra nutans</i>			
510.	<i>Lomandra</i> sp.			
511.	36375 <i>Lysimachia arvensis</i> (Pimpernel)	Y		
512.	2550 <i>Maireana marginata</i>			
513.	4074 <i>Medicago lacinata</i> (Cutleaf Medic)	Y		
514.	4077 <i>Medicago minima</i> (Small Burr Medic)	Y		
515.	37580 <i>Melaleuca acutifolia</i>			
516.	5870 <i>Melaleuca adnata</i>			
517.	5876 <i>Melaleuca aspalathoides</i>			
518.	5881 <i>Melaleuca brevifolia</i>			
519.	17982 <i>Melaleuca carrii</i>			
520.	5888 <i>Melaleuca ciliosa</i>			
521.	5893 <i>Melaleuca concreta</i>			
522.	5904 <i>Melaleuca depressa</i>			

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523.	19952 <i>Melaleuca dichroma</i>			
524.	5925 <i>Melaleuca lateriflora</i> (Gorada)			
525.	18112 <i>Melaleuca leuropoma</i>			
526.	41120 <i>Melaleuca marginata</i>			
527.	17981 <i>Melaleuca orbicularis</i>			
528.	5958 <i>Melaleuca radula</i> (Graceful Honeymyrtle)			
529.	5959 <i>Melaleuca raphiophylla</i> (Swamp Paperbark)			
530.	5964 <i>Melaleuca seriata</i>			
531.	5972 <i>Melaleuca strobophylla</i>			
532.	5978 <i>Melaleuca teretifolia</i> (Banbar)			
533.	5983 <i>Melaleuca trichophylla</i>			
534.	5987 <i>Melaleuca viminea</i> (Mohan)			
535.	13280 <i>Melaleuca viminea</i> subsp. <i>viminea</i>			
536.	6897 <i>Microcorys longifolia</i>			
537.	6899 <i>Microcorys obovata</i>			
538.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
539.	34158 <i>Microtis alboboviridis</i>			
540.	15419 <i>Microtis media</i> subsp. <i>media</i>			
541.	1660 <i>Microtis orbicularis</i> (Dark Mignonette Orchid)			
542.	8105 <i>Millotia myosotidifolia</i>			
543.	14344 <i>Millotia tenuifolia</i> var. <i>tenuifolia</i> (Soft Millotia)			
544.	4091 <i>Mirbelia floribunda</i> (Purple Mirbelia)			
545.	4100 <i>Mirbelia spinosa</i>			
546.	29418 <i>Monoculus monstrosus</i>	Y		
547.	19585 <i>Monotaxis grandiflora</i> var. <i>grandiflora</i>			
548.	19180 <i>Moraea miniata</i> (Two-leaf Cape Tulip)	Y		
549.	19177 <i>Moraea setifolia</i>	Y		
550.	2412 <i>Muehlenbeckia adpressa</i> (Climbing Lignum)			
551.	2415 <i>Muehlenbeckia polybotrya</i>			
552.	17925 <i>Myriocephalus oldfieldii</i>			
553.	492 <i>Neurachne alopecuroidea</i> (Foxtail Mulga Grass)			
554.	2401 <i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
555.	44401 <i>Olearia</i> sp. <i>Eremicola</i> (Diels & Pritzel s.n. PERTH 00449628)			
556.	20660 <i>Oncosiphon piluliferum</i> (Globe Chamomile)	Y		
557.	18255 <i>Opercularia vaginata</i> (Dog Weed)			
558.	4113 <i>Ornithopus compressus</i> (Yellow Serradella)	Y		
559.	4115 <i>Ornithopus sativus</i> (French Serradella)	Y		
560.	11442 <i>Orthrosanthus laxus</i> var. <i>gramineus</i> (Grass-leaved Orthrosanthus)			
561.	30375 <i>Oxalis exilis</i>			
562.	4356 <i>Oxalis pes-caprae</i> (Soursob)	Y		
563.	516 <i>Parapholis incurva</i> (Coast Barbgrass)	Y		
564.	7089 <i>Parentucellia latifolia</i> (Common Bartsia)	Y		
565.	1546 <i>Patersonia juncea</i> (Rush Leaved Patersonia)			
566.	30472 <i>Patersonia occidentalis</i> var. <i>occidentalis</i>			
567.	43761 <i>Pauridia occidentalis</i> var. <i>occidentalis</i>			
568.	40423 <i>Pentameris airoides</i> (False Hairgrass)	Y		
569.	40424 <i>Pentameris airoides</i> subsp. <i>airoides</i>	Y		
570.	40422 <i>Pentameris pallida</i>	Y		
571.	15501 <i>Pericalymma spongiocaula</i>			
572.	2258 <i>Persoonia comata</i>			
573.	2281 <i>Persoonia trinervis</i>			
574.	2286 <i>Petrophile brevipolia</i>			
575.	2292 <i>Petrophile divaricata</i>			
576.	2294 <i>Petrophile drummondii</i>			
577.	16874 <i>Petrophile recurva</i>			
578.	2308 <i>Petrophile seminuda</i>			
579.	2309 <i>Petrophile serruriae</i>			
580.	2312 <i>Petrophile striata</i>			
581.	19825 <i>Petrorhagia dubia</i>	Y		
582.	551 <i>Phalaris minor</i> (Lesser Canary Grass)	Y		
583.	20460 <i>Pheladenia deformis</i>			
584.	18529 <i>Philothea spicata</i> (Pepper and Salt)			
585.	16825 <i>Phyllangium divergens</i>			
586.	16824 <i>Phyllangium sulcatum</i>			
587.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
588.	6797 <i>Physopsis spicata</i> (Hill River Lambstail)			
589.	5231 <i>Pimelea angustifolia</i> (Narrow-leaved Pimelea)			
590.	5244 <i>Pimelea floribunda</i>			
591.	11402 <i>Pimelea imbricata</i> var. <i>piligera</i>			
592.	5254 <i>Pimelea leucantha</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
593.	5268 <i>Pimelea sulphurea</i> (Yellow Banjine)			
594.	7299 <i>Plantago debilis</i>			
595.	6247 <i>Platysace cirrosa</i> (Karna)			
596.	573 <i>Poa drummondiana</i> (Knotted Poa)			
597.	45237 <i>Podolepis aristata</i> subsp. <i>aristata</i>			
598.	8173 <i>Podolepis capillaris</i> (Wiry Podolepis)			
599.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
600.	8177 <i>Podolepis lessonii</i>			
601.	582 <i>Polygonum monspeliensis</i> (Annual Beardgrass)	Y		
602.	1669 <i>Prasophyllum cyphochilum</i> (Pouched Leek Orchid)			
603.	16688 <i>Prasophyllum gracile</i>			
604.	4725 <i>Psammomoya choretroides</i>			
605.	8189 <i>Pseudognaphalium luteoalbum</i> (Jersey Cudweed)			
606.	41651 <i>Pteridium esculentum</i> subsp. <i>esculentum</i>			
607.	13255 <i>Pterochaeta paniculata</i>			
608.	45355 <i>Pterostylis exserta</i>			
609.	10778 <i>Pterostylis picta</i>			
610.	45343 <i>Pterostylis platypetala</i>			
611.	1696 <i>Pterostylis sargentii</i> (Frog Greenhood)			
612.	1697 <i>Pterostylis scabra</i> (Bronze Shell Orchid)			
613.	45344 <i>Pterostylis scitula</i>			
614.	10897 <i>Pterostylis spathulata</i>			
615.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
616.	2716 <i>Ptilotus declinatus</i> (Curved Mulla Mulla)			
617.	2718 <i>Ptilotus drummondii</i> (Narrowleaf Mulla Mulla)			
618.	2727 <i>Ptilotus gaudichaudii</i>			
619.	15856 <i>Ptilotus sericostachyus</i> subsp. <i>sericostachyus</i>			
620.	2760 <i>Ptilotus spathulatus</i>			
621.	40841 <i>Ptilotus stirlingii</i> subsp. <i>stirlingii</i>			
622.	41060 <i>Quoya dilatata</i>			
623.	41080 <i>Quoya verbascina</i> (Golden Bush)			
624.	6012 <i>Regelia ciliata</i>			
625.	11240 <i>Rhagodia preissii</i> subsp. <i>obovata</i>			
626.	11254 <i>Rhagodia preissii</i> subsp. <i>preissii</i>			
627.	13241 <i>Rhodanthe chlorocephala</i> subsp. <i>rosea</i>			
628.	13300 <i>Rhodanthe citrina</i>			
629.	13294 <i>Rhodanthe laevis</i>			
630.	13234 <i>Rhodanthe manglesii</i>			
631.	13296 <i>Rhodanthe polycephala</i>			
632.	13309 <i>Rhodanthe spicata</i>			
633.	19942 <i>Ricinocarpos undulatus</i>			
634.	4704 <i>Ricinocarpos velutinus</i>			
635.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
636.	44608 <i>Rosulabryum billardieri</i>			
637.	32429 <i>Rosulabryum torquescens</i>			
638.	46434 <i>Rumex hypogaeus</i>	Y		
639.	20171 <i>Rumex pulcher</i> subsp. <i>woodsii</i>	Y		
640.	115 <i>Ruppia megacarpa</i>			
641.	116 <i>Ruppia polycarpa</i>			
642.	40431 <i>Rytidosperma acerosum</i>			
643.	40425 <i>Rytidosperma caespitosum</i>			
644.	40427 <i>Rytidosperma setaceum</i>			
645.	2356 <i>Santalum acuminatum</i> (Quandong, Warnga)			
646.	2359 <i>Santalum spicatum</i> (Sandalwood, Wilarak)			
647.	7613 <i>Scaevola glandulifera</i> (Viscid Hand-flower)			
648.	7618 <i>Scaevola humifusa</i> (Procumbent Scaevola)			
649.	7634 <i>Scaevola phlebopetala</i> (Velvet Fanflower)			
650.	7636 <i>Scaevola platyphylla</i> (Broad-leaved Fanflower)			
651.	12585 <i>Scaevola repens</i>			
652.	7644 <i>Scaevola spinescens</i> (Currant Bush, Maroon)			
653.	982 <i>Schoenus clandestinus</i>			
654.	994 <i>Schoenus humilis</i>			
655.	998 <i>Schoenus latitans</i>			
656.	1018 <i>Schoenus subfascicularis</i>			
657.	6031 <i>Scholtzia drummondii</i>			
658.	49114 <i>Scholtzia halophila</i> subsp. <i>halophila</i>			
659.	6037 <i>Scholtzia parviflora</i>			
660.	2609 <i>Sclerolaena diacantha</i> (Grey Copperburr)			
661.	12276 <i>Senna artemisioides</i> subsp. <i>filifolia</i>			
662.	46819 <i>Seringia integrifolia</i> (Common firebush)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
663.	46824 <i>Seringia velutina</i> (Velvet firebush)			
664.	15972 <i>Silene gallica</i> var. <i>gallica</i>	Y		
665.	3067 <i>Sinapis alba</i> (White Mustard)	Y		
666.	3068 <i>Sinapis arvensis</i> (Charlock)	Y		
667.	7018 <i>Solanum lasiophyllum</i> (Flannel Bush, Mindjulu)			
668.	7022 <i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
669.	7025 <i>Solanum oldfieldii</i>			
670.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
671.	31080 <i>Spergularia bocconeii</i>	Y		
672.	8900 <i>Spergularia marina</i>			
673.	2915 <i>Spergularia rubra</i> (Sand Spurry)	Y		
674.	4205 <i>Sphaerolobium linophyllum</i>			
675.	4714 <i>Stachystemon brachyphyllus</i>			
676.	9070 <i>Stackhousia pubescens</i> (Downy Stackhousia)			
677.	2918 <i>Stellaria media</i> (Chickweed)	Y		
678.	15065 <i>Stenanthemum notiale</i> subsp. <i>notiale</i>			
679.	13476 <i>Stenanthemum pomaderroides</i>			
680.	19403 <i>Stenopetalum gracile</i>			
681.	7679 <i>Stylidium adpressum</i> (Trigger-on-stilts)			
682.	30278 <i>Stylidium androsaceum</i>			
683.	7698 <i>Stylidium caricifolium</i> (Milkmaids)			
684.	40944 <i>Stylidium decipiens</i>			
685.	7713 <i>Stylidium dichotomum</i> (Pins-and-needles)			
686.	19251 <i>Stylidium eriopodium</i>			
687.	7749 <i>Stylidium leptophyllum</i> (Needle-leaved Triggerplant)			
688.	7762 <i>Stylidium miniatum</i> (Pink Butterfly Triggerplant)			
689.	7773 <i>Stylidium petiolare</i> (Horn Triggerplant)			
690.	7790 <i>Stylidium roseoalatum</i> (Pink-wing Triggerplant)			
691.	7798 <i>Stylidium schoenoides</i> (Cow Kicks)			
692.	19247 <i>Stylidium septentrionale</i>			
693.	<i>Stylidium</i> sp.			
694.	20608 <i>Stylidium stenosepalum</i>			
695.	9304 <i>Stylidium zeicolor</i> (Maize Triggerplant)			
696.	3181 <i>Stylobasium australe</i>			
697.	1260 <i>Stypandra glauca</i> (Blind Grass)			
698.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
699.	33020 <i>Tamarix parviflora</i>	Y		
700.	33236 <i>Tecticornia halocnemoides</i> (Shrubby Samphire)			
701.	33297 <i>Tecticornia pergranulata</i> subsp. <i>pergranulata</i> (Blackseed Samphire)			
702.	4258 <i>Templetonia sulcata</i> (Centipede Bush)			
703.	46437 <i>Tetrapora preissiana</i>			
704.	4528 <i>Tetraloche confertifolia</i>			
705.	1701 <i>Thelymitra antennifera</i> (Vanilla Orchid)			
706.	10856 <i>Thelymitra benthamiana</i> (Leopard Orchid)			
707.	20736 <i>Thelymitra maculata</i>			
708.	1715 <i>Thelymitra spiralis</i> (Curlylocks)			
709.	1718 <i>Thelymitra villosa</i> (Custard Orchid)			
710.	5084 <i>Thomasia grandiflora</i> (Large Flowered Thomasia)			
711.	6057 <i>Thryptomene hyporhysis</i>			
712.	6060 <i>Thryptomene mucronulata</i>			
713.	6064 <i>Thryptomene racemulosa</i>			
714.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			
715.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
716.	1343 <i>Thysanotus patersonii</i>			
717.	1358 <i>Thysanotus triandrus</i>			
718.	8248 <i>Tolpis barbata</i> (Yellow Hawkweed)	Y		
719.	6268 <i>Trachymene cyanopetala</i>			
720.	6279 <i>Trachymene ornata</i> (Spongefruit)			
721.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
722.	1483 <i>Tribonanthes longipetala</i> (Branching Tiurndin)			
723.	4383 <i>Tribulus terrestris</i> (Caltrop)	Y		
724.	17542 <i>Trifolium arvense</i> var. <i>arvense</i>	Y		
725.	17115 <i>Trifolium repens</i> var. <i>repens</i>	Y		
726.	33676 <i>Triglochin calcitrapa</i>			
727.	33677 <i>Triglochin centrocarpa</i>			
728.	150 <i>Triglochin stowardii</i>			
729.	17882 <i>Triodia danthonioides</i>			
730.	4737 <i>Tripterococcus brunonis</i> (Winged Stackhousia)			
731.	708 <i>Triticum aestivum</i> (Wheat)	Y		
732.	4839 <i>Trymalium angustifolium</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
733.	4840 <i>Trymalium daphnifolium</i>			
734.	13479 <i>Trymalium ledifolium</i> var. <i>rosmarinifolium</i>			
735.	4844 <i>Trymalium urceolare</i>			
736.	8255 <i>Ursinia anthemoides</i> (<i>Ursinia</i>)	Y		
737.	38388 <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Y		
738.	7656 <i>Velleia cynopotamica</i>			
739.	7107 <i>Verbascum virgatum</i> (<i>Twiggy Mullein</i>)	Y		
740.	15725 <i>Verbesina encelioides</i>	Y		
741.	7666 <i>Verreauxia reinwardtii</i> (<i>Common Verreauxia</i>)			
742.	12395 <i>Verticordia bifimbriata</i>			
743.	6071 <i>Verticordia brachypoda</i>			
744.	12402 <i>Verticordia chrysanthella</i>			
745.	12411 <i>Verticordia densiflora</i> var. <i>cespitosa</i>			
746.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			
747.	12422 <i>Verticordia eriocephala</i> (<i>Common Cauliflower</i>)			
748.	6083 <i>Verticordia grandis</i> (<i>Scarlet Featherflower</i>)			
749.	12430 <i>Verticordia huegelii</i> var. <i>stylosa</i>			
750.	10822 <i>Verticordia nobilis</i>			
751.	6105 <i>Verticordia patens</i>			
752.	6107 <i>Verticordia pennigera</i>			
753.	6109 <i>Verticordia picta</i> (<i>Painted Featherflower</i>)			
754.	12052 <i>Vulpia myuros</i> forma <i>megalura</i>	Y		
755.	33101 <i>Vulpia myuros</i> forma <i>myuros</i>	Y		
756.	7386 <i>Wahlenbergia gracilentia</i> (<i>Annual Bluebell</i>)			
757.	7389 <i>Wahlenbergia preissii</i>			
758.	<i>Wahlenbergia</i> sp.			
759.	13328 <i>Waitzia nitida</i>			
760.	6659 <i>Wilsonia humilis</i> (<i>Silky Wilsonia</i>)			
761.	1393 <i>Wurmbea dilatata</i>			
762.	1395 <i>Wurmbea drummondii</i> (<i>York Gum Nancy</i>)			
763.	1401 <i>Wurmbea pygmaea</i>			
764.	8287 <i>Xanthium spinosum</i> (<i>Bathurst Burr, Common Cockleburr, Spiny Cockleburr, Spiny Clotburr</i>)	Y		
765.	6287 <i>Xanthosia fruticulosa</i>			
766.	6289 <i>Xanthosia huegelii</i>			
767.	2330 <i>Xylomelum angustifolium</i> (<i>Sandplain Woody Pear</i>)			
768.	7113 <i>Zaluzianskya divaricata</i> (<i>Spreading Night Phlox</i>)	Y		

Conservation Codes

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

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

NatureMap Species Report

Created By Colleen McDonald on 22/10/2019

Kingdom Animalia
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 116° 01' 03" E, 30° 39' 59" S
Buffer 40km
Group By Family

Family	Species	Records
Acanthizidae	12	562
Accipitridae	14	122
Actinopodidae	2	4
Aegothelidae	2	4
Agamidae	4	18
Anatidae	13	299
Araneidae	7	18
Ardeidae	5	81
Artamidae	4	52
Bdelloidea	2	2
Boidae	3	5
Brachionidae	4	8
Burhinidae	1	4
Burramyidae	1	3
Buthidae	1	2
Cacatuidae	1	164
Caenidae	1	1
Campephagidae	2	115
Caprimulgidae	1	2
Casuaridae	1	6
Ceinidae	1	4
Centropagidae	3	6
Ceratopogonidae	5	9
Charadriidae	5	55
Chernetidae	1	1
Chiltoniidae	1	6
Chironomidae	15	38
Chydoridae	4	6
Coenagrionidae	2	6
Columbidae	5	150
Corduliidae	2	6
Corixidae	5	13
Corvidae	4	250
Cractidae	4	339
Cuculidae	6	40
Culicidae	1	2
Cyclopidae	4	11
Cypridae	10	17
Cyprinopsidae	1	4
Daphniidae	4	4
Dasyuridae	5	10
Dicaeidae	1	16
Dicruridae	5	401
Diplodactylidae	6	25
Dytiscidae	12	27
Echeneidae	1	1
Ecnomidae	2	5
Elapidae	11	106
Ephyridae	1	1
Estrilidae	1	1
Falconidae	7	81
Galaxiidae	1	4
Gekkonidae	4	33
Gnaphosidae	1	2
Gobiesocidae	1	3
Gobiidae	2	3
Halcyonidae	4	76
Haliplidae	1	2
Henicopidae	1	1
Hexarthridae	1	2
Hirundinidae	4	216
Hydraenidae	3	4
Hydrophilidae	8	16
Hylidae	1	1
Idiopidae	3	18
Ilyocyprididae	1	4
Ixodidae	1	4
Lamponidae	1	1
Laridae	3	6
Leptoceridae	4	10
Lestidae	3	10
Libellulidae	1	2
Limnodynastidae	5	23
Lycosidae	7	20
Macropodidae	1	9

Macrotrichidae	1	2
Maluridae	7	103
Megapodiidae	1	1
Meliphagidae	17	495
Meropidae	1	23
Mesostigmata	1	1
Mesoveliidae	1	1
Micropholcommatidae	1	2
Motacillidae	1	4
Muridae	5	9
Myobatrachidae	4	35
Naididae	1	1
Nematoda	1	5
Nemesiidae	1	6
Neosittidae	2	17
Nicodamidae	1	2
Notonectidae	5	10
Oligochaeta	1	2
Oniscidae	1	1
Otididae	1	1
Oxyopidae	1	2
Pachycephalidae	5	199
Pardalotidae	2	167
Pelecanidae	1	1
Peripatopsidae	1	2
Petroicidae	5	116
Phalacrocoracidae	4	23
Phasianidae	3	5
Pionidae	1	2
Planorbidae	1	1
Podargidae	2	7
Podicipedidae	3	68
Pomatostomidae	2	13
Procellariidae	1	1
Psittacidae	23	601
Pygopodidae	6	30
Pyralidae	1	1
Rallidae	7	20
Recurvirostridae	4	30
Salticidae	3	3
Scincidae	13	67
Scolopacidae	3	7
Scolopendridae	8	23
Scutigeridae	1	1
Sididae	1	2
Stratiomyidae	1	5
Sylviidae	2	2
Tarsipedidae	1	6
Tenuipalpidae	1	10
Testudinellidae	1	1
Tettigoniidae	1	1
Theridiidae	1	2
Threskiornithidae	2	40
Trombidiformes	1	2
Turnicidae	2	6
Typhlopidae	1	1
Tytonidae	1	5
Urodacidae	3	25
Varanidae	1	3
Vespertilionidae	2	5
Withiidae	1	2
Zodariidae	2	2
Zosteropidae	1	97
TOTAL	459	5911

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Acanthizidae				
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	<i>Acanthiza lineata</i>			
5.	24265 <i>Acanthiza uropygialis</i> (Chestnut-rumped Thornbill)			
6.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
7.	24271 <i>Gerygone fusca</i> subsp. <i>fusca</i> (Western Gerygone)			
8.	24277 <i>Hylacola cauta</i> (Shy Groundwren, Shy Heathwren)			
9.	24278 <i>Pyrrholaemus brunneus</i> (Redthroat)			
10.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
11.	24279 <i>Sericornis frontalis</i> subsp. <i>maculatus</i> (White-browed Scrubwren)			
12.	30948 <i>Smicromis brevirostris</i> (Weebill)			
Accipitridae				
13.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
14.	24281 <i>Accipiter cirrocephalus</i> subsp. <i>cirrocephalus</i> (Collared Sparrowhawk)			
15.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
16.	24282 <i>Accipiter fasciatus</i> subsp. <i>fasciatus</i> (Brown Goshawk)			
17.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
18.	24288 <i>Circus approximans</i> (Swamp Harrier)			
19.	24289 <i>Circus assimilis</i> (Spotted Harrier)			
20.	<i>Elanus axillaris</i>			
21.	25540 <i>Elanus caeruleus</i> (Black-shouldered Kite)			
22.	24290 <i>Elanus caeruleus</i> subsp. <i>axillaris</i> (Australian Black-shouldered Kite)			
23.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
24.	24296 <i>Hamirostra isura</i> (Square-tailed Kite)			
25.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
26.	25542 <i>Milvus migrans</i> (Black Kite)			
Actinopodidae				
27.	<i>Missulena granulosa</i>			
28.	<i>Missulena occatoria</i>			
Aegothelidae				
29.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			
30.	24301 <i>Aegotheles cristatus</i> subsp. <i>cristatus</i> (Australian Owlet-nightjar)			
Agamidae				
31.	30899 <i>Ctenophorus adelaidensis</i> (Southern Heath Dragon, Western Heath Dragon)			
32.	24886 <i>Ctenophorus reticulatus</i> (Western Nettle Dragon)			
33.	25510 <i>Pogona minor</i> (Dwarf Bearded Dragon)			
34.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
Anatidae				
35.	24310 <i>Anas castanea</i> (Chestnut Teal)			
36.	24312 <i>Anas gracilis</i> (Grey Teal)			
37.	24313 <i>Anas platyrhynchos</i> (Mallard)			
38.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
39.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
40.	24318 <i>Aythya australis</i> (Hardhead)			
41.	24319 <i>Biziura lobata</i> (Musk Duck)			
42.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
43.	24322 <i>Cygnus atratus</i> (Black Swan)			
44.	24326 <i>Malacorhynchus membranaceus</i> (Pink-eared Duck)			
45.	24328 <i>Oxyura australis</i> (Blue-billed Duck)		P4	
46.	24329 <i>Stictonetta naevosa</i> (Freckled Duck)			
47.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
Araneidae				
48.	<i>Araneus cyphoxis</i>			
49.	<i>Araneus eburniventris</i>			
50.	<i>Argiope protensa</i>			
51.	<i>Argiope trifasciata</i>			
52.	<i>Austracantha minax</i>			
53.	<i>Backobourkia collina</i>			
54.	<i>Nephila edulis</i>			
Ardeidae				
55.	41324 <i>Ardea modesta</i> (great egret, white egret)			
56.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
57.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
58.	<i>Egretta novaehollandiae</i>			
59.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			
Artamidae				
60.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
61.	<i>Artamus cinereus</i> subsp. <i>cinereus</i>			
62.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
63.	24356 <i>Artamus personatus</i> (Masked Woodswallow)			
Bdelloidea				
64.	<i>Bdelloidea</i> sp.			
65.	<i>Bdelloidea</i> sp. 2:2			
Boidae				
66.	25241 <i>Antaresia stimsoni</i> subsp. <i>stimsoni</i> (Stimson's Python)			
67.	25236 <i>Aspidites ramsayi</i> (Woma)			
68.	25240 <i>Morelia spilota</i> subsp. <i>imbricata</i> (Carpet Python)			
Brachionidae				
69.	<i>Brachionus</i> cf. <i>plicatilis</i> (SAP)			
70.	<i>Brachionus plicatilis</i> s.l.			
71.	<i>Brachionus urceolaris</i> s.l.			
72.	<i>Keratella australis</i>			
Burhinidae				
73.	24359 <i>Burhinus grallarius</i> (Bush Stone-curlew)			
Burramyidae				
74.	24086 <i>Cercartetus concinnus</i> (Western Pygmy-possum, Mundarda)			
Buthidae				
75.	<i>Urodacus hartmeyeri</i>			
Cacatuidae				
76.	<i>Eolophus roseicapillus</i>			
Caenidae				
77.	<i>Tasmanocoenis tillyardi</i>			
Campephagidae				
78.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
79.	24367 <i>Lalage tricolor</i> (White-winged Triller)			
Caprimulgidae				
80.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
Casuariidae				
81.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
Ceinidae				
82.	<i>Ceinidae</i> sp.			
Centropagidae				
83.	<i>Boeckella triarticulata</i>			
84.	<i>Calamoecia ampulla</i>			
85.	<i>Calamoecia</i> sp. 342 (ampulla variant) (CB)			
Ceratopogonidae				
86.	<i>Bezzia</i> sp. 1 (SAP)			
87.	<i>Ceratopogonidae</i> sp.			
88.	<i>Culicoides</i> sp.			
89.	<i>Forcypomyia</i> sp.			
90.	<i>Monohelea</i> sp. 3 (SAP)			
Charadriidae				
91.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
92.	47937 <i>Elsayornis melanops</i> (Black-fronted Dotterel)			
93.	24379 <i>Erythrogonys cinctus</i> (Red-kneed Dotterel)			
94.	24380 <i>Peltohyas australis</i> (Inland Dotterel)			
95.	24386 <i>Vanellus tricolor</i> (Banded Lapwing)			
Chemetidae				
96.	<i>Troglocheres dewae</i>			
Chiltoniidae				
97.	<i>Austrochiltonia subtenuis</i>			
Chironomidae				
98.	<i>Chironominae</i> sp.			

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99.	<i>Chironomus aff. alternans</i> (V24) (CB)			
100.	<i>Cladopelma curtivalva</i>			
101.	<i>Cryptochironomus griseidorsum</i>			
102.	<i>Dicrotendipes conjunctus</i>			
103.	<i>Kiefferulus intertinctus</i>			
104.	<i>Orthocladiinae sp.</i>			
105.	<i>Paramerina levidensis</i>			
106.	<i>Polypedium nubifer</i>			
107.	<i>Procladius paludicola</i>			
108.	<i>Procladius villosimanus</i>			
109.	<i>Tanypodinae sp.</i>			
110.	<i>Tanytarsus barbitarsis</i>			
111.	<i>Tanytarsus fuscithorax/semibarbitarsus</i>			
112.	<i>Tanytarsus nr bispinosus</i> (SAP)			
Chydoridae				
113.	<i>Alona cf. rigidicaudis</i> s.l. (CB, but may be multiple spp.)			
114.	<i>Alona rigidicaudis</i>			
115.	<i>Leydigia cf. leydigii</i> (SAP)			
116.	<i>Pleuroxus inermis</i>			
Coenagrionidae				
117.	<i>Coenagrionidae sp.</i>			
118.	<i>Xanthagrion erythroneurum</i>			
Columbidae				
119.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
120.	24404 <i>Geophaps plumifera</i> (Spinifex Pigeon)			
121.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
122.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
123.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
Corduliidae				
124.	<i>Corduliidae sp.</i>			
125.	<i>Hemicordulia tau</i>			
Corixidae				
126.	<i>Agraptocorixa eurynome</i>			
127.	<i>Agraptocorixa parvipunctata</i>			
128.	<i>Corixidae sp.</i>			
129.	<i>Micronecta robusta</i>			
130.	<i>Sigara mullaka</i>			
Corvidae				
131.	24416 <i>Corvus bennetti</i> (Little Crow)			
132.	25592 <i>Corvus coronoides</i> (Australian Raven)			
133.	24417 <i>Corvus coronoides subsp. perplexus</i> (Australian Raven)			
134.	25593 <i>Corvus orru</i> (Torresian Crow)			
Cracticidae				
135.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
136.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
137.	24422 <i>Cracticus tibicen subsp. dorsalis</i> (White-backed Magpie)			
138.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
Cuculidae				
139.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
140.	24427 <i>Cacomantis flabelliformis subsp. flabelliformis</i> (Fan-tailed Cuckoo)			
141.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
142.	24431 <i>Chrysococcyx basalus</i> (Horsfield's Bronze Cuckoo)			
143.	24432 <i>Chrysococcyx lucidus subsp. plagosus</i> (Shining Bronze Cuckoo)			
144.	24434 <i>Chrysococcyx osculans</i> (Black-eared Cuckoo)			
Culicidae				
145.	<i>Culicidae sp.</i>			
Cyclopidae				
146.	<i>Apocyclops dengizicus</i>			
147.	<i>Mesocyclops brooksi</i>			
148.	<i>Metacyclops/Pescocyclops sp.</i>			
149.	<i>Pescocyclops sp. 442=462=465=CB2</i> (salinarum in Morton)			
Cyprididae				
150.	<i>Alboa worooa</i>			
151.	<i>Bennelongia australis lineage</i>			
152.	<i>Bennelongia barangaroo lineage</i>			

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153.	<i>Candonocypris novaezelandiae</i>			
154.	<i>Cypricercus salinus</i>			
155.	<i>Diacypris compacta</i>			
156.	<i>Diacypris spinosa</i>			
157.	<i>Ilyodromus condonites</i>			
158.	<i>Mytilocypris mytiloides</i>			
159.	<i>Platycypris baueri</i>			
Cypridopsidae				
160.	<i>Sarscypridopsis aculeata</i>			
Daphniidae				
161.	<i>Daphnia carinata</i>			
162.	<i>Daphnia cephalata</i>			
163.	<i>Daphnia</i> sp.			
164.	<i>Daphnia truncata</i>			
Dasyuridae				
165.	24092 <i>Dasyurus geoffroii</i> (Chuditch, Western Quoll)		T	
166.	24097 <i>Parantechinus apicalis</i> (Dibbler)		T	
167.	24108 <i>Sminthopsis crassicaudata</i> (Fat-tailed Dunnart)			
168.	24109 <i>Sminthopsis dolichura</i> (Little long-tailed Dunnart)			
169.	24112 <i>Sminthopsis granulipes</i> (White-tailed Dunnart)			
Dicaeidae				
170.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
Dicruridae				
171.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
172.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
173.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
174.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
175.	24454 <i>Rhipidura leucophrys</i> subsp. <i>leucophrys</i> (Willie Wagtail)			
Diplodactylidae				
176.	24918 <i>Crenadactylus ocellatus</i> subsp. <i>ocellatus</i> (Clawless Gecko)			
177.	25469 <i>Diplodactylus granariensis</i>			
178.	24929 <i>Diplodactylus granariensis</i> subsp. <i>granariensis</i>			
179.	24940 <i>Diplodactylus pulcher</i>			
180.	24936 <i>Strophurus michaelsoni</i>			
181.	24942 <i>Strophurus spinigerus</i> subsp. <i>spinigerus</i>			
Dytiscidae				
182.	<i>Allodessus bistrigatus</i>			
183.	<i>Antiporus</i> sp.			
184.	<i>Dytiscidae</i> sp.			
185.	<i>Hyphydrus</i> sp.			
186.	<i>Lancetes lanceolatus</i>			
187.	<i>Limbodessus inornatus</i>			
188.	<i>Limbodessus shuckhardi</i>			
189.	<i>Megaporus howittii</i>			
190.	<i>Necterosoma penicillatus</i>			
191.	<i>Necterosoma</i> sp.			
192.	<i>Stemopriscus multimaculatus</i>			
193.	<i>Stemopriscus</i> sp.			
Echeneidae				
194.	<i>Echeneis naucrates</i>			
Ecnomidae				
195.	<i>Ecnomus pansus</i>			
196.	<i>Ecnomus pansus/turgidus</i>			
Elapidae				
197.	42380 <i>Brachyuropis fasciolatus</i> subsp. <i>fasciolatus</i> (Narrow-banded Shovel-nosed Snake)			
198.	42381 <i>Brachyuropis semifasciatus</i> (Southern Shovel-nosed Snake)			
199.	25296 <i>Demansia psammophis</i> subsp. <i>reticulata</i> (Yellow-faced Whipsnake)			
200.	25251 <i>Echiopsis curta</i> (Bardick)			
201.	25253 <i>Parasuta gouldii</i>			
202.	25255 <i>Parasuta nigriceps</i>			
203.	25261 <i>Pseudechis australis</i> (Mulga Snake)			
204.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
205.	42416 <i>Pseudonaja mengdeni</i> (Western Brown Snake)			
206.	25263 <i>Pseudonaja modesta</i> (Ringed Brown Snake)			
207.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			

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Ephydriidae				
208.	<i>Ephydriidae sp. 6 (SAP)</i>			
Estrilidae				
209.	30871 <i>Taeniopygia guttata subsp. castanotis (Zebra Finch)</i>			
Falconidae				
210.	25621 <i>Falco berigora (Brown Falcon)</i>			
211.	24471 <i>Falco berigora subsp. berigora (Brown Falcon)</i>			
212.	25622 <i>Falco cenchroides (Australian Kestrel, Nankeen Kestrel)</i>			
213.	24472 <i>Falco cenchroides subsp. cenchroides (Australian Kestrel, Nankeen Kestrel)</i>			
214.	25623 <i>Falco longipennis (Australian Hobby)</i>			
215.	24474 <i>Falco longipennis subsp. longipennis (Australian Hobby)</i>			
216.	25624 <i>Falco peregrinus (Peregrine Falcon)</i>		S	
Galaxiidae				
217.	34028 <i>Galaxias occidentalis (Western Minnow)</i>			
Gekkonidae				
218.	24980 <i>Christinus marmoratus (Marbled Gecko)</i>			
219.	24959 <i>Gehyra variegata</i>			
220.	24961 <i>Heteronotia binoei (Bynoe's Gecko)</i>			
221.	24983 <i>Underwoodisaurus milii (Barking Gecko)</i>			
Gnaphosidae				
222.	<i>Eilica albopunctata</i>			Y
Gobiesocidae				
223.	<i>Alabes brevis</i>			
Gobiidae				
224.	<i>Afurcagobius suppositus</i>			
225.	<i>Pseudogobius olorum</i>			
Halcyonidae				
226.	30901 <i>Dacelo novaeguineae (Laughing Kookaburra)</i>	Y		
227.	42351 <i>Todiramphus pyrrhopygius (Red-backed Kingfisher)</i>			
228.	25549 <i>Todiramphus sanctus (Sacred Kingfisher)</i>			
229.	24309 <i>Todiramphus sanctus subsp. sanctus (Sacred Kingfisher)</i>			
Haliplidae				
230.	<i>Halipilus sp.</i>			
Henicopidae				
231.	<i>Henicops dentatus</i>			
Hexarthridae				
232.	<i>Hexarthra n. sp.a (cf. fennica with 7/7 unci teeth) (SAP)</i>			
Hirundinidae				
233.	47909 <i>Cheramoeca leucosterna (White-backed Swallow)</i>			
234.	24491 <i>Hirundo neoxena (Welcome Swallow)</i>			
235.	48060 <i>Petrochelidon ariel (Fairy Martin)</i>			
236.	48061 <i>Petrochelidon nigricans (Tree Martin)</i>			
Hydraenidae				
237.	<i>Gymnothebius sp. 1 (SAP)</i>			
238.	<i>Gymnothebius sp. 3 (SAP)</i>			Y
239.	<i>Hydraenidae sp.</i>			
Hydrophilidae				
240.	<i>Berosus discolor</i>			
241.	<i>Berosus sp.</i>			
242.	<i>Enochrus elongatulus</i>			
243.	<i>Enochrus eyrensis</i>			
244.	<i>Hydrochus australis</i>			
245.	<i>Hydrophilidae sp.</i>			
246.	<i>Limnoxenus zelandicus</i>			
247.	<i>Paracymus pygmaeus</i>			
Hylidae				
248.	25388 <i>Litoria moorei (Motorbike Frog)</i>			
Idiopidae				
249.	<i>Eucyrtops riparia</i>			Y
250.	33917 <i>Idiosoma nigrum (Shield-backed Trapdoor Spider)</i>		T	
251.	48935 <i>Idiosoma sigillatum (Swan Coastal Plain shield-backed trapdoor spider)</i>		P3	

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Ilyocypridae				
252.	<i>Ilyocypris 'spiculata' (ms name) (SAP)</i>			
Ixodidae				
253.	<i>Amblyomma triguttatum</i>			
Lamponidae				
254.	<i>Lampona cylindrata</i>			
Laridae				
255.	<i>Chroicocephalus novaehollandiae</i>			
256.	24511 <i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Silver Gull)			
257.	24528 <i>Sterna hybrida</i> subsp. <i>javanica</i> (Whiskered Tern)			
Leptoceridae				
258.	<i>Leptoceridae</i> sp.			
259.	<i>Notalina spira</i>			
260.	<i>Oecetis</i> sp.			
261.	<i>Tripletides australis</i>			
Lestidae				
262.	<i>Austrolestes annulosus</i>			
263.	<i>Austrolestes aridus</i>			
264.	<i>Lestidae</i> sp.			
Libellulidae				
265.	<i>Orthetrum caledonicum</i>			
Limnodynastidae				
266.	25408 <i>Heleioporus albopunctatus</i> (Western Spotted Frog)			
267.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
268.	25412 <i>Heleioporus psammophilus</i> (Sand Frog)			
269.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
270.	25426 <i>Neobatrachus pelobatooides</i> (Humming Frog)			
Lycosidae				
271.	<i>Artoriopsis expolita</i>			
272.	<i>Dingosa serrata</i>			
273.	<i>Dingosa simsoni</i>			
274.	<i>Hoggicosa storri</i>			
275.	<i>Tasmanicosa leuckartii</i>			
276.	<i>Venator immansueta</i>			
277.	<i>Venatrix pullastra</i>			
Macropodidae				
278.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
Macrotrichidae				
279.	<i>Macrotrich breviseta</i>			
Maluridae				
280.	<i>Malurus cyaneus</i>			
281.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
282.	24544 <i>Malurus lamberti</i> subsp. <i>assimilis</i> (Variegated Fairy-wren)			
283.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
284.	24549 <i>Malurus leucopterus</i> subsp. <i>leuconotus</i> (White-winged Fairy-wren)			
285.	24551 <i>Malurus pulcherrimus</i> (Blue-breasted Fairy-wren)			
286.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
Megapodiidae				
287.	24557 <i>Leipoa ocellata</i> (Malleefowl)		T	
Meliphagidae				
288.	24559 <i>Acanthagenys rufogularis</i> (Spiny-cheeked Honeyeater)			
289.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
290.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
291.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
292.	24567 <i>Epthianura albifrons</i> (White-fronted Chat)			
293.	24570 <i>Epthianura tricolor</i> (Crimson Chat)			
294.	42314 <i>Gavicalis virescens</i> (Singing Honeyeater)			
295.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
296.	25659 <i>Lichenostomus leucotis</i> (White-eared Honeyeater)			
297.	24576 <i>Lichenostomus leucotis</i> subsp. <i>novaenoriae</i> (White-eared Honeyeater)			
298.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
299.	24582 <i>Lichmera indistincta</i> subsp. <i>indistincta</i> (Brown Honeyeater)			
300.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
301.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			

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302.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
303.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
304.	42344 <i>Pumella albiglans</i> (White-fronted Honeyeater)			
Meropidae				
305.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
Mesostigmata				
306.	<i>Mesostigmata</i> sp.			
Mesoveliidae				
307.	<i>Mesoveliidae</i> sp.			
Micropholcommatidae				
308.	<i>Raveniella cirrata</i>			
Motacillidae				
309.	24599 <i>Anthus australis</i> subsp. <i>australis</i> (Australian Pipit)			
Muridae				
310.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
311.	24223 <i>Mus musculus</i> (House Mouse)	Y		
312.	24227 <i>Notomys longicaudatus</i> (Long-tailed Hopping-mouse, koolawa)		X	
313.	24228 <i>Notomys macrotis</i> (Big-eared Hopping-mouse, noompa)		X	
314.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
Myobatrachidae				
315.	25400 <i>Crinia insignifera</i> (Squelching Froglet)			
316.	25401 <i>Crinia pseudinsignifera</i> (Bleating Froglet)			
317.	25420 <i>Myobatrachus gouldii</i> (Turtle Frog)			
318.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
Naididae				
319.	<i>Naididae</i> (ex <i>Tubificidae</i>)			
Nematoda				
320.	<i>Nematoda</i> sp.			
Nemesiidae				
321.	<i>Aname mainae</i>			
Neosittidae				
322.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
323.	24606 <i>Daphoenositta chrysoptera</i> subsp. <i>pileata</i> (Varied Sittella, Black-capped Sittella)			
Nicodamidae				
324.	<i>Nicodamus mainae</i>			
Notonectidae				
325.	<i>Anisops baylii</i>			
326.	<i>Anisops gratus</i>			
327.	<i>Anisops</i> sp.			
328.	<i>Anisops thienemanni</i>			
329.	<i>Notonectidae</i> sp.			
Oligochaeta				
330.	<i>Oligochaeta</i> sp.			
Oniscidae				
331.	<i>Oniscidae</i> sp.			
Otididae				
332.	24610 <i>Ardeotis australis</i> (Australian Bustard)			
Oxyopidae				
333.	<i>Oxyopes gracilipes</i>			
Pachycephalidae				
334.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
335.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
336.	24618 <i>Oreoica gutturalis</i> (Crested Bellbird)			
337.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
338.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
Pardalotidae				
339.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
340.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
Pelecanidae				
341.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Peripatopsidae				
342.	<i>Occiperipatoides gilesii</i>			
Petroicidae				
343.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
344.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
345.	24654 <i>Microeca fascinans</i> subsp. <i>assimilis</i> (Jacky Winter)			
346.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
347.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
Phalacrocoracidae				
348.	<i>Microcarbo melanoleucos</i>			
349.	25698 <i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
350.	24666 <i>Phalacrocorax melanoleucos</i> subsp. <i>melanoleucos</i> (Little Pied Cormorant)			
351.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
Phasianidae				
352.	24671 <i>Coturnix pectoralis</i> (Stubble Quail)			
353.	25701 <i>Coturnix ypsilophora</i> (Brown Quail)			
354.	<i>Gallus gallus</i>			
Pionidae				
355.	<i>Acercella falcipes</i>			
Planorbidae				
356.	<i>Planorbidae</i> sp.			
Podargidae				
357.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
358.	24679 <i>Podargus strigoides</i> subsp. <i>brachypterus</i> (Tawny Frogmouth)			
Podicipedidae				
359.	24681 <i>Poliiocephalus poliocephalus</i> (Hoary-headed Grebe)			
360.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
361.	24682 <i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
Pomatostomidae				
362.	24683 <i>Pomatostomus superciliosus</i> (White-browed Babbler)			
363.	34013 <i>Pomatostomus superciliosus</i> subsp. <i>ashbyi</i> (White-browed Babbler (western wheatbelt))			
Procellariidae				
364.	24689 <i>Halobaena caerulea</i> (Blue Petrel)			
Psittacidae				
365.	<i>Barnardius zonarius</i>			
366.	24722 <i>Cacatua leadbeateri</i> (Major Mitchell's Cockatoo)			
367.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
368.	24723 <i>Cacatua pastinator</i> subsp. <i>butleri</i> (Butler's Corella)			
369.	25715 <i>Cacatua roseicapilla</i> (Galah)			
370.	24725 <i>Cacatua roseicapilla</i> subsp. <i>assimilis</i> (Galah)			
371.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
372.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
373.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)			T
374.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)			T
375.	24736 <i>Melopsittacus undulatus</i> (Budgerigar)			
376.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
377.	24742 <i>Nymphicus hollandicus</i> (Cockatiel)			
378.	41348 <i>Pezoporus flaviventris</i> (Western Ground Parrot)			T
379.	24745 <i>Platycercus icterotis</i> subsp. <i>icterotis</i> (Western Rosella)			
380.	24746 <i>Platycercus icterotis</i> subsp. <i>xanthogenys</i> (Western Rosella (inland))			P4
381.	24748 <i>Platycercus varius</i> (Mulga Parrot)			
382.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
383.	24750 <i>Platycercus zonarius</i> subsp. <i>semitorquatus</i> (Twenty-eight Parrot)			
384.	24751 <i>Platycercus zonarius</i> subsp. <i>zonarius</i> (Port Lincoln Parrot)			
385.	25722 <i>Polytelis anthopeplus</i> (Regent Parrot)			
386.	30854 <i>Polytelis anthopeplus</i> subsp. <i>westralis</i> (Regent Parrot)			
387.	<i>Purpureicephalus spurius</i>			
Pygopodidae				
388.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
389.	25766 <i>Delma fraseri</i> (Fraser's Legless Lizard)			
390.	24999 <i>Delma grayii</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
391.	25005 <i>Lialis burtonis</i>			
392.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (Keeled Legless Lizard)			
393.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
Pyralidae				
394.	<i>Pyralidae</i> sp.			
Rallidae				
395.	25727 <i>Fulica atra</i> (Eurasian Coot)			
396.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
397.	24763 <i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (Dusky Moorhen)			
398.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
399.	24769 <i>Porzana fluminea</i> (Australian Spotted Crane)			
400.	24770 <i>Porzana pusilla</i> subsp. <i>palustris</i> (Baillon's Crane)			
401.	48141 <i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
Recurvirostridae				
402.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
403.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
404.	24775 <i>Himantopus himantopus</i> subsp. <i>leucocephalus</i> (Black-winged Stilt)			
405.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
Salticidae				
406.	<i>Maratus pavonis</i>			
407.	<i>Salpesia squalida</i>			Y
408.	<i>Sandalodes joannae</i>			
Scincidae				
409.	30893 <i>Cryptoblepharus buchananii</i>			
410.	25027 <i>Ctenotus australis</i>			
411.	25039 <i>Ctenotus fallens</i>			
412.	25065 <i>Ctenotus pantherinus</i> subsp. <i>pantherinus</i> (Leopard Ctenotus)			
413.	25074 <i>Ctenotus schomburgkii</i>			
414.	25107 <i>Egernia stokesii</i> subsp. <i>badia</i> (Western Spiny-tailed Skink, Gidgee Skink)		T	
415.	25109 <i>Eremiascincus richardsonii</i> (Broad-banded Sand Swimmer)			
416.	25131 <i>Lerista distinguenda</i>			
417.	25148 <i>Lerista lineopunctulata</i>			
418.	25184 <i>Menetia greyii</i>			
419.	25192 <i>Morethia obscura</i>			
420.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
421.	25207 <i>Tiliqua rugosa</i> subsp. <i>rugosa</i>			
Scolopacidae				
422.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
423.	24779 <i>Calidris acuminata</i> (Sharp-tailed Sandpiper)		IA	
424.	24786 <i>Calidris melanotos</i> (Pectoral Sandpiper)		IA	
Scolopendridae				
425.	<i>Cormocephalus aurantiipes</i>			
426.	<i>Cormocephalus rubriceps</i>			
427.	<i>Cormocephalus strigosus</i>			
428.	<i>Cormocephalus turneri</i>			
429.	<i>Ethmostigmus rubripes</i>			
430.	<i>Notiasemus glauerti</i>			
431.	<i>Scolopendra laeta</i>			
432.	<i>Scolopendra morsitans</i>			
Scutigeridae				
433.	<i>Thereuopoda lesueurii</i>			
Sididae				
434.	<i>Latonopsis cf. brehmi</i> (SAP)			
Stratiomyidae				
435.	<i>Stratiomyidae</i> sp.			
Sylviidae				
436.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
437.	24838 <i>Megalurus gramineus</i> subsp. <i>gramineus</i> (Little Grassbird)			
Tarsipedidae				
438.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
Tenuipalpidae				
439.	<i>Aegyptobia yertle</i>			Y
Testudinellidae				

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
440.	<i>Testudinella patina</i>			
Tettigoniidae				
441.	33993 <i>Throscodectes xederoides</i> (Mogumber Bush Cricket, Northern Throsco)		P3	
Theridiidae				
442.	<i>Latrodectus hasseltii</i>			
Threskiomithidae				
443.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
444.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
Trombidiformes				
445.	<i>Acariformes</i> sp.			
Turnicidae				
446.	48147 <i>Turnix varius</i> (Painted Button-quail)			
447.	24851 <i>Turnix velox</i> (Little Button-quail)			
Typhlopidae				
448.	44629 <i>Anilios australis</i>			
Tytonidae				
449.	24852 <i>Tyto alba</i> subsp. <i>delicatula</i> (Barn Owl)			
Urodacidae				
450.	<i>Urodacus armatus</i>			
451.	<i>Urodacus hoplurus</i>			
452.	<i>Urodacus novaehollandiae</i>			
Varanidae				
453.	25526 <i>Varanus tristis</i> (Racehorse Monitor)			
Vespertilionidae				
454.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
455.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
Withiidae				
456.	<i>Withius piger</i>			
Zodariidae				
457.	<i>Pentasteron intermedium</i>			
458.	<i>Storena formosa</i>			
Zosteropidae				
459.	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

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



EPBC Act Protected Matters Report

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

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

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

Report created: 01/11/19 19:14:49

[Summary](#)

[Details](#)

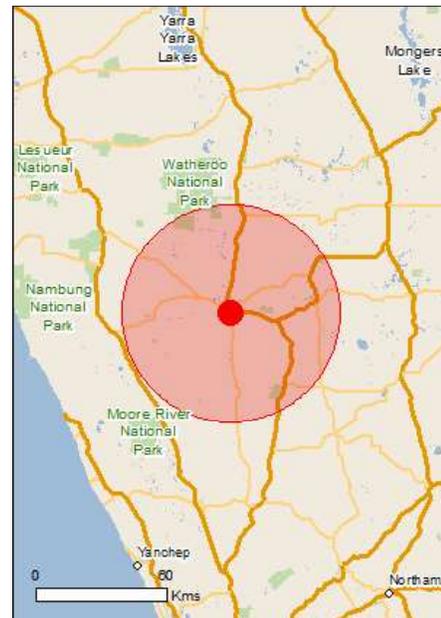
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 50.0Km



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](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	79
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

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

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

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

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

Extra Information

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

State and Territory Reserves:	34
Regional Forest Agreements:	1
Invasive Species:	23
Nationally Important Wetlands:	1
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [\[Resource Information \]](#)

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

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community likely to occur within area
Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area

Listed Threatened Species [\[Resource Information \]](#)

Name	Status	Type of Presence
Birds		
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Breeding known to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted-snipe, Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
Fish		
Nannatherina balstoni Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat likely to occur within area
Mammals		
Dasyurus geoffroi Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
Parantechinus apicalis Dibbler [313]	Endangered	Species or species habitat may occur within

Name	Status	Type of Presence area
Phascogale calura Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316]	Vulnerable	Species or species habitat likely to occur within area
Other		
Idiosoma nigrum Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat known to occur within area
Plants		
Acacia aprica Blunt Wattle [64821]	Endangered	Species or species habitat likely to occur within area
Acacia aristulata Watheroo Wattle [64822]	Endangered	Species or species habitat known to occur within area
Acacia ataxiphylla subsp. magna Large-fruited Tammin Wattle [64823]	Endangered	Species or species habitat may occur within area
Acacia cochlocarpa subsp. cochlocarpa Spiral-fruited Wattle [23877]	Endangered	Species or species habitat known to occur within area
Acacia cochlocarpa subsp. velutinosa Velvety Spiral Pod Wattle [65112]	Critically Endangered	Species or species habitat likely to occur within area
Acacia forrestiana Forest's Wattle [17235]	Vulnerable	Species or species habitat known to occur within area
Acacia splendens Splendid Wattle, Dandaragan Wattle [81510]	Endangered	Species or species habitat known to occur within area
Acacia vassalii Vassal's Wattle [6144]	Endangered	Species or species habitat known to occur within area
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat likely to occur within area
Asterolasia nivea Bindoon Starbush [8225]	Vulnerable	Species or species habitat likely to occur within area
Banksia fuscobractea Dark-bract Banksia [83059]	Critically Endangered	Species or species habitat known to occur within area
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area
Banksia serratuloides subsp. perissa Northern Serrate Dryandra [82767]	Critically Endangered	Species or species habitat may occur within area
Banksia serratuloides subsp. serratuloides Southern Serrate Dryandra [82768]	Vulnerable	Species or species habitat known to occur within area
Caladenia drakeoides Hinged Dragon Orchid [68687]	Endangered	Species or species

Name	Status	Type of Presence
Chamelaucium sp. Cataby (G.J.Keighery 11009) Griffin's Waxflower [82509]	Vulnerable	habitat known to occur within area Species or species habitat known to occur within area
Chamelaucium sp. Gingin (N.G.Marchant 6) Gingin Wax [88881]	Endangered	Species or species habitat likely to occur within area
Chorizema humile Prostrate Flame Pea [32573]	Endangered	Species or species habitat known to occur within area
Conospermum densiflorum subsp. unicephalatum One-headed Smokebush [64871]	Endangered	Species or species habitat known to occur within area
Darwinia acerosa Fine-leaved Darwinia [9004]	Endangered	Species or species habitat known to occur within area
Darwinia carnea Mogumber Bell, Narrogin Bell [9736]	Endangered	Species or species habitat likely to occur within area
Dasymalla axillaris Native Foxglove [38829]	Critically Endangered	Species or species habitat likely to occur within area
Daviesia dielsii Diels' Daviesia [19617]	Endangered	Species or species habitat known to occur within area
Daviesia euphorbioides Wongan Cactus [3477]	Endangered	Species or species habitat may occur within area
Diplolaena andrewsii [6601]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat known to occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat known to occur within area
Eremophila glabra subsp. chlorella [84927]	Endangered	Species or species habitat known to occur within area
Eremophila pinnatifida Pinnate-leaf Eremophila [64894]	Endangered	Species or species habitat likely to occur within area
Eremophila scaberula Rough Emu Bush [16729]	Endangered	Species or species habitat known to occur within area
Eucalyptus absita Badgingarra Box [24260]	Endangered	Species or species habitat known to occur within area
Eucalyptus crispata Yandanooka Mallee [24268]	Vulnerable	Species or species habitat may occur within area
Eucalyptus dolorosa Dandaragan Mallee, Mount Misery Mallee [56709]	Endangered	Species or species habitat known to occur

Name	Status	Type of Presence
Eucalyptus impensa Eneabba Mallee [56711]	Endangered	within area Species or species habitat may occur within area
Eucalyptus leprophloia Scaly Butt Mallee, Scaly-butt Mallee [56712]	Endangered	Species or species habitat may occur within area
Eucalyptus pruiniramis Midlands Gum, Jingymia Gum [56403]	Endangered	Species or species habitat known to occur within area
Eucalyptus recta Silver Mallet [56430]	Endangered	Species or species habitat known to occur within area
Eucalyptus rhodantha Rose Mallee [9362]	Vulnerable	Species or species habitat known to occur within area
Eucalyptus x balanites Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
Frankenia conferta Silky Frankenia [6074]	Endangered	Species or species habitat may occur within area
Gastrolobium appressum Scale-leaf Poison [7358]	Vulnerable	Species or species habitat may occur within area
Gastrolobium hamulosum Hook-point Poison [9212]	Endangered	Species or species habitat known to occur within area
Glyceria drummondii Nangetty Grass [14008]	Endangered	Species or species habitat known to occur within area
Goodenia arthrotricha [12448]	Endangered	Species or species habitat known to occur within area
Grevillea calliantha Foote's Grevillea, Cataby Grevillea, Black Magic Grevillea [56339]	Endangered	Species or species habitat known to occur within area
Grevillea christineae Christine's Grevillea [64520]	Endangered	Species or species habitat known to occur within area
Grevillea curviloba subsp. incurva Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
Grevillea dryandroides subsp. hirsuta Hairy Phalanx Grevillea [64577]	Endangered	Species or species habitat likely to occur within area
Grevillea pythara Pythara Grevillea [64525]	Endangered	Species or species habitat may occur within area
Grevillea sp. Gillingarra (R.J.Cranfield 4087) [86383]	Critically Endangered	Species or species habitat known to occur within area
Hakea megalosperma Lesueur Hakea [10505]	Vulnerable	Species or species habitat likely to occur within area

Name	Status	Type of Presence
Haloragis platycarpa Broad-fruited Haloragis [15371]	Critically Endangered	Species or species habitat likely to occur within area
Hemiandra gardneri Red Snakebush [7945]	Endangered	Species or species habitat known to occur within area
Hemiandra rutilans Sargents Snakebush, Colourful Snakebush [17932]	Endangered	Species or species habitat likely to occur within area
Jacksonia pungens Pungent Jacksonia [64920]	Endangered	Species or species habitat may occur within area
Leucopogon obtectus Hidden Beard-heath [19614]	Endangered	Species or species habitat may occur within area
Melaleuca sciotostyla Wongan Melaleuca [24324]	Endangered	Species or species habitat known to occur within area
Paracaleana dixonii Sandplain Duck Orchid [86882]	Endangered	Species or species habitat likely to occur within area
Ptychosema pusillum Dwarf Pea [11268]	Vulnerable	Species or species habitat likely to occur within area
Roycea pycnophylloides Saltmat [21161]	Endangered	Species or species habitat likely to occur within area
Spirogardnera rubescens Spiral Bush [15667]	Endangered	Species or species habitat may occur within area
Synaphea quartzitica Quartz-loving Synaphea [64978]	Endangered	Species or species habitat known to occur within area
Thelymitra dedmaniarum Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat may occur within area
Thelymitra stellata Star Sun-orchid [7060]	Endangered	Species or species habitat may occur within area
Thomasia sp. Green Hill (S.Paust 1322) Green Hill Thomasia [64542]	Endangered	Species or species habitat likely to occur within area
Verticordia staminosa subsp. staminosa Wongan Featherflower [55825]	Endangered	Species or species habitat may occur within area

Reptiles

Egernia stokesii badia Western Spiny-tailed Skink, Baudin Island Spiny-tailed Skink [64483]	Endangered	Species or species habitat may occur within area
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Listed Migratory Species

[Resource Information]

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

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

Name	Threatened	Type of Presence within area
Migratory Terrestrial Species		
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat known to occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area
Calidris ferruginea		
Curllew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos		
Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat known to occur within area
Tringa nebularia		
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
Birds		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat known to occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba		
Great Egret, White Egret [59541]		Species or species habitat known to occur within area
Ardea ibis		
Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata		
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within

Name	Threatened	Type of Presence area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Chrysococcyx osculans Black-eared Cuckoo [705]		Species or species habitat known to occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves	[Resource Information]
Name	State
Bundarra	WA
Dandarangan	WA
Gillingarra	WA
Jam Hill	WA
Karamarra	WA
Koodjee	WA
Lake Wannamal	WA
Long Pool	WA
Manaling	WA
Merewana	WA
Minyulo	WA
Mogumber	WA
Mogumber West	WA
Moochamulla	WA
NTWA Bushland covenant (0048)	WA
NTWA Bushland covenant (0057)	WA
NTWA Bushland covenant (0115)	WA
Namban	WA
Namming	WA
Quins Hill	WA

Name	State
Sevenmile Well	WA
Unnamed WA23179	WA
Unnamed WA25591	WA
Unnamed WA28710	WA
Unnamed WA39322	WA
Unnamed WA39571	WA
Unnamed WA41042	WA
Unnamed WA43811	WA
Unnamed WA44081	WA
Unnamed WA45337	WA
Unnamed WA46899	WA
Unnamed WA47694	WA
Unnamed WA47808	WA
Watheroo	WA

Regional Forest Agreements [\[Resource Information \]](#)

Note that all areas with completed RFAs have been included.

Name	State
South West WA RFA	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
Birds		
Anas platyrhynchos Mallard [974]		Species or species habitat likely to occur within area
Columba livia Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Capra hircus Goat [2]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
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

Name	Status	Type of Presence
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Sus scrofa Pig [6]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area

Plants

Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Carrichtera annua Ward's Weed [9511]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species habitat may occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area

Nationally Important Wetlands

[[Resource Information](#)]

Name	State
Wannamal Lake System	WA

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

-30.66647 116.01754

Acknowledgements

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

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

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

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

NAME_ID	NAME_CODE	CLASS	CONS_CODE	Date	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M	
Actitis hypoleucos	Common Sandpiper	BRD	IA	09/12/1973	127361157	BRD/ATLASS							18000	
Apollites ramseyi (southwest subsp.)	woma (southwest subsp.)	REFILE	PS	01/08/1989	12051	ITALUNA	Certain	Survey	Caught or trapped	1	Watheroo		1000	
Apollites ramseyi (southwest subsp.)	woma (southwest subsp.)	REFILE	PS	10/01/1993	REP F110702	WAM_REFILES		WAM Vouchered	Collection	Specimen	1	WALERING	WALERING	50000
Callisitta sumatrana	black-bellied sandpiper	BRD	IA		ANFF 1813	WAM_BIRD5		WAM Vouchered	Collection	Specimen	1	MOORA	MOORA	10000
Callisitta sumatrana	curlew sandpiper	BRD	CR & IA	10/02/1978	221471161	BRD/ATLASS	Moderately Certain	Observational	Sighting	1	YATHROO	YATHROO	18000	
Callisitta sumatrana	curlew sandpiper	BRD	CR & IA	02/11/1977	221451161	BRD/ATLASS	Moderately Certain	Observational	Sighting	1	YATHROO	YATHROO	18000	
Callisitta sumatrana	perched sandpiper	BRD	IA	07/02/1973	ANFF 17833	WAM_BIRD5		WAM Vouchered	Collection	Specimen	1	MOORA	MOORA	10000
Callisitta sumatrana	red-necked stint	BRD	IA	10/02/1978	221471162	BRD/ATLASS	Moderately Certain	Observational	Sighting	1	YATHROO	YATHROO	18000	
Callisitta sumatrana	red-necked stint	BRD	IA	02/11/1977	221451162	BRD/ATLASS	Moderately Certain	Observational	Sighting	1	YATHROO	YATHROO	18000	
Callipepla squamata	forest red-tailed black cockatoo	BRD	VU	23/02/1966	96591	ITALUNA	Certain			1	MOORA		50000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	24/11/2016	82723	ITALUNA	Very Certain (photo, specimen, expert)	Opportunistic sighting	Sighting	1	Raggans Ford		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	31/10/2016	88186	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	0	GILLINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	31/10/2016	88187	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	2	GILLINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88185	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88188	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88189	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88190	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88193	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	0	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88195	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	0	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88196	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	0	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88197	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	0	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	15/10/2016	88198	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	0	BADGINGARRA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	30/09/2016	88164	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	GLENTROME		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	30/09/2016	88214	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	WALERING		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	30/09/2016	88235	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	WALERING		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	30/09/2016	88236	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	WALERING		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	30/09/2016	88237	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	WALERING		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88165	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88166	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88167	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88168	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88169	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88170	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88171	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88172	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88173	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88174	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sighting	1	MOGLUMBER		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88200	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	BARBERTON		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88201	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	BARBERTON		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88203	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	0	BARBERTON		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88204	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	0	BARBERTON		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88205	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88206	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88207	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88208	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	2	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88209	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88210	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88211	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88212	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88213	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88214	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88215	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Callipepla squamata	Canaby's cockatoo	BRD	EN	23/09/2016	88216	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	

NAME_S0	NAME_COM	CLASS	CONS_CODE	Date	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88218	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote camera	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88219	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88220	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88221	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88222	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88223	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88224	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88225	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88226	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88227	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88228	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88229	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88230	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88231	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	23/09/2016	88232	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	15/09/2016	88202	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	BARBERTON		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	15/09/2016	88233	ITALUNA	Very Certain (photo, specimen, expert)	Regular Monitoring	Sightings	1	MOORA		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	21/06/2016	89535	ITALUNA	Very Certain (photo, specimen, expert)	Regular monitoring	Remote sensing	1	Mixstara		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	08/12/2015	1282466	FAUNASURVEY	Certain	Survey	Sightings	1	WATHEROO	Moora, Watheroo	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282450	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282451	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282452	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282453	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282454	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282455	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/11/2015	1282456	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	20/10/2015	1282357	FAUNASURVEY	Certain	Survey	Sightings	1	GILLINGARRA	Victoria Plains, Jewel Park	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	18/10/2015	1282375	FAUNASURVEY	Certain	Survey	Sightings	2	REGANS FOND	Dandragan, Reid Property	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282376	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282379	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282382	FAUNASURVEY	Certain	Survey	Sightings	1	BARBERTON	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282383	FAUNASURVEY	Certain	Survey	Sightings	1	BERKSHIRE VALLEY	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282384	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	17/10/2015	1282385	FAUNASURVEY	Certain	Survey	Sightings	1	WALEING	Moora, Poppellwell Property	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	12/10/2015	1282387	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	12/10/2015	1282388	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	12/10/2015	1282389	FAUNASURVEY	Certain	Survey	Sightings	1	MOGLUMBER	Victoria Plains, Mogumber	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	09/10/2015	1282350	FAUNASURVEY	Certain	Survey	Sightings	1	BADGINSBARRA	Dandragan, Fearley	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282386	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282387	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282388	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282389	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282390	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282391	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282392	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora, Karroff	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282393	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282394	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282395	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282396	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	02/10/2015	1282397	FAUNASURVEY	Certain	Survey	Sightings	1	MOORA	Moora	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	12/04/2015	86939	ITALUNA	Certain	Community survey	Day sightings	2	Dandragan		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	16/12/2014	1047653	FAUNASURVEY	Certain	Survey	Unknown	1	COOMBERGALLE	COORNOW, MOORA	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	16/12/2014	1047654	FAUNASURVEY	Certain	Survey	Unknown	1	NAMBAN	COORNOW, MOORA	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	16/12/2014	1047655	FAUNASURVEY	Certain	Survey	Unknown	1	NAMBAN	COORNOW, MOORA	100	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	18/11/2014	80788	ITALUNA	Moderately certain	Community survey	Secondary sign	0	Mogumber		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	21/10/2014	76049	ITALUNA	Certain	Opportunistic sighting	Day sightings	1	Mogumber		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	21/10/2014	76050	ITALUNA	Certain	Opportunistic sighting	Day sightings	0	Mogumber		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	21/10/2014	76051	ITALUNA	Certain	Opportunistic sighting	Day sightings	0	Mogumber		1000	
Calystorhynchus latirostris	White-tailed Short-billed Black Cuckoo	BRD	EN	07/10/2014	1317741	794	BRIDATA	Moderately certain	Community survey	Day sightings	460	Dandragan	Moora Motel	0
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	06/04/2015	86185	ITALUNA	Moderately certain	Survey	Day sightings	60	WALEING		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	10/12/2013	77919	ITALUNA	Moderately certain	Survey	Day sightings	60	WALEING		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	28/10/2013	86292	FAUNASURVEY	Certain	Survey	Unknown	2	COOMBERGALLE	COORNOW, MOORA	0	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	30/10/2013	77952	ITALUNA	Moderately certain	Survey	Day sightings	5	GLENTROOME		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	22/10/2013	77956	ITALUNA	Moderately certain	Survey	Day sightings	1	WADSWORTH		1000	
Calystorhynchus latirostris	Canaby's cockatoo	BRD	EN	21/09/2013	77960	ITALUNA	Moderately certain	Survey	Day sightings	30	DANDRAGAN		1000	

NAME_S2	NAME_CODE	CLASS	CONF_CODE	DATE	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	17/10/2013	75956	ITALIANA	Moderately certain	Survey	Day sighting	100	MOORA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/09/2013	75955	ITALIANA	Moderately certain	Survey	Day sighting	4	BADGINGARRA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/09/2013	75954	ITALIANA	Moderately certain	Survey	Day sighting	10	DANDARAGAN		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/09/2013	75952	ITALIANA	Not sure	Survey	Day sighting	1	WATHURONG		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/09/2013	75947	ITALIANA	Moderately certain	Survey	Day sighting	12	NEW NORCIA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	14/09/2013	75952	ITALIANA	Moderately certain	Survey	Day sighting	25	MOORA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/09/2013	75951	ITALIANA	Moderately certain	Survey	Day sighting	8	MOORA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	09/09/2013	74648	ITALIANA	Certain	Opportunistic sighting	Day sighting	1	Magumber		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	22/08/2013	72945	ITALIANA	Moderately certain	Survey	Day sighting	6	REGANS FORD		1000
Calyptranthes latifolia	Canabily Lockatoo, White-tailed Short-billed Red Cuckoo	BRD	EN	21/08/2013	12612171794	BRD/ATA						Cairn Hill (proposed nature reserve)	0
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	08/04/2013	24066	ITALIANA	Certain	Community survey	Day sighting	591	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	07/04/2013	24065	ITALIANA	Certain	Community survey	Day sighting	228	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	03/03/2013	24064	ITALIANA	Certain	Community survey	Day sighting	8	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/01/2013	24063	ITALIANA	Certain	Community survey	Day sighting	204	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	09/10/2012	527570	FAUNASURVEY	Certain	Survey	Unknown	1	GILLINGARRA	Gurnell, GUNVISO	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	09/10/2012	527595	FAUNASURVEY	Certain	Survey	Unknown	2	YERONG	Gurnell, Opportunistic	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	08/10/2012	527742	FAUNASURVEY	Certain	Survey	Unknown	4	YERONG	Gurnell, GUNVISO	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	21/09/2012	51214311794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	09/09/2012	24062	ITALIANA	Certain	Community survey	Day sighting	39	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	14/08/2012	24062	ITALIANA	Certain	Community survey	Day sighting	14	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	10/06/2012	24060	ITALIANA	Certain	Community survey	Day sighting	120	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/04/2012	24059	ITALIANA	Certain	Community survey	Day sighting	313	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	09/03/2012	15941	ITALIANA	Certain	Opportunistic sighting	Dead	1			50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	10/09/2011	781311794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	KODJAN	Kojan Salmon Gum Res	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	07/04/2011	24074	ITALIANA	Certain	Community survey	Day sighting	22	REGANS FORD		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	24/09/2010	AVF-37332	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	DANDARAGAN	Canabily	10000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/05/2010	81294	ITALIANA	Certain	Community survey	Day sighting	2	Red Gully		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/05/2010	81296	ITALIANA	Certain	Community survey	Day sighting	2	Nimban		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/05/2010	81297	ITALIANA	Certain	Community survey	Day sighting	1	Nimban		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	06/04/2010	19219	ITALIANA	Certain	Opportunistic sighting	Day sighting	5			1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	03/01/2010	19866	ITALIANA	Certain	Opportunistic sighting	Day sighting	10			1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	03/01/2010	19867	ITALIANA	Not defined	Opportunistic sighting	Day sighting	10			1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	03/01/2010	19868	ITALIANA	Not defined	Opportunistic sighting	Day sighting	100			1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	03/01/2010	19869	ITALIANA	Not defined	Opportunistic sighting	Day sighting	100			1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	07/03/2009	151310	ITALIANA	Survey	Survey	Day sighting	100	REGANS FORD		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	14/10/2008	50640961794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	MCDUMBER	Magumber Reserve	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	21/09/2008	19130	ITALIANA	Certain	Survey	Day sighting	7	BADGINGARRA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	06/09/2008	24094	ITALIANA	Certain	Survey	Secondary sign	1	REGANS FORD		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	18/08/2008	13181	ITALIANA	Certain	Survey	Day sighting	1	BADGINGARRA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	23/02/2008	50222281794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	REGANS FORD	moquebar farm	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	16/02/2008	29145	ITALIANA	Certain	Survey	Day sighting	1	MCDUMBER		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	08/02/2008	14953	ITALIANA	Certain	Opportunistic sighting	Day sighting	20	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	22/09/2007	29309	ITALIANA	Certain	Survey	Day sighting	1	REGANS FORD		50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/07/2007	14396	ITALIANA	Certain	Monitoring	Day sighting	3	Regans Ford		50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/07/2007	14397	ITALIANA	Certain	Monitoring	Day sighting	3	Mimgarra		50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	18/07/2007	151494601794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	MCDUMBER	Moora Lbr	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/06/2006	14395	ITALIANA	Certain	Monitoring	Day sighting	50	Regans Ford		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/10/2006	14399	ITALIANA	Certain	Monitoring	Secondary sign	1	Ninyio Nature Reserve		50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	27/09/2006	4714831794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia	0
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	24/09/2006	476641794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia	500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/09/2006	14394	ITALIANA	Certain	Monitoring	Day sighting	4	Regans Ford		50
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/12/2005	4402261794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	GILLINGARRA	Fern Rd, Pease Brook??	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	14/09/2005	438411794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/09/2005	440481794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Piggswell's Farm	5000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/09/2005	4404821794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Woolley's Farm	500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	11/08/2005	4357431794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WADDINGTON	Waddling Hill Camp	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	25/08/2005	50002881794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	REGANS FORD	Regans Ford Brand Hay	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/11/2004	9767	ITALIANA	Certain	Targeted survey	Day sighting	1	Waddington		500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/11/2004	9770	ITALIANA	Certain	Targeted survey	Day sighting	1	Waddington		500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	13/11/2004	9771	ITALIANA	Certain	Targeted survey	Day sighting	0	Waddington		500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	12/11/2004	9768	ITALIANA	Certain	Targeted survey	Day sighting	1	Waddington		500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	12/11/2004	9769	ITALIANA	Certain	Targeted survey	Day sighting	1	Waddington		500
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/10/2004	9773	ITALIANA	Certain	Targeted survey	Day sighting	10	Moora		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36596	ITALIANA	Certain	Survey	Day sighting	2	WALBING		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36597	ITALIANA	Certain	Survey	Day sighting	4	WALBING		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36604	ITALIANA	Certain	Survey	Day sighting	2	NEW NORCIA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36605	ITALIANA	Certain	Survey	Day sighting	3	NEW NORCIA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36606	ITALIANA	Certain	Survey	Day sighting	2	NEW NORCIA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	28/08/2004	36607	ITALIANA	Certain	Survey	Day sighting	3	NEW NORCIA		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/11/2003	4181381794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	GILLINGARRA	Bindoon - Moora Road	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/11/2003	4181391794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	GILLINGARRA	Woolley Park Farm	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	20/11/2003	4181401794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	YARAWINDAH	Gillingarra - New Norcia Road	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	18/11/2003	431091794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	Magumber/New Norcia Rd	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	07/11/2003	430844794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Goondrobbie Farm	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	06/11/2003	4308451794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Woolley Farm	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	05/11/2003	4308421794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	Monastery Precincts	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	05/11/2003	4308431794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Waddling Roadhouse	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/10/2003	7912	ITALIANA	Certain	Survey	Day sighting	2	Waddling		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/10/2003	7913	ITALIANA	Certain	Survey	Day sighting	2	Waddling		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/10/2003	7916	ITALIANA	Certain	Survey	Secondary sign	0	Waddling		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	30/09/2003	4441411794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WADDINGTON	Waddling	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	23/09/2003	AVF-38370	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	NEW NORCIA	New Norcia	10000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	23/09/2003	AVF-38372	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	NEW NORCIA	S. of New Norcia	10000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	22/09/2003	7917	ITALIANA	Certain	Survey	Secondary sign	2	Brnd Brnd		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	10/09/2003	14820	ITALIANA	Certain	Targeted survey	Day sighting	6	Dandaragan		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	02/09/2003	4121471794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	GILLINGARRA	Gillingarra	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	02/09/2003	4121481794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia Farms	0
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	01/09/2003	7915	ITALIANA	Certain	Survey	Day sighting	6	Brnd Brnd		1000
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	19/11/2002	2968921794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	GILLINGARRA	Woolley Park	100
Calyptranthes latifolia	Canabily Lockatoo	BRD	EN	11/09/2002	2968451794	BRD/ATA/AS2	Moderately Certain	Observational	Sighting	1	WALBING	Goondrobbie	1000

NAME_SQ	NAME_COM	CLASS	CONS_CODE	Date	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	10/08/2002	288461 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	KODJAN	Pison paddock, New Norcia	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	10/08/2002	288461 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	Moore River walk, New Norcia	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	01/04/2002	283246 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	YATHROO	Capella Rd	5000
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	03/01/2002	9717	ITALUNA	Certain	Community survey	Day sighting	20	Glenidrome		1000
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	30/11/2001	262339 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	25/11/2001	9649	ITALUNA	Certain	Community survey	Day sighting	4	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	25/11/2001	9650	ITALUNA	Certain	Community survey	Day sighting	5	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	25/11/2001	9651	ITALUNA	Certain	Community survey	Day sighting	6	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	25/11/2001	9652	ITALUNA	Certain	Community survey	Day sighting	4	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	25/11/2001	9653	ITALUNA	Certain	Community survey	Day sighting	14	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	23/11/2001	9648	ITALUNA	Certain	Community survey	Day sighting	40	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	23/11/2001	9653	ITALUNA	Certain	Community survey	Day sighting	3	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	23/11/2001	9654	ITALUNA	Certain	Community survey	Day sighting	6	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	22/11/2001	9646	ITALUNA	Certain	Community survey	Day sighting	4	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	22/11/2001	9647	ITALUNA	Certain	Community survey	Day sighting	20	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	21/11/2001	9643	ITALUNA	Certain	Community survey	Day sighting	35	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	21/11/2001	9644	ITALUNA	Certain	Community survey	Day sighting	4	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	21/11/2001	9645	ITALUNA	Certain	Community survey	Day sighting	12	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	18/11/2001	9638	ITALUNA	Certain	Community survey	Day sighting	2	Dandabagan		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	18/11/2001	9641	ITALUNA	Certain	Community survey	Day sighting	2	Miyah Nature Reserve		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	15/11/2001	9642	ITALUNA	Certain	Community survey	Day sighting	2	Gillingarra		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	08/11/2001	9607	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	08/11/2001	9608	ITALUNA	Certain	Community survey	Day sighting	4	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	08/11/2001	9609	ITALUNA	Certain	Community survey	Day sighting	5	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	08/11/2001	9610	ITALUNA	Certain	Community survey	Day sighting	3	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9595	ITALUNA	Certain	Community survey	Day sighting	1	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9596	ITALUNA	Certain	Community survey	Day sighting	1	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9597	ITALUNA	Certain	Community survey	Day sighting	4	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9603	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9604	ITALUNA	Certain	Community survey	Day sighting	1	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9605	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9606	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9611	ITALUNA	Certain	Community survey	Day sighting	14	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9612	ITALUNA	Certain	Community survey	Day sighting	4	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	07/11/2001	9613	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	02/11/2001	9715	ITALUNA	Certain	Community survey	Day sighting	1	Moora		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	02/11/2001	9716	ITALUNA	Certain	Community survey	Day sighting	1	Moora		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	262338 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	9598	ITALUNA	Certain	Community survey	Day sighting	3	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	9599	ITALUNA	Certain	Community survey	Day sighting	1	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	9600	ITALUNA	Certain	Community survey	Day sighting	4	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	9601	ITALUNA	Certain	Community survey	Day sighting	2	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/10/2001	9602	ITALUNA	Certain	Community survey	Day sighting	1	Walkebb		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	17/10/2001	181851 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	PAWANING	Pawanning Nature Reserve	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	01/10/2001	187191 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MOORA	Midlands Road, Moora	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	01/10/2001	9615	ITALUNA	Certain	Community survey	Day sighting	1	Woolroo		500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	30/09/2001	186171 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	BADGINGARRA	Mullering Road	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	30/09/2001	262337 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	29/09/2001	9718	ITALUNA	Certain	Community survey	Day sighting	3	Moora		1000
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	09/09/2001	172804 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MOORA	Moora Cemetery	5000
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	01/09/2001	9718	ITALUNA	Certain	Community survey	Day sighting	5	Bindi Bindi		1000
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	11/08/2001	262336 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	20/08/2001	172918 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	WALEBING	Great Northern Hwy	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	19/08/2001	187197 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	WADDINGTON	New Norcia nature Reserve, Great Northern Hwy	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	10/08/2001	187190 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	Moore River, New Norcia	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	04/08/2001	186702 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MINDARRA	Mogumber Nature Reserve	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	09/07/2001	155834 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	NEW NORCIA	New Norcia	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	19/04/2001	267584 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	REGANS FORD	Regans Ford, Brand Hwy	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	18/04/2001	142065 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	RED GULLY	Wireless Hill Park, Arabos	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	28/02/2001	262333 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/01/2001	127558 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	13/01/2001	125751 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Miyah Brook	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	31/12/2000	127557 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	30/11/2000	127556 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	DANDABAGAN	Wolba Road & Badgingarra Road junction	500
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	18/11/2000	141808 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	PAWANING	Pawanning	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	18/11/2000	141809 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	PAWANING	Pawanning	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	12/11/2000	113152 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MOORA	Cairn Hill	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	12/11/2000	113153 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	GULLINGARRA	Gillingarra Road	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	11/11/2000	113150 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MOORA	Cairn Hill	100
Calyptrorhynchus latrostris	Canaby's cockatoo	BRD	EN	11/11/2000	113151 794	BRDQTLAS2	Moderately Certain	Observational	Sighting	1	MOORA	Cairn Hill	100

NAME_S2	NAME_CON	CLASS	COND_CODE	DATE	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	21/02/2000	113131794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	Cain Hill	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	08/10/2000	122462794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	Moora	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	30/09/2000	1133991794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	Wolha Road & Badgingarra Road Junction	500
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	17/09/2000	1072741794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	WADDINGTON	Waddington Nature Reserve, Great Northern Hwy	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	09/09/2000	105472794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	REGANS FORD	Regans Ford, Brand Hwy	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	27/08/2000	1051441794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	Cain Hill	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	27/08/2000	933493794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	WALEING	Coat Northern Hwy	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	27/08/2000	933501794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	WADDINGTON	Waddington Nature Reserve	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	27/08/2000	933511794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	YARAWINDAH	Coat Northern Hwy, Swan Mile Well Nature Reserve	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	20/08/2000	908111794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	COOMBERALE	Mulbards Road, Comberdale	5000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	23/07/2000	900131794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	Mulbards Road	500
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	20/11/1999	651981794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	Mogumber Nature Reserve	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	20/11/1999	651991794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MINDARRA	Mulbards Road, Mogumber	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	20/10/1999	418431794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	NEW NORCIA	Swagby ponds, New Norcia	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	28/10/1999	476481794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GLENTROME	Coat Northern Hwy	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	25/10/1999	475081794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	REGANS FORD	Regans Ford	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	18/09/1999	629701794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	NEW NORCIA	New Norcia	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	18/09/1999	28241794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	REGANS FORD	Regans Ford, Moore River	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	23/08/1999	44881794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	PAWANING	Paawaning Nature Reserve	100
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	24/08/1999	181061794	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	Dandabagan	5000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	27/09/1999	AVF-28183	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Dalano	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	13/02/1997	AVF-21174	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	RED GULLY	Grain, shire	5
Calyptronychia latrostris	Canaby's Cockatoo, White-tailed Short-tailed Black Cockatoo	BRD	EN	13/02/1997	AVF-27177	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	RED GULLY	Grain, shire	5
Calyptronychia latrostris	Canaby's Cockatoo	BRD	EN	18/12/1996	AVF-27171	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	RED GULLY	Grain, shire	5
Calyptronychia latrostris	Canaby's Cockatoo, White-tailed Short-tailed Black Cockatoo	BRD	EN	18/12/1996	AVF-27172	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	RED GULLY	Grain, shire	5
Calyptronychia latrostris	Canaby's Cockatoo	BRD	EN	18/12/1996	AVF-27173	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	RED GULLY	Grain, shire	5
Calyptronychia latrostris	Canaby's Cockatoo	BRD	EN	22/10/1996	AVF-34030	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	PAWANING	PAWANING	0
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	12/09/1996	AVF-27116	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora, near	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	12/09/1996	AVF-28184	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora	5
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	01/06/1996	AVF-26249	WAM_BRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora, area	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	23/10/1986	10226	ITALINA	Certain	Survey	Day lighting	10	BUNDRA	Bundra Nature Reserve	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	06/07/1985	10292	ITALINA	Certain	Opportunistic lighting	Day lighting	300	Change Springs/Red Gully	Change Springs/Red Gully	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	01/01/1990	3791	ITALINA	Moderately certain	Historical (written)	Day lighting	10	Wathroo	Wathroo	10000
Calyptronychia latrostris	Canaby's cockatoo	BRD	EN	01/01/1990	3792	ITALINA	Moderately certain	Historical (written)	Day lighting	10	Moora	Moora	10000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	24/04/1999	182071841	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	Wathroo NP	5000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1986	1402341266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1986	1402321266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	28/02/1986	1088381266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	30/11/1986	1087841266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	16/09/1986	1168841266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	07/09/1986	1087681266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GILLINGARRA	GILLINGARRA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1986	908441266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	23/08/1986	1169241266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BINDI BINDI	BINDI BINDI	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1986	908411266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	29/02/1986	83771266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	23/12/1979	82911266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GILLINGARRA	GILLINGARRA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	23/12/1979	837891266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GLENTROME	GLENTROME	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	30/11/1979	83781266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	02/11/1979	837871266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	02/11/1979	837871266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	02/11/1979	83781266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1979	671481266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1979	671561266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	23/07/1979	671401266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GLENTROME	GLENTROME	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	23/07/1979	90831266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	GILLINGARRA	GILLINGARRA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	19/06/1979	67531266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	31/08/1979	671461266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	14/03/1979	650291266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	12/01/1979	513361266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	28/02/1979	650381266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	28/02/1979	513341266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	14/12/1978	510271266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	YATHROO	YATHROO	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	09/12/1978	451271266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BERKSHIRE VALLEY	BERKSHIRE VALLEY	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	09/12/1978	451321266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BERKSHIRE VALLEY	BERKSHIRE VALLEY	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	09/12/1978	45131266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BERKSHIRE VALLEY	BERKSHIRE VALLEY	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	09/12/1978	451321266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOORA	MOORA	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	19/10/1978	1003451266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	28/08/1978	451221266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BERKSHIRE VALLEY	BERKSHIRE VALLEY	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	27/12/1977	1421201266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	BINDI BINDI	BINDI BINDI	18000
Calyptronychia sp. white-tailed black cockatoo	white-tailed black cockatoo	BRD	EN	30/11/1977	101681266	BRIGATLAS2	Moderately Certain	Observational	Lighting	1	DANDABAGAN	DANDABAGAN	18000
Dopelia zillii	water flea (land south west)	INVERTEBRATE	PL	16/10/2007	126790	AP_WHEREINVERTS	Moderately Certain	Survey	Unknown	1	WATHROO	Wathroo/Melaysia Swamp	30
Dopelia zillii	water flea (land south west)	INVERTEBRATE	PL	28/07/1999	168110	SAPWERT	Moderately Certain	Survey	Unknown	1	WATHROO	WATHROO	0
Dopelia zillii	water flea (land south west)	INVERTEBRATE	PL	28/07/1999	6179	ITALINA	Certain	Survey	Caught or trapped	1	Wathroo National Park	WATHROO	1000
Desonurus poefferi	chuditch, western quail	MAMMAL	VU	01/06/2000	1113	ITALINA	Certain	Opportunistic lighting	Dead	1	Regans Ford	Regans Ford	1000
Desonurus poefferi	chuditch, western quail	MAMMAL	VU	12/06/1996	1118	ITALINA	Certain	Opportunistic lighting	Dead	1	MOORA	MOORA	1000
Desonurus poefferi	chuditch, western quail	MAMMAL	VU	12/06/1996	MAMM047196	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	MOORA	TOWNITE	10000

NAME_S2	NAME_COM	CLASS	COND_CODE	DATE	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M
Onychia geoffroyi	Onychia, western wall	MAMMAL	VU	11/02/1982	756	ITALIANA	Certain	Opportunistic lighting	Night lighting	1	Wathra rd		200
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	01/01/1994	4083	ITALIANA	Certain	Survey	Caught or trapped	1	Miling		50000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	01/01/1994	4083	ITALIANA	Certain	Survey	Caught or trapped	1	Bindi Bindi		50000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	01/01/1994	4087	ITALIANA	Certain	Historical (written)	Caught or trapped	1	Miling		50000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	REPT.F10416		WAM, REPTILES	WAM Vouchered	Collection	Specimen	1	BINDI BINDI	BINDI BINDI	50000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	REPT.F1103		WAM, REPTILES	WAM Vouchered	Collection	Specimen	1	MILING		5000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	REPT.F9392		WAM, REPTILES	WAM Vouchered	Collection	Specimen	1	MILING		50000
Egernia sikink bnda	western spiny tailed skink	REPTILE	VU	REPT.F8634		WAM, REPTILES	WAM Vouchered	Collection	Specimen	1	MILING		10000
Falco peregrinus	peregrine falcon	IRD	OS	07/05/2013	65337	FAUNASURVEY	Certain	Survey	Unknown	1	WADDINGTON	Great Northern Highway, Betty Bag Road to the town of Waddington	10000
Falco peregrinus	peregrine falcon	IRD	OS	05/10/2012	527969	FAUNASURVEY	Certain	Survey	Unknown	1	YERCONO	Gurnal, GUNCREO7	100
Falco peregrinus	peregrine falcon	IRD	OS	02/10/2012	527959	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, OPPORTUNISTIC	100
Falco peregrinus	peregrine falcon	IRD	OS	13/09/2005	4024821237	BROGATAS2	Moderately Certain	Observational	Lighting	1	WALERING	Humphreys Farm	500
Falco peregrinus	peregrine falcon	IRD	OS	23/09/2002	6518	ITALIANA	Certain	Opportunistic lighting	Day lighting	1	MOORA		1000
Falco peregrinus	peregrine falcon	IRD	OS	22/10/2000	11331237	BROGATAS2	Moderately Certain	Observational	Lighting	1	MOORA	Cain Hill	100
Falco peregrinus	peregrine falcon	IRD	OS	01/05/1971	19797	ITALIANA	Moderately certain	Opportunistic lighting	Day lighting	1	Pawling		10000
Hydromys chrysopterus	water rat, rakas	MAMMAL	P4	14/07/1972	15565	ITALIANA	Certain	Survey	Caught or trapped	1	Raggans Ford		1000
Hydromys chrysopterus	water rat, rakas	MAMMAL	P4	16/07/1972	MAMM.M10328	WAM, MAMMALS	WAM Vouchered	Collection	Specimen	1	RED GULLY	MOORE RIVER NAT PARK	50
Hydromys chrysopterus	water rat, rakas	MAMMAL	P4	01/01/1991	10609	ITALIANA	Certain	Historical (written)	Caught or trapped	1	MOORA		10000
Hydromys chrysopterus	water rat, rakas	MAMMAL	P4	MAMM.M1540		WAM, MAMMALS	WAM Vouchered	Collection	Specimen	1	MOORA	MOORE RIVER NAT PARK	50000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	08/10/2012	528014	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, GUNCREO7	100
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	08/10/2012	528015	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, GUNCREO7	100
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	08/10/2012	528020	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, GUNCREO7	100
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	13/09/2012	528006	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, GUNCREO3	100
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	13/09/2012	528007	FAUNASURVEY	Certain	Survey	Unknown	1	GLENTROME	Gurnal, GUNCREO3	100
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	13/09/2012	ABACH117015	WAM, ARACHNIDS	WAM Vouchered	Collection	Specimen	1	GLENTROME	GLENTROME	50
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	13/09/2012	ABACH117017	WAM, ARACHNIDS	WAM Vouchered	Collection	Specimen	1	GLENTROME	GLENTROME	50
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	11/07/1993	9613	ITALIANA	Certain	Survey	Caught or trapped	1	Wathra rd		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	11/07/1993	9014	ITALIANA	Certain	Survey	Caught or trapped	1	Wathra rd		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	11/07/1993	9015	ITALIANA	Certain	Survey	Caught or trapped	1	Wathra rd		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9076	ITALIANA	Certain	Survey	Caught or trapped	1	Kojoon		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9077	ITALIANA	Certain	Survey	Caught or trapped	1	Kojoon		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9078	ITALIANA	Certain	Survey	Caught or trapped	1	Kojoon		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9079	ITALIANA	Certain	Survey	Caught or trapped	1	Kojoon		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9080	ITALIANA	Certain	Survey	Caught or trapped	1	Edbert/Kojoon		1000
Idiosoma dandaragan	shield backed trapdoor spider	INVERTEBRATE	EN	23/05/1994	9081	ITALIANA	Certain	Survey	Caught or trapped	1	Baberton		1000
Idiosoma mactemmerstoni	shield backed trapdoor spider	INVERTEBRATE	P2	18/06/2008	61110	FAUNASURVEY, WLS	4	Survey	Burpee excelsior	1	Yarawindah	IND11	5
Idiosoma mactemmerstoni	shield backed trapdoor spider	INVERTEBRATE	EN	17/09/2008	14615	ITALIANA	Certain	Survey	Caught or trapped	1	Yarawindah		1000
Idiosoma mactemmerstoni	Sean Coastal Plain shield backed trapdoor spider	INVERTEBRATE	P3	17/09/2008	14616	ITALIANA	Certain	Survey	Secondary sign	20	Yarawindah		1000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	24/04/1995	9080	ITALIANA	Certain	Survey	Caught or trapped	1	Walbling		10000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	08/04/1995	8986	ITALIANA	Certain	Survey	Caught or trapped	1	Bindi Bindi		1000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	08/04/1995	8987	ITALIANA	Certain	Survey	Caught or trapped	1	Bindi Bindi		1000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	28/05/1994	9082	ITALIANA	Certain	Survey	Caught or trapped	1	Bindi Bindi		1000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	06/05/1993	9069	ITALIANA	Certain	Survey	Caught or trapped	1	Walbling		10000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	06/05/1993	9070	ITALIANA	Certain	Survey	Caught or trapped	1	Walbling		10000
Idiosoma nigram	shield backed trapdoor spider	INVERTEBRATE	EN	06/05/1993	9071	ITALIANA	Certain	Survey	Caught or trapped	1	Walbling		10000
Isodon fusciventris	quenda, south western brown bandicoot	MAMMAL	P4	13/09/2012	80926	ITALIANA	Moderately certain	Community survey	Day lighting	6	Wannamal		1000
Leposa oculata	multiflor	IRD	VU	07/05/2001	13183	ITALIANA	Certain	Opportunistic lighting	Day lighting	2	Wathra rd National Park		1000
Leposa oculata	multiflor	IRD	VU	15/12/2005	10451	ITALIANA	Certain	Opportunistic lighting	Dead	1	Egna		500
Macrotis lagotis	bilby, bilby, bilby	MAMMAL	VU	01/02/1994	24511	ITALIANA	Moderately certain	Historical (written)	Caught or trapped	1	Wathra rd		10000
Macrotis lagotis	bilby, bilby, bilby	MAMMAL	VU	01/02/1994	24506	ITALIANA	Moderately certain	Historical (written)	Caught or trapped	1	Wathra rd		10000
Notamacropus irma	western brush wallaby	MAMMAL	P4	18/09/1982	10640	ITALIANA	Certain	Survey	Lighting	1	Raggans Ford/Red Gully		500
Notamacropus irma	western brush wallaby	MAMMAL	P4	MAMM.M1746		WAM, MAMMALS	WAM Vouchered	Collection	Specimen	1	MOGLUMBER	MOGLUMBER	10000
Notamacropus irma	western brush wallaby	MAMMAL	P4	MAMM.M1747		WAM, MAMMALS	WAM Vouchered	Collection	Specimen	1	MOGLUMBER	MOGLUMBER	10000
Oryzopsis australis	blue-billed duck	IRD	P4	15/03/2010	7813511216	BROGATAS2	Moderately Certain	Observational	Lighting	1	DANDARAGAN	Aggles Lake	0
Oryzopsis australis	blue-billed duck	IRD	P4	14/10/2008	50650971216	BROGATAS2	Moderately Certain	Observational	Lighting	1	WANNAMAL	Wannamal north Lake Wannamal	100
Oryzopsis australis	blue-billed duck	IRD	P4	16/10/2007	5153811216	BROGATAS2	Moderately Certain	Observational	Lighting	2	MOGLUMBER	Farm Lake, via Dandaragan	5000
Oryzopsis australis	blue-billed duck	IRD	P4	03/09/2005	1870941216	BROGATAS2	Moderately Certain	Observational	Lighting	1	DANDARAGAN	Dandaragan Road, Dandaragan	100
Oryzopsis australis	blue-billed duck	IRD	P4	18/07/1981	1428471216	BROGATAS1	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Oryzopsis australis	blue-billed duck	IRD	P4	01/05/1980	109331216	BROGATAS1	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Oryzopsis australis	blue-billed duck	IRD	P4	23/07/1979	675411216	BROGATAS1	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Oryzopsis australis	blue-billed duck	IRD	P4	19/10/1978	1093451216	BROGATAS1	Moderately Certain	Observational	Lighting	1	MOGLUMBER	MOGLUMBER	18000
Oryzopsis australis	blue-billed duck	IRD	P4	02/10/1977	221451216	BROGATAS1	Moderately Certain	Observational	Lighting	1	YATHROO		18000
Oryzopsis australis	blue-billed duck	IRD	P4	10/10/1917	AVF1-0144	WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Dalano Swamp, Moora	0
Paraceternis spicatus	ditador	MAMMAL	VU	01/11/1979	10665	ITALIANA	Certain	Historical (written)	Caught or trapped	1	Moore River		50000
Phascogale tapoatafa wambanger	south western brush tailed phascogale, wambanger	MAMMAL	CD	MAMM.M20897		WAM, MAMMALS	WAM Vouchered	Collection	Specimen	1	WANNAMAL	WANNAMAL	10000
Phascogale tapoatafa wambanger	western moalla (intand)	IRD	P4	01/11/1979	10665	ITALIANA	Certain	Opportunistic lighting	Day lighting	1	Dandaragan		50000
Phascogale tapoatafa wambanger	western moalla (intand)	IRD	P4	01/11/1979	10666	ITALIANA	Certain	Opportunistic lighting	Day lighting	1	Moora		50000
Phascogale tapoatafa wambanger	western moalla (intand)	IRD	P4	01/11/1977	10659	ITALIANA	Certain	Opportunistic lighting	Day lighting	1	Dandaragan		10000
Phascogale tapoatafa wambanger	glony ibis	IRD	JA	28/08/1978	451221178	BROGATAS1	Moderately Certain	Observational	Lighting	1	BERKSHIRE VALLEY	BERKSHIRE VALLEY	18000
Pseudomylura umbinina	western swamp tortoise	REPTILE	CR	13/09/2002	8868	ITALIANA	Certain	Translocation	Released	42	Mogumber		1000
Pseudomylura umbinina	western swamp tortoise	REPTILE	CR	21/07/2002	8867	ITALIANA	Certain	Translocation	Released	18	Mogumber		1000
Pseudomylura umbinina	western swamp tortoise	REPTILE	CR	02/06/2002	8865	ITALIANA	Certain	Translocation	Released	10	Mogumber		1000
Pseudomylura umbinina	western swamp tortoise	REPTILE	CR	01/01/2001	8872	ITALIANA	Certain	Targeted survey	Dead	2	Mogumber		1000
Pseudomylura umbinina	western swamp tortoise	REPTILE	CR	01/08/2002	8865	ITALIANA	Certain	Translocation	Released	6	Mogumber		1000
Rhynchalia australis	Australian painted stige	IRD	EN	24/01/1993	AVF1-0226	WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Dalano Lakes, Moora	0
Thomomys rubrocollis	hooded plover, hooded dotterel	IRD	P4	01/01/1981	AVF1-8672	WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora	10000
Thomomys rubrocollis	hooded plover, hooded dotterel	IRD	P4	01/10/1991	AVF1-8671	WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora	10000
Thomomys rubrocollis	hooded plover, hooded dotterel	IRD	P4	AVF1-7944		WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora	10000
Thomomys rubrocollis	hooded plover, hooded dotterel	IRD	P4	AVF1-7945		WAM, IRDS	WAM Vouchered	Collection	Specimen	1	MOORA	Moora	10000

NAME_SQ	NAME_CODE	CLASS	CONS_CODE	Date	SOURCE_ID	SOURCE	CERTAINTY	METHOD	TYPE	#	LOCALITY	SITE	ACCURACY_M
Thraupodactes wedderoides	Magumber bush cricket, Northern Throsso	INVERTEBRATE	P3	01/10/1999	6466	TFAUNA	Certain	Survey	Caught or trapped		Magumber		1000
Thraupodactes wedderoides	Magumber bush cricket, Northern Throsso	INVERTEBRATE	P3	01/01/1999	6590	TFAUNA	Certain	Opportunistic sighting	Sightling		Sevenshik Well Nature Reserve		1000
Thraupodactes wedderoides	Magumber bush cricket, Northern Throsso	INVERTEBRATE	P3	24/01/1975	6322	TFAUNA	Certain	Survey	Caught or trapped	1	Magumber		1000
Tringa glareosa	wood sandpiper	IRD	JA	19/02/1978	21471154	IRDATLASS1	Moderately Certain	Observational	Sightling	1	YATHROO	YATHROO	18000
Tringa nebularia	common greenshank, greenshank	IRD	JA	03/03/2003	2871611158	IRDATLASS2	Moderately Certain	Observational	Sightling	1	REGANS FORD	Witland, Brand Highway	500
Tringa nebularia	common greenshank, greenshank	IRD	JA	02/11/1977	221451158	IRDATLASS1	Moderately Certain	Observational	Sightling	1	YATHROO	YATHROO	18000
Westralumio carteri	Carter's freshwater mussel	INVERTEBRATE	VU	01/12/1965	85291	TFAUNA	Very Certain (photo, specimen, expert)	Survey	Caught or trapped	1	MINDARRA		10000

Appendix B

Flora Likelihood Assessment

Appendix B: Flora Likelihood of Occurrence

Closest record to Survey Area based on DBCA 2019. High = Suitable habitat present and records less than 10 km from the Survey Area, Medium = Suitable habitat present and records between 10 km and 20 km from the Survey Area, and Low = No suitable habitat present and/or records greater than 50 km from the Survey Area. CR = Listed as Critically Endangered under the EPBC Act. EN = Listed as Endangered under the EPBC Act. VU = Listed as Vulnerable under the EPBC Act.

Species	Conservation Status			Source			Distance to Nearest Record (km)	Flowering Period	Preferred Habitat	Habitat status within the Survey Area	Likelihood of Occurrence
	DBCA	EPBC	NatureMap	EPBC	DBCA						
<i>Acacia aristulata</i>	T	EN	X	X	X	10.3	Sep to Dec	Loamy or clayey sand over chert. Low rocky ridges and hills, outcrops.	Yes	Medium	
<i>Acacia cochlearia</i> subsp. <i>cochlearia</i>	T	EN	X	X	X	3	Sep to Nov	Clayey, sandy, often gravelly soils.	Yes	High	
<i>Acacia cochlearia</i> subsp. <i>velutinos</i>	T	CR		X		-	Jul to Nov	Sandy clay or siltite.	Yes	Medium	
<i>Banksia fuscobractea</i>	T	CR		X		-	Jul to Oct	Lateritic gravel, grey sand over laterite	No	Low	
<i>Banksia serratuloides</i> subsp. <i>serratuloides</i>	T	VU		X		-	Jul to Sep	Loam or clay loam over laterite, sandy gravel	Yes	Medium	
<i>Chamaelucium</i> sp. <i>Gingin</i> (N.G. Marchant 6)	T	EN		X		-	Sep to Nov	Gravel and sand over laterite	No	Low	
<i>Chorizema humile</i>	T	EN		X		-	Jul to Sep	Sandy clay or loam	Yes	Medium	
<i>Conospermum densiflorum</i> subsp. <i>unicephalum</i>	T	EN	X	X	X	17	Sep to Nov	Clay soils. Low-lying areas. Associated species: <i>Dryandra</i> spp., <i>Allocasuarina</i> , <i>Melaleuca</i> sp., weeds, grasses, <i>Philotus</i> sp.	Yes	Medium	
<i>Darwinia acerosa</i>	T	EN	X	X	X	16.1	Sep to Nov	Sand, loam, often moist soils. Granite outcrops, road verges.	Yes	Medium	
<i>Dasyalia axillans</i>	T	CR		X		-	Jul to Dec	Sand, Loam, gravel, most often on plain	Yes	Medium	
<i>Daviesia delzii</i>	T	EN	X	X	X	11.7	Jul	Sandy, often gravelly soils, rocky brown, sandy loam. Associated species: <i>Banksia</i> sp., <i>Acacia</i> sp., <i>Allocasuarina</i> sp., <i>Melaleuca</i> sp.	Yes	Medium	
<i>Eleocharis keigheryi</i>	T	VU	X	X	X	15.1	Aug to Nov	Clay, sandy loam. Emergent in freshwater: creeks, claypans.	No	Low	
<i>Eremophila glabra</i> subsp. <i>chlorella</i>	T	VU	X	X	X	8.2	Jul to Nov	Sandy clay. Winter-wet depressions. Under <i>Eucalyptus</i> / <i>Acacia</i> low woodland.	No	Low	
<i>Eremophila scaberula</i>	T	EN	X	X	X	1.7	Aug to Oct	Clay, sandy clay or loam. Winter-wet plains, inundated areas. Associated with <i>Eucalypt</i> woodlands.	No	Low	
<i>Eucalyptus absita</i>	T	EN	X	X	X	11.1	Apr to Jul	White lateric sand. Paddock	No	Low	
<i>Eucalyptus dolosa</i>	T	EN	X	X	X	-	Feb to Mar	Laterite. Hillsides	No	Low	
<i>Eucalyptus impensa</i>	T	EN	X	X	X	-	Jan to Jul	Yellow sand. Lateritic hills.	No	Low	
<i>Eucalyptus lepropholia</i>	T	EN	X	X	X	-	Aug to Oct	White or grey sand over laterite. Valley slopes	No	Low	
<i>Eucalyptus recta</i>	T	EN	X	X	X	-	Jan	Sandy laterite	No	Low	
<i>Eucalyptus x balantines</i>	T	EN	X	X	X	-	Jan to Feb	Sandy soils with lateritic gravel	No	Low	
<i>Gastrolobium appressum</i>	T	VU		X		-	Aug to Dec	White/yellow sand with quartz gravel. Sandplains, low rises	No	Low	
<i>Gastrolobium hamulosum</i>	T	EN		X		-	Aug to Oct	Sandy, often gravelly soils or clay. Flats, slopes, ridges	Yes	Medium	
<i>Goodenia arthrotricha</i>	T	EN	X	X	X	15.8	Oct to Nov	Gravel. Granite rocks, slopes	No	Low	
<i>Grevillea christinae</i>	T	EN		X		-	Aug to Sep	Clay loam, sandy clay, often moist	Yes	Medium	
<i>Grevillea pythara</i>	T	EN		X		-	May to Oct (possibly all year)	Sand or sandy loam with gravel	Yes	Medium	
<i>Haloragis platycarpa</i>	T	CR	X	X	X	15	Sep to Dec	Loamy clay, sand or granite, granite outcrops, claypans, margins of wetlands.	Yes	Medium	
<i>Hemandra gardneri</i>	T	EN	X	X	X	4	Aug to Oct	Grey or yellow sand, clayey sands. Sandplains	Yes	High	
<i>Sporogardneria rubescens</i>	T	EN		X		-	Aug to Dec	Laterite, sand over laterite, loam	No	Low	
<i>Synaphea quartzitica</i>	T	EN	X	X	X	13	Jul to Aug	Rocky quartzite hill.	No	Low	
<i>Thelymitra dedmanianum</i>	T	EN		X		-	Nov to Dec or Jan	Granite	No	Low	
<i>Thelymitra stellata</i>	T	EN		X		-	Oct to Nov	Sand, gravel, lateritic loam	No	Low	
<i>Verticordia staminosa</i> subsp. <i>staminosa</i>	T	EN		X		-	Jul to Oct	Soil pockets. Granite outcrops	No	Low	
<i>Acacia congesta</i> subsp. <i>cliftoniana</i>	P1	-	X		X	14	Aug to Sep	Rocky or lateritic loam.	No	Low	
<i>Caladenia dundasiae</i>	P1	-	X		X	13.4	Jul to Aug	Appears to be confined to Watheroo area. Clayey loam. Well-drained soils under scattered wandoo.	Yes	Medium	
<i>Calytrix ecalycata</i> subsp. <i>pubescens</i>	P1	-	X		X	7.5	Jul to Oct	Brown loamy clay. Upper slopes. Forest with <i>E. wandoo</i> .	Yes	High	
<i>Micromyrtus rogeri</i>	P1	-	X		X	18.6	Jul to Oct	Yellow-brown sandy soils, gravel, laterite. Breakaways	No	Low	
<i>Stylidium carnosum</i> subsp. <i>Narrow leaves</i>	P1	-	X		X	17.1	Sep to Nov	White/grey sand or sandy loam with lateritic gravel. In association with <i>Banksia</i> spp.	No	Low	
<i>Verticordia dasystylis</i> subsp. <i>oestropia</i>	P1	-	X		X	15.9	Oct	Gritty soils over granite. Outcrops. Slope. Brown clayey loam and sheet granite	No	Low	
<i>Anigozanthos humilis</i> subsp. <i>Badgingarra</i>	P2	-	X		X	3	-	Grey-white sand, rich brown sandy loam, sandy clay, alluvial soils. Low plains, river-banks, winter-wet swamps	No	Low	
<i>Boronia ericifolia</i>	P2	-	X		X	14.9	Sep to Dec	White sand over lateritic gravel, clay loam, sandy loam, alluvial flats. Winter-wet swamp, riverbanks	No	Low	
<i>Bosstea moyleri</i>	P2	-	X		X	13.8	Sep to Nov	Silty loam or sand. Steep slopes. In association with <i>Allocasuarina huegeliana</i>	Yes	Medium	
<i>Eremaea</i> sp. <i>Cairn Hill</i>	P2	-	X		X	13.3	Sep to Dec	Gravelly, white sand over laterite, sandy loam. Gully floors between ridges. Associated vegetation: <i>Banksia</i> spp.	No	Low	
<i>Gompholobium roseum</i>	P2	-	X		X	-	Oct	Sandy clay with laterite gravel and limestone	No	Low	
<i>Hemigenia curvifolia</i>	P2	-	X		X	2.9	Sep to Oct	Sandy soils. Associated with Low open woodland/health, <i>E. todiana</i> , <i>M. scabra</i> .	No	Low	
<i>Stylidium</i> sp. <i>Moora</i>	P2	-	X		X	7.5	Sep to Oct	Gravelly clay loam over granite, sandy clay, sandy loam. Hilltop and hillside, open woodland, low-lying areas	Yes	High	
<i>Synaphea rangiferops</i>	P2	-	X		X	19.9	Jul to Sep	Sandy loam, gravel	Yes	Medium	
<i>Tricornis</i> sp. <i>Wongan Hills</i>	P2	-	X		X	16.2	Sep to Nov	Yellow to grey sand, gravelly clay quartz, laterite, limestone. Midslopes and uplands. Associated with <i>Allocasuarina huegeliana</i> low woodland.	No	Low	
<i>Acacia cummingiana</i>	P3	-	X		X	7.2	May to Jun or Aug	Grey or yellow sand, lateritic gravel. Sandplains, lateritic breakaways	No	Low	
<i>Acacia nodiflora</i>	P3	-	X		X	-	Aug to Sep	Rocky loam or clay. Rocky ranges, granite hills	No	Low	
<i>Austrostipa</i> sp. <i>Cairn Hill</i>	P3	-	X		X	14.3	Oct	Clay, yellow sands, granite. Midslope, valley floor. Litter under <i>Allocasuarina</i> canopies.	No	Low	
<i>Babingtonia cherticola</i>	P3	-	X		X	14	Oct to Feb	Sand, sand loam, sandy gravel over laterite. Found in woodland of <i>Allocasuarina huegeliana</i> .	Yes	Medium	
<i>Babingtonia urbana</i>	P3	-	X		X	18.7	Dec to Mar	Sandy, clay loam. Winter wet	No	Low	
<i>Banksia dallmannii</i> subsp. <i>poliostra</i>	P3	-	X		X	4.9	Aug to Sep	Grey/yellow sand. Flats, lateritic rises	No	Low	
<i>Beaufortia bicolor</i>	P3	-	X		X	17.8	Nov to Dec	White sand over laterite. Sandplains	No	Low	
<i>Beaufortia eriocephala</i>	P3	-	X		X	-	Sep to Nov	Lateritic sand soils. Slopes	No	Low	
<i>Blackallia nudiflora</i>	P3	-	X		X	14.6	Aug to Sep	Clay or sandy clay with granite. On hills or breakaways, plains	Yes	Medium	
<i>Calytrix ecalycata</i> subsp. <i>breviflora</i>	P3	-	X		X	17	Aug to Sep	Dry yellow sand. Sandplains, low-rises	No	Low	
<i>Davessia debilis</i> subsp. <i>sinuans</i>	P3	-	X		X	-	May to Jul	Gravelly lateritic clay	No	Low	
<i>Eucalyptus macrocarpa</i> x <i>pyriformis</i>	P3	-	X		X	-	Apr or Aug to Oct	Sand, lateritic sandy soils. Hills, rocky ironstone ridges, sandplains	No	Low	
<i>Gastrolobium rotundifolium</i>	P3	-	X		X	7.9	Aug to Sep	Heavy clay or loam soils, granite, sandstone, quartzite. Low rises, breakaways. In association with open woodland with <i>E. wandoo</i> .	Yes	High	
<i>Guichenotia tuberculata</i>	P3	-	X		X	18.9	Aug to Oct	Sand clay over laterite, sand	Yes	Medium	
<i>Isoopogon drummondii</i>	P3	-	X		X	17.1	Feb to Jun	White/grey sand, laterite gravel. Hilltop, hillslope, sandplains	No	Low	
<i>Isotropis cuneifolia</i> subsp. <i>glabra</i>	P3	-	X		X	3	Sep	Sand, clay loam. Winter-wet flats	No	Low	
<i>Leucopogon altius</i>	P3	-	X		X	3	Mar to Apr	Sand over gravel.	No	Low	
<i>Leucopogon laminisus</i> var. <i>laminisus</i>	P3	-	X		X	3	Jun or Oct to Dec	White-light brown sand, white-yellow clayey sand, gravel. Sandplains, gentle slopes.	Yes	High	
<i>Meionectes tenuifolia</i>	P3	-	X		X	14.4	Oct to Dec	Grey sand, granite flats. Swamp edge, ephemeral wetland. Associated vegetation dominated by <i>Banksia</i> spp.	No	Low	
<i>Melaleuca sclerophylla</i>	P3	-	X		X	8.8	Jun to Sep	Gravelly sand, clayey sand. Granite outcrops, rises. Sandplains.	Yes	High	
<i>Petrophile biternata</i>	P3	-	X		X	4	Aug to Oct	Yellow/grey sand and gravel, laterite, quartzite soils. Lateritic ridges, plains	No	Low	
<i>Stylidium pericellanthum</i>	P3	-	X		X	12.9	Sep to Oct	Loamy clays, moist soil pockets. Wet flats, low granitic hill.	Yes	Medium	
<i>Stylidium sacculatum</i>	P3	-	X		X	-	Oct to Nov	Clayey sand or sand. Lower slopes and flats	Yes	Medium	
<i>Verticordia hupehii</i> var. <i>indiana</i>	P3	-	X		X	11.2	Sep to Nov	Sandy or gravelly loam	Yes	Medium	
<i>Verticordia insonis</i> subsp. <i>sonagis</i>	P3	-	X		X	3	Aug to Nov	Sandy soils over laterite. Sandplains, rocky rises	No	Low	
<i>Calothamnus accedens</i>	P4	-	X		X	17.3	Sep to Jan	Sandy soils over laterite, brown loam. Road verge	Yes	Medium	
<i>Calothamnus pachystachyus</i>	P4	-	X		X	18	Aug to Oct	Lateritic soils, often gravelly. Ridges, road verges. Dense shrubland	No	Low	
<i>Desmodium elongatum</i>	P4	-	X		X	14.6	Aug to Dec	White or grey sand, sandy soil	No	Low	
<i>Diura recurva</i>	P4	-	X		X	1.7	Jul to Aug	Winter-wet areas.	No	Low	
<i>Eucalyptus x carnabyi</i>	P4	-	X		X	4	Oct to Nov	Grey sand, sandy loam. Lateritic ridges	Yes	High	
<i>Grevillea saccata</i>	P4	-	X		X	14	Apr or Jun to Nov	Yellow or brown sand, often with lateritic gravel	No	Low	
<i>Hibbertia miniata</i>	P4	-	X		X	18.6	Aug to Nov	Lateritic gravelly soils	No	Low	
<i>Regelia megalophylla</i>	P4	-	X		X	11.2	Oct to Dec	Red sand. Quartzite hills. In association with Open low woodland of <i>Allocasuarina huegeliana</i>	No	Low	

Appendix C

Flora Inventory

Family	Species
Araliaceae	<i>Trachymene cyanopetala</i>
Araliaceae	<i>Trachymene ornata</i>
Araliaceae	<i>Trachymene cyanopetala</i>
Asparagaceae	<i>Asparagaceae sp.</i>
Asparagaceae	<i>Sowerbaea laxiflora</i>
Asparagaceae	<i>Thysanotus ?thyrsoideus</i>
Asparagaceae	<i>Thysanotus manglesianus</i>
Asteraceae	<i>Arctotheca calendula*</i>
Asteraceae	<i>Blennospora drummondii</i>
Asteraceae	<i>Erymophyllum tenellum</i>
Asteraceae	<i>Gorteria personata*</i>
Asteraceae	<i>Hyalosperma glutinosum subsp. glutinosum</i>
Asteraceae	<i>Monoculus monstrosus*</i>
Asteraceae	<i>Podolepis lessonii</i>
Asteraceae	<i>Podolepis aristata subsp. aristata</i>
Asteraceae	<i>Rhodanthe pygmaea</i>
Asteraceae	<i>Ursinia anthemoides*</i>
Brassicaceae	<i>Brassicaceae sp.</i>
Casuarinaceae	<i>Allocasuarina huegeliana</i>
Chenopodiaceae	<i>Enchylaena lanata</i>
Chenopodiaceae	<i>Sclerolaena diacantha</i>
Crassulaceae	<i>Crassula colorata</i>
Fabaceae	<i>Acacia erinacea</i>
Fabaceae	<i>Acacia ?microbotrya</i>
Fabaceae	<i>Acacia acuminata</i>
Fabaceae	<i>Acacia ericifolia</i>
Fabaceae	<i>Acacia erinacea variant</i>
Fabaceae	<i>Acacia lineolata subsp. lineolata</i>
Fabaceae	<i>Acacia microbotrya</i>
Fabaceae	<i>Acacia saligna subsp. lindleyi</i>
Fabaceae	<i>Daviesia benthamii</i>
Fabaceae	<i>Daviesia hakeoides subsp. subnuda</i>
Hemerocallidaceae	<i>Dianella revoluta var. divaricata</i>
Iridaceae	<i>Romulea rosea*</i>
Montiaceae	<i>Calandrinia calyptrata</i>
Montiaceae	<i>Calandrinia ?baccata</i>
Myrtaceae	<i>Eucalyptus loxophleba subsp. loxophleba</i>
Orchidaceae	<i>Caladenia flava subsp. flava</i>
Poaceae	<i>Austrostipa elegantissima</i>
Poaceae	<i>Austrostipa sp.</i>
Poaceae	<i>Briza maxima*</i>
Poaceae	<i>Ehrharta longiflora*</i>
Poaceae	<i>Eragrostis curvula*</i>
Poaceae	<i>Poaceae sp.</i>
Poaceae	<i>Rytidosperma sp.</i>
Primulaceae	<i>Lysimachia arvensis*</i>
Proteaceae	<i>Grevillea biternata</i>
Proteaceae	<i>Hakea preissi</i>
Proteaceae	<i>Hakea recurva subsp. recurva</i>
Santalaceae	<i>Exocarpos sparteus</i>
Solanaceae	<i>Solanum lasiophyllum</i>
Surianaceae	<i>Stylobasium australe</i>
Xanthorrhoeaceae	<i>Xanthorrhoea preissii</i>

Appendix D

Flora Site Sheets

MOORA SITE SHEETS

Project Name CBH Moora Biological Survey

Site MQ01

-30.6667359 E

116.0190543 N

Recorder: Colleen McDonald
Date: 03/09/2019
Record Type: Quadrat
Soil Colour: Brown
Soil Type: Medium Clay - Loam
Landform: Flat
Condition: Very Good
Rock Type: -
Rock Cover: -
Outcropping: -
Total PFC: 70
Bareground: 15
Leaf Litter: 14
Logs: 1
Fire Age: >15 years
Disturbance: Weeds, Cattle

Vegetation Description:

Woodland of *Eucalyptus loxophleba* subsp. *loxophleba* and *Allocasuarina huegeliana* over a mid open shrubland of *Acacia lineolata* subsp. *lineolata*, *Daviesia benthamii* and *Hakea preissi* over an open forbland of *Podolepis aristata* subsp. *aristata*, *Podolepis lessonii* and **Monoculus monstrosus*.



SPECIES LIST

Species	Height (cm)	Cover	Notes
<i>Acacia erinacea</i>	200	0.5	
<i>Acacia erinacea</i> variant	30	0.1	Variant
<i>Acacia lineolata</i> subsp. <i>lineolata</i>	180	40	
<i>Allocasuarina huegeliana</i>	210	1	
<i>Austrostipa elegantissima</i>	30	0.0	
<i>Austrostipa</i> sp.	5	0.0	
<i>Calandrinia calyptrata</i>	3	0.0	
<i>Daviesia benthamii</i>	150	31	
<i>Dianella revoluta</i> var. <i>divaricata</i>	50	0.0	
<i>Enchylaena</i> sp.	5	0.0	
<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	1000	30	
* <i>Gorteria personata</i>	1	0.0	
<i>Hakea preissi</i>	200	10	
* <i>Lysimachia arvensis</i>	2	0.0	
* <i>Monoculus monstrosus</i>	3	0.0	
<i>Podolepis aristata</i> subsp. <i>aristata</i>	5	0.0	
<i>Podolepis lessonii</i>	5	0.0	
<i>Stylobasium australe</i>	80	0.0	
<i>Thysanotus manglesianus</i>	c	0.0	
<i>Trachymene cyanopetala</i>	2	0.0	

MOORA SITE SHEETS

Project Name CBH Moora Biological Survey

Site MQ02

-30.66597756 E

116.0165507 N

Recorder: Colleen McDonald
 Date: 03/09/2019
 Record Type: Quadrat
 Soil Colour: Brown
 Soil Type: Clay Loam
 Landform: Flat
 Condition: Very Good
 Rock Type: -
 Rock Cover: -
 Outcropping: -
 Total PFC: 80
 Bareground: 10
 Leaf Litter: 10
 Logs: 1
 Fire Age: >15 years
 Disturbance: Weeds
 Vegetation Description:



A tall open forest of *Eucalyptus loxophleba* subsp. *loxophleba* and *Allocasuarina huegeliana* over a mid open shrubland of *Exocarpos sparteus*, *Hakea preissi* and *Grevillea biternata* over grassland of **Eragrostis curvula*, **Ehrharta longiflora* and **Briza maxima*

SPECIES LIST

Species	Height (cm)	Cover	Notes
<i>Acacia ?microbotrya</i>	50	1	
<i>Acacia ericifolia</i>	250	1	
<i>Acacia lineolata</i> subsp. <i>lineolata</i>	150	5	
<i>Acacia saligna</i> subsp. <i>lindleyi</i>	90	1	
<i>Allocasuarina huegeliana</i>	350	7	
<i>Austrostipa</i> sp.	2	0.1	
<i>*Briza maxima</i>	15	1	
<i>Dianella revoluta</i> var. <i>divaricata</i>	20	0.2	
<i>*Ehrharta longiflora</i>	20	0.1	
<i>*Eragrostis curvula</i>	50	1	
<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	1500	40	
<i>Exocarpos sparteus</i>	400	10	
<i>Grevillea ?biternata</i>	200	0.1	
<i>Grevillea biternata</i>	180	15	
<i>Hakea preissi</i>	200	5	
<i>*Monoculus monstrosus</i>	2	0.1	
<i>Poaceae</i> sp.	10	50	
<i>Podolepis lessonii</i>	3	0.1	
<i>Thysanotus manglesianus</i>	0	0.1	
<i>Trachymene cyanopetala</i>	2	0.1	
<i>?Trachymene</i> sp.	2	0.1	

MOORA SITE SHEETS

Project Name CBH Moora Biological Survey

Site MQ03

-30.6668379 E

116.0161636 N

Recorder: Colleen McDonald
 Date: 03/09/2019
 Record Type: Quadrat
 Soil Colour: Brown, Orange
 Soil Type: Clay, Loam
 Landform: Flat
 Condition: Good
 Rock Type: -
 Rock Cover: -
 Outcropping: -
 Total PFC: 65
 Bareground: 25
 Leaf Litter: 10
 Logs: 0
 Fire Age: >15 years
 Disturbance: Weeds
 Vegetation Description:



Tall woodland of *Eucalyptus loxophleba* subsp. *loxophleba* over tall shrubland of *Hakea preissi*, *Acacia lineolata* subsp. *lineolata*, *Grevillea biternata* over open forbland of **Briza maxima*, **Monoculus monstrosus* and *Podolepis lessonii*.

SPECIES LIST

Species	Height (cm)	Cover	Notes
<i>Acacia erinacea</i>	10	2	
<i>Acacia lineolata</i> subsp. <i>lineolata</i>	200	5	
<i>*Arctotheca calendula</i>	5	0.1	
<i>Allocastrum huegeliana</i>	200	1	
<i>Austrostipa elegantissima</i>	50	1	
<i>Blennospora drummondii</i>	1	0.1	
<i>*Briza maxima</i>	20	0.1	
<i>Calandrinia ?baccata</i>	2	0.1	
<i>Crassula colorata</i>	5	0.1	
<i>Daviesia benthamii</i>	150	2	
<i>Dianella revoluta</i> var. <i>divaricata</i>	50	0.1	
<i>Enchylaena lanata</i>	10	0.1	
<i>Erymophyllum tenellum</i>	2	0.1	
<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>	1200	40	
<i>*Gorteria personata</i>	5	5	
<i>Grevillea biternata</i>	180	2	
<i>Hakea preissi</i>	500	20	
<i>*Monoculus monstrosus</i>	10	0.1	
<i>Poaceae</i> sp.	10	0.1	
<i>Podolepis lessonii</i>	10	1	
<i>Solanum lasiophyllum</i>	50	0	
<i>Thysanotus manglesianus</i>	1	0.1	
? <i>Trachymene</i> sp.	2	0.1	
<i>Trachymene cyanopetala</i>	5	0.1	
<i>Trachymene ornata</i>	3	0.1	

Appendix E

Fauna Habitat Assessments

Fauna Habitat Assessment - York Gum Woodland

Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666757 Longitude: 116.018897



Vegetation				Ground Cover											
Vegetation Description: York Gum Woodland				Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	10-20%	Hummock Grass	0%		
				Vegetation Condition:	Very Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	10-20%	Tussock Grass	<2%		
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-6cm)	0%	Boulders (>2m)	0%	Logs >10cm	<2%	Herbs	<2%			
Overstorey	York Gum	8	20	Moderate	Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	10-20%	Other:	0			
Midstorey	Acacia, Hakea and Allocasuarina	30	0	Sparse	Microhabitats				Disturbance						
Understorey	Acacia and mixed Shrubs over annuals	40	0	Sparse	Exfoliating Slabs	None	Ceves	None	Last Fire	>5 years	Fire Intensity	Unknown			
Soil				Water				Rook Crannies	None	Tree Hollows	Moderate	Cattle Disturbance	None	Other Disturbance	Rabbit and Kangaroo
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	Rare	Termite Mounds	None				

Fauna Habitat Assessment - York Gum Woodland

Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666887 Longitude: 116.019823



Vegetation				Ground Cover											
Vegetation Description: York Gum Woodland				Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	2-10%	Hummock Grass	0%		
				Vegetation Condition:	Very Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	10-20%	Tussock Grass	10-20%		
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-6cm)	0%	Boulders (>2m)	0%	Logs >10cm	<2%	Herbs	10-20%			
Overstorey	York Gum	10	1	Sparse	Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	10-20%	Other:	0			
Midstorey	Allocasuarina	60	0	Sparse	Microhabitats				Disturbance						
Understorey	Acacia, Hakea, sedge over annuals	30	0	Sparse	Exfoliating Slabs	None	Ceves	None	Last Fire	>5 years	Fire Intensity	Unknown			
Soil				Water				Rook Crannies	None	Tree Hollows	None	Cattle Disturbance	None	Other Disturbance	Rabbit and Kangaroo
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	Rare	Termite Mounds	None				

Fauna Habitat Assessment - York Gum Woodland



Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666120 Longitude: 116.019184

Vegetation				Ground Cover											
Vegetation Description:		York Gum Woodland		Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	0%	Hummock Grass	0%		
				Vegetation Condition:	Very Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	0	Tussock Grass	0%		
Stratum	Vegetation Species	Height (m)	% Cover	Description		Stones (2-9cm)	0%	Boulders (>2m)	0%	Logs >10cm	0	Herbs	0%		
Overstorey	York Gum	7	1	Sparse		Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	0	Other:	0		
Midstorey	Allocasuarina	30	0	Sparse		Microhabitats				Disturbance					
Understorey	Acacia, Hakea, sedge over annuals	30	0	Sparse		Exfoliating Slabs	None	Ceves	None	Last Fire	0	Fire Intensity	0		
Soil		Water													
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Rook Crèches	None	Tree Hollows	None	Cattle Disturbance	None	Other Disturbance	0
								Peeling Bark	Rare	Termite Mounds	None				

Fauna Habitat Assessment - York Gum Woodland



Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666950 Longitude: 116.017095

Vegetation				Ground Cover											
Vegetation Description:		York Gum Woodland		Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	20-50%	Hummock Grass	0%		
				Vegetation Condition:	Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	2-10%	Tussock Grass	10-20%		
Stratum	Vegetation Species	Height (m)	% Cover	Description		Stones (2-9cm)	0%	Boulders (>2m)	0%	Logs >10cm	2-10%	Herbs	2-10%		
Overstorey	York Gum	10	10	Sparse		Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	2-10%	Other:	0		
Midstorey	Hakea, Acacia	30	0	Sparse		Microhabitats				Disturbance					
Understorey	Tussock grass and mixed Shrubs, over annuals	40	0	Sparse		Exfoliating Slabs	None	Ceves	None	Last Fire	>5 years	Fire Intensity	Unknown		
Soil		Water													
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Rook Crèches	None	Tree Hollows	Rare	Cattle Disturbance	None	Other Disturbance	Rabbit and Kangaroo
								Peeling Bark	Rare	Termite Mounds	None				

Fauna Habitat Assessment - Cleared/Degraded

Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666864 Longitude: 116.015504



Vegetation				Ground Cover							
Vegetation Description: Cleared / Completely Degraded				Botanical Province: South West and Interzone	Pebbles (<0.6cm) 0%	Rocks (20-60cm) 0%	Bare Ground 0%	Hummock Grass 0%			
Vegetation Condition: Completely Degraded				Small Stones (0.6-2m) 0%	Big Rocks (60cm-2m) 0%	Leaf Litter 0	Tussock Grass 0%				
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-9cm) 0%	Boulders (>2m) 0%	Logs >10cm 0	Herbs 0%			
Overstorey	York Gum	3	1	Sparse	Small Rocks (6-20cm) 0%	Outcrop 0%	Woody Debris 0	Other: 0			
Midstorey	-	-	0	Sparse	Microhabitats				Disturbance		
Understorey	-	-	0	Sparse	Exfoliating Slabs None	Ceves None	Last Fire 0	Fire Intensity 0			
Soil				Water				Rook Crèches None	Tree Hollows None	Cattle Disturbance None	Other Disturbance 0
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	-	Termites Mounds	None

Fauna Habitat Assessment - York Gum Woodland

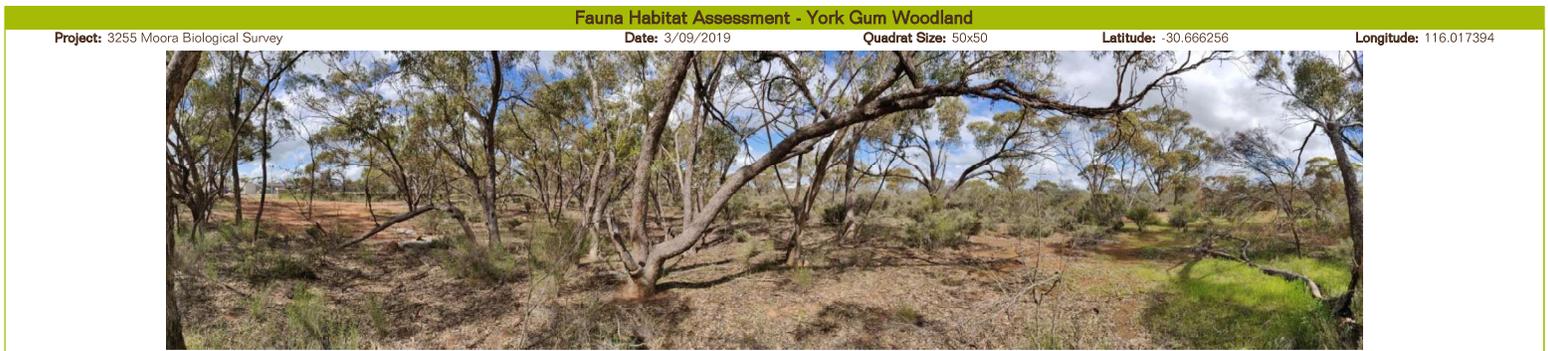
Project: 3255 Moora Biological Survey Date: 3/09/2019 Quadrat Size: 50x50 Latitude: -30.666808 Longitude: 116.014818



Vegetation				Ground Cover							
Vegetation Description: York Gum Woodland				Botanical Province: South West and Interzone	Pebbles (<0.6cm) 0%	Rocks (20-60cm) 0%	Bare Ground 2-10%	Hummock Grass <2%			
Vegetation Condition: Good				Small Stones (0.6-2m) 0%	Big Rocks (60cm-2m) 0%	Leaf Litter 50-90%	Tussock Grass 2-10%				
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-9cm) 0%	Boulders (>2m) 0%	Logs >10cm 10-20%	Herbs 2-10%			
Overstorey	York Gum, occasional Salmon Gum	10	20	Moderate	Small Rocks (6-20cm) 0%	Outcrop 0%	Woody Debris 10-20%	Other: 0			
Midstorey	Allocasuarina, Hakea, Acacia	60	0	Sparse	Microhabitats				Disturbance		
Understorey	Isolated mixed Shrubs over annuals	10	0	Sparse	Exfoliating Slabs None	Ceves None	Last Fire >5 years	Fire Intensity Unknown	Rabbit and Kangaroo, as well as very		
Soil				Water				Rook Crèches None	Tree Hollows Rare	Cattle Disturbance None	Other Disturbance None
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	Rare	Termites Mounds	None



Vegetation				Ground Cover											
Vegetation Description: York Gum Woodland				Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	10-20%	Hummock Grass	0%		
				Vegetation Condition:	Very Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	10-20%	Tussock Grass	2-10%		
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-6cm)	0%	Boulders (>2m)	0%	Logs >10cm	<2%	Herbs	2-10%			
Overstorey	York Gum	12	40	Moderate	Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	2-10%	Other:	0			
Midstorey	Allocasuarina, Acacia, Hakea	40	0	Sparse	Microhabitats				Disturbance						
Understorey	Acacia and mixed Shrubs, over annuals	50	0	Sparse	Exfoliating Slabs	None	Ceves	None	Last Fire	>5 years	Fire Intensity	Unknown			
Soil				Water				Rook Crèches	None	Tree Hollows	Moderate	Cattle Disturbance	None	Other Disturbance	Kangaroo and Rabbit
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	Rare	Termite Mounds	None				



Vegetation				Ground Cover											
Vegetation Description: York Gum Woodland				Botanical Province:	South West and Interzone	Pebbles (<0.6cm)	0%	Rocks (20-60cm)	0%	Bare Ground	20-50%	Hummock Grass	0%		
				Vegetation Condition:	Very Good	Small Stones (0.6-2cm)	0%	Big Rocks (60cm-2m)	0%	Leaf Litter	20-50%	Tussock Grass	2-10%		
Stratum	Vegetation Species	Height (m)	% Cover	Description	Stones (2-6cm)	0%	Boulders (>2m)	0%	Logs >10cm	<2%	Herbs	2-10%			
Overstorey	York Gum	12	50	Moderate	Small Rocks (6-20cm)	0%	Outcrop	0%	Woody Debris	2-10%	Other:	0			
Midstorey	Acacia and Hakea	30	0	Sparse	Microhabitats				Disturbance						
Understorey	Acacia and Mixed Shrubs over annuals	40	0	Sparse	Exfoliating Slabs	None	Ceves	None	Last Fire	>5 years	Fire Intensity	Unknown			
Soil				Water				Rook Crèches	None	Tree Hollows	Moderate	Cattle Disturbance	None	Other Disturbance	Kangaroo and Rabbit
Soil Texture	Sandy-clay	Soil Colour	Brown	Water Presence	None	Water Distance	>5 km	Peeling Bark	Rare	Termite Mounds	None				

Appendix F

Black Cockatoo Potential Breeding Trees

Raw Data

Latitude	Longitude	Texa	Ciroumference	DBH	Approx Height	Hollows	> 12 cm Diameter	Hollows with Bees	Comments	Tree Photo ID
-30.66608138	116.01926677	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	178	57	8	no	no	-		1
-30.66707690	116.01885630	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	164	52	10	yes	no	-		2
-30.66690730	116.01884270	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	168	54	8	yes	no	-		3
-30.66707730	116.01865350	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	196	62	10	no	no	-		4
-30.66665640	116.01848190	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	161	51	10	yes	no	-		5
-30.66687704	116.01809800	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	161	51	10	yes	no	-		6
-30.66631360	116.01763210	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	162	52	12	yes	no	-		7
-30.66607340	116.01638890	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	194	62	12	no	no	-		8
-30.66613040	116.01575978	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	184	59	10	no	no	-		9
-30.66610130	116.01569300	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	177	56	10	yes	no	-		10
-30.66665650	116.01525470	Salmon gum (<i>Eucalyptus salmonophloia</i>)	140	45	7	no	no	-		11
-30.66613940	116.01499630	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	200	64	14	yes	no	-		12
-30.66664620	116.01470020	Salmon gum (<i>Eucalyptus salmonophloia</i>)	132	42	10	no	no	-		13
-30.66631910	116.01469090	Salmon gum (<i>Eucalyptus salmonophloia</i>)	137	44	12	no	no	-		14
-30.66651050	116.01465070	Salmon gum (<i>Eucalyptus salmonophloia</i>)	96	31	10	no	no	-		15
-30.66656530	116.01454970	Salmon gum (<i>Eucalyptus salmonophloia</i>)	110	35	12	no	no	-		16
-30.66674710	116.01454640	Salmon gum (<i>Eucalyptus salmonophloia</i>)	116	37	10	no	no	-		17
-30.66683040	116.01444210	Salmon gum (<i>Eucalyptus salmonophloia</i>)	104	33	12	no	no	-		18
-30.66706160	116.01444000	York Gum (<i>Eucalyptus loxophleba</i> subsp. <i>loxophleba</i>)	265	84	16	yes	no	-		19
-30.66652810	116.01442110	Salmon gum (<i>Eucalyptus salmonophloia</i>)	147	47	12	no	no	-		20
-30.66672620	116.01433490	Salmon gum (<i>Eucalyptus salmonophloia</i>)	335	107	20	yes	yes	Yes	Bees not occupying large BC hollow.	21



Tree Photo ID: 1



Tree Photo ID: 2



Tree Photo ID: 3



Tree Photo ID: 4



Tree Photo ID: 5



Tree Photo ID: 6



Tree Photo ID: 7



Tree Photo ID: 8



Tree Photo ID: 9



Tree Photo ID: 10



Tree Photo ID: 11



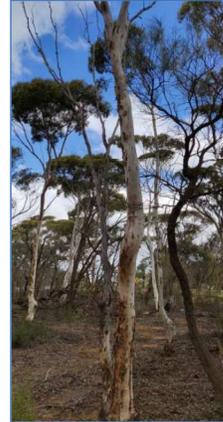
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Tree Photo ID: 13



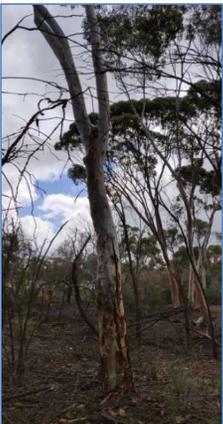
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Tree Photo ID: 15



Tree Photo ID: 16



Tree Photo ID: 17



Tree Photo ID: 18



Tree Photo ID: 19



Tree Photo ID: 20



Tree Photo ID: 21

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