Malleefowl Survey for the Dalgaranga Gold Project

Gascoyne Resources Ltd

Limitations

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Executive Summary

Gascoyne Resources Limited is preparing to further develop the Dalgaranga Gold Project which is approximately 65 km north west of Mount Magnet in the Murchison region of Western Australia. Gascoyne Resources Limited is proposing an extension of two existing waste rock dumps, a water diversion bund and a borefield (collectively called here the survey area) within a recently granted miscellaneous lease in the Dalgaranga Gold Project area (includes all leases and operations associated with the project) as part of its mining activities. A recent vertebrate desktop assessment considered that it was possible for Malleefowl (*Leipoa ocellata*) to occur in the Dalgaranga Gold Project area. Further to this, one old extinct mound was found in the project area while a flora survey was being undertaken in 2012. Consequently, Western Ecological was commissioned by Gascoyne Resources Limited in April 2020 to undertake a Malleefowl survey in the proposed waste rock dumps, the water diversion bund and the borefield.

Searches of the Western Australian Department of Biodiversity, Conservation and Attractions threatened fauna database, NatureMap, and the Commonwealth Protected Matters Search Tool were undertaken to see if there were records of the Malleefowl in and near the project area.

The field survey was undertaken over two days from the 6 – 7 May 2020 by one qualified and experienced Zoologist (Dr Ron Firth) and the Projects Acting Environmental Advisor (Kevin McCormick).

Multiple systematic transects were walked in the survey area in pairs with a distance between each pair of approximately 100 m (apart from the borefield as it was about 100 m wide on average), though this was dependent in part on the density/cover of vegetation, which in turn impacts on the distance an observer can see while walking. The pair each used a GPS to record tracks while searching for Malleefowl, their mounds and tracks.

While walking the survey area a number of photo points were taken to illustrate the habitat in the proposed waste rock dumps, water diversion bund and borefield. A description and map of the main broad habitats in the survey area are provided. The habitats were evaluated for their potential to support Malleefowl, with this based on previous surveys in the project area, habitats present, known distributions and ecology of species from the literature and survey personnel's extensive experience.

Malleefowl were absent from the NatureMap search (noting that the maximum radial search area is 40 km), but were present in the Protected Matters Search Tool and the Department of Biodiversity, Conservation and Attractions threatened fauna database. The Department of Biodiversity, Conservation and Attractions threatened fauna database search returned 32 records of the Malleefowl.

Transects were walked extensively across both of the proposed waste rock dumps, the water diversion bund and the borefield and no Malleefowl were sighted, nor were their mounds or tracks. Further to this no Malleefowl or their mounds were seen while driving between the three separate survey areas.

During the Malleefowl survey four different broad fauna habitat types were identified in the survey area, with this based on vegetation structure (primarily the extent of vegetation cover in the upper storey) and species composition.

The two waste rock dumps and diversion bund consisted of one broad habitat type; Mulga Shrubland and small areas that have been cleared for roads and tracks. The borefield consisted of four broad habitat types; Sparse Mulga Shrubland, Shrubland, Open Eucalypt Woodland and Mulga Shrubland.

The one old extinct historical mound in the project area indicates that Malleefowl once occurred in the project area, but given previous targeted searches and this current targeted survey, the likelihood of Malleefowl now occurring in the project area, but more particularly the waste rock dumps and diversion bund is highly unlikely. The habitats in the borefield are unsuitable for constructing mounds and consequently Malleefowl are highly unlikely to use them at all.

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1. Introduction

1.1 Background

Gascoyne Resources Limited's (Gascoyne) Dalgaranga Gold Project is located approximately 65 km north west of Mount Magnet in the Murchison region of Western Australia (WA) (Figure 1). Gascoyne commenced mining activities at the project in March 2018 and is still currently active.

Gascoyne is proposing an extension of two existing waste rock dumps, a water diversion bund and a borefield (collectively called here, the survey area) within a recently granted miscellaneous lease in the Dalgaranga Project area (project area) as part of its mining activities (Figure 1). A recent vertebrate desktop assessment considered that it was possible for Malleefowl (*Leipoa ocellata*) to occur in the project area (Western Ecological 2020). Further to this, one old extinct mound was found in the project area while a flora survey was being undertaken in 2012 (Native Vegetation Solutions 2016, MBContracting 2016). The Malleefowl is listed as Vulnerable (Vu) under the *Western Australian Biodiversity Conservation Act 2016* (BC Act), and Endangered (En) under the *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Consequently, Western Ecological was commissioned by Gascoyne in April 2020 to undertake a Malleefowl survey in the proposed waste rock dumps, the water diversion bund and the borefield.

1.2 Objectives and Scope

The scope of work (SoW) to be undertaken was as follows:

- Targeted searches and habitat assessment for the Malleefowl in the two proposed waste rock dumps, water diversion bund and borefield in the Dalgaranga project area
- Document the above in a report that will be appended to a mining proposal that will be submitted to the Western Australian Department of Mines, Industry Regulation and Safety (DMIRS).

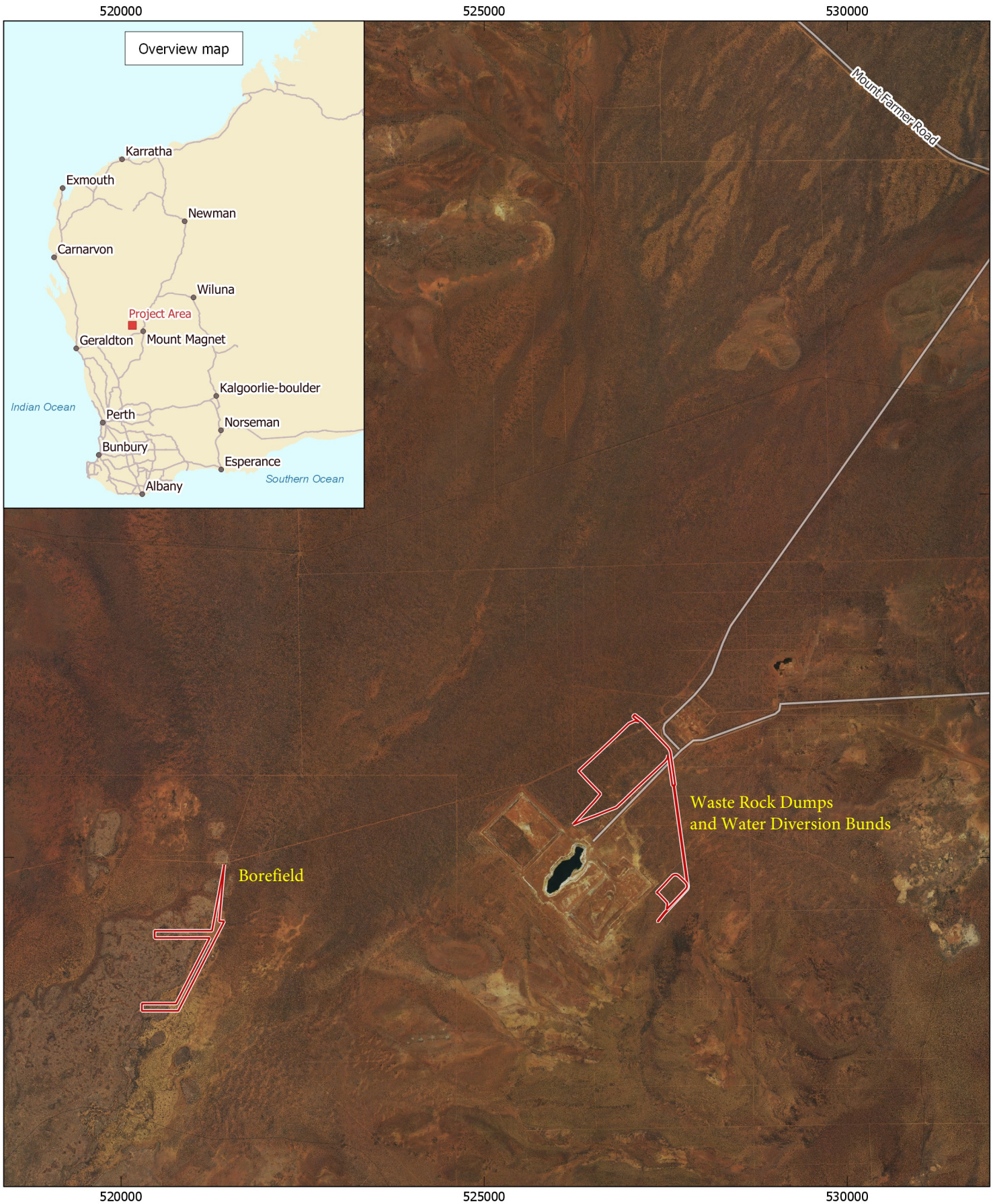

Figure 1: Site Location

0 700 1400 2100 m

Scale 1:70,000

GDA94 - MGA Zone 50

Legend

Road

Study Area

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1.3 Legislative context

Fauna in Western Australia is protected formally and informally by various legislative and non-legislative measures, which are as follows:

- *Commonwealth Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)
- *Western Australian Biodiversity Conservation Act 2016* (BC Act).

Non-legislative measures:

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

A short description of each is given below. Other definitions, including species conservation categories, are provided in Appendix 1.

EPBC Act

The EPBC Act aims to protect matters of national environmental significance, which are detailed in Appendix 1. Under the EPBC Act, the Commonwealth Department of Agriculture, Water and the Environment (DAWE) lists protected species and Threatened Ecological Communities (TECs) by criteria set out in the Act. Species are conservation significant if they are listed as Threatened (i.e. Critically Endangered, Endangered and Vulnerable) or Migratory.

Bird species protected as Migratory under the EPBC Act include those listed under international migratory bird agreements relating to the protection of birds, which migrate between Australia and other countries, for which Australia has agreed. This includes the Japan-Australia Migratory Bird Agreement (JAMBA), the China-Australia Migratory Bird Agreement (CAMBA), the Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA) and the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention).

Some marine fauna or terrestrial fauna that use marine habitats are listed as Marine under the EPBC Act. These species are only considered conservation significant when a proposed development occurs in a Commonwealth marine area (i.e. any Commonwealth Waters or Commonwealth Marine Protected Area). Outside of such areas, the EPBC Act does not consider these species to be matters of national environmental significance, so are not protected under the Act.

BC Act

The BC Act 2016 replaced both the *Wildlife Conservation Act 1950* (WC Act) and the *Sandalwood Act 1929* (S Act) and came into effect on 1 January 2019. The aim of the new Act is to conserve and protect biodiversity and to promote the ecologically sustainable use of biodiversity components in the State, and will bring more activities within the scope of biodiversity laws.

Taxa listed as Threatened in the category of critically endangered, endangered or vulnerable under section 19 (1a, 1b, and 1c), or is a rediscovered species to be regarded as threatened species under section 26(2) of the Biodiversity Conservation Act 2016 (BC Act). Other categories include extinct or extinct in the wild and they are listed under section 23 (1) of the BC Act (Appendix 1).

If species meet one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection, they are covered under section 13 (1) of the BC Act and are called specially protected species. Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act can't also be listed as Specially Protected species (see Appendix 1 for a more detailed description of each threat category).

Threatened Ecological Communities (TECs) are also covered under the Biodiversity Conservation Act 2016 (BC Act) and are placed into three categories of critically endangered, endangered or vulnerable under section 27 (1a, 1b, and 1c) of the BC Act depending on their threat status.

DBCA Priority Species and Communities

DBCA lists species that are possibly threatened but that do not meet criteria for listing under the BC Act, or are otherwise data deficient, and adds them to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring. Consideration of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations (see Appendix 1 for more detail of the priority codes).

The DBCA also has a list of Priority Ecological Communities (PECs) that have scant information available to be considered a TEC, or which are rare but not currently threatened. Ecological communities that do not meet survey criteria or that are not sufficiently defined are added to the PEC list under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as a TEC. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for near threatened, or that have been recently removed from the threatened list, are placed in priority 4. These ecological communities require regular monitoring. Conservation dependent ecological communities are placed in priority 5.

Informal Recognition of Threatened Fauna

Certain populations or communities of fauna may be of local significance or interest because of their patterns of distribution and abundance. For example, fauna may be locally significant because they are range extensions to the previously known distribution or are newly discovered species (and have the potential to be of conservation significance). In addition, many species are in decline as a result of threatening processes (land clearing, grazing, and changed fire regimes) and relict populations of such species assume local importance for DBCA. It is not uncommon for DBCA to make comment on these species of interest.

2. Methods

2.1 Survey Guidance

The Malleefowl survey is to be completed in accordance with the following EPA and DAWE requirements for the environmental surveying and reporting of fauna surveys in WA, and other documents where relevant and practical, and as documented in:

- EPA Statement of Environmental Principles, Factors and Objectives (EPA 2018)
- EPA Environmental Factor Guideline: Terrestrial Fauna (EPA 2016)
- EPA Technical Guidance: Sampling methods for Terrestrial vertebrate fauna (EPA 2016)
- EPA Technical Guidance: Terrestrial Fauna Surveys (EPA 2016)
- Survey Guidelines for Australia's Threatened Birds. EPBC Act survey guidelines 6.2 (2010) (DSEWPaC)
- National Recovery Plan for Malleefowl *Leipoa ocellata* Department for Environment and Heritage (J. Benshemesh 2007).

Please note that the two EPA Technical Guidance documents (Sampling methods for Terrestrial vertebrate fauna and Terrestrial Fauna Surveys) above from 2016 have not been updated and are respectively the same as the following documents:

- Technical Guidance – Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment (EPA-DEC 2010).
- Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia. Guidance Statement No. 56 (EPA 2004)

2.2 Database Searches

Searches of DBCA threatened fauna database, NatureMap, and the EPBC Protected Matters Search Tool (EPBC PMST) were undertaken to see if there were records of the Malleefowl in and near the project area (DBCA 2020, DBCA 2020, DAWE 2020) (Appendix 2). The search area was centred on 27° 51' 24" S and 117° 12' 53" E for all three databases and consisted of a 40 km radial search area for NatureMap (maximum search area) and a 50 km radial search area for the EPBC PMST. Originally a radial search area of 60 km was submitted to DBCA for the threatened fauna database, however, a larger buffer of 100 km was applied by DBCA in order to select a greater number of Malleefowl records that adequately demonstrate the potential for this species in the search area.

Please note that there are records of other threatened and priority fauna in these database searches, however, these species were considered in a previous vertebrate desktop assessment (Western Ecological 2020).

2.3 Field Survey

The field survey was undertaken over two days from the 6 – 7 May 2020 by one qualified and experienced Zoologist (Dr Ron Firth) and the Projects Acting Environmental Advisor (Kevin McCormick).

Malleefowl Survey

The targeted Malleefowl survey methods undertaken in the survey area were as follows:

- Multiple systematic transects were walked in the survey area in pairs with a distance between each pair of approximately 100 m (apart from the borefield as it was about 100 m wide on average), though this was dependent in part on the density/cover of vegetation, which in turn impacts on the distance an observer can see while walking. The pair used a GPS each and a track log was recorded on each GPS.
- If evidence of Malleefowl activity was observed while walking the transects the following was to be recoded:
    - Malleefowl tracks
    - Malleefowl nesting mounds including status (inactive/ active) and activity according to the following criteria:
        - Nest in preparation – eggs not laid (evidence of litter trail)
        - Mound is in progress/ maintenance – eggs assumed to be laid

    - Evidence of chicks leaving nest – chicks fledging site / shell fragments
    - Decommissioned – spreading and returning of mound soil
- Malleefowl individual sightings and assessment of age (chick/ adult)
- Opportunistic observations of Malleefowl evidence (tracks, mounds and or individual sightings) in the survey area while not walking the systematic transects.
- In addition, Malleefowl evidence (tracks, mounds and or individual sightings) in the survey area was also looked for when driving tracks as this was mostly undertaken at about 30 km/hr.

Fauna Habitat

While walking the survey area a number of photo points were taken to illustrate the habitat in the proposed waste rock dumps, water diversion bund and a borefield (Appendix 3). A description and map of the main broad habitats in the survey area are provided.

The habitats were evaluated for their potential to support Malleefowl, with this based on previous surveys in the project area, habitats present, known distributions and ecology of species from the literature and survey personnel's extensive experience.

3. Results

3.2 Database Results

Malleefowl were absent from the NatureMap search (noting that the maximum radial search area is 40 km), but were present in the EPBC PMST and the DBCA threatened fauna database. The DBCA threatened fauna database search returned 32 records of the Malleefowl (Figure 2). The earliest record was from 1964, with the location given as Yalgoo and based on the coordinates in the database, the location is approximately 85 km south west of the project area (Figure 2 and Appendix 2). The latest record comes from 2016, and the location provided is Daggar Hills and based on the coordinates in the database, the location is approximately 55 km south east of the project area (Figure 2 and Appendix 2). The closest record to the project area is from 2001 and is approximately just over 40 km south east (hence why the Malleefowl was not present in the NatureMap search) (Figure 2 and Appendix 2).

Please note that not all of the 32 Malleefowl records in the DBCA threatened fauna database are presented in Figure 2, as the map scale would have to be larger, which would result in some loss of scale and project area context.

Figure 2: Malleefowl Database Records

0 10 20 km

Scale 1:700,000

GDA94 - MGA Zone 50

Legend

- DBCA Malleefowl Record
- Project Area

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3.3 Malleefowl Survey

Transects were walked extensively across both of the proposed waste rock dumps, the water diversion bund and the borefield and no Malleefowl were sighted, nor were their mounds or tracks (Figure 3 and 4). Further to this no Malleefowl or their mounds were seen while driving between the three separate survey areas.

3.4 Fauna Habitat

During the Malleefowl survey four different broad fauna habitat types were identified in the survey area, with this based on vegetation structure (primarily the extent of vegetation cover in the upper storey) and species composition (Figures 3, 4 and Appendix 3).

The two waste rock dumps and diversion bund consisted of one broad habitat type; Mulga Shrubland and small areas that have been cleared for roads and tracks (Figure 3 and Appendix 3).

The borefield consisted of four broad habitat types; Sparse Mulga Shrubland, Shrubland, Open Eucalypt Woodland and Mulga Shrubland (Figure 4 and Appendix 3). A brief broad description of each is provided below as is a photo.

Mulga Shrubland

This habitat consisted of Mulga (*Acacia aneura*) in the upper storey, with a sparse midstorey of for example *Acacia spp*., *Eremophila spp*. and *Grevillea spp.* and very sparse to near absent ground layer.

Photo Point 13 (see Figure 3).

Sparse Mulga Shrubland

This habitat consisted of a sparse to scattered cover of Mulga, with limited cover in the midstorey of for example *Acacia spp*., *Eremophila spp*. and a sparse ground cover of for example *Ptilotus spp.* and other small shrubs. The majority of this habitat occurred on a calcrete substrate.

Photo Point 4 (see Figure 4).

Shrubland

This habitat had no upper storey and consisted of a sparse shrub layer that included for example *Maireana spp*. and *Atriplex spp*. There was little to no ground cover vegetation.

Photo Point 9 (see Figure 4).

Open Eucalypt Woodland

This habitat consisted of scattered *Eucalyptus gongylocarpa* and very scattered *Melaleuca sp*. There was almost no midstorey and a few small scattered patches of shrubs in the groundstorey underneath the Eucalypts where leaf litter had accumulated.

Photo Point 5 (see Figure 4).

Figure 3: Habitat and Malleefowl Transects at the Waste Rock Dumps

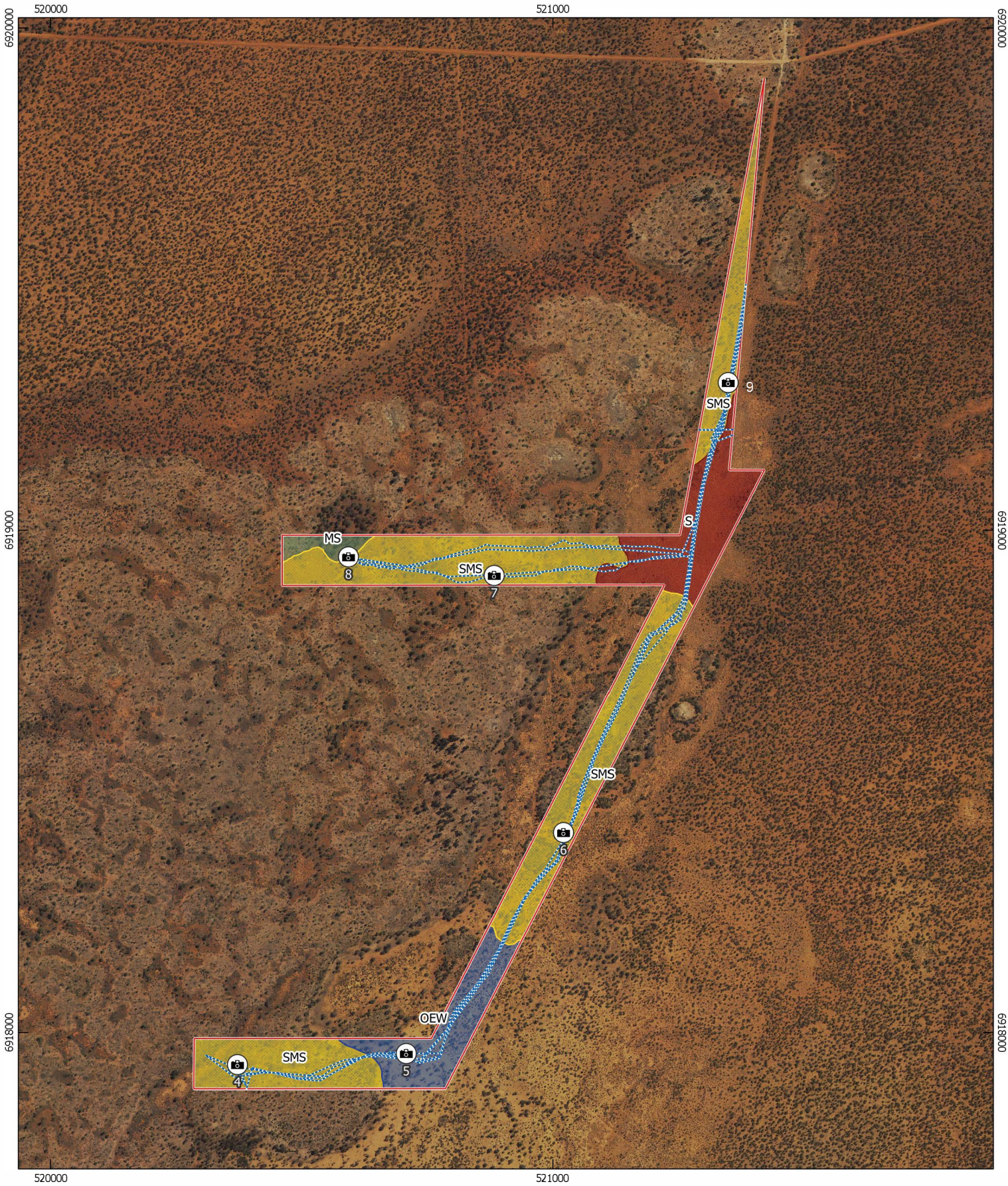

Figure 4: Habitat and Malleefowl Transects at the Borefield

0 100 200 300 m

Scale 1:10,000

GDA94 - MGA Zone 50

Legend

- Photo Points
- Transect
- Survey Area

Fauna Habitat

- Mulga Shrubland
- Open Eucalypt Woodland
- Shrubland
- Sparse Mulga Shrubland

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4. Discussion

Despite extensively walking a series of systematic transects across the survey area no Malleefowl were sighted, nor were their mounds or tracks. Further to this no Malleefowl or their mounds were seen while driving between the three separate survey areas. The DBCA threatened fauna database search retuned 32 records of the Malleefowl within a 100 km radial search area and the closest record to the project area was just over 40 km south east. One old and extinct Malleefowl mound was found in the project area while a flora survey was being undertaken in 2012 (Native Vegetation Solutions 2016, MBContracting 2016). However, two previous fauna surveys that included targeted Malleefowl searches in the project area did not detect Malleefowl, their mounds or tracks (MBContracting 2016 and 2017).

The habitats present in the Borefield (apart from a very small area of Mulga Shrubland) are too open and have very little to no cover in the upper story for Malleefowl to build their mounds. Malleefowl prefer habitat with a dense canopy and an open ground layer in which they can construct their mounds (Benshemesh 2007). Benshemesh (1992) also found that dense canopy cover was the most important feature associated with high breeding densities at sites in Victoria. Mulga Shrubland habitat in both of the waste rock dump sites and diversion bund could be considered potentially suitable habitat, based on cover in the upper storey, however, there are very few shrub species in the midstorey which might provide a food source. Studies have also shown that a wide range of food shrubs, rather than an abundance of any one species is probably important for birds during for example droughts (Harlen & Priddel 1996). This is supported by studies showing that Malleefowl are more abundant in areas where shrubs are more diverse (Woinarski 1989). These birds have a relatively large home range that can be up to 4 km^2 in low rainfall areas (Booth 1987).

There are large numbers of Goats in the project area and many individuals were seen while walking transects. Goats are likely to be causing habitat degradation as they are known to browse extensively on shrubs. Fox scats have previously been recorded in the project area (MBContracting 2017). Predation by the introduced Fox is also thought to be limiting the abundance of Malleefowl and in many areas may be a major cause of decline (Benshemesh 2007).

The one old extinct historical mound in the project area indicates that Malleefowl once occurred in the project area, but given the results of the previous targeted searches and this current targeted survey, the likelihood of Malleefowl now occurring in the project area, but more particularly the waste rock dumps and diversion bund is highly unlikely. The habitats in the borefield are unsuitable for constructing mounds and consequently Malleefowl are highly unlikely to use them at all.

5. References

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Woinarski, J. C. Z. (1989). The vertebrate fauna of Broombush *Melaleuca uncinata* vegetation in north-western Victoria, with reference to effects of broombush harvesting. Australian Wildlife Research 16, 217-238.

APPENDICES

Appendix 1: Conservation Categories

Categories of Threatened Fauna Species under the EPBC Act

Conservation Code	Description
Ex	Extinct Taxa which at a particular time if, at the time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild Taxa which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered Taxa which at a particular time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
En	Endangered Taxa which is not critically endangered and it is facing a very high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Vu	Vulnerable Taxa which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Mi	Migratory Taxa that are listed under international agreements to which Australia is a party are protected under the EPBC Act.

Department of **Biodiversity, Conservation and Attractions**

GOVERNMENT OF WESTERN AUSTRALIA

CONSERVATION CODES

For Western Australian Flora and Fauna

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

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

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

T **Threatened species**

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

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

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

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

CR **Critically endangered species**

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

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

EN **Endangered species**

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

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

VU **Vulnerable species**

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

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

Extinct species

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

EX Extinct species

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

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

EW Extinct in the wild species

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

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

Specially protected species

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

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

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

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

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

CD Species of special conservation interest (conservation dependent fauna)

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

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

OS Other specially protected species

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

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

P Priority species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

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

1 Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

2 Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

3 Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.
(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

[1] The definition of flora includes algae, fungi and lichens
[2]Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

Appendix 2: Database Searches

NAME SCI	NAME COM	CLASS	CONS CODE	YEAR	SOURCE	CERTAINTY	METHOD	TYPE	COUNT	LOCALITY	SITE	ACCURACY M	GDA_LONG	GDA_LAT	NAME ID	*FAMILY*	*GENUS*	*SPECIES*	*SUBSPECIES*
Actitis hypoleucos	Common Sandpiper	BIRD	IA	1979	BIRDATLAS1				0			108000	117.50140000000	-28.49870000000	41323	*Scolopacidae*	*Actitis*	*hypoleucos*	
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	Austin, Lake	10000	117.71670000000	-27.55000000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Austin, Lake	10000	117.71670000000	-27.55000000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Day Dawn	0	117.86670000000	-27.46670000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Day Dawn	0	117.86670000000	-27.46670000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Day Dawn	0	117.86670000000	-27.46670000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1903	WAM_BIRDS				0		Day Dawn	0	117.86670000000	-27.46670000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1908	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.66690000000	-28.33280000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1908	WAM_BIRDS				0		Yalgoo	10000	116.66690000000	-28.33280000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1899	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	CUE	Cue; Murchison	0	117.90000000000	-27.43280000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Amytornis textilis textilis	Western grasswren	BIRD	P4	1899	WAM_BIRDS				0		Cue; Murchison	0	117.90000000000	-27.43280000000	24541	*Maluridae*	*Amytornis*	*textilis*	*textilis*
Apus pacificus	fork-tailed swift	BIRD	IA	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Walga Rock	100	117.46470000000	-27.40090000000	25554	*Apodidae*	*Apus*	*pacificus*	
Apus pacificus	fork-tailed swift	BIRD	IA	2008	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Yalgoo Caravan Park	100	116.68470000000	-28.34870000000	25554	*Apodidae*	*Apus*	*pacificus*	
Calidris acuminata	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATA				0		Lake Austin	0	117.89690000000	-27.60080000000	24779	*Scolopacidae*	*Calidris*	*acuminata*	
Calidris acuminata	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATA				0		Lake Austin	0	117.88690000000	-27.60890000000	24779	*Scolopacidae*	*Calidris*	*acuminata*	
Calidris acuminata	Sharp-tailed Sandpiper	BIRD	IA	2004	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Wetland Great Northern Hwy	100	117.90110000000	-27.58110000000	24779	*Scolopacidae*	*Calidris*	*acuminata*	
Calidris acuminata	Sharp-tailed Sandpiper	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.90080000000	-27.58080000000	24779	*Scolopacidae*	*Calidris*	*acuminata*	
Calidris acuminata	Sharp-tailed Sandpiper	BIRD	IA	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Lake Austin	100	117.88830000000	-27.60760000000	24779	*Scolopacidae*	*Calidris*	*acuminata*	
Calidris ferruginea	curlew sandpiper	BIRD	CR	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.90080000000	-27.58080000000	24784	*Scolopacidae*	*Calidris*	*ferruginea*	
Calidris ruficollis	red-necked stint	BIRD	IA	2012	FAUNASURVEY	Certain	Survey	Unknown	2	WELD RANGE	Cue, Lake Austin	3000	117.47250000000	-27.20110000000	24788	*Scolopacidae*	*Calidris*	*ruficollis*	
Chlidonias leucopterus	white-winged black tern	BIRD	IA	2015	BIRDATA				0		Lake Austin, Lakeside Rd causeway	0	117.81720000000	-27.52640000000	41332	*Laridae*	*Chlidonias*	*leucopterus*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	TFAUNA	Certain	Survey	Caught or trapped	2	Mount Magnet		1000	117.86670000000	-28.06670000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	TFAUNA	Certain	Survey	Caught or trapped	2	Mount Magnet		1000	117.82820000000	-28.06130000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	MOUNT MAGNET	MOUNT MAGNET	10000	117.86670000000	-28.06670000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	MOUNT MAGNET	MOUNT MAGNET	10000	117.86670000000	-28.06670000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES				0		MOUNT MAGNET	10000	117.86670000000	-28.06670000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Cyclodomorphus branchialis	gilled slender blue-tongue	REPTILE	VU	2005	WAM_REPTILES				0		MOUNT MAGNET	10000	117.86670000000	-28.06670000000	25086	*Scincidae*	*Cyclodomorphus*	*branchialis*	
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Yalgoo		10000	116.68470000000	-28.34870000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs/Weld Range		10000	117.38470000000	-27.39870000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Survey	Caught or trapped	1	Walga Rock		10000	117.46810000000	-27.39870000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2003	TFAUNA	Certain	Survey	Caught or trapped	3	Austin Downs		1000	117.47080000000	-27.39860000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Not Sure	Survey	Caught or trapped	1	Austin Downs/Weld Range		1000	117.35000000000	-27.38330000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	Weld Range/South Murchinson		1000	117.33510000000	-27.13980000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	South Murchinson		1000	117.07650000000	-27.07180000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2006	TFAUNA	Certain	Targeted survey	Day sighting	1	Weld Range/South Murchinson		1000	117.31570000000	-27.14170000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1986	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs		1000	117.38330000000	-27.40000000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2003	TFAUNA	Certain	Survey	Caught or trapped	1	Austin Downs		1000	117.47080000000	-27.39860000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2004	TFAUNA	Certain	Survey	Caught or trapped	1	Yalgoo		1000	116.72560000000	-28.34830000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Targeted survey	Day sighting	2	Lake Austin		1000	117.38700000000	-27.39400000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	TFAUNA	Certain	Targeted survey	Day sighting	2	Lake Austin		1000	117.36000000000	-27.38200000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2018	WL_REG17		Survey		0		Egernia stokesii subsp. badia||13/10/2018.2	30	116.86640000000	-28.24140000000	25107	*Scincidae*	*Egernia*	*stokesii*	*subsp.*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	1	LAKE AUSTIN	SA3, SA3 29-5	100	117.49110000000	-27.40730000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	5	YALGOO	SA2, SA2 29 2	100	117.34380000000	-27.76510000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	YALGOO	SA2, SA2 29 4	100	116.73900000000	-28.11070000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	1	YALGOO	SA2, SA2 29 5	100	117.16020000000	-28.27190000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	SOUTH MURCHISON	SA1, SA1S05	100	117.28910000000	-26.97250000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	12	DAGGAR HILLS	SA2, SA2-02	100	117.67880000000	-28.44300000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	YALGOO	SA2, SA2 1 4	100	117.01250000000	-28.28940000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	12	DAGGAR HILLS	SA2, SA2 3 1	100	117.65710000000	-28.41320000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	2	PAYNES FIND	SA2, SA2 3 2	100	117.55220000000	-28.56750000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2010	FAUNASURVEY	Certain	Survey	Unknown	3	YALGOO	SA2, SA2 4 1	100	117.17450000000	-28.25760000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1986	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WOOLGERONG ROCK	10000	117.38330000000	-27.40000000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WOOLGERONG ROCK	10000	117.38280000000	-27.40000000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	1998	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	WELD RANGE	WURRAH ROCK	10000	117.35000000000	-27.38330000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2003	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WALGA ROCK	200000	117.47080000000	-27.39860000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2003	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	LAKE AUSTIN	WALGA ROCK	200000	117.47080000000	-27.39860000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Egernia stokesii badia	western spiny-tailed skink	REPTILE	VU	2004	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	YALGOO	YALGOO	200000	116.72560000000	-28.34830000000	25107	*Scincidae*	*Egernia*	*stokesii*	*badia*
Falco peregrinus	peregrine falcon	BIRD	OS	1994	TFAUNA	Certain	Opportunistic sighting	Day sighting	2			50000	117.83400000000	-27.95400000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	1993	TFAUNA	Certain	Opportunistic sighting	Day sighting	1	Mount Magnet		50000	117.83100000000	-28.01290000000	25624	*Falconidae*	*Falco*	*peregrinus*	

Falco peregrinus	peregrine falcon	BIRD	OS	2011	BIRDATA				0		Walga Rock	0	117.03420000000	-27.39580000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2014	BIRDATA				0		Nalbarra Station	0	117.60750000000	-28.64920000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2017	BIRDATA				0		Nalbarra Station Grid Soak	0	117.63470000000	-28.63990000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	1980	BIRDATLAS1	Moderately certain	Observational	Sighting	1	WELD RANGE	WELD RANGE	18000	117.58470000000	-27.24870000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Noongal Station	100	117.14640000000	-27.87010000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Walga Rock	500	117.46250000000	-27.40290000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Muralgarra Homestead	100	117.03340000000	-28.52510000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2001	BIRDATLAS2	Moderately certain	Observational	Sighting	1	WELD RANGE	Claypan, The Glen Station	500	117.41190000000	-26.99730000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2008	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Yalgoo Caravan Park	100	116.68470000000	-28.34870000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Falco peregrinus	peregrine falcon	BIRD	OS	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	YALGOO	Walga Rock	100	117.03420000000	-27.39580000000	25624	*Falconidae*	*Falco*	*peregrinus*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1978	BIRDATLAS1				0			108000	116.50140000000	-27.49870000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.91810000000	-27.58200000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.91810000000	-27.58200000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	117.50140000000	-27.49870000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.91810000000	-27.58200000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			18000	117.91810000000	-27.58200000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	117.50140000000	-27.49870000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	117.50140000000	-27.49870000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	1980	BIRDATLAS1				0			108000	116.50140000000	-27.49870000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Gelochelidon nilotica	gull-billed tern	BIRD	IA	2006	BIRDATLAS2				0		Lake Austin	100	117.88970000000	-27.61060000000	47954	*Sturnidae*	*Gelochelidon*	*nilotica*	
Leipoa ocellata	malleefowl	BIRD	VU	1980	BIRDATLAS1	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	LAKE AUSTIN	108000	117.50140000000	-27.49870000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	DAGGAR HILLS	20km NW of Mount Magnet	100	117.64080000000	-27.94870000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.68280000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.68280000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS	WAM Vouchered	Collection	Specimen	1	YALGOO	Yalgoo	10000	116.68330000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Gnows Nest via Yalgoo	10000	116.86670000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.68280000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.68280000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	WAM_BIRDS				0		Yalgoo	10000	116.68330000000	-28.35000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	2016	TFAUNA	Certain	Opportunistic sighting	Night sighting	1	Daggar Hills		1000	117.78220000000	-27.93030000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	2001	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	YALGOO		1000	116.75000000000	-28.50000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	2001	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	DAGGAR HILLS		500	117.63940000000	-27.95000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1972	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		1000	116.86670000000	-28.68330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1966	TFAUNA	Moderately certain	Historical (written)	Secondary sign	1	YALGOO		1000	116.95000000000	-28.68330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1996	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	DAGGAR HILLS		1000	117.34600000000	-28.20530000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	1	LAKE AUSTIN		50000	117.90000000000	-27.41660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1966	TFAUNA	Moderately certain	Historical (written)	Secondary sign	1	YALGOO		50000	116.91670000000	-28.66660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		1000	116.91670000000	-28.66660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1964	TFAUNA	Moderately certain	Historical (written)	Secondary sign	0	YALGOO		1000	116.85200000000	-28.57940000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1980	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		10000	116.91670000000	-28.66660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1972	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.91670000000	-28.66660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1974	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.85000000000	-28.58330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	1975	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.91670000000	-28.66660000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	YALGOO		50000	116.73330000000	-27.75000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	TFAUNA	Moderately certain	Opportunistic sighting	Secondary sign	0	SOUTH MURCHISON		50000	117.18330000000	-27.13330000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	

Leipoa ocellata	malleefowl	BIRD	VU	1980	TFAUNA	Moderately certain	Opportunistic sighting	Sighting	1	LAKE AUSTIN		50000	117.50000000000	-27.50000000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leipoa ocellata	malleefowl	BIRD	VU	0	TFAUNA	Certain	Historical (written)	Secondary sign	0	Cue		1000	117.85260000000	-27.44710000000	24557	*Megapodiidae*	*Leipoa*	*ocellata*	
Leporillus conditor	greater stick-nest rat, wopilkara	MAMMAL	CD	2012	TFAUNA	Not Sure	Opportunistic sighting	Secondary sign	0	East Murchison		1000	117.25400000000	-27.19240000000	24219	*Muridae*	*Leporillus*	*conditor*	
Lerista eupoda	West Coast mulga slider	REPTILE	P1	0	TFAUNA	Certain	Historical (written)	Caught or trapped	1	Coodardy		10000	117.56670000000	-27.26670000000	25134	*Scincidae*	*Lerista*	*eupoda*	
Lerista eupoda	West Coast mulga slider	REPTILE	P1	1984	WAM_REPTILES	WAM Vouchered	Collection	Specimen	1	WELD RANGE	COODARDY HS	10000	117.58330000000	-27.26670000000	25134	*Scincidae*	*Lerista*	*eupoda*	
Lerista eupoda	West Coast mulga slider	REPTILE	P1	1984	WAM_REPTILES				0		COODARDY HS	10000	117.58330000000	-27.26670000000	25134	*Scincidae*	*Lerista*	*eupoda*	
Limosa lapponica	bar-tailed godwit	BIRD	IA	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Claypan, Austin Downs Station	100	117.65360000000	-27.42200000000	30932	*Scolopacidae*	*Limosa*	*lapponica*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	CUE	10000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	EMILY GOLD MINE	50000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS	WAM Vouchered	Collection	Specimen	1	CUE	EMILY GOLD MINE	50000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0			10000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0		EMILY GOLD MINE	50000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Macrotis lagotis	bilby, dalgyte, ninu	MAMMAL	VU	0	WAM_MAMMALS				0		EMILY GOLD MINE	50000	117.90000000000	-27.43330000000	24168	*Thylacomyidae*	*Macrotis*	*lagotis*	
Oxyura australis	blue-billed duck	BIRD	P4	2016	BIRDATA				0		Meeline Swamp	0	117.84420000000	-28.34060000000	24328	*Anatidae*	*Oxyura*	*australis*	
Petrogale lateralis lateralis	black-flanked rock-wallaby	MAMMAL	EN	0	TFAUNA	Moderately certain	Historical (written)	Dead	0	Mt Farmer		10000	117.41670000000	-27.70000000000	24142	*Macropodidae*	*Petrogale*	*lateralis*	*lateralis*
Pezoporus occidentalis	night parrot	BIRD	CR	0	TFAUNA	Certain	Historical (written)	Dead	1	Daggar Hills		10000	117.49200000000	-27.79800000000	24743	*Psittacidae*	*Pezoporus*	*occidentalis*	
Thinornis rubricollis	hooded plover	BIRD	P4	2000	TFAUNA	Certain	Community survey	Day sighting	2	Lake Austin		50000	117.90000000000	-27.61670000000	48135	*Charadriidae*	*Thinornis*	*rubricollis*	
Thinornis rubricollis	hooded plover	BIRD	P4	2000	TFAUNA	Certain	Community survey	Day sighting	2	Lake Austin		1000	117.90110000000	-27.58140000000	48135	*Charadriidae*	*Thinornis*	*rubricollis*	
Thinornis rubricollis	hooded plover	BIRD	P4	2000	BIRDATLAS2				0		Cue South	500	117.90250000000	-27.58010000000	48135	*Charadriidae*	*Thinornis*	*rubricollis*	
Thinornis rubricollis	hooded plover	BIRD	P4	2012	FAUNASURVEY	Certain	Survey	Unknown	500	WELD RANGE	Cue, Lake Austin	3000	117.47250000000	-27.20110000000	48135	*Charadriidae*	*Thinornis*	*rubricollis*	
Tringa glareola	wood sandpiper	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.90080000000	-27.58080000000	24806	*Scolopacidae*	*Tringa*	*glareola*	
Tringa nebularia	common greenshank	BIRD	IA	2011	BIRDATA				0		Lake Austin - Lakeside Rd	0	117.81670000000	-27.52500000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	2015	BIRDATA				0		Lake Austin	0	117.25310000000	-27.60440000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	1978	BIRDATLAS1	Moderately certain	Observational	Sighting	1	YALGOO	YALGOO	18000	117.25140000000	-28.41540000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	1999	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Claypan, Austin Downs Station	100	117.65360000000	-27.42200000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	2005	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Small Lake	100	117.90080000000	-27.58080000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	2011	BIRDATLAS2	Moderately certain	Observational	Sighting	1	LAKE AUSTIN	Lake Austin - Lakeside Rd	0	117.81670000000	-27.52500000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	
Tringa nebularia	common greenshank	BIRD	IA	2012	FAUNASURVEY	Certain	Survey	Unknown	45	WELD RANGE	Cue, Lake Austin	3000	117.47250000000	-27.20110000000	24808	*Scolopacidae*	*Tringa*	*nebularia*	

NatureMap
Mapping Western Australia's biodiversity

NatureMap Species Report

Created By Guest user on 09/02/2020

Kingdom	Animalia
Current Names Only	Yes
Core Datasets Only	Yes
Method	'By Circle'
Centre	117° 12' 54" E,27° 51' 22" S
Buffer	40km
Group By	Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	119	1319
Other specially protected fauna	1	1
Priority 3	1	1
Protected under international agreement	1	1
Rare or likely to become extinct	4	5
TOTAL	**126**	**1327**

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
Rare or likely to become extinct					
1.	25107	*Egernia stokesii subsp. badia (Western Spiny-tailed Skink, Gidgee Skink)*		T	
2.	33917	*Idiosoma nigrum (Shield-backed Trapdoor Spider)*		T	
3.	24142	*Petrogale lateralis subsp. lateralis (Black-flanked Rock-wallaby, Black-footed Rock-wallaby)*		T	
4.	24743	*Pezoporus occidentalis (Night Parrot)*		T	
Protected under international agreement					
5.	24808	*Tringa nebularia (Common Greenshank, greenshank)*		IA	
Other specially protected fauna					
6.	25624	*Falco peregrinus (Peregrine Falcon)*		S	
Priority 3					
7.	33936	*Branchinella wellardi (fairy shrimp (Carnavon and Murchison))*		P3	
Non-conservation taxon					
8.	24559	*Acanthagenys rufogularis (Spiny-cheeked Honeyeater)*			
9.	24260	*Acanthiza apicalis (Broad-tailed Thornbill, Inland Thornbill)*			
10.	24261	*Acanthiza chrysorrhoa (Yellow-rumped Thornbill)*			
11.	25527	*Acanthiza iredalei (Samphire Thornbill, Slender-billed Thornbill)*			
12.	24264	*Acanthiza robustirostris (Slaty-backed Thornbill)*			
13.	24265	*Acanthiza uropygialis (Chestnut-rumped Thornbill)*			
14.	25535	*Accipiter cirrocephalus (Collared Sparrowhawk)*			
15.	25536	*Accipiter fasciatus (Brown Goshawk)*			
16.	25544	*Aegotheles cristatus (Australian Owlet-nightjar)*			
17.	24312	*Anas gracilis (Grey Teal)*			
18.	24316	*Anas superciliosa (Pacific Black Duck)*			
19.	25528	*Aphelocephala leucopsis (Southern Whiteface)*			
20.	24268	*Aphelocephala nigricincta (Banded Whiteface)*			
21.	24285	*Aquila audax (Wedge-tailed Eagle)*			
22.	24340	*Ardea novaehollandiae (White-faced Heron)*			
23.	24341	*Ardea pacifica (White-necked Heron)*			
24.	24610	*Ardeotis australis (Australian Bustard)*			
25.	25566	*Artamus cinereus (Black-faced Woodswallow)*			
26.	24355	*Artamus minor (Little Woodswallow)*			
27.	24356	*Artamus personatus (Masked Woodswallow)*			
28.		*Barnardius zonarius*			
29.	24359	*Burhinus grallarius (Bush Stone-curlew)*			
30.	24564	*Certhionyx variegatus (Pied Honeyeater)*			
31.	24377	*Charadrius ruficapillus (Red-capped Plover)*			
32.	24321	*Chenonetta jubata (Australian Wood Duck, Wood Duck)*			
33.	47909	*Cheramoeca leucosterna (White-backed Swallow)*			
34.	25580	*Cinclosoma castaneothorax (Chestnut-breasted Quail-thrush)*			

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
35.	24774	*Cladorhynchus leucocephalus (Banded Stilt)*			
36.	25675	*Colluricincla harmonica (Grey Shrike-thrush)*			
37.	24361	*Coracina maxima (Ground Cuckoo-shrike)*			
38.	25568	*Coracina novaehollandiae (Black-faced Cuckoo-shrike)*			
39.	24416	*Corvus bennetti (Little Crow)*			
40.	25592	*Corvus coronoides (Australian Raven)*			
41.	25593	*Corvus orru (Torresian Crow)*			
42.	24420	*Cracticus nigrogularis (Pied Butcherbird)*			
43.	25595	*Cracticus tibicen (Australian Magpie)*			
44.	25596	*Cracticus torquatus (Grey Butcherbird)*			
45.	24869	*Ctenophorus caudicinctus subsp. mensarum (Ring-tailed Dragon)*			
46.	24886	*Ctenophorus reticulatus (Western Netted Dragon)*			
47.	24889	*Ctenophorus scutulatus (Lozenge-marked Dragon)*			
48.	25052	*Ctenotus leonhardii*			
49.	25075	*Ctenotus severus*			
50.	25673	*Daphoenositta chrysoptera (Varied Sittella)*			
51.	25607	*Dicaeum hirundinaceum (Mistletoebird)*			
52.	24470	*Dromaius novaehollandiae (Emu)*			
53.	25092	*Egernia depressa (Southern Pygmy Spiny-tailed Skink)*			
54.	47937	*Elseyornis melanops (Black-fronted Dotterel)*			
55.		*Eolophus roseicapillus*			
56.	24567	*Epthianura albifrons (White-fronted Chat)*			
57.	24570	*Epthianura tricolor (Crimson Chat)*			
58.	25621	*Falco berigora (Brown Falcon)*			
59.	25622	*Falco cenchroides (Australian Kestrel, Nankeen Kestrel)*			
60.	25623	*Falco longipennis (Australian Hobby)*			
61.	25727	*Fulica atra (Eurasian Coot)*			
62.	24958	*Gehyra punctata*			
63.	24959	*Gehyra variegata*			
64.	24401	*Geopelia cuneata (Diamond Dove)*			
65.	25530	*Gerygone fusca (Western Gerygone)*			
66.	24443	*Grallina cyanoleuca (Magpie-lark)*			
67.	24295	*Haliastur sphenurus (Whistling Kite)*			
68.	24961	*Heteronotia binoei (Bynoe's Gecko)*			
69.	47965	*Hieraaetus morphnoides (Little Eagle)*			
70.	25734	*Himantopus himantopus (Black-winged Stilt)*			
71.	24491	*Hirundo neoxena (Welcome Swallow)*			
72.	24572	*Lacustroica whitei (Grey Honeyeater)*			
73.	25137	*Lerista gerrardii*			
74.	25157	*Lerista nichollsi*			
75.	42411	*Lerista timida*			
76.	25661	*Lichmera indistincta (Brown Honeyeater)*			
77.	41417	*Liopholis striata (Night Skink)*			
78.	25651	*Malurus lamberti (Variegated Fairy-wren)*			
79.	25652	*Malurus leucopterus (White-winged Fairy-wren)*			
80.	25654	*Malurus splendens (Splendid Fairy-wren)*			
81.	24583	*Manorina flavigula (Yellow-throated Miner)*			
82.	47997	*Melanodryas cucullata (Hooded Robin)*			
83.	24736	*Melopsittacus undulatus (Budgerigar)*			
84.	24598	*Merops ornatus (Rainbow Bee-eater)*			
85.	25248	*Neelaps bimaculatus (Black-naped Snake)*			
86.	25425	*Neobatrachus kunapalari (Kunapalari Frog)*			
87.	25427	*Neobatrachus sutor (Shoemaker Frog)*			
88.	24737	*Neophema bourkii (Bourke's Parrot)*			
89.		*Neopsephotus bourkii*			
90.	24742	*Nymphicus hollandicus (Cockatiel)*			
91.	24407	*Ocyphaps lophotes (Crested Pigeon)*			
92.	24976	*Oedura marmorata (Marbled Velvet Gecko)*			
93.	24618	*Oreoica gutturalis (Crested Bellbird)*			
94.	24085	*Oryctolagus cuniculus (Rabbit)*	Y		
95.	25680	*Pachycephala rufiventris (Rufous Whistler)*			
96.	48060	*Petrochelidon ariel (Fairy Martin)*			
97.	48061	*Petrochelidon nigricans (Tree Martin)*			
98.	24659	*Petroica goodenovii (Red-capped Robin)*			
99.	24409	*Phaps chalcoptera (Common Bronzewing)*			
100.	25703	*Podargus strigoides (Tawny Frogmouth)*			
101.	24681	*Poliocephalus poliocephalus (Hoary-headed Grebe)*			
102.	24683	*Pomatostomus superciliosus (White-browed Babbler)*			
103.	25706	*Pomatostomus temporalis (Grey-crowned Babbler)*			
104.	25262	*Pseudechis butleri (Spotted Mulga Snake)*			

	Name ID	Species Name	Naturalised	Conservation Code	[1]Endemic To Query Area
105.	25434	*Pseudophryne occidentalis (Western Toadlet)*			
106.	24390	*Psophodes occidentalis (Western Wedgebill, Chiming Wedgebill)*			
107.		*Ptilonorhynchus guttatus*			
108.	42344	*Purnella albifrons (White-fronted Honeyeater)*			
109.	24278	*Pyrrholaemus brunneus (Redthroat)*			
110.	24776	*Recurvirostra novaehollandiae (Red-necked Avocet)*			
111.	48096	*Rhipidura albiscapa (Grey Fantail)*			
112.	25614	*Rhipidura leucophrys (Willie Wagtail)*			
113.	24982	*Rhynchoedura ornata (Western Beaked Gecko)*			
114.	25266	*Simoselaps bertholdi (Jan's Banded Snake)*			
115.	30948	*Smicrornis brevirostris (Weebill)*			
116.	24108	*Sminthopsis crassicaudata (Fat-tailed Dunnart)*			
117.		*Storena sinuosa*			
118.	24946	*Strophurus strophurus*			
119.	25705	*Tachybaptus novaehollandiae (Australasian Grebe, Black-throated Grebe)*			
120.	24331	*Tadorna tadornoides (Australian Shelduck, Mountain Duck)*			
121.	30870	*Taeniopygia guttata (Zebra Finch)*			
122.	24845	*Threskiornis spinicollis (Straw-necked Ibis)*			
123.	42351	*Todiramphus pyrrhopygius (Red-backed Kingfisher)*			
124.	24851	*Turnix velox (Little Button-quail)*			
125.	24386	*Vanellus tricolor (Banded Lapwing)*			
126.	25211	*Varanus caudolineatus*			

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 wholely 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.

Australian Government
Department of the Environment and Energy

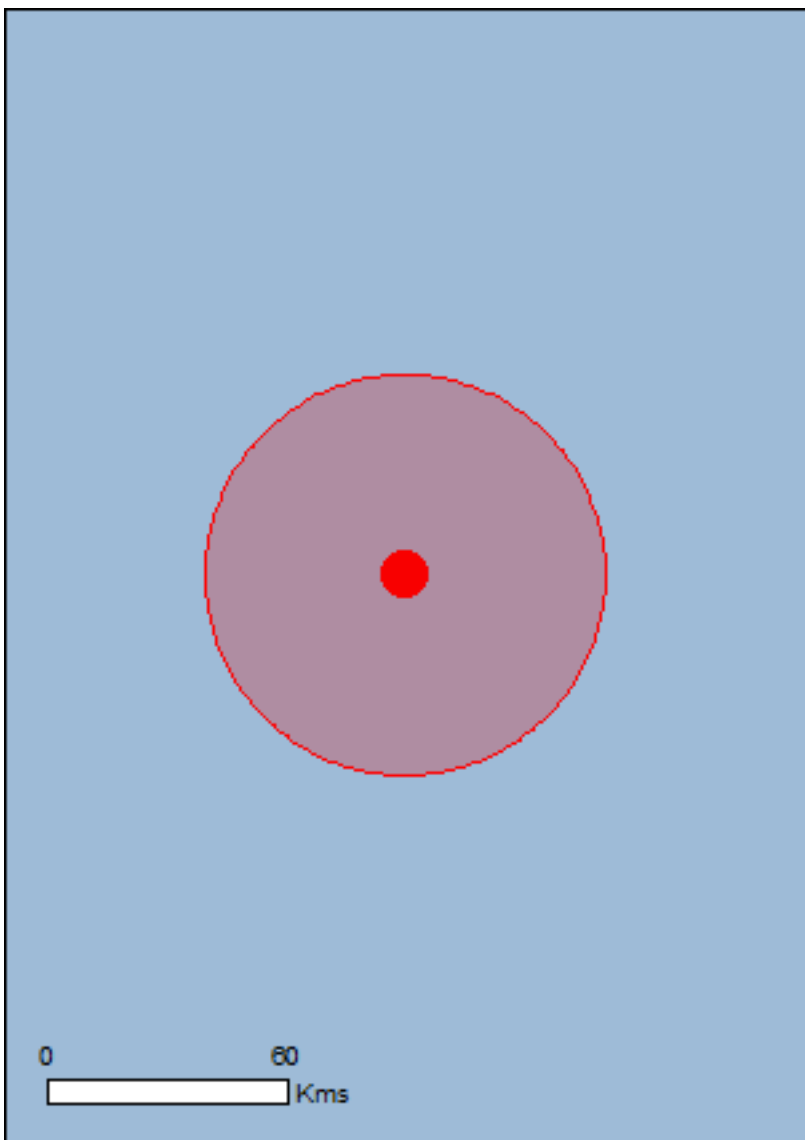
EPBC Act Protected Matters Report

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.

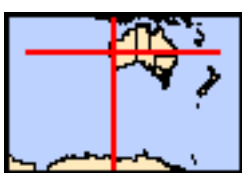
Information is available about Environment Assessments and the EPBC Act including significance guidelines, forms and application process details.

Report created: 09/02/20 13:58:43



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:	None
Listed Threatened Species:	7
Listed Migratory Species:	6

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:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	12
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:	2
Regional Forest Agreements:	None
Invasive Species:	11
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

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
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat known to occur within area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may 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		
Ricinocarpos brevis [82879]	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 known to occur within area

Listed Migratory Species		[Resource Information]
* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.		
Name	Threatened	Type of Presence
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within

Name	Threatened	Type of Presence
		area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within 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

Other Matters Protected by the EPBC Act

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 may 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 likely 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 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
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

Name	Threatened	Type of Presence
Rostratula benghalensis (sensu lato)		
Painted Snipe [889]	Endangered*	Species or species habitat may occur within area
Thinornis rubricollis		
Hooded Plover [59510]		Species or species habitat may occur within area

Extra Information

State and Territory Reserves [Resource Information]

Name	State
Dalgaranga and Noongal Pastoral Leases	WA
Lakeside Pastoral Lease	WA

Invasive Species [Resource Information]

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

Name	Status	Type of Presence
Birds		
Columba livia		
Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
Streptopelia senegalensis		
Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
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
Equus asinus		
Donkey, Ass [4]		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
Vulpes vulpes		
Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		

Name	Status	Type of Presence
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 likely to occur within area

Caveat

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

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

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

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

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

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

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

- migratory and
- marine

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

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

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

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

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

Coordinates

-27.85611 117.215

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.

Department of the Environment
GPO Box 787
Canberra ACT 2601 Australia
+61 2 6274 1111

Appendix 3: Photo Points

Photo Point 1.

Photo Point 2.

Photo Point 3.

Photo Point 4.

Photo Point 5.

Photo Point 6.

Photo Point 7.

Photo Point 8.

Photo Point 9.

Photo Point 10.

Photo Point 11.

Photo Point 12.

Photo Point 13.

Photo Point 14.

Photo Point 15.

Photo Point 16.