Crossroads Project

Reconnaissance Flora and Basic Fauna Assessment

Prepared for Forrestania Resources Ltd.







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Cover Photo: Vegetation within the Crossroads project area (17/08/2022)

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EXECUTIVE SUMMARY

Botanica Consulting Pty Ltd (Botanica) was commissioned by Forrestania Resources Ltd. to undertake a reconnaissance flora and vegetation survey of the Crossroads exploration program area (hereafter referred to as the 'survey area'). The survey area is approximately 23 ha in extent and is located within tenement E77/2348, approximately 140 km south of Southern Cross and 72 km north of Lake King, Western Australia. The survey in intended to support an exploration program and clearing permit associated with planned activities within the Crossroads exploration project area.

The survey area lies within the Southern Cross (COO2) subregion of the Coolgardie Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA).

The Southern Cross subregion (7,041,323 ha) lies on the Southern Cross Terrains of the Yilgarn Craton, which is described as comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. The underlying geology is of granite strata interrupted by parallel intrusions of Archaean Greenstone with occluded drainage. Valleys have Quaternary duplex and gradational soils and include chains of saline playa-lakes. Upper levels in the landscape are eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways. (Cowan et. al., 2001).

The vegetation consists diverse Eucalyptus woodlands (*Eucalyptus salmonophloia, E. salubris, E transcontinentalis, E. longicornis*), rich in endemic eucalypts, that occur around salt lakes, on low greenstone hills, valley alluvials and broad plains of calcareous earths. Salt lake surfaces support dwarf shrublands of samphire. Granite basement outcrops at mid-levels in the landscape and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*. Mallees (*Eucalyptus leptopoda, E. platycorys* and *E. scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata, Callitris preissii, Melaleuca uncinata* and *Acacia beauverdiana*) occur in upland areas, as well as on sand lunettes associated with playas along the broad valley floors, and sand sheets around the granite outcrops. The scrubs are rich in endemic Acacia and Myrtaceae species.

In accordance with Beard (1990) the survey area is located in the Coolgardie Botanical District of the Southwestern Interzone Province. The landscape is described as gently undulating with occasional ranges of low hills, with sandplains in the western part and some large playa lakes. Soils are principally brown calcareous earths, which overlays the Proterozoic granite and gneiss of the Fraser Range block and Archaean granite, with infolded volcanics and meta-sediments, of the Yilgarn block. Vegetation is predominately *Eucalyptus* woodlands, with slopes and flats containing *E. longicornis* alongside *E. salubris* and *E. salmonophloia.* Woodland understories range from tall sclerophyll shrubland dominated by *Melaleuca pauperiflora* to soft-leaved saltbush shrubland of *Atriplex vesicaria* and *A. nummularia.* Some hill slopes contain mallees of *E. livida* or *E. loxophleba*, while ironstone ridges are covered in thickets of *Acacia quadrimarginea, Allocasuarina acutivalvis* and *A. campestris.* Other vegetation assemblages include species-rich scrub-heaths and *Allocasuarina* thickets on sandplains, merging into *Acacia* thickets and Kwongan vegetation to the north.

The dominant land uses of the Southern Cross subregion includes native pasture grazing (17%), Unallocated Crown Land (UCL) and Crown reserves (66.7%) and conservation reserves (11.5%) (Cowan et. al., 2001). The survey area is not located within a Pastoral Lease.

Prior to the field assessment a literature review was undertaken of previous flora and fauna assessments conducted within the local region. Documents reviewed included:

• Botanica Consulting (2020). *Targeted search for flora/ fauna and vegetation of conservation significance-Crossroads exploration program*. Prepared on behalf of Firefly Resources Ltd., January 2020



• Terratree (2022). *Detailed Flora and Vegetation Survey of Lady Lila project area*. Prepared on behalf of Forrestania Resources Ltd., February 2022

In addition to the literature review, searches of the following databases were undertaken to aid in the compilation of a list of significant flora within the survey area:

- DBCA Threatened/ Priority Flora spatial data (DBCA, 2022a);
- DBCA Threatened/ Priority Ecological Communities spatial data (DBCA, 2022b);
- Atlas of Living Australia (ALA) database (ALA, 2022); and
- EPBC Protected Matters search tool (DAWE, 2021a).

The DBCA database searches, ALA spatial portal search and EPBC Protected Matters search were conducted with a 40 km buffer from the survey area.

The ALA desktop search identified 1,352 vascular flora species as occurring within 40 km of the survey area, representing 343 genera from 84 families. The most diverse families were Myrtaceae (238 species), Fabaceae (195 species) and Proteaceae (114 species). The most dominant genera were *Acacia* (98 species), *Eucalyptus* (97 species) and *Melaleuca* (55 species).

The desktop review identified 35 introduced flora (weed) species, representing 11 families, as potentially occurring in the vicinity of the survey area. None of these species are listed as a Declared Pest on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management (BAM) Act 2007* or as a Weed of National Significance.

The assessment of the DBCA Priority/ Threatened flora database records (DBCA, 2019), ALA (ALA, 2022) and Protected Matters searches (DCCEEW, 2022a), and previous relevant literature identified 128 flora species of conservation significance recorded within a 40 km radius of the survey area. These consist of one Presumed Extinct, 13 Threatened, 32 Priority 1, 22 Priority 2, 46 Priority 3 and 14 Priority 4 taxa.

These taxa were assessed for distribution and known habitat to determine their likelihood of occurrence within the survey area. No taxa were identified as likely to occur or previously recorded within the survey area. A total of seven taxa were identified as possibly occurring in the survey area, consisting of one Threatened, three Priority 1, four Priority 2, eight Priority 3 and five Priority 4 taxa.

According to the results of the ALA database search (ALA, 2022), a total of 238 terrestrial vertebrate fauna taxa have been recorded within 40 km of the survey area, consisting of 161 bird, 19 mammal, 49 reptile and nine amphibian taxa. Of these, four species , representing 1.7% of faunal diversity, are introduced (non-native) species.

The desktop review identified 10 terrestrial vertebrate fauna species of conservation significance as previously being recorded in the regional area, consisting of seven Threatened and three migratory or otherwise protected species. In addition, six migratory wading/shorebird species were assessed collectively due to their similar habitat requirements.

Habitat and distribution data was used to determine the likelihood of occurrence within the survey area. Habitat and distribution data was used to determine the likelihood of occurrence within the survey area. The assessment identified three significant fauna species, consisting of one Endangered (EN), three Vulnerable (VU) and one Otherwise Protected taxa, as potentially occurring in the survey area.

The Protected Matters search (DCCEEW, 2022a) identified the *Eucalypt Woodlands of the Western Australia Wheatbelt* Threatened Ecological Community (TEC) as recorded within 40 km of the survey area. However, this TEC is unlikely to occur within the survey area as it is outside the geographic extent in which ecological communities may be considered representative of this TEC. This



community would only be considered present of vegetation communities that meet the vegetation composition criteria are contiguous with similar vegetation within the Wheatbelt region.

The DBCA Threatened and Priority Ecological Communities search identified three Priority ecological communities as recorded within 40 km of the survey area. The survey area is located within the mapped boundary of the Priority 3 community *Ironcap Hills vegetation assemblages (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (greenstone ranges).*

The Forrestania 511 vegetation association retains >99% of its pre-European extent, and development within the survey area will not significantly reduce the current extent of this vegetation association.

The survey area is located within an Environmentally Sensitive Area buffer associated with the Lake Cronin Nature Reserve.

There are no wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

There are no proposed nor gazetted conservation reserves within the survey area.

There are no DBCA managed or DBCA lands of interest located within the survey area.

The closest area of conservation significance is the Lake Cronin Nature Reserve, gazetted with the Conservation Council of WA for the purpose of conservation of flora and fauna and also categorised as an Environmentally Sensitive Area. The EPA has proposed an expansion of the Lake Cronin Reserve to support conservation management at a regional level in support of the Great Western Woodlands conservation strategy. The survey area is located within this proposed reserve expansion area, and ground-disturbance activities within the survey area may impact conservation values associated with the proposed expanded reserve.

Botanica conducted a targeted flora and vegetation survey on the 17th September 2022, with the survey undertaken by Jim Williams (Director/Principal Botanist, Diploma of Horticulture) and Kaitlyn Coyle (Field Technician). The survey area was traversed via 4WD and on foot, with a handheld GPS unit used to record the track log of the survey effort and significant flora, fauna and vegetation.

The field survey identified 78 vascular flora taxa within the survey area, represented 38 genera across 20 families. The most diverse families were Fabaceae (11 species), Myrtaceae (30 species), and Rutaceae (four species). Dominant genera include *Eucalyptus* (15 species), *Melaleuca* (11 species) and *Acacia* (seven species).

No introduced (weed) species were recorded within the survey area.

No Threatened flora species were recorded within the survey area. The Priority 2 flora species, *Eutaxia lasiocalyx* was recorded within the survey area. No additional Priority or otherwise significant flora species were recorded within the survey area.

A total of two broad-scale vegetation communities were identified within the survey area. Vegetation community descriptions and extents were determined from field survey results, aerial imagery interpretation and extrapolation of the communities.

The survey found CLP-MWS1 was the most widespread community in the survey area, occupying 13.5 ha (58.7%), while CLP-EW1 was the most restricted with 9.5 ha (41.3%). The most diverse vegetation type was CLP-EW1 with 70 species (89.7%), while the least diverse was CLP-MWS1 with 30 species (38.5%).

No Threatened, Priority or otherwise significant ecological communities were identified within the survey area. Although the survey area is located within the mapped buffer of the *Ironcap Hills*



vegetation assemblages ecological community, vegetation within the survey area was not considered representative of this community.

Based on vegetation and associated landforms identified during the flora and vegetation assessment, two broad scale terrestrial fauna habitats were identified as occurring within the survey area.

No significant fauna were recorded within the survey area. No Malleefowl mounds or other evidence of Malleefowl activity (incl. tracks, feathers, direct bird observations) were identified during the field survey.

Disturbances within the survey area included access tracks, and recent fire events. No significant ground-disturbance activities or weed presence was observed within the survey area, and vegetation within the survey area is expected to achieve 'very good' condition after recovery from the fire event.

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act. The assessment found that the proposed vegetation clearing activities may be at variance with clearing principles (f) and (h).



1 INTRODUCTION

Botanica Consulting Pty Ltd (Botanica) was commissioned by Forrestania Resources Ltd. to undertake a reconnaissance flora and vegetation survey of the Crossroads exploration program area (hereafter referred to as the 'survey area'). The survey area is approximately 23 ha in extent and is located within tenement E77/2348, approximately 140 km south of Southern Cross and 72 km north of Lake King, Western Australia (Figure 1-1). The survey in intended to support an exploration program and clearing permit associated with planned activities within the Crossroads exploration project area.

1.1 Objectives

The flora and vegetation assessment was conducted in accordance with the requirements of a reconnaissance survey as defined in *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment – December 2016* (EPA, 2016a). The objectives of the assessment were to:

- Gather background information on flora and vegetation in the desktop study area (literature review, database and map-based searches);
- Conduct a field survey to verify / ground truth the desktop study findings through reconnaissance survey;
- Define and map vegetation communities of the survey area to a scale appropriate for the Bioregion and described according to the National Vegetation Information System (NVIS) classification (NVIS Level V – Association);
- Record the species composition (abundance and diversity) of each vegetation community within the survey area and compile a species list for the survey area by vegetation type;
- Determine the local and regional conservation significance of flora and vegetation within the survey area;
- Identify any potential significant flora or vegetation within the survey area;
- Identify any introduced flora species (including Declared Pests) within the survey area; and
- Define and map the condition of vegetation within the survey area in accordance with the vegetation condition rating scale specified in the Technical Guidance (EPA, 2016a).

The fauna assessment was conducted in accordance with the requirements of a basic terrestrial fauna survey as defined in *Technical Guidance - Terrestrial Fauna Surveys for Environmental Impact Assessment – June 2020* (EPA, 2020). The objectives of the assessment were to:

- Undertake a literature review, including map-based information searches of all current and relevant literature sources and databases relating to the survey area;
- Undertake a desktop investigation to identify any previously recorded occurrences of or potentially occurring Threatened and Priority listed fauna within the survey area;
- Undertake searches on available databases for details relating to any Threatened and Priority listed fauna previously identified as occurring or potentially occurring within the survey area;
- Conduct fauna habitat mapping and identify habitat types which are suitable for each significant fauna considered likely or possible to occur, or fauna recorded in the survey area;
- Compile an inventory of fauna species occurrences within the survey area;
- Undertake opportunistic, low intensity sampling of fauna; and
- Report on the conservation status of species present using the Western Australian Museum and Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) databases for presence of Threatened and Priority listed fauna species within the survey area.

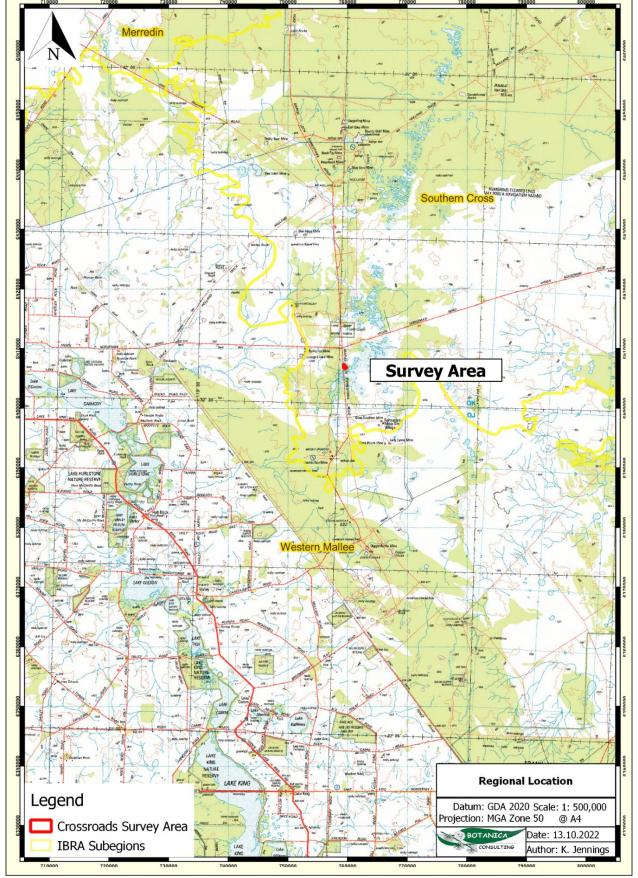


Figure 1-1: Regional map of the desktop survey area/ survey area

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2 BIOPHYSICAL ENVIRONMENT

2.1 Regional Environment

The survey area lies within the Southern Cross (COO2) subregion of the Coolgardie Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA).

The Southern Cross subregion (7,041,323 ha) lies on the Southern Cross Terrains of the Yilgarn Craton, which is described as comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. The underlying geology is of granite strata interrupted by parallel intrusions of Archaean Greenstone with occluded drainage. Valleys have Quaternary duplex and gradational soils and include chains of saline playa-lakes. Upper levels in the landscape are eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways. (Cowan et. al., 2001).

The vegetation consists diverse Eucalyptus woodlands (*Eucalyptus salmonophloia, E. salubris, E transcontinentalis, E. longicornis*), rich in endemic eucalypts, that occur around salt lakes, on low greenstone hills, valley alluvials and broad plains of calcareous earths. Salt lake surfaces support dwarf shrublands of samphire. Granite basement outcrops at mid-levels in the landscape and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*. Mallees (*Eucalyptus leptopoda, E. platycorys* and *E. scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata, Callitris preissii, Melaleuca uncinata* and *Acacia beauverdiana*) occur in upland areas, as well as on sand lunettes associated with playas along the broad valley floors, and sand sheets around the granite outcrops. The scrubs are rich in endemic Acacia and Myrtaceae species.

In accordance with Beard (1990) the survey area is located in the Coolgardie Botanical District of the Southwestern Interzone Province. The landscape is described as gently undulating with occasional ranges of low hills, with sandplains in the western part and some large playa lakes. Soils are principally brown calcareous earths, which overlays the Proterozoic granite and gneiss of the Fraser Range block and Archaean granite, with infolded volcanics and meta-sediments, of the Yilgarn block. Vegetation is predominately *Eucalyptus* woodlands, with slopes and flats containing *E. longicornis* alongside *E. salubris* and *E. salmonophloia*. Woodland understories range from tall sclerophyll shrubland dominated by *Melaleuca pauperiflora* to soft-leaved saltbush shrubland of *Atriplex vesicaria* and *A. nummularia*. Some hill slopes contain mallees of *E. livida* or *E. loxophleba*, while ironstone ridges are covered in thickets of *Acacia quadrimarginea*, *Allocasuarina acutivalvis* and *A. campestris*. Other vegetation assemblages include species-rich scrub-heaths and *Allocasuarina* thickets on sandplains, merging into *Acacia* thickets and Kwongan vegetation to the north.

2.2 Land Use

The dominant land uses of the Southern Cross subregion includes native pasture grazing (17%), Unallocated Crown Land (UCL) and Crown reserves (66.7%) and conservation reserves (11.5%) (Cowan et. al., 2001). The survey area is not located within a Pastoral Lease.



2.3 Soil Landscape Systems

The survey area lies within the Kalgoorlie Province, located in the southern Goldfields between Paynes Find, Menzies, Southern Cross and Balladonia. The landscape consists of undulating plains (with some sandplains, hills and salt lakes) on the granitic rocks and greenstone of the Yilgarn Craton. Soils range from calcareous loamy earths and red loamy earths with some salt lake soils to red deep sands, yellow sandy earths, shallow loams and loamy duplexes. Vegetation communities are predominately Eucalypt woodlands with some acacia-casuarina thickets, mulga shrublands, halophytic shrublands and spinifex grasslands. The Kalgoorlie Province is further divided into six soil-landscape zones, with the survey area located in the Southern Cross Zone.

The Southern Cross zone is located in the eastern Wheatbelt/south-western Goldfields between Bullfinch and Mt Holland and contains Undulating plains and uplands (with some salt lake and low hills) on deeply weathered mantle, colluvium and alluvium over greenstone and granitic rocks of the Yilgarn Craton. Soils consist of calcareous loamy earths, red and yellow loamy earths and alkaline deep and shallow sandy duplexes with some yellow sandy earths, salt lake soils, yellow deep sands and red shallow loamy duplexes. Vegetation includes salmon gum-gimlet-morrel-York gum woodlands with acacia-casuarina thickets and some mallee, scrub-heath and halophytic shrublands.

In accordance with soil landscape system mapping data (Government of Western Australia, 2019), the soil landscape zones are divided into soil landscape systems, with the survey areas located within the Ya28 landscape system as described in Table 2-1 and shown in Figure 2-1.

Soil Landscape System	Description	Area and %
DD 10	Plains with some clay pans and small salt lakes, dunes, and lunettes	23.0 ha (100%)

Table 2-1: Soil landscape systems	within the survey area
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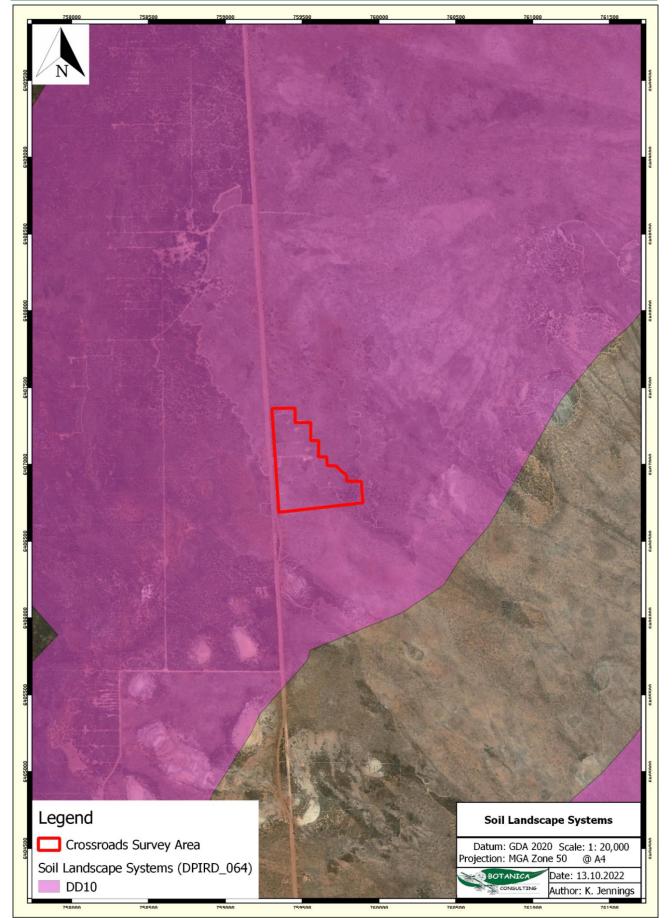


Figure 2-1: Soil landscape systems within the survey area



2.4 Regional Vegetation

The Kalgoorlie Province is described by Tille (2006) as woodlands of redwood (Eucalyptus transcontinentalis), red mallee (E. oleosa), Dundas blackbutt (E. dundasii), merrit (E. flocktoniae) and salmon gum (E. salmonophloia), found on undulating plains over granite. There are also some hummock grasslands with red mallee over spinifex (Triodia scariosa) and thickets of Acacia, Casuarina and Melaleuca spp. Plains on greenstone have woodlands of York gum (E. loxophleba), salmon gum and gimlet (E. salubris). The valley plains have woodlands of salmon gum, red mallee, Goldfields blackbutt (E. lesouefii), gimlet, York gum and morrel (E. longicornis). These sometimes have an understorey of saltbush (Atriplex spp.), pearl bluebush (Maireana sedifolia), sago bluebush (M. pyramidata) and Eremophila spp. There are areas of spinifex grasslands with red mallee, mallees (e.g. E. youngiana) and marble gum (E. gongylocarpa). Low woodlands of mulga (Acacia aneura) and black sheoak (Casuarina pauper) over bluebush and saltbush are also present. Apart from the bare salt lake surfaces, saline valley floors have shrublands of samphire (Tecticornia spp.) and Frankenia spp. in lower areas, shrublands of saltbush and bluebush on red deep sandy duplexes, and woodlands of salmon gum, merrit, red mallee, gimlet and York gum. Acacia neurophylla, A. beauverdiana and A. resinimarginea thickets grow on gently sloping uplands on granite, with thickets of acacia, casuarina and melaleuca. There are also scrub-heaths and York gum-salmon gum-gimlet woodlands on these uplands. The hilly terrain on greenstone supports woodlands of salmon gum, Goldfields blackbutt, coral gum (*E. torquata*), York gum, gimlet, morrel, Dundas blackbutt and black sheoak. Thickets of granite wattle (Acacia quadrimarginea) are also present. The stony plains support scattered woodlands of Goldfields blackbutt, gimlet and salmon gum, along with shrublands of saltbush and bluebush. Sandplains in the west have acacia (A. coolgardiensis, A. ramulosa, A. aneura, A. burkittii and A. tetragonophylla) shrublands, commonly with patchy native pine (Callitris columellaris, C. preissii) and mallees (E. leptopoda, E. longicornis and E. loxophleba). Native box (Bursaria occidentalis), Melaleuca uncinata and Hakea recurva may also be present. Hard spinifex (T. basedowii) grasslands with mulga, marble gum and mallees (e.g. E. kingsmillii) are found on sandplains to the east. The sandy-surfaced plains support acacia, casuarina and melaleuca thickets; woodlands of York gum, cypress pine (Callitris columellaris), salmon gum, gimlet and mulga; and shrublands of bowgada (A. ramulosa).



2.5 Conservation Values

The Southern Cross subregion contains 11 vegetation associations, predominately Eucalyptus woodlands and Acacia shrublands, that have at least 85 per cent of their total extent in the bioregion. The subregion contains no wetlands of national importance and seven wetlands of subregional importance (Cowan et. al., 2001).

No ecosystems are listed as threatened under WA State legislation occur within the subregion, but 19 communities and vegetation associations are thought to be at risk for a variety of reasons. Impacts from mining are the main threatening process. Grazing from livestock, goats and rabbits in the region, and to a lesser extent changed fire regimes, erosion and sedimentation, also cause significant impacts to vegetation and communities.

2.5.1 Great Western Woodlands

The survey area lies within the Great Western Woodlands (GWW), considered by The Wilderness Society of WA to be of global biological and conservation importance as one of the largest and healthiest temperate woodlands on Earth, containing many endemic taxa. The region covers almost 16 million hectares (160,000 square kilometres), from the southern edge of the Western Australian Wheatbelt to the pastoral lands of the Mulga country in the north, the inland deserts to the northeast, and the treeless Nullarbor Plain to the east.

The GWW provides a connection between southwest forests and inland deserts (Gondwana Link) as well as linking the north-west passage to Shark Bay. The majority of the GWW is unallocated crown land (61.1%) with other interests including pastoral leases (20.4%), conservation reserves (15.4%) unallocated crown land, ex pastoral (2%) managed by the Department of Biodiversity, Conservation and Attractions (DBCA) and private land (approximately 1%).

No specific management strategy or formal conservation status applies to the GWW which currently includes towns, highways, roads, railways, private property, Crown Reserves, agricultural activities and mining tenements.



2.6 Climate

The climate of the Southern Cross subregion is characterised as arid to semi-arid Warm Mediterranean, with 250-300 mm of winter-dominant rainfall (Cowan et. al., 2001). Rainfall data for the Holt Rock (#10565) weather station, located approximately 38 km south-west of the survey area, and temperature data for the Hyden (#10568) weather station, located approximately 87 km west of the survey area, is shown in Figure 2-1. Mean monthly rainfall ranges from 45.0 mm in June to 13.9 mm in December, with a mean annual rainfall of 327.5 mm. The survey was conducted in September 2022, with the preceding months being characterised by significant winter rainfall, broadly in accordance with historical averages. Climate conditions are unlikely to represent a survey constraint, with flowering material and ephemeral species expected to be present within the survey area.

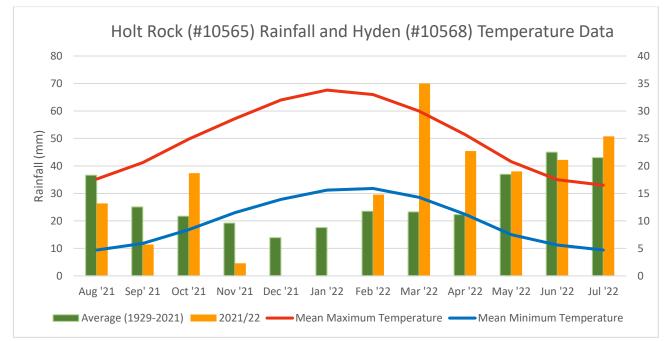


Figure 2-2: Rainfall data of Holt Rock Aero (#10565) and temperature data of Hyden (#10568)



2.7 Hydrology

According to the Geoscience Australia database (2015), there is a non-perennial water body within the survey area. No permanent or ephemeral drainage lines occur within the survey area (Figure 2-3).

Groundwater Dependent Ecosystems (GDE) includes biological assemblages of species such as wetlands or woodlands that use groundwater either opportunistically or as their primary water source. For the purposes of this report, a GDE is defined as any vegetation community that derives part of its water budget from groundwater and must be assumed to have some degree of groundwater dependency. In accordance with the BoM Atlas of Groundwater Dependent Ecosystems (BoM, 2020b) database, there is one moderate-potential terrestrial GDE within the survey area (Figure 2-3). The description and extent within the survey area of this GDE is described in Table 2-2. There are no potential aquatic GDE's within the survey area.

Туре	Geomorphology	Potential	Description	Extent within the survey area
Terrestrial	Undulating plains with some sandplains, ferruginous breakaways; ridges of metamorphic rocks and granitic hills and rises; calcretes, large salt lakes and dunes along valleys.	Moderate	Medium woodland; salmon gum & morrel	23.0 ha (100%)





Figure 2-3: Regional hydrology of the survey area



3 SURVEY METHODOLOGY

3.1 Desktop Assessment

Prior to the field assessment a literature review was undertaken of previous flora and fauna assessments conducted within the local region. Documents reviewed included:

- Botanica Consulting (2020). *Targeted search for flora/ fauna and vegetation of conservation significance-Crossroads exploration program.* Prepared on behalf of Firefly Resources Ltd., January 2020
- Terratree (2022). *Detailed Flora and Vegetation Survey of Lady Lila project area*. Prepared on behalf of Forrestania Resources Ltd., February 2022

In addition to the literature review, searches of the following databases were undertaken to aid in the compilation of a list of significant flora within the survey area:

- DBCA Threatened/ Priority Flora spatial data (DBCA, 2022a);
- DBCA Threatened/ Priority Ecological Communities spatial data (DBCA, 2022b);
- Atlas of Living Australia (ALA) database (ALA, 2022); and
- EPBC Protected Matters search tool (DAWE, 2022).

The DBCA database searches, ALA spatial portal search and EPBC Protected Matters search were conducted with a 40 km buffer from the survey area.

Significant flora species identified by the desktop review were assessed with regards to their population extent and distribution and preferred habitat to determine their likelihood of occurrence within the survey area.

The assessment categorised flora species as follows:

- Unlikely- Suitable habitat is not expected to occur and/or the survey area is outside the known range of the species.
- Possible- Suitable habitat may be present, and the area is within the known range of the species. This option is also used when there is insufficient information to determine the preferred habitat of a species.
- Likely- Suitable habitat is expected to occur and there are records within 10 km of the survey area.
- Previously Recorded- A record for this species is located within the survey area. Field survey will ground-truth currently occurring individuals and populations.

It should be noted that these lists are based on observations from a broader area than the assessment area (40 km radius) and therefore may include taxa not present. The databases also often include very old records that may be incorrect or in some cases the taxa in question have become locally or regionally extinct. Information from these sources should therefore be taken as indicative only and local knowledge and information also needs to be taken into consideration when determining what actual species may be present within the specific area being investigated.

The conservation significance of flora taxa was assessed using data from the following sources:

- *Environment Protection and Biodiversity and Conservation* (EPBC) *Act 1999.* Administered by the Australian Government (DAWE);
- Biodiversity Conservation (BC) Act 2016. Administered by the WA Government (DBCA);
- Red List produced by the Species Survival Commission (SSC) of the World Conservation Union (also known as the IUCN Red List the acronym derived from its former name of the International Union for Conservation of Nature and Natural Resources). The Red List has no



legislative power in Australia but is used as a framework for State and Commonwealth categories and criteria; and

• Priority Flora list. A non-legislative list maintained by DBCA for management purposes (released October 2022).

Descriptions of conservation significant species and communities are provided in Appendix A.

3.2 Flora and Vegetation Field Assessment

Botanica conducted a targeted flora and vegetation survey on the 17th September 2022, with the survey undertaken by Jim Williams (Director/Principal Botanist, Diploma of Horticulture) and Kaitlyn Coyle (Field Technician). The survey area was traversed via 4WD and on foot, with a handheld GPS unit used to record the track log of the survey effort and significant flora, fauna and vegetation. The GPS track log of the survey effort is shown in Figure 3-1.



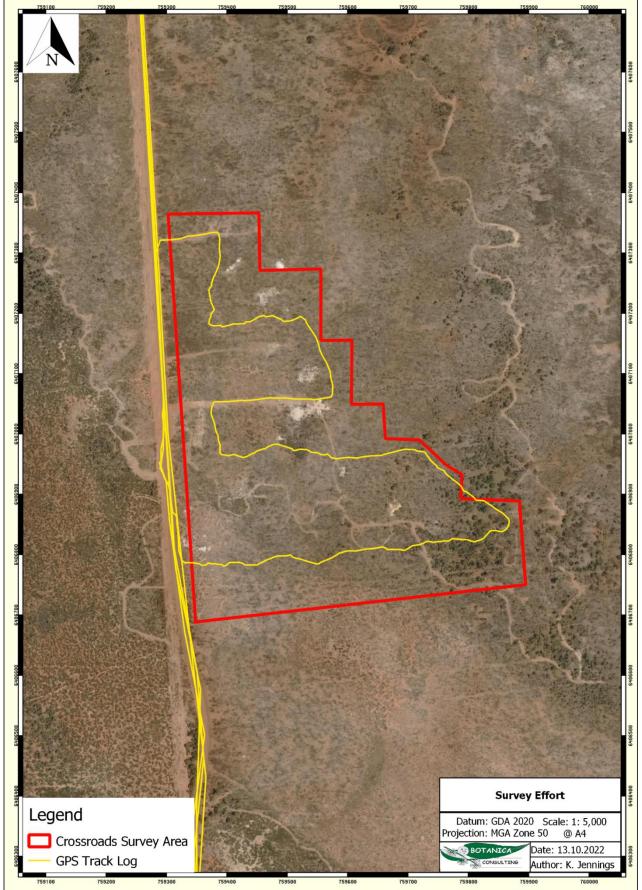


Figure 3-1: Quadrat locations and GPS track log of the survey effort



3.2.1 Flora Assessment

Prior to the commencement of field work, aerial photography was inspected and obvious differences in the vegetation assemblages were identified. The different vegetation communities identified were then inspected during the field survey to assess their validity. A handheld GPS unit was used to record the coordinates of the boundaries between existing vegetation communities. At each sample point, the following information was recorded:

- GPS location;
- Photograph of vegetation;
- Dominant taxa for each stratum;
- All vascular taxa (including annual taxa);
- Landform classification;
- Vegetation condition rating;
- Collection and documentation of unknown plant specimens; and
- GPS location, photograph and collection of flora of conservation significance if encountered.

Unknown specimens collected during the survey were identified with the aid of samples housed at the Botanica Herbarium and Western Australian Herbarium. Vegetation was classified in accordance with NVIS classifications.

3.2.2 Data Analysis Tools

Following field assessments, vegetation types and condition were mapped using the GIS program QGIS, and the hectare area/ percentage area of each vegetation type and condition within the survey area was calculated. Spatial maps illustrating the location of vegetation types and any significant flora/ vegetation and fauna were generated using QGIS.

3.3 Terrestrial Fauna Field Assessment

Fauna habitat types were identified across the survey area based on broad major vegetation groups and associated landform. A handheld GPS unit was used to record the coordinates of the boundaries between fauna habitats and each habitat was photographed.

The main aim of the fauna habitat assessment was to determine the likelihood of a species of conservation significance utilising habitat within the survey area. The habitat information obtained was also used to aid in finalising the overall potential fauna list.

Available information on the habitat requirements of the species of conservation significance listed as possibly occurring in the area (determined from the desktop assessment) was researched. During the field survey, the habitats within the survey area were assessed and specific elements identified, if present, to determine the likelihood of listed Threatened and Priority species utilising habitat within the survey area.

Opportunistic observations of fauna species were made during all field survey work.

Fauna of conservation significance identified during the literature review and database searches as previously being recorded in the general area were assessed and ranked for their likelihood of occurrence within the survey area. The rankings and criteria used were:

Would Not Occur: There is no suitable habitat for the species in the survey area and/or there
is no documented record of the species in the general area since records have been kept
and/or the species is generally accepted as being locally/regionally extinct (supported by a
lack of recent records).



- Locally Extinct: Populations no longer occur within a small part of the species natural range, in this case within 10 or 20 km of the survey area. Populations do however persist outside of this area.
- Regionally Extinct: Populations no longer occur in a large part of the species natural range, in this case within the Southern Cross subregion. Populations do however persist outside of this area.
- Unlikely to Occur: The survey area is outside of the currently documented distribution for the species in question, or no suitable habitat (type, quality and extent) was identified as being present during the field assessment. Individuals of some species may occur occasionally as vagrants/transients especially if suitable habitat is located nearby but the site itself would not support a population or part population of the species.
- Possibly Occurs: Survey area is within the known distribution of the species in question and habitat of at least marginal quality was identified as likely to be present during the field survey and literature review, supported in some cases by recent records being documented in literature from within or near the survey area. In some cases, while a species may be classified as possibly being present at times, habitat may be marginal (e.g. poor quality, fragmented, limited in extent) and therefore the frequency of occurrence and/or population levels may be low.
- Known to Occur: The species in question has been positively identified as being present (for sedentary species) or as using the survey area as habitat for some other purpose (for nonsedentary/mobile species) during field surveys within or near the survey area. This information may have been obtained by direct observation of individuals or by way of secondary evidence (e.g. tracks, foraging debris, scats). In some cases, while a species may be classified as known to occur, habitat may be marginal (e.g. poor quality, fragmented, limited in extent) and therefore the frequency of occurrence and/or population levels may be low.

3.4 Scientific Licences

Table 3-1: Scientific Licenses of Botanica Staff coordinating the s	urvey
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Licensed Staff	Permit Number	Date of Expiry
Jim Williams	FB62000457(licence to take flora for scientific purposes)	04/08/2025



3.4.1 Survey Limitations and Constraints

It is important to note that flora surveys will entail limitations notwithstanding careful planning and design. Potential limitations are listed in Table 3-2.

The conclusions presented in this report are based upon field data and environmental assessments and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of the field assessments. Also, it should be recognised that site conditions can change with time. Information not available at the time of this assessment which may subsequently become available may alter the conclusions presented.

Some species are reported as potentially occurring based on there being suitable habitat (quality and extent) within the survey area or immediately adjacent. The habitat requirements and ecology of many of the species known to occur in the wider area are however often not well understood or documented. It can therefore be difficult to exclude species from the potential list based on a lack of a specific habitats or microhabitats within the survey area. As a consequence of this limitation, the potential species list produced is most likely an overestimation of those species that actually utilise the survey area for some purpose.

In recognition of survey limitations, a precautionary approach has been adopted for this assessment. Any flora species that would possibly occur within the survey area (or immediately adjacent), as identified through ecological databases, publications, discussions with local experts/residents and the habitat knowledge of the author, has been listed as having the potential to occur.



Table 3-2: Limitations and constraints associated with the flora/ vegetation and fauna survey

Variable	Potential Impact on Survey	Details		
Access problems	Not a constraint	The survey was conducted via 4WD and on foot. Numerous access tracks were present within the survey area providing ease of access.		
Competency/ Experience Not a constraint		The Botanica personnel that conducted the survey were regarded a suitably qualified and experienced. Coordinating Staff : Jim Williams (Botanist) Data Interpretation : Jim Williams (Botanist) and Kelby Jenning (Senior Environmental Consultant).		
		Fieldwork was undertaken during the EPA's recommended survey period (September - November) for the South-West and Interzone Province.		
Area disturbanceNot a constraintThe majority of the survey area was in good to very and comprised of native vegetation.		The majority of the survey area was in good to very good condition and comprised of native vegetation.		
Survey Effort/ Extent Not a constraint		Survey intensity was appropriate for the size/significance of the are with a reconnaissance flora survey and basic fauna survey complete to identify vegetation types/ fauna habitats and significant flora, faun and vegetation.		
Availability of contextual information	Not a constraint	BoM, DWER, DPIRD, DBCA and DAWE databases were reviewed to obtain appropriate regional desktop information on the biophysical environment of the local region.		
at a regional and local scale		Botanica has conducted a number of surveys within the Southern Cross bioregion and was also able to obtain information about the area from previous research conducted within the area. Results of previous assessments in the local area were reviewed to provide context on the local environment.		
		In the opinion of Botanica, the survey area was covered sufficiently in order to identify vegetation assemblages. All observed flora individuals were able to be identified to species level.		
Completeness	Not a constraint	The vegetation associations for this study were based on visual descriptions of locations in the field. The distribution of these vegetation associations outside the survey area is not known, however vegetation associations identified were categorised via comparison to vegetation distributions throughout WA given on NVIS (DotEE, 2017).		



4 RESULTS

4.1 Desktop Assessment

Table 3: Previous flora and fauna surveys in the local and regional area

Author & Year	Title	Vegetation	Flora of Conservation Significance	
Botanica Consulting (2020)	Targeted search for flora/ fauna and vegetation of conservation significance- Crossroads exploration program	Sparse low mulga woodland to mulga shrubland, samphire low shrubland	No Threatened, Priority or otherwise significa	
Terratree (2022)	Detailed Flora and Vegetation Survey of Lady Lila project area	Mixed mallee woodland	Eucalyptus steedmanii (VU) Hysterobaeckea pterocera (P1) Eutaxia ?lasiocalyx (P2) Baeckea grandibracteata subsp. Parker Range (K. Newbey 9270) (P3) Beyeria sulcata var. truncata (P3) Rinzia torquata (P3) Stylidium sejunctum (P3) Verticordia stenopetala (P3)	

4.1.1.1 Flora

The ALA desktop search identified 1,352 vascular flora species as occurring within 40 km of the survey area, representing 343 genera from 84 families. The most diverse families were Myrtaceae (238 species), Fabaceae (195 species) and Proteaceae (114 species). The most dominant genera were *Acacia* (98 species), *Eucalyptus* (97 species) and *Melaleuca* (55 species).

4.1.1.2 Introduced Flora

The desktop review identified 35 introduced flora (weed) species, representing 11 families, as potentially occurring in the vicinity of the survey area. None of these species are listed as a Declared Pest on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management (BAM) Act 2007* or as a Weed of National Significance.

The full list of potential weed species is contained in Appendix B.

4.1.1.3 Significant Flora

The assessment of the DBCA Priority/ Threatened flora database records (DBCA, 2019), ALA (ALA, 2022) and Protected Matters searches (DAWE, 2020a), and previous relevant literature identified 128 flora species of conservation significance recorded within a 40 km radius of the survey area. These consist of one Presumed Extinct, 13 Threatened, 32 Priority 1, 22 Priority 2, 46 Priority 3 and 14 Priority 4 taxa (Appendix C).

These taxa were assessed for distribution and known habitat to determine their likelihood of occurrence within the survey area. No taxa were identified as likely to occur or previously recorded within the survey area. A total of seven taxa were identified as possibly occurring in the survey area, consisting of one Threatened, three Priority 1, four Priority 2, eight Priority 3 and five Priority 4 taxa (Table 4-4). The full flora likelihood assessment is listed in Appendix C. The locations of the DBCA database records are illustrated spatially in Figure 4-1.



Table 4-4: Significant flora potentially occurring within the survey area

Status		i			-	
EPBC	BC Act	DBCA	Taxon	Habitat	Assessment	Likelihood
VU	VU	-	Banksia sphaerocarpa var. dolichostyla	Lateritic gravel, grey sand.	Within known range, habitat may be present	Possible
-	-	P1	Brachyloma nguba	White to brown sandy clay, shallow sandy loam. Open mallee woodland, mallee scrub, flat plains.	Within known range, habitat may be present	Possible
-	-	P1	Dicrastylis capitellata	Loamy sand, sandy loam.	Within known range, habitat may be present	Possible
-	-	P1	Stenanthemum liberum	Yellow sandy loam over laterite.	Within known range, habitat may be present	Possible
-	-	P2	Acacia asepala	Red-brown sandy loam. Undulating plains, along drainage lines.	Within known range, habitat may be present	Possible
-	-	P2	Acacia kerryana	Granitic loamy sand, stony clayey loam or clayey sand. Low stony ridges, undulating plains.	At extreme of known range, habitat may be present	Possible
-	-	P2	Balaustion grandibracteatum subsp. juncturum	-	Within known range	Possible
-	-	P2	Balaustion grandibracteatum subsp. juncturum	Hills, undulating landscape	Within known range, habitat may be present	Possible
-	-	P3	Eucalyptus exigua	Sandy loam, white sand. Sandplains.	Within known range, habitat may be present	Possible
-	-	P3	Eutaxia nanophylla	Clayey sand, red clay, stony clayey loam. Low- lying areas, damp flats, slopes, undulating plains, low stony ridges.	Within known range, habitat may be present	Possible
-	-	P3	Eutaxia rubricarina	Gravelly sand, grey to pinkish-white sandy clay, red loam. Flats, slopes, valley floors, road verges.	Within known range, habitat may be present	Possible
-	-	P3	Mirbelia densiflora	Stony loam, loamy sand. Small ridges, breakaways, undulating plains.	At extreme of known range, habitat may be present	Possible
-	-	P3	Notisia intonsa	Red sands. Burnt areas.	Within known range, habitat may be present	Possible
-	-	P3	Pityrodia scabra subsp. dendrotricha	Red-brown sand, gravel soils.	Within known range, habitat may be present	Possible
-	-	P3	Rinzia torquata	Sandplain, low laterite ridges, midslope	Within known range habitat my be present	Possible
-	-	P3	Seringia adenogyna	Loam, brown clay, sandy clay	Within known range, habitat may be present	Possible
-	-	P4	Eremophila inflata	Brown clay loam, ironstone gravel	Within known range, habitat may be present	Possible
-	-	P4	Eremophila racemosa	Sandy or stony loam, clay loam. Undulating plains, roadsides.	Within known range, habitat may be present	Possible
-	-	P4	Grevillea prostrata	White, grey or yellow sand, gravel. Sandplains.	Within known range, habitat may be present	Possible
-	-	P4	Gyrostemon ditrigynus	Sand, sandy clay, loam. Plains, low ironstone ridges.	Within known range, habitat may be present	Possible
-	-	P4	<i>Microcory</i> s sp. Forrestania (V. English 2004)	Yellow sandy clay or red- brown clay. Open woodland or cleared areas.	Within known range, habitat may be present	Possible



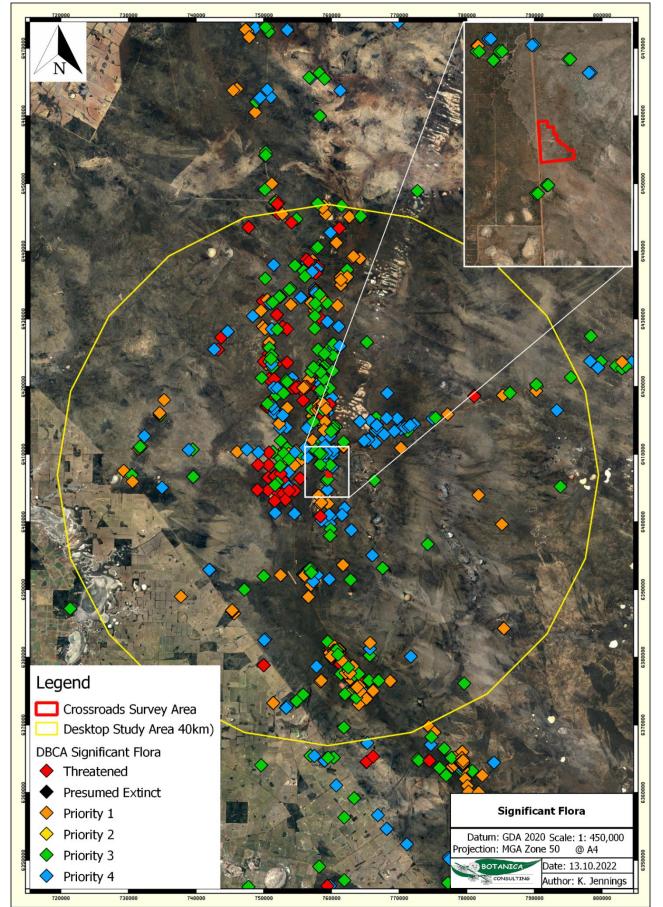


Figure 4-1: Significant flora within the desktop search area



4.1.1.4 Vegetation and Ecological Communities4.1.1.5 Vegetation Associations

The Pre-European vegetation association spatial mapping dataset (DPIRD, 2018) identified the Forrestania 511 vegetation association as occurring within the survey area (Figure 4-2). The association description and its remaining extent, as specified in the 2018 Statewide Vegetation Statistics (DBCA, 2019b) are provided in Table 4-5. Areas retaining less than 30% of their pre-European vegetation extent generally experience exponentially accelerated species loss, while areas with less than 10% are considered "endangered" (EPA, 2000). The Forrestania 511 vegetation association retains >99% of its pre-European extent, and development within the survey area will not significantly reduce the current extent of this vegetation association.

Vegetation Association	Current Extent (ha)	Pre-European extent remaining	% Protected for Conservation	Floristic Description	Extent within Survey Area
Forrestania 511	153,002	99.58	9.68	Medium woodland; salmon gum & morrel	23.0 ha (100%)

Table 4-5: Pre-European vegetation	associations within the survey area
Table 4-5. Fre-European vegetation	associations within the survey area



4.1.1.6 Significant Ecological Communities

The Protected Matters search (DCCEEW, 2022a) identified the *Eucalypt Woodlands of the Western Australia Wheatbelt* Threatened Ecological Community (TEC) as recorded within 40 km of the survey area. However, this TEC is unlikely to occur within the survey area as it is outside the geographic extent in which ecological communities may be considered representative of this TEC. This community would only be considered present of vegetation communities that meet the vegetation composition criteria are contiguous with similar vegetation within the Wheatbelt region.

The DBCA Threatened and Priority Ecological Communities search identified three Priority ecological communities as recorded within 40 km of the survey area. Of these, the Priority 3 community *Ironcap Hills vegetation assemblages (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (greenstone ranges)* was identified as occurring within the survey area.

This vegetation community was first described by Newbey and Hnatiuk (1988) during the biological survey of the Lake Johnston-Hyden area as a BIF complex. The vegetation community is described as:

'mallees (*Eucalyptus*. aff. *wandoo*, *E. livida*, *E. capillosa* subsp. *polyclada*) were usually present in small areas partially lateritized, while low trees (*Eucalyptus flocktoniae*, *E. eremophila*, *Acacia lasiocalyx*) occurred rarely. Tall shrubs that were occasionally present included Allocasuarina *campestris* ssp. *campestris* (also low shrub), *A. corniculata*, *Banksia sphaerocarpa* var. *dolichostyla* (Ironcaps), *Calothamnus quadrifidus* (also low shrub), *Dryandra* aff. *cersioides*, *Grevillea pterosperma*, *Hakea subsulcata*, *H. scoparia*, *Leptospermum erubescens*, *Melaleuca fulgens*, *M. uncinata*, *Santalum acuminatum* and *Trymalium* aff. *ledifolium*; low shrubs were *Acacia sulcata* var. *platyphylla*, *Acacia* sp. (KRN 5226), *Chamelaucium ciliatum* (south), *Cryptandra miliaris*, *Dodonaea adenophora*, *D. amblyophylla* (west), *Dryandra* sp. (KRN 5229), *Melaleuca cordata*, *Phebalium filifolium*, *P. microphyllum*, *P. tuberculosum* ssp. *tuberculosum*, *P.* aff. *tuberculosum* and *Platysace maxwellii* (west); perennial grasses of *Spartochloa scirpoidea*; and sedges of *Lepidosperma* drummondii, *L. viscidum* var. *viscidum*, *Lepidosperma* sp. (KRN 5232), *Lepidosperma* sp. (KRN 5233) and *Lepidosperma* sp. (KRN 6488).'

Analysis of the Priority Ecological Communities within Western Australia (DBCA, 2021) did not identify any additional significant vegetation assemblages as likely or possibly occurring within the survey area.



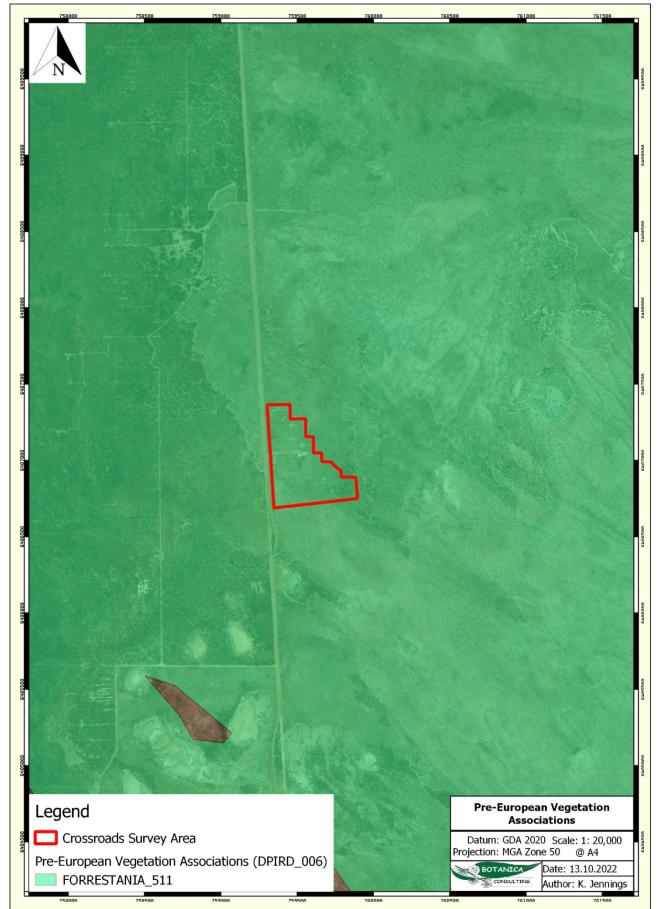


Figure 4-2: Pre-European vegetation systems within the survey area



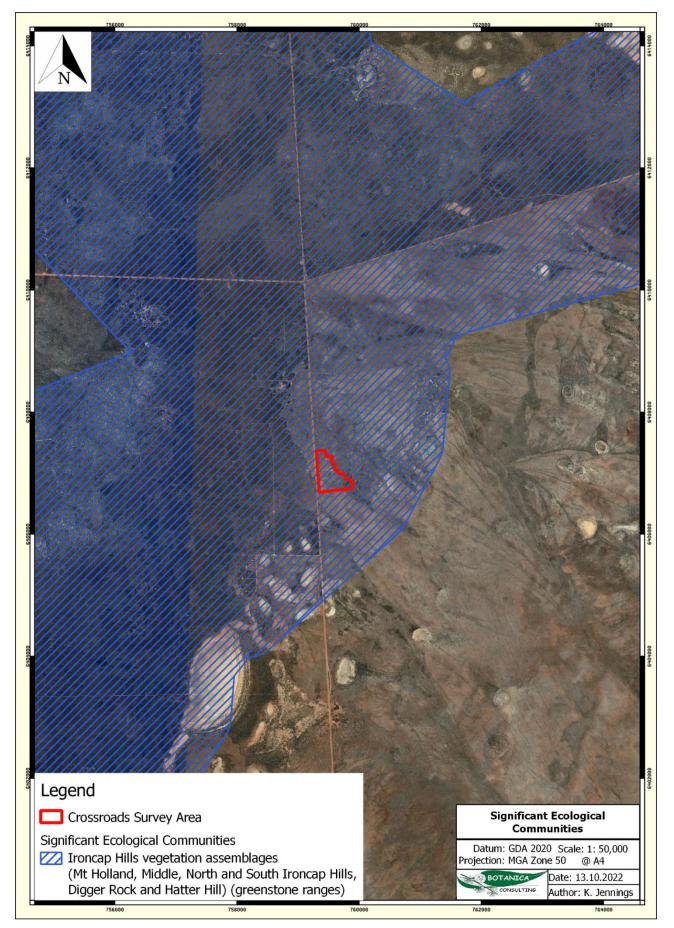


Figure 4-3: Significant ecological communities in relation to the survey area



4.1.2 Fauna

According to the results of the ALA database search (ALA, 2022), a total of 238 terrestrial vertebrate fauna taxa have been recorded within 40 km of the survey area, consisting of 161 bird, 19 mammal, 49 reptile and nine amphibian taxa. Of these, four species , representing 1.7% of faunal diversity, are introduced (non-native) species.

4.1.2.1 Conservation Significant Fauna

The desktop review identified 10 terrestrial vertebrate fauna species of conservation significance as previously being recorded in the regional area, consisting of seven Threatened and three migratory or otherwise protected species. In addition, six migratory wading/shorebird species were assessed collectively due to their similar habitat requirements. The full fauna likelihood assessment is listed in Appendix D.

Habitat and distribution data was used to determine the likelihood of occurrence within the survey area. The assessment identified three significant fauna species, consisting of one Endangered (EN), three Vulnerable (VU) and one Otherwise Protected taxon, as potentially occurring in the survey area (Table 4-6).

Species	Conservation Status					
	EPBC Act	DRCA		Habitat Description	Assessment	Likelihood
Grey Falcon <i>Falco</i> hypoleucos	VU	VU	-	The Grey Falcon occurs at low densities across inland Australia. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter. Prey species are predominately birds, including doves, pigeons, small parrots and cockatoos and finches, but also hunt small mammals and lizards.	Survey area may form part of larger home range.	Possible
Malleefowl Leipoa ocellata	VU	VU	-	Scrublands and woodlands dominated by mallee and wattle species (DAWE, 2020b).	Few regional records, suitable habitat may be present.	Possible
Carnaby's Cockatoo Calyptorhy nchus latirostris	EN	EN	-	Carnaby's Cockatoo is endemic to, and widespread in, the south-west of Western Australia. Breeding habitat consists of woodland or forest. Nest in hollows in live or dead trees of salmon gum (<i>E. salmonophloia</i>), wandoo, tuart, jarrah (<i>E. marginata</i>), flooded gum (<i>E. rudis</i>), york gum (<i>E. loxophleba</i> subsp. <i>loxophleba</i>), powderbark (<i>E. accedens</i>), karri and marri.	Within known range, breeding habitat may be present.	Possible
Peregrine Falcon <i>Falco</i> peregrinus	OS	-	-	Found in most habitats, from rainforests to the arid zone, and at most altitudes, from the coast to alpine areas. It requires abundant prey and secure nest sites and prefers coastal and inland cliffs or open woodlands near water, and may even be found nesting on high city buildings (Birdlife Australia, 2018).	Survey area may form part of larger home range.	Possible
Chuditch, Western Quoll Dasyurus geoffroii	VU	VU	-	The major portion of the remaining natural populations occur in varying densities in jarrah (<i>Eucalyptus marginata</i>) forests and woodlands in the south-west corner of WA, and in woodlands, mallee shrublands and heaths along the south coast, east to the Ravensthorpe area. There are also occasional records from drier woodland and mallee shrubland in the Wheatbelt and Goldfield Regions.	Very occasionally recorded in the region, suitable habitat may be present.	Possible

Table 4-6: Potentially occurring significant fauna



4.2 Field Assessment

4.2.1 Flora

The field survey identified 78 vascular flora taxa within the survey area, represented 38 genera across 20 families. The most diverse families were Fabaceae (11 species), Myrtaceae (30 species), and Rutaceae (four species). Dominant genera include *Eucalyptus* (15 species), *Melaleuca* (11 species) and *Acacia* (seven species). No introduced (weed) species were recorded within the survey area. The full field species inventory is listed in Appendix E.

4.2.1.1 Introduced Flora

No introduced (weed) species were recorded within the survey area.

4.2.1.2 Significant Flora

According to the EPA Environmental Factor Guideline for Flora and Vegetation (EPA, 2016b) significant flora includes:

- flora being identified as threatened or priority species;
- locally endemic flora or flora associated with a restricted habitat type (e.g. surface water or groundwater dependent ecosystems);
- new species or anomalous features that indicate a potential new species;
- flora representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range);
- unusual species, including restricted subspecies, varieties or naturally occurring hybrids; and
- flora with relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape.

No Threatened flora species were recorded within the survey area.

The Priority 2 flora species, *Eutaxia lasiocalyx* was recorded within the survey area. More details regarding this species and its distribution within the survey area are provided below.

No additional Priority or otherwise significant flora species were recorded within the survey area.

4.2.1.3 Eutaxia lasiocalyx (P2)

The Priority 2 flora species *Eutaxia lasiocalyx*, from the Fabaceae family, is a I ow, spreading, multistemmed shrub growing to 0.15 m in height. It produces a yellow infloresence that typically is emergent during November. Its preferred habitat includes Gentle lower slopes with red sandy loam, laterite and quartz gravel. In Western Australia, it has been recorded within the Eastern Goldfield, Merredin, Southern Cross subregions.

Within the survey area, one population of *Eutaxia lasiocalyx* was recorded, consisting of eight individuals. This population occurred within vegetation community CLP-EW1 (Section 4.2.2). The location of *Eutaxia lasiocalyx* within the survey area is shown in Figure 4-4.





Plate 4-1: Eutaxia lasiocalyx (P2) within the Crossroads survey area





Figure 4-4: Significant flora within the survey area



4.2.2 Vegetation Communities

A total of two broad-scale vegetation communities were identified within the survey area. Vegetation community descriptions and extent are listed below in Table 4-7 and illustrated spatially in Figure 4-5. Vegetation community descriptions and extents were determined from field survey results, aerial imagery interpretation and extrapolation of the communities.

The survey found CLP-MWS1 was the most widespread community in the survey area, occupying 13.5 ha (58.7%), while CLP-EW1 was the most restricted with 9.5 ha (41.3%). The most diverse vegetation type was CLP-EW1 with 70 species (89.7%), while the least diverse was CLP-MWS1 with 30 species (38.5%).



Table 4-7: Vegetatio	n communities v	within the survey	area
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Vegetation Code	NVIS Major Vegetation Group	Vegetation Type	Landform	Image
CLP-EW1 9.5 ha (41.3%)	<i>Eucalyptus</i> woodland	<i>Eucalyptus salmonophloia</i> woodland over <i>Eucalyptus cylindrocarpa</i> and <i>E. eremophila</i> tall mallee shrubland over <i>Acacia maculata, Acacia</i> <i>densifolia</i> and <i>Eremophila drummondii</i> shrubland	Clay-loam plain	
CLP-MWS1 13.5 ha (58.7%)	<i>Eucalyptus</i> mallee woodland	<i>Eucalyptus polita</i> and <i>E. urna</i> mallee woodland over <i>Melaleuca pauperiflora</i> tall shrubland over <i>Acacia</i> <i>merrallii, A. tetragonophylla and A. deficiens</i> shrubland	Clay-loam plain	



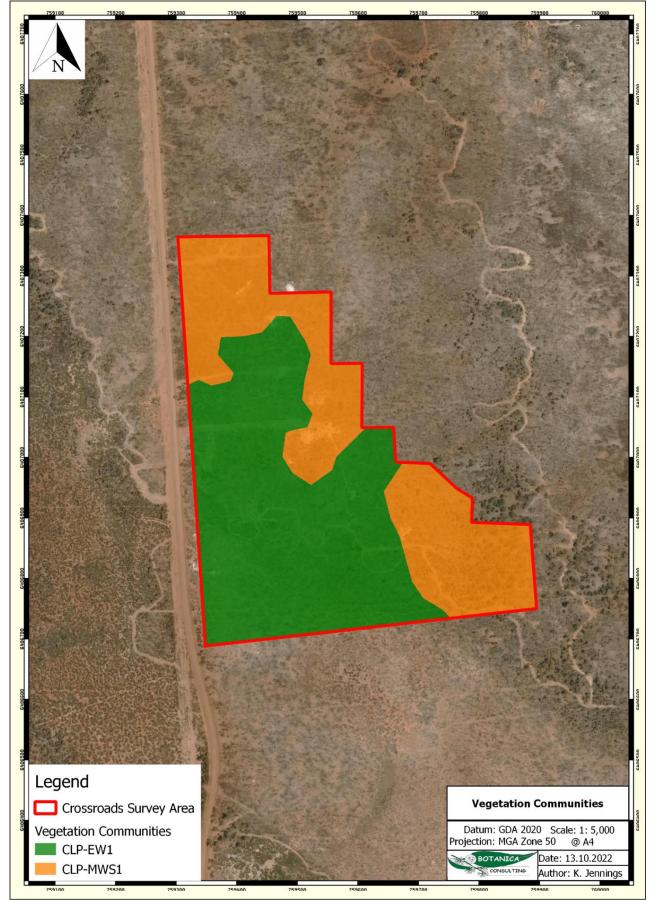


Figure 4-5: Vegetation communities within the survey area



4.2.3 Vegetation Condition

Based on the vegetation condition rating scale adapted from Keighery (1994) and Trudgen, (1988), native vegetation within the survey area was categorized as 'very good' to 'good' (Table 4-8, Figure 4-6). Vegetation condition rating descriptions are listed in Appendix F. Disturbances within the survey area included access tracks, and recent fire events. No significant ground-disturbance activities or weed presence was observed within the survey area, and vegetation within the survey area is expected to achieve 'very good' condition after recovery from the fire event.

Condition rating	Description	Area (ha)	Area (%)
Very Good	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.	4.1	17.87
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.		82.2
TOTAL			100

Table 4-8: Vegetation condition rating within the survey area

Forrestania Resources Ltd. Crossroads Project



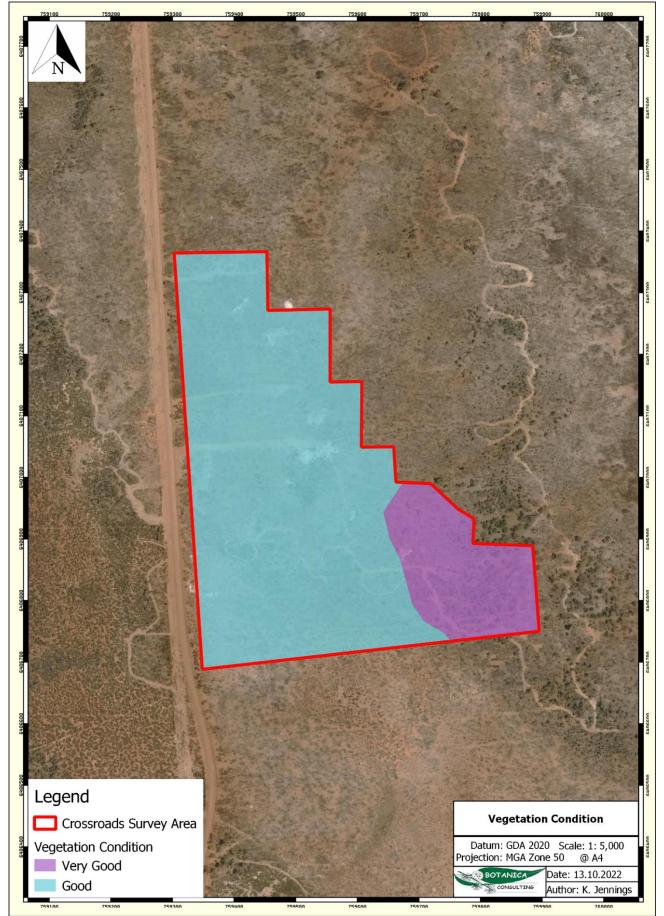


Figure 4-6: Vegetation condition within the survey area



4.2.4 Significant Vegetation

According to the EPA *Environmental Factor Guideline for Flora and Vegetation* (EPA, 2016b) significant vegetation includes:

- vegetation being identified as threatened or priority ecological communities;
- vegetation with restricted distribution;
- vegetation subject to a high degree of historical impact from threatening processes;
- vegetation which provides a role as a refuge; and
- vegetation providing an important function required to maintain ecological integrity of a significant ecosystem.

No Threatened, Priority or otherwise significant ecological communities were identified within the survey area. Although the survey area is located within the mapped buffer of the *Ironcap Hills vegetation assemblages* ecological community, vegetation within the survey area was not considered representative of this community.

4.2.5 Fauna Habitat

Based on vegetation and associated landforms identified during the flora and vegetation assessment, two broad scale terrestrial fauna habitats were identified as occurring within the survey area. Table 4-7 provides the area and a visual representation of fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-7.

The survey found '*Eucalyptus* mallee woodland on clay-loam plain' was the most widespread fauna habitat in the survey area, occupying 13.5 ha (58.7%), while '*Eucalyptus* woodland on clay-loam plain' was the most restricted with 9.5 ha (41.3%).

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01033102031110/00	Table 4-9: Main terrestrial fauna habitats within the survey area					
Fauna Habitat	Description	Representative Fauna Attributes	Possibly Occurring Conservation Significant Species	Example Image		
<i>Eucalyptus</i> woodland on clay-loam plain 9.5 ha (41.3%)	<i>Eucalyptus</i> woodland on clay- loam plain	 Ground not particularly suited to burrowing species. Low to moderate diversity vegetation strata supporting avifauna assemblage. Low to moderate vegetation density and low leaf litter. 	Malleefowl <i>Leipoa ocellata</i> Grey Falcon <i>Falco hypoleucos</i> Peregrine Falcon <i>Falco peregrinus</i>			
<i>Eucalyptus</i> mallee woodland on clay-loam plain 13.5 ha (58.7%)	<i>Eucalyptus</i> mallee woodland on clay- loam plain	 Ground not particularly suited to burrowing species. Moderate diversity vegetation strata supporting avifauna assemblage. Moderate vegetation density and low leaf litter. 	Malleefowl <i>Leipoa ocellata</i> Grey Falcon <i>Falco hypoleucos</i> Peregrine Falcon <i>Falco peregrinus</i>			



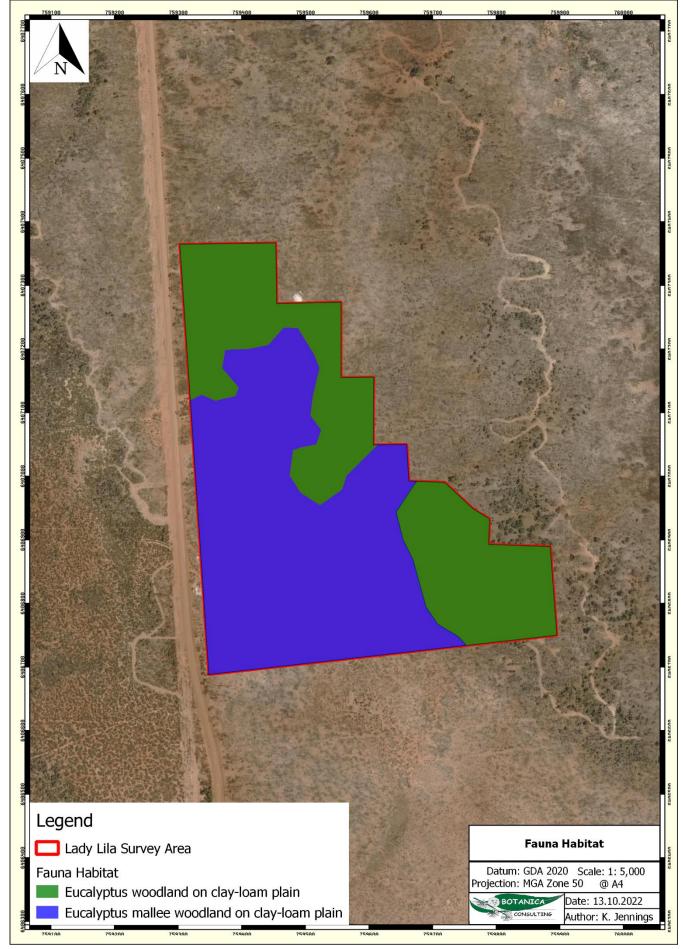


Figure 4-7: Fauna habitats within the survey area



4.2.6 Significant Fauna

According to the EPA *Environmental Factor Guideline for Terrestrial Fauna* (EPA, 2016c) significant fauna includes:

- Fauna being identified as a Threatened or Priority species;
- Fauna species with restricted distribution;
- Fauna subject to a high degree of historical impact from threatening processes; and
- Fauna providing an important function required to maintain the ecological integrity of a significant ecosystem.

No significant fauna were recorded within the survey area. No Malleefowl mounds or other evidence of Malleefowl activity (incl. tracks, feathers, direct bird observations) were identified during the field survey.

The current status of some species on site and/or in the general area is difficult to determine, however, based on the habitats present and, in some cases, direct observations or recent nearby records, the following species of conservation significance can be regarded as possibly utilising the survey area for some purpose at times, these being:

• Malleefowl (Leipoa ocellata) - Vulnerable (EPBC Act and BC Act)

This species is occasionally recorded in the Southern Cross subregion. Habitat appears marginal/or unsuitable for breeding, however occasional transients could potentially occur. No evidence of malleefowl activity (inactive or active mounds, tracks, feathers or bird observations etc.) were observed within the survey area. Significant impact unlikely.

• Grey Falcon (*Falco hypoleucos*) - Vulnerable (EPBC Act and BC Act)

This species is sparsely recorded throughout inland Australia. Suitable habitat may be present but is unlikely to represent critical habitat. No suitable nesting sites were observed during the field survey. The species may inhabit the area as part of its larger home range. Significant impact unlikely.

Carnaby's Cockatoo (*Calyptorhynchus latirostris*) – Endangered (EPBC Act and BC Act)

This species range extends throughout the south-west, south coast and wheatbelt regions of Western Australia. Eucalyptus woodlands within the survey area may provide breeding habitat for this species; however, no suitable nesting hollows were observed during the field survey. Clearing of significant trees (>500 mm d.b.h.) may cause local impacts to habitat for this species but are unlikely to significantly affect the long-term viability of this species.

• Chuditch (*Dasyurus geoffroii*) - Vulnerable (EPBC Act and BC Act)

This species range is occasionally recorded in the local region, but populations are very scattered and of low density. Vegetation within the survey area may comprise part of the home range of individuals but are unlikely to represent critical habitat. Significant impact unlikely.

• Peregrine Falcon (Falco peregrinus) – Specially Protected (EPBC Act)

This species is recorded throughout Australia. No suitable nesting sites were observed during the field survey. The species may inhabit the area as part of its larger home range. Significant impact unlikely.

It should be noted that while habitats onsite for one or more of the species listed above are considered possibly suitable, some or all may be marginal in extent/quality and therefore the fauna species considered as possibly occurring may in fact only visit the area for short periods as infrequent vagrants.



4.3 Matters of National Environmental Significance

4.3.1 Environment Protection and Biodiversity Conservation Act 1999

The EPBC Act protects matters of national environmental significance and is used by the Commonwealth Department of Climate Change, Energy, the Environment and Water (DCEEW) to list threatened taxa and ecological communities into categories based on the criteria set out in the Act (<u>www.environment.gov.au/epbc/index.html</u>). The Act provides a national environmental assessment and approval system for proposed developments and enforces strict penalties for unauthorised actions that may affect matters of national environmental significance. Matters of national environmental significance as defined by the Commonwealth EPBC Act include:

- Nationally threatened flora and fauna species;
- World heritage properties;
- National heritage places;
- Wetlands of international importance (often called 'Ramsar' wetlands after the international treaty under which such wetlands are listed);
- Nationally threatened ecological communities;
- Commonwealth marine area;
- The Great Barrier Reef Marine Park; and
- Nuclear actions (including uranium mining) a water resource, in relation to coal seam gas development and large coal mining development.

No Matters of National Environmental Significance were identified within the survey area.



4.4 Matters of State Environmental Significance.

4.4.1 Environmental Protection Act WA 1986

The EP Act provides for the prevention, control and abatement of pollution and environmental harm, for the conservation, preservation, protection, enhancement and management of the environment. The Act is administered by The Department of Water and Environment Regulation (DWER), which is the State Government's environmental regulatory agency.

Under Section 51C of the EP Act and the *Environmental Protection (Clearing of Native Vegetation) Regulations (Regulations) WA 2004* any clearing of native vegetation in Western Australia that is not eligible for exemption under Schedule 6 of the *EP Act 1986* or under the Regulations 2004 requires a clearing permit from the DWER or DMIRS. Under Section 51A of the *EP Act 1986* native vegetation includes aquatic and terrestrial vegetation indigenous to Western Australia, and intentionally planted vegetation declared by regulation to be native vegetation, but not vegetation planted in a plantation or planted with commercial intent. Section 51A of the *EP Act 1986* defines clearing as "the killing or destruction of; the removal of; the severing or ringbarking of trunks or stems of; or the doing of substantial damage to some or all of the native vegetation in an area, including the flooding of land, the burning of vegetation, the grazing of stock or an act or activity that results in the above". Exemptions under Schedule 6 of the EP Act and the EP Regulations do not apply in ESAs as declared under Section 51B of the EP Act or TEC listed under State and Commonwealth legislation.

No Matters of State Environmental Significance were identified within the survey area.

4.4.2 Biodiversity Conservation Act 2016

This Act is used by the Western Australian DBCA for the conservation and protection of biodiversity and biodiversity components in Western Australia and to promote the ecologically sustainable use of biodiversity components in the State. Taxa are classified as 'Threatened" when their populations are geographically restricted or are threatened by local processes (see following sections for Threatened definitions). Under this Act all native flora and fauna are protected throughout the State. Financial penalties are enforced under this Act if threatened species are collected without an appropriate license.

Under Section 54(1) of the BC Act, habitat is eligible for listing as critical habitat if:

- a) it is critical to the survival of a threatened species or a threatened ecological community; and
- b) its listing is otherwise in accordance with the ministerial guidelines.

No threatened species or critical habitat listed under the BC Act were recorded within the survey area.



4.5 Other Areas of Conservation Significance

The survey area is located within an Environmentally Sensitive Area buffer associated with the Lake Cronin Nature Reserve.

There are no wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

There are no proposed nor gazetted conservation reserves within the survey area.

There are no DBCA managed or DBCA lands of interest located within the survey area.

The closest area of conservation significance is the Lake Cronin Nature Reserve, gazetted with the Conservation Council of WA for the purpose of conservation of flora and fauna and also categorised as an Environmentally Sensitive Area. The EPA has proposed an expansion of the Lake Cronin Reserve to support conservation management at a regional level in support of the Great Western Woodlands conservation strategy. The survey area is located within this proposed reserve expansion area, and ground-disturbance activities within the survey area may impact conservation values associated with the proposed expanded reserve.

Both proposed and gazetted conservation reserves are managed by DBCA, with gazetted conservation reserves vested with the Conservation and Parks Commission of Western Australia. The Conservation and Parks Commission is an independent statutory authority that was established under the Conservation and Land Management (CALM) Act 1984 in November 2000 and is the controlling body in which the State's conservation estate, including national parks, conservation parks, nature reserves, state forests and timber reserves, are vested. The Conservation and Parks Commission develops policies and provides independent advice to the Minister for Environment with respect to conservation, the management of ecological biodiversity and the application of ecologically sustainable forest management. The DBCA manages land on behalf of the Conservation and Parks Commission.

The location of proposed and gazetted conservation reserves, ESA's and Nationally Important Wetlands in relation to the survey area is provided in Figure 4.3.



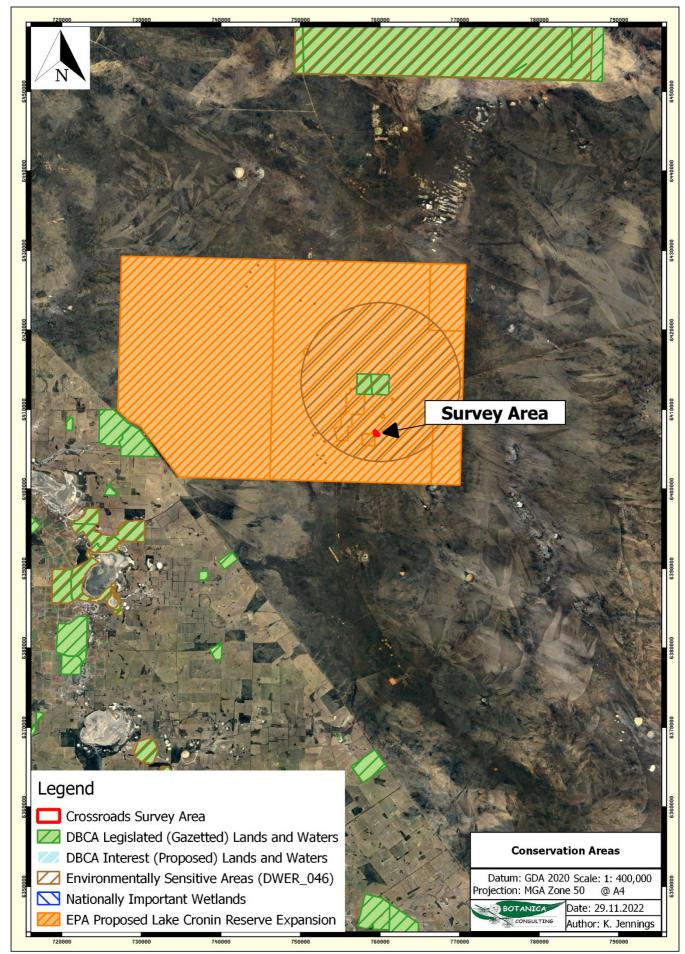


Figure 4-8: Areas of conservation significance



4.6 Native Vegetation Clearing Principles

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act (Table 4-10). The assessment found that the proposed vegetation clearing activities may be at variance with clearing principles (f) and (h).

Letter	Principle		
Native v	egetation should not be cleared if it:	Assessment	Outcome
(a)	comprises a high level of biological diversity.	Vegetation within the survey area is considered to be of low biological diversity and is well represented outside the survey area. No Threatened, Priority or otherwise significant	Clearing is unlikely to be at variance with this principle
		flora or ecological communities were identified within the survey area.	
(b)	comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to WA.	The basic fauna search did not record any evidence for the presence of significant fauna or habitat within the survey area.	Clearing is unlikely to be at variance with this principle
(c)	includes, or is necessary for the continued existence of rare flora.	No Threatened Flora taxa, pursuant to the BC Act and the EPBC Act were identified within the survey area.	Clearing is unlikely to be at variance with this principle
(d)	comprises the whole or part of or is necessary for the maintenance of a threatened ecological community (TEC).	No Threatened Ecological Communities were identified as potentially occurring within the survey area.	Clearing is unlikely to be at variance with this principle
(e)	is significant as a remnant of native vegetation in an area that has been extensively cleared	The Forrestania 511 vegetation association retains over 99% of its Pre-European extent.	Clearing is unlikely to be at variance with this principle
(f)	is growing, in, or in association with, an environment associated with a watercourse or wetland	One ephemeral water body was identified within the survey area.	Clearing may be at variance with this principle
(g)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.	The survey area and surrounding region has not been extensively cleared. Clearing within the survey area is not considered likely to lead to land degradation issues such as salinity, water logging or acidic soils.	Clearing is unlikely to be at variance with this principle
(h)	Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.	Clearing within the survey area may impact environmental values within the proposed expansion envelope of Lake Cronin Nature Reserve.	Clearing may be at variance with this principle
(i)	Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.	No ephemeral drainage lines were identified within the survey area. Clearing activities are unlikely to impact hydrological systems.	Clearing is unlikely to be at variance with this principle
(j)	Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding	Rainfall in the Southern Cross subregion is characterized as arid to semi-arid Warm Mediterranean, with 250-300 mm of winter- dominant rainfall. Clearing within the survey area is not likely to increase the incidence or intensity of flooding within the survey area or surrounds.	Clearing is unlikely to be at variance with this principle



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APPENDIX A: CONSERVATION RATINGS BC ACT AND EPBC ACT

Definitions of Conservation Significant Species

Code	Category					
State categories	s of Threatened and Priority species					
Threatened Species (T)						
under section 19	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).					
	Critically Endangered					
CR	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.					
	Endangered					
	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".					
EN	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.					
	Vulnerable					
VU	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	of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.					
Listed by order t	Extinct					
EX	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 <i>Wildlife Conservation (Specially Protected Fauna) Notice 2018</i> for extinct fauna or the <i>Wildlife Conservation (Rare Flora) Notice 2018</i> for extinct flora.					
	Extinct in the Wild 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					
EW	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 protect						
the following cate	of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of egories: species of special conservation interest; migratory species; cetaceans; species subject 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.					
IA	International Agreement/ Migratory 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 <i>Convention on the Conservation of Migratory Species of Wild Animals</i> (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 <i>Wildlife Conservation (Specially Protected Fauna) Notice 2018.</i>					



Project	
Code	Category
CD	Species of special conservation interest 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 <i>Wildlife Conservation</i> (<i>Specially Protected Fauna</i>) 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 <i>Wildlife Conservation</i> (<i>Specially Protected Fauna</i>) Notice 2018.
Priority Fauna Priority for surv	s ened species that do not meet survey criteria, or are otherwise data deficient, are added to the or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order o ey and evaluation of conservation status so that consideration can be given to their declaration Fauna or Flora.
have been rece taxonomic reas	e adequately known, are rare but not threatened, or meet criteria for near threatened, or that ntly removed from the threatened species or other specially protected fauna lists for other that ons, are placed in Priority 4. These species require regular monitoring.
	Priority codes is based on the Western Australian distribution of the species, unless the /A is part of a contiguous population extending into adjacent States, as defined by the known ons.
	Priority 1: Poorly-known species
P1	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, graver 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.
P2	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 bu 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.
P3	Priority 3: Poorly-known species Species that are known from several locations, and the species does not appear to be unde imminent threat, or from few but widespread locations with either large population size o significant remaining areas of apparently suitable habitat, much of it not under imminen 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.
P4	 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.
Com <u>monwealt</u>	h categories of Threatened species
EX	Extinct Taxa where there is no reasonable doubt that the last member of the species has died.
EW	Extinct in the Wild Taxa where it 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.
CR	Critically Endangered Taxa that are 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 are not critically endangered and is facing a very high risk of extinction in the wile in the near future, as determined in accordance with the prescribed criteria.



Code	Category
VU	Vulnerable Taxa which are 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.
CD	Conservation DependentTaxa which are the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or (b) the following subparagraphs are satisfied:(i)the species is a species of fish;(ii)the species is the focus of a plan of management that provides for actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised;(iii)the plan of management is in force under a law of the Commonwealth or of a State or Territory;(iv)cessation of the plan of management would adversely affect the conservation status of the species.

Category	Definitions of conservation significant communities
Code	Category
State catego	ries of Threatened Ecological Communities (TEC)
	Presumed Totally Destroyed
	An ecological community will be listed as Presumed Totally Destroyed if there are no recent records of the community being extant and either of the following applies:
PD	 records within the last 50 years have not been confirmed despite thorough searches or known likely habitats or;
	all occurrences recorded within the last 50 years have since been destroyed.
	Critically Endangered
	An ecological community will be listed as Critically Endangered when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one of the following criteria:
CR	The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification;
	The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area;
	The ecological community is highly modified with potential of being rehabilitated in the immediate future.
	Endangered
	An ecological community will be listed as Endangered when it has been adequately surveyed and is not Critically Endangered but is facing a very high risk of total destruction in the near future. The ecological community must meet any one of the following criteria:
EN	The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short-term future, or is unlikely to be substantially rehabilitated in the short-term future due to modification;
	The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area;
	The ecological community is highly modified with potential of being rehabilitated in the short-term future.
	Vulnerable
	An ecological community will be listed as Vulnerable when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one of the following criteria:
VU	The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated;
	The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution;
	The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Definitions of conservation significant communities



ads Project	
Category Code	Category
Commonwea	alth categories of Threatened Ecological Communities (TEC)
CE	Critically Endangered If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).
EN	Endangered If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).
VU	Vulnerable If, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).
Priority Ecol	ogical Communities
	Poorly-known ecological communities
P1	Ecological communities with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist.
	Poorly-known ecological communities
P2	Communities that are known from few small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, un-allocated Crown land, water reserves, etc.) and not under imminent threat of destruction or degradation.
	Poorly known ecological communities
P3	Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or: Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or;
	Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Ecological communities that are adequately known, rare but not threatened or meet criteria for near threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.
	Conservation Dependent ecological communities
P5	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.



APPENDIX B: POTENTIALLY OCCURRING INTRODUCED (WEED) FLORA SPECIES

Family	Taxon	Vernacular Name	WAOL Status	Control Category	WONS
Aizoaceae	Mesembryanthemum crystallinum	Crystalline Ice Plant	Permitted - s11	No Control Category	No
Aizoaceae	Mesembryanthemum nodiflorum	Small Ice-plant	Permitted - s11	No Control Category	No
Araceae	Landoltia punctata	Thin Duckweed	Permitted - s11	No Control Category	No
Asteraceae	Arctotheca calendula	Cape Weed	Permitted - s11	No Control Category	No
Asteraceae	Centaurea melitensis	Maltese Cockspur	Permitted - s11	No Control Category	No
Asteraceae	Cotula bipinnata	Ferny Cotula	Permitted - s11	No Control Category	No
Asteraceae	Cotula coronopifolia	Water-buttons	Permitted - s11	No Control Category	No
Asteraceae	Hypochaeris glabra	Smooth Catsear	Permitted - s11	No Control	No
Asteraceae	Monoculus monstrosus	-	Permitted -	Category No Control	No
Asteraceae	Sonchus oleraceus	Common Sow-	s11 Permitted -	Category No Control	No
Asteraceae	Ursinia anthemoides	thistle Ursinia	s11 Permitted -	Category No Control	No
Brassicaceae	Brassica tournefortii	Mediterranean	s11 Permitted -	Category No Control	No
Brassicaceae	Rorippa nasturtium-aquaticum	Turnip Watercress	s11 Permitted -	Category No Control	No
			s11 Permitted -	Category No Control	-
Caryophyllaceae	Stellaria pallida	Lesser Chickweed	s11 Permitted -	Category No Control	No
Fabaceae	Medicago sativa	Alfalfa	s11 Permitted -	Category No Control	No
Fabaceae	Trifolium arvense var. arvense	Hare's-foot Clover	s11 Permitted -	Category No Control	No
Fabaceae	Trifolium campestre Trifolium tomentosum var.	Hop Clover	s11 Permitted -	Category No Control	No
Fabaceae	tomentosum	Woolly Clover Common Heron's-	s11 Permitted -	Category No Control	No
Geraniaceae	Erodium cicutarium	bill	s11	Category	No
Orobanchaceae	Parentucellia latifolia	Common Bartsia	Permitted - s11	No Control Category	No
Plantaginaceae	Plantago coronopus	Cut-leaved Plantain	Permitted - s11	No Control Category	No
Poaceae	Aira caryophyllea	Silvery Hairgrass	Permitted - s11	No Control Category	No
Poaceae	Avellinia festucoides	-	Permitted - s11	No Control Category	No
Poaceae	Bromus catharticus	Prairie Grass	Permitted - s11	No Control Category	No
Poaceae	Bromus rubens	Red Brome	Permitted - s11	No Control Category	No
Poaceae	Ehrharta longiflora	Annual Veldt Grass	Permitted - s11	No Control Category	No
Poaceae	Hordeum leporinum	Barley Grass	Permitted - s11	No Control Category	No
Poaceae	Lolium rigidum	Wimmera Rye Grass	Permitted - s11	No Control Category	No
Poaceae	Parapholis incurva	Curley Barb Grass	Permitted - s11	No Control Category	No
Poaceae	Pentameris airoides	False Hairgrass	Permitted - s11	No Control Category	No
Poaceae	Rostraria cristata	Annual Cat's Tail	Permitted -	No Control	No
Poaceae	Rostraria pumila	Roughtail	s11 Permitted -	Category No Control	No
Poaceae	Schismus barbatus	Arabian Grass	s11 Permitted -	Category No Control	No



Family	Taxon	Vernacular Name	WAOL Status	Control Category	WONS
Poaceae	Vulpia bromoides	Silver Grass	Permitted - s11	No Control Category	No
Primulaceae	Lysimachia arvensis	Pimpernel	Permitted - s11	No Control Category	No



APPENDIX C: SIGNIFICANT FLORA LIKELIHOOD ASSESSMENT

Status			_		_	
EPBC	BC Act	DBCA	Taxon	Habitat	Assessment	Likelihood
EN	VU	-	Acacia lanuginophylla	White/grey sand, clayey sand, gravelly soils. Flats, along drainage lines.	Habitat unlikely to be present	Unlikely
VU	VU	-	Banksia sphaerocarpa var. dolichostyla			Possible
EN	VU	-	Boronia revoluta	Stony sandy loam or sand. Plains, hillsides & summits.	Within known range, habitat unlikely to be present	Unlikely
VU	VU	-	Calectasia pignattiana	Sand to sandy clay over granite or laterite, gravel. Plains and gentle slopes.	Outside known range of species	Unlikely
EN	CR	-	Eremophila verticillata	Clay loam, loam over limestone.	Outside known range of species	Unlikely
EN	VU	-	Eucalyptus recta	Sandy laterite.	Outside known range of species	Unlikely
VU	VU	-	Eucalyptus steedmanii	Gravelly loam over ironstone, sand. Low hills, undulating plains.	Outside known range of species	Unlikely
EN	EN	-	Grevillea involucrata	Gravelly sand.	Outside known range of species	Unlikely
CR	VU	-	Paragoodia crenulata	Loam gravels over laterite. Hill slopes and crests	Outside known range of species	Unlikely
EN	VU	-	Roycea pycnophylloides	Sandy soils, clay. Saline flats.	At extreme of known range, habitat unlikely to be present	Unlikely
VU	VU	-	<i>Tetratheca aphylla</i> subsp <i>. aphylla</i>	Red-brown loam, sandy loam, banded ironstone. Crevices in cliffs and outcrops, slopes, valleys, ridges.	Outside known range of species	Unlikely
х	Х	-	Thomasia gardneri	-	Presumed to be extinct	Unlikely
VU	VU	-	Tribonanthes purpurea	Seasonally wet soils in moss swards & herbfields among granite rocks.	Outside known range of species	Unlikely
EN	VU	-	Verticordia staminosa var. cylindracea	Soil pockets. Granite outcrops.	Within known range, habitat unlikely to be present	Unlikely
-	-	P1	Acacia tetraneura	Clay & lateritic gravel. Ridges & low rises.	Outside known range of species	Unlikely
-	-	P1	<i>Alyogyne</i> sp. Hyden (G.S. Durell GD 127)	-	Outside known range of species	Unlikely
-	-	P1	Aotus lanea	Grey clayey sand, yellow clay, deep siliceous sand. Edges of salt lakes, valleys.	Outside known range of species	Unlikely
-	-	P1	Austrostipa everettiana	-	Outside known range of species	Unlikely
-	-	P1	Balaustion multicaule	-	Outside known range of species	Unlikely
-	-	P1	<i>Balaustion</i> sp. North Ironcap (R.J. Cranfield 10580)	Hill slopes and crests	Within known range, habitat unlikely to be present	Unlikely
-	-	P1	Beyeria opaca	Red sandy clay. Dunes, slopes.	Widespread, scattered, habitat unlikely to be present	Unlikely
-	-	P1	Brachyloma nguba	White to brown sandy clay, shallow Within known rate		Possible
-	-	P1	Dampiera scaevolina	ra pagavalina Sandy & gravally paila Outsi		Unlikely
-	-	P1	Dicrastylis capitellata	Within known range,		Possible
-	-	P1	Eremophila lucida	Clay loam, sandy loam. Adjacent to samphire flats & granite outcrops.	Outside known range of species	Unlikely



	Status		_			
EPBC	BC Act	DBCA	Taxon	Habitat	Assessment	Likelihood
-	- -	P1	<i>Eutaxia</i> sp. North Ironcap. (Armstrong PA 06/898)	-	Outside known range of species	Unlikely
-	-	P1	Gastrolobium tenue	Yellow sand or sandy clay. Undulating dunes, stony outcrops.	Outside known range of species	Unlikely
-	-	P1	Grevillea lissopleura	Stony loam on banded ironstone. On ridges.	Outside known range of species	Unlikely
-	-	P1	Grevillea lullfitzii	Lateritic soils, shallow soils on granite.	Outside known range of species	Unlikely
-	-	P1	Grevillea marriottii	Yellow or white sand over laterite. On rises or on tops of lateritic cappings.	Within known range, habitat unlikely to be present.	Unlikely
-	-	P1	Guichenotia anota	Sandy, loamy gravel. Undulating land.	Outside known range of species	Unlikely
-	-	P1	<i>Hemigenia</i> sp. Newdegate (E. BishoP75)	Clay loam. Rocky hills, breakaways.	Within known range, habitat unlikely to be present	Unlikely
-	-	P1	Hibbertia axillibarba	Lateritic soil. Ranges.	Outside known range of species	Unlikely
-	-	P1	Hibbertia tuberculata	Red clay. Hill crests, undulating plains.	Outside known range of species	Unlikely
-	-	P1	Hysterobaeckea pterocera	Red clay. Hill slopes and ridges.	Within known range, habitat unlikely to be present	Unlikely
-	-	P1	Labichea rossii	-	Outside known range of species	Unlikely
-	-	P1	Lepidosperma amantiferrum	Yellow sandy loam with banded ironstone gravel and rocks. Gentle lower slopes.	Outside known range of species	Unlikely
-	-	P1	Lepidosperma ferriculmen	Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes.	Within known range, habitat unlikely to be present.	Unlikely
-	-	P1	Microcorys elatoides	-	Outside known range of species	Unlikely
-	-	P1	Microcorys wilsoniana	-	Outside known range of species	Unlikely
-	-	P1	Mirbelia taxifolia	Red or yellow sand.	Outside known range of species	Unlikely
-	-	P1	Scaevola tortuosa	Sandy clay. Margins of salt lakes.	Within known range, habitat unlikely to be present	Unlikely
-	-	P1	Stenanthemum liberum	Yellow sandy loam over laterite.	Within known range, habitat may be present	Possible
-	-	P1	Stylidium validum	Clayey sand or loam, ironstone, greenstone gravel. Hillslopes and hilltops. Eucalypt woodland, mallee shrubland.	Outside known range of species	Unlikely
-	-	P1	Thryptomene salina	Deep alluvial sand. On a flat along a saline creek.	Outside known range of species	Unlikely
-	-	P1	Thysanotus Iavanduliflorus	Sand, sandy loam.	Outside known range of species	Unlikely
-	-	P2	Acacia asepala	Red-brown sandy loam. Undulating plains, along drainage lines.	Within known range, habitat may be present	Possible
-	-	P2	Acacia heterochroa subsp. robertii	Gravelly lateritic soils. Hilltops & ridges.	At extreme of known range, habitat unlikely to be present	Unlikely
-	-	P2	Acacia kerryana	Granitic loamy sand, stony clayey loam or clayey sand. Low stony ridges, undulating plains.	At extreme of known range, habitat may be present	Possible
-	-	P2	Balaustion grandibracteatum subsp. juncturum	-	Within known range	Possible
-	-	P2	Balaustion grandibracteatum subsp. juncturum	Hills, undulating landscape	Within known range, habitat may be present	Possible
-	-	P2	Balaustion thamnoides	-	Outside known range of species	Unlikely



	Status					
EPBC	BC	DBCA	Taxon	Habitat	Assessment	Likelihood
-	Act -	P2	Bentleya diminuta	Sandy clay or loam with calcareous nodules.	Widespread, scttered records	Unlikely
-	-	P2	Boronia westringioides	Yellow sand, undulating plains	Outside known range of species	Unlikely
-	-	P2	Conospermum sigmoideum	Yellow sand.	Within known range, habitat unlikely to be present	Unlikely
-	-	P2	Cyanothamnus westringioides	Yellow sand, undulating plains	Outside known range of species	Unlikely
-	-	P2	Dampiera orchardii	Sand.	Widespread, scattered records	Unlikely
-	-	P2	Dicrastylis obovata	Yellow sand, sandy loam. Ridges and low dunes.	Outside known range of species	Unlikely
-	-	P2	Eutaxia hirsuta	-	Scattered records, at extreme of known range	Unlikely
-	-	P2	Eutaxia lasiocalyx	Red sandy loam, laterite and quartz gravel. Gentle lower slopes.	Outside known range of species	Unlikely
-	-	P2	Guichenotia asteriskos	Sandy clay or loam with gravel.	At extreme of known range	Unlikely
-	-	P2	<i>Halgania</i> sp. Peak Eleanora (M.A. Burgman 3547 B)	Loamy sand. Undulating plains.	Outside known range of species	Unlikely
-	-	P2	Hydrocotyle papilionella	-	Outside known range of species	Unlikely
-	-	P2	<i>Microcorys</i> sp. Parker Range (C. Hancock s.n. PERTH 09215123)	-	Outside known range of species	Unlikely
-	-	P2	Olearia laciniifolia	White sand. Around playa lakes.	Widespread range, habitat unlikely to be present	Unlikely
-	-	P2	Orianthera exilis	Brown lateritic soils and sands. Hills, heaths.	Within known range, habitat unlikely to be present.	Unlikely
-	-	P2	Stylidium thylax	Sand. Gentle slopes and plains. Heath, mallee shrubland.	Outside known range of species	Unlikely
-	-	P2	Verticordia multiflora subsp. solox	Yellow sand over gravel, sand over granite.	Outside known range of species	Unlikely
-	-	P3	Acacia repanda	Loam, sandy or gravelly loam. Near granite outcrops.	At extreme of known range, habitat unlikely to be present	Unlikely
-	-	P3	Acacia singula	Gravelly sand over laterite, white or yellow sand. Rises, hilltops.	At extreme of known range, habitat unlikely to be present	Unlikely
-	-	P3	Adenanthos gracilipes	White sand.	Outside known range of species	Unlikely
-	-	P3	Anticoryne melanosperma	-	Outside known range of species	Unlikely
-	-	P3	Austrostipa turbinata	-	Widespread, scattered range	Unlikely
-	-	P3	Banksia rufa subsp. flavescens	Sandy loam or sand with gravel.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Banksia viscida	Gravelly soils. Lateritic rises.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Boronia ternata var. promiscua	Yellow sandy clay, laterite. Mallee, heath.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Calytrix nematoclada	At extreme of known		Unlikely
-	-	P3	Chorizema circinale	Yellow sand, sandy clay with gravel. Flats, margin of gravel pit.	Outside known range of species	Unlikely
-	-	P3	Comesperma calcicola	Calcareous or semi-saline clay loams, limestone. Areas around saline water.	Widespread, scattered range, habitat unlikely to be present	Unlikely



	Status		_			
EPBC	BC	DBCA	Taxon	Habitat	Assessment	Likelihood
-	Act -	P3	<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Sand. Sandplains.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Daviesia implexa	Gravels, sands. Plains.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Dillwynia acerosa	Gravelly clay with laterite.	Outside known range of species	Unlikely
-	-	P3	Elatine macrocalyx	Shallow sands over clay. Margins of playa lakes and clay pans.	At extreme of widespread range, habitat unlikely to be present.	Unlikely
-	-	P3	Eucalyptus exigua	Sandy loam, white sand. Sandplains.	Within known range, habitat may be present	Possible
-	-	P3	Eucalyptus histophylla	Sandy loam on granite or laterite. Granite outcrops.	Outside known range of species	Unlikely
-	-	P3	Eutaxia acanthoclada	Light brown sandy clay, shallow sandy loam, red clay over banded ironstone, gravel. Gently undulating plains.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Eutaxia nanophylla	Clayey sand, red clay, stony clayey loam. Low-lying areas, damp flats, slopes, undulating plains, low stony ridges.	Within known range, habitat may be present	Possible
-	-	P3	Eutaxia rubricarina	Gravelly sand, grey to pinkish-white sandy clay, red loam. Flats, slopes, valley floors, road verges.	Within known range, habitat may be present	Possible
-	-	P3	Frankenia drummondii	Sand. Lake edges.	Widespread range, habitat unlikely to be present	Unlikely
-	-	P3	<i>Grevillea insignis</i> subsp. <i>elliotii</i>	Grevillea insignis Gravelly sand or loam over Within known ran		Unlikely
-	-	P3	Grevillea pilosa subsp. redacta	Sand, laterite.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Hakea pendens	Stony loam. Ironstone ridges.	Outside known range of species	Unlikely
-	-	P3	Hibbertia pachyphylla	White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. Undulating plains, low rises, valley floors.	Outside known range of species	Unlikely
-	-	P3	Hydrocotyle eichleri	-	Widespread, scattered records	Unlikely
-	-	P3	Isoetes brevicula	Submerged in rock pools on granitic outcrops.	Habitat unlikely to be present	Unlikely
-	-	P3	Isolepis australiensis	Silty sand, sandy clay. Lake margins, pools.	Habitat unlikely to be present	Unlikely
-	-	P3	<i>Leucopogon</i> sp. Ironcaps (N. Gibson & K. Brown 3070)	Skeletal sand, yellow sandy loam, rocky loam, gravel, laterite, ironstone. Gentle lower slopes, flat uplands, hill tops.	At extreme of known range, habitat unlikely to be present	Unlikely
-	-	P3	Melaleuca macronychia subsp. trygonoides	Sandy soils. Granite outcrops.	Ar extreme of known range, habitat unlikely to be present	Unlikely
-	-	P3	Melaleuca ochroma	-	Outside known range of species	Unlikely
-	-	P3	Mirbelia densiflora	Stony loam, loamy sand. Small ridges, breakaways, undulating plains.	At extreme of known range, habitat may be present	Possible
-	-	P3	Notisia intonsa	Red sands. Burnt areas.	Within known range, habitat may be present	Possible
-	-	P3	Oxymyrrhine plicata	Sandy loams	Within known range, scattered records	Unlikely
-	-	P3	Persoonia cymbifolia	Sandy soils. On flats or in rock crevices.	At extreme of known range	Unlikely



	Status					
EPBC	BC Act	DBCA	Taxon	Habitat	Assessment	Likelihood
-	-	P3	Phebalium brachycalyx	Sand, gravelly soils. Lateritic uplands, hills.	Widespread, scattered range.	Unlikely
-	-	P3	Pityrodia scabra subsp. dendrotricha			Possible
-	-	P3	Pterostylis echinulata	-	At extreme of known range	Unlikely
-	-	P3	Pultenaea daena	White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, in disturbed areas.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Rinzia torquata	Sandplain, low laterite ridges, midslope	Within known range habitat my be present	Possible
-	-	P3	Rinzia triplex	-	Outside known range of species	Unlikely
-	-	P3	Seringia adenogyna	Loam, brown clay, sandy clay	Within known range, habitat may be present	Possible
-	-	P3	Stylidium sejunctum	Clayey sand or loam, laterite. Outcrops, upper slopes, breakaways. Mallee and Allocasuarina shrubland.	Within known range, habitat unlikely to be present	Unlikely
-	-	P3	Teucrium diabolicum	-	Outside known range of species	Unlikely
-	-	P3	Verticordia gracilis	Yellow sand, gravelly sand, sandy loam.	Outside known range of species	Unlikely
-	-	P3	Verticordia stenopetala	Yellow sand, sometimes with gravel. Undulating plains.	Within known range, habitat unlikely to be present	Unlikely
-	-	P4	Eremophila biserrata	Sandy or sandy clay soils Alluvial Hat		Unlikely
-	-	P4	Eremophila inflata	Brown clay loam, ironstone gravel	Within known range, habitat may be present	Possible
-	-	P4	Eremophila racemosa	Sandy or stony loam, clay loam. Undulating plains, roadsides.	Within known range, habitat may be present	Possible
-	-	P4	Eucalyptus cerasiformis	Red loamy soils.	Outside known range of species	Unlikely
-	-	P4	Eucalyptus deflexa	Clay loam, sandy loam, white or yellow sand, often with gravel. Flat areas & slight rises.	Outside known range of species	Unlikely
-	-	P4	Eucalyptus georgei subsp. fulgida	Sandy loam, clayey sand. Slight depressions.	Within known range, habitat unlikely to be present	Unlikely
-	-	P4	Eucalyptus rugulata	Orange laterite gravel. Summits, gentle upland slopes.	Outside known range of species	Unlikely
-	-	P4	Grevillea aneura	Sand, sandy clay, gravel.	Outside known range of species	Unlikely
-	-	P4	Grevillea neodissecta	-	Outside known range of species	Unlikely
-	-	P4	Grevillea prostrata	White, grey or yellow sand, gravel. Sandplains.	Within known range, habitat may be present	Possible
-	-	P4	Gyrostemon ditrigynus	Sand, sandy clay, loam, Plains, low, Within known range,		Possible
-	-	P4	Haegiela tatei	Clay, sandy loam, gypsum. Saline habitats.	Widespread, habitat unlikely to be present	Unlikely
-	-	P4	<i>Microcorys</i> sp. Forrestania (V. English 2004)	Yellow sandy clay or red-brown clay. Open woodland or cleared areas.	Within known range, habitat may be present	Possible
-	-	P4	Stenanthemum bremerense	Orange-brown sandy loam, orange- red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways.	Outside known range of species	Unlikely



APPENDIX D: SIGNIFICANT FAUNA LIKELIHOOD ASSESSMENT

	Conservation Status					
Taxon	EPBC Act	BC Act	DBCA Priority	Habitat Description	Assessment	Likelihood
Night Parrot Pezoporus occidentalis	EN	CR	-	Most habitat records are of Triodia (Spinifex) grasslands and/or chenopod shrublands in the arid and semi-arid zones, or <i>Astrebla</i> spp. (Mitchell grass), shrubby samphire and chenopod associations, scattered trees and shrubs, <i>Acacia aneura</i> (Mulga) woodland, treeless areas and bare gibber are associated with sightings of the species. Roosting and nesting sites are consistently reported as within clumps of dense vegetation, primarily old and large Spinifex (<i>Triodia</i>) clumps, but sometimes other vegetation types (DAWE, 2020b).	Outside known range, no suitable habitat.	Would Not Occur
Carnaby's Cockatoo Calyptorhynchus latirostris	EN	EN	-	Carnaby's Cockatoo is endemic to, and widespread in, the south-west of Western Australia. It occurs from the wheatbelt, in areas that receive between 300 and 750 mm of rainfall annually, across to wetter regions in the extreme south-west, including the Swan Coastal Plain and the southern coast. Its range extends from Cape Arid in the south-east to Kalbarri in the north, and inland to Hatter Hill, Gibb Rock, Narembeen, Noongar, Wongan Hills, Nugadong, near Perenjori, Wilroy and Nabawa.	Outside known range of species.	Unlikely
Grey Falcon Falco hypoleucos	VU	VU	-	The Grey Falcon occurs at low densities across inland Australia. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter.	Survey area may form part of larger home range.	Possible
Malleefowl Leipoa ocellata	VU	VU	-	Scrublands and woodlands dominated by mallee and wattle species (DAWE, 2020b).	Within known range, suitable habitat likely to be present.	Possible
Migratory Shorebirds (Various Species)	IA/MI	IA/MI	-	Prefers muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans and hypersaline salt lakes inland (DAWE, 2020b).	No suitable habitat.	Would Not Occur
Peregrine Falcon Falco peregrinus	-	OS	-	The Peregrine Falcon is found in most habitats, from rainforests to the arid zone, and at most altitudes, from the coast to alpine areas. It requires abundant prey and secure nest sites and prefers coastal and inland cliffs or open woodlands near water, and may even be found nesting on high city buildings (Birdlife Australia, 2018).	Survey area may form part of larger home range but unlikely to breed in area.	Possible
Fork-tailed Swift Apus pacificus	MI	МІ	-	Low to very high airspace over varied habitat from rainforest to semi desert (Birdlife Australia, 2019).	Very occasional aerial transients only.	Unlikely
Grey Wagtail <i>Motacilla cinerea</i>	МІ	-	-	Running water in disused quarries, sandy, rocky streams in escarpments and rainforest, sewerage ponds, ploughed fields and airfields (Morecombe 2004).	No suitable habitat.	Would Not Occur
Chuditch, Western Quoll Dasyurus geoffroii	VU	VU	-	The major portion of the remaining natural populations occur in varying densities in jarrah (<i>Eucalyptus marginata</i>) forests and woodlands in the south-west corner of WA, and in woodlands, mallee shrublands and heaths along the south coast, east to the Ravensthorpe area. There are also occasional records from drier woodland and mallee shrubland in the Wheatbelt and Goldfield Regions.	Very occasionally recorded in the region, suitable habitat may be present.	Possible
Red-tailed Phascogale Phascogale calura	VU	VU	-	The red-tailed phascogale occurs in remnant vegetation in the southern wheatbelt of Western Australia where annual mean rainfall is 400–500 mm. It occurs in the Avon Wheatbelt, Jarrah Forest, Mallee and Esperance Plains IBRA Bioregions and the Avon, Northern Agricultural, Rangelands, South Coast, South West and Swan Natural Resource Management Regions. Confined to woodlands with old-growth hollow-producing	Outside known range of species.	Unlikely

Prepared by Botanica Consulting

APPENDICES 60

Forrestania Resources Ltd.

Crossroads Project



	Conservation Status		Conservation Status		n Status			
Taxon			DBCA Priority	Habitat Description	Assessment	Likelihood		
				eucalypts, particularly Wandoo (<i>Eucalyptus wandoo</i>) and York gum (<i>E. loxophleba</i>), often with associated rock sheoak (<i>Allocasuarina huegeliana</i>), but has also been recorded in shrublands and various mosaics of woodland, shrubland and scrub-heath (Short & Hide, 2012). It does not appear to extend into unfragmented habitat in either the Jarrah Forest to the west or the Mallee Bioregion to the east.				
Heath Mouse Pseudomys shortridgei	EN	VU	-	In Western Australia, the first collection of the species was near Pingelly in the Western Australian wheatbelt (Woinarski et al., 2014). Since 1987, it has been trapped in low numbers in several localities in the southern parts of Western Australia including Reserve No. 31111 (6 km north of Burngup, near Lake Biddy), Dragon Rocks Nature Reserve, Lake Magenta Nature Reserve, Fitzgerald River National Park and the Ravensthorpe Range area (Sanders et al., 2012; WA TSSC 2015). The heath mouse has been trapped mostly in species-rich heath but also in mixed scrub and mallee. The species has not been located in vegetation less than 10 years post-fire and it has been known to attain high densities in heath 30 years post-fire (DPAW 2012; Woinarski et al., 2014).	Within known range, habitat unlikely to be present	Unlikely		



APPENDIX E: LIST OF SPECIES IDENTIFIED WITHIN THE SURVEY AREA

(W) denotes introduced (weed) species; (A) denotes ephemeral (annual) species; (P) denotes Priority species

Family	Taxon	CLP-EW1	CLP-MWS1
Apiaceae	Daucus glochidiatus (A)	*	
Apiaceae	Platysace maxwellii (A)	*	
Asteraceae	Blennospora drummondii	*	
Asteraceae	Olearia muelleri	*	*
Asteraceae	Senecio quadridentatus (A)	*	
Chenopodiaceae	Maireana georgei	*	
Chenopodiaceae	Maireana marginata	*	
Chenopodiaceae	Sclerolaena parviflora	*	
Cupressaceae	Callitris preissii	*	
Dilleniaceae	Hibbertia exasperata	*	
Dilleniaceae	Hibbertia gracilipes	*	*
Dilleniaceae	Hibbertia psilocarpa	*	
Euphorbiaceae	Beyeria sulcata var. sulcata	*	
Fabaceae	Acacia acanthoclada subsp. acanthoclada	*	*
Fabaceae	Acacia densiflora	*	
Fabaceae	Acacia erinacea	*	*
Fabaceae	Acacia maculata	*	
Fabaceae	Acacia merrallii		*
Fabaceae	Acacia tetragonophylla	*	*
Fabaceae	Acacia tetraptera	*	*
Fabaceae	Daviesia aphylla	*	*
Fabaceae	Daviesia scoparia	*	
Fabaceae	Dillwynia divaricata	*	
Fabaceae	Euryomyrtus leptospermoides	*	
Goodeniaceae	Scaevola spinescens		*
Hemerocallidaceae	Dianella revoluta	*	*
Lamiaceae	Westringia cephalantha	*	
Lauraceae	Cassytha melantha	*	*
Myrtaceae	Beaufortia schaueri	*	
Myrtaceae	Eucalyptus calycogona subsp. calycogona	*	
Myrtaceae	Eucalyptus cylindrocarpa	*	
Myrtaceae	Eucalyptus eremophila	*	
Myrtaceae	Eucalyptus flocktoniae subsp. flocktoniae	*	
Myrtaceae	Eucalyptus incerata	*	*
Myrtaceae	Eucalyptus neutra		*
Myrtaceae	Eucalyptus riedina	*	
Myrtaceae	Eucalyptus polita	*	*
Myrtaceae	Eucalyptus rigidula	*	
-		*	*
Myrtaceae Myrtaceae	Eucalyptus salmonophloia		*
Myrtaceae Myrtaceae	Eucalyptus salubris	*	
Myrtaceae Myrtaceae	Eucalyptus sheathiana	*	*
Myrtaceae Myrtaceae	Eucalyptus steedmanii	*	
Myrtaceae	Eucalyptus tenera	*	*
Myrtaceae	Eucalyptus urna		*
Myrtaceae	Eutaxia lasiocalyx (P2)	*	
Myrtaceae	Leptospermum erubescens	I	



Family	Taxon	CLP-EW1	CLP-MWS1
Myrtaceae	Melaleuca acuminata	*	
Myrtaceae	Melaleuca eleuterostachya	*	
Myrtaceae	Melaleuca hamata	*	
Myrtaceae	Melaleuca johnsonii	*	*
Myrtaceae	Melaleuca lateriflora	*	*
Myrtaceae	Melaleuca pauperiflora subsp. fastigiata	*	
Myrtaceae	Melaleuca pauperiflora subsp. pauperiflora		*
Myrtaceae	Melaleuca phoidophylla		*
Myrtaceae	Melaleuca rigidifolia	*	
Myrtaceae	Melaleuca sapientes	*	
Myrtaceae	Melaleuca thyoides	*	*
Myrtaceae	Rinzia sessilis	*	
Pittosporaceae	Billardiera fusiformis	*	
Poaceae	Austrostipa scabra	*	
Poaceae	Pentameris airoides	*	
Poaceae	Rytidosperma setaceum	*	
Proteaceae	Banksia elderiana	*	
Proteaceae	Grevillea acuaria	*	*
Proteaceae	Grevillea huegelii		*
Rhamnaceae	Cryptandra minutifolia subsp. minutifolia	*	
Rhamnaceae	Cryptandra recurva	*	
Rhamnaceae	Spyridium mucronatum subsp. mucronatum	*	
Rutaceae	Boronia inornata subsp. leptophylla	*	
Rutaceae	Phebalium filifolium	*	
Rutaceae	Phebalium megaphyllum	*	
Rutaceae	Phebalium tuberculosum	*	
Santalaceae	Exocarpos aphyllus	*	*
Santalaceae	Santalum acuminatum	*	
Sapindaceae	Dodonaea bursariifolia	*	
Sapindaceae	Dodonaea stenozyga	*	*
Scrophulariaceae	Eremophila decipiens subsp. decipiens	*	*
Scrophulariaceae	Eremophila drummondii	*	



APPENDIX F: SIGNIFICANT FLORA LOCATIONS (GDA2020, ZONE 50)

Status	Taxon	Abundance	Easting	Northing
P2	Eutaxia lasiocalyx	8	759521	6406976



APPENDIX G: VEGETATION CONDITION RATING

Vegetation Condition Rating	South West and Interzone Botanical Provinces	Eremaean and Northern Botanical Provinces
Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.	
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.	Pristine or nearly so, no obvious signs of damage caused by human activities since European settlement.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.	Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.	More obvious signs of damage caused by human activity since European settlement, including some obvious impact on the vegetation structure such as that caused by low levels of grazing or slightly aggressive weeds.
Poor		Still retains basic vegetation structure or ability to regenerate it after very obvious impacts of human activities since European settlement, such as grazing, partial clearing, frequent fires or aggressive weeds.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.	Severely impacted by grazing, very frequent fires, clearing or a combination of these activities. Scope for some regeneration but not to a state approaching good condition without intensive management. Usually with a number of weed species present including very aggressive species.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e., areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.



APPENDIX H: ATLAS OF LIVING AUSTRALIA DESKTOP SEARCH (40KM)

VASCULAR FLORA

Family	Taxon
Aizoaceae	Carpobrotus modestus
Aizoaceae	Disphyma crassifolium
Aizoaceae	Disphyma crassifolium subsp. clavellatum
Aizoaceae	Gunniopsis intermedia
Aizoaceae	Gunniopsis quadrifida
Aizoaceae	Gunniopsis septifraga
Aizoaceae	Mesembryanthemum crystallinum
Aizoaceae	Mesembryanthemum nodiflorum
Alismataceae	Damasonium minus
Amaranthaceae	Ptilotus drummondii
Amaranthaceae	Ptilotus eremita
Amaranthaceae	Ptilotus halophilus
Amaranthaceae	Ptilotus holosericeus
Amaranthaceae	Ptilotus humilis
Amaranthaceae	Ptilotus manglesii
Amaranthaceae	Ptilotus polystachyus
Amaranthaceae	Ptilotus spathulatus
Amaranthaceae	Surreya diandra
Apiaceae	Actinotus humilis
Apiaceae	Bupleurum semicompositum
Apiaceae	Chlaenosciadium gardneri
Apiaceae	Daucus glochidiatus
Apiaceae	Platysace deflexa
Apiaceae	Platysace effusa
Apiaceae	Platysace juncea
Apiaceae	Platysace maxwellii
Apiaceae	Platysace trachymenioides
Apocynaceae	Alyxia buxifolia
Araceae	Landoltia punctata
Araceae	Lemna minor
Araliaceae	Hydrocotyle callicarpa
Araliaceae	Hydrocotyle diantha
Araliaceae	Hydrocotyle eichleri
Araliaceae	Hydrocotyle intertexta
Araliaceae	Hydrocotyle papilionella
Araliaceae	Hydrocotyle pilifera var. glabrata
Araliaceae	Hydrocotyle rugulosa
Araliaceae	Trachymene anisocarpa var. anisocarpa
Araliaceae	Trachymene cyanopetala
Araliaceae	Trachymene pilosa
Asparagaceae	Chamaexeros fimbriata
Asparagaceae	Laxmannia paleacea
Asparagaceae	Lomandra collina
Asparagaceae	Lomandra micrantha subsp. teretifolia
-	

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Family	Taxon
Asparagaceae	Lomandra mucronata
Asparagaceae	Thysanotus manglesianus
Asparagaceae	Thysanotus patersonii
Asparagaceae	Thysanotus sp. Yellowdine (A.S.George 6040)
Asparagaceae	Thysanotus sp. Badgingarra (E.A.Griffin 2511)
Asparagaceae	Thysanotus triandrus
Aspleniaceae	Pleurosorus rutifolius
Asteraceae	Actinobole uliginosum
Asteraceae	Angianthus tomentosus
Asteraceae	Arctotheca calendula
Asteraceae	Argyroglottis turbinata
Asteraceae	Asteridea athrixioides
Asteraceae	Blennospora drummondii
Asteraceae	Blennospora phlegmatocarpa
Asteraceae	Brachyscome ciliaris
Asteraceae	Brachyscome exilis
Asteraceae	Brachyscome eyrensis
Asteraceae	Brachyscome iberidifolia
Asteraceae	Brachyscome lineariloba
Asteraceae	Brachyscome perpusilla
Asteraceae	Calotis hispidula
Asteraceae	Centaurea melitensis
Asteraceae	Centipeda crateriformis subsp. crateriformis
Asteraceae	Centipeda crateriformis subsp. compacta
Asteraceae	Centipeda crateriformis
Asteraceae	Ceratogyne obionoides
Asteraceae	Chrysocephalum apiculatum subsp. glandulosum
Asteraceae	Chrysocephalum apiculatum
Asteraceae	Chrysocephalum semipapposum subsp. occidentale
Asteraceae	Chthonocephalus pseudevax
Asteraceae	Cotula bipinnata
Asteraceae	Cotula coronopifolia
Asteraceae	Cotula cotuloides
Asteraceae	Erymophyllum ramosum
Asteraceae	Euchiton sphaericus
Asteraceae	Gnephosis uniflora
Asteraceae	Haegiela tatei
Asteraceae	Helichrysum leucopsideum
Asteraceae	Hyalochlamys globifera
Asteraceae	Hyalosperma demissum
Asteraceae	Hypochaeris glabra
Asteraceae	Isoetopsis graminifolia
Asteraceae	Kippistia suaedifolia
Asteraceae	Lagenophora huegelii
Asteraceae	Microseris walteri
Asteraceae	Millotia myosotidifolia
Asteraceae	Millotia tenuifolia var. tenuifolia
Asteraceae	Millotia tenuifolia

BOTANICA

CONSULTING



Family	Taxon	
Asteraceae	Myriocephalus oldfieldii	
Asteraceae	Myriocephalus pygmaeus	
Asteraceae	Notisia intonsa	
Asteraceae	Olearia adenolasia	
Asteraceae	Olearia incana	
Asteraceae	Olearia incondita	
Asteraceae	Olearia laciniifolia	
Asteraceae	Olearia muelleri	
Asteraceae	Olearia muricata	
Asteraceae	Olearia ramosissima	
Asteraceae	Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	
Asteraceae	Ozothamnus blackallii	
Asteraceae	Ozothamnus occidentalis	
Asteraceae	Panaetia tepperi	
Asteraceae	Podolepis capillaris	
Asteraceae	Podolepis lessonii	
Asteraceae	Podolepis tepperi	
Asteraceae	Podotheca angustifolia	
Asteraceae	Podotheca gnaphalioides	
Asteraceae	Pogonolepis muelleriana	
Asteraceae	Pogonolepis stricta	
Asteraceae	Pseudognaphalium luteoalbum	
Asteraceae	Pterochaeta paniculata	
Asteraceae	Rhodanthe heterantha	
Asteraceae	Rhodanthe laevis	
Asteraceae	Rhodanthe pygmaea	
Asteraceae	Senecio glabrescens	
Asteraceae	Senecio glossanthus	
Asteraceae	Senecio giossaninas Senecio hispidulus	
Asteraceae	Senecio Inspidulus Senecio lautus	
Asteraceae	Senecio quadridentatus	
_	Senecio spanomerus	
Asteraceae		
Asteraceae	Siloxerus pygmaeus	
Asteraceae	Sonchus oleraceus	
Asteraceae	Ursinia anthemoides	
Asteraceae	Vittadinia gracilis	
Asteraceae	Waitzia acuminata var. acuminata	
Asteraceae	Waitzia acuminata	
Asteraceae	Waitzia suaveolens var. flava	
Boraginaceae	Halgania andromedifolia	
Boraginaceae	Halgania cyanea	
Boraginaceae	Halgania erecta	
Boraginaceae	Halgania integerrima	
Boraginaceae	Halgania lavandulacea	
Boraginaceae	Halgania sp. Peak Eleanora (M.A.Burgman 3547 B)	
Boraginaceae	Heliotropium curassavicum	
Boryaceae	Borya constricta	
Boryaceae	Borya sphaerocephala	
Brassicaceae	Alyssum linifolium	



Family	Taxon
Brassicaceae	Brassica tournefortii
Brassicaceae	Brassica x napus
Brassicaceae	Hornungia procumbens
Brassicaceae	Lepidium africanum
Brassicaceae	Lepidium rotundum
Brassicaceae	Rorippa nasturtium-aquaticum
Brassicaceae	Stenopetalum filifolium
Brassicaceae	Stenopetalum lineare
Brassicaceae	Stenopetalum salicola
Campanulaceae	Isotoma scapigera
Campanulaceae	Lobelia cleistogamoides
Campanulaceae	Lobelia gibbosa
Campanulaceae	Lobelia rarifolia
Campanulaceae	Wahlenbergia gracilenta
Caryophyllaceae	Spergularia diandra
Caryophyllaceae	Spergularia marina
Caryophyllaceae	Stellaria filiformis
Caryophyllaceae	Stellaria pallida
Casuarinaceae	Allocasuarina acutivalvis subsp. acutivalvis
Casuarinaceae	Allocasuarina acutivalvis
Casuarinaceae	Allocasuarina campestris
Casuarinaceae	Allocasuarina corniculata
Casuarinaceae	Allocasuarina helmsii
Casuarinaceae	Allocasuarina microstachya
Casuarinaceae	Allocasuarina spinosissima
Casuarinaceae	Allocasuarina thuyoides
Celastraceae	Psammomoya choretroides
Celastraceae	Stackhousia muricata
Celastraceae	Stackhousia pubescens
Celastraceae	Stackhousia scoparia
Celastraceae	Tripterococcus brunonis
Centrolepidaceae	Centrolepis cephaloformis subsp. cephaloformis
Centrolepidaceae	Centrolepis glabra
Centrolepidaceae	Centrolepis humillima
Centrolepidaceae	Centrolepis pilosa
Centrolepidaceae	Centrolepis polygyna
Centrolepidaceae	Centrolepis strigosa subsp. strigosa
Centrolepidaceae	Centrolepis strigosa
Chenopodiaceae	Atriplex holocarpa
Chenopodiaceae	Atriplex paludosa
Chenopodiaceae	Atriplex pumilio
Chenopodiaceae	Atriplex semibaccata
Chenopodiaceae	Atriplex stipitata subsp. stipitata
Chenopodiaceae	Atriplex vesicaria
Chenopodiaceae	Chenopodium desertorum subsp. microphyllum
Chenopodiaceae	Didymanthus roei
Chenopodiaceae	Dysphania melanocarpa
Chenopodiaceae	Enchylaena tomentosa
Chenopodiaceae	Eriochiton sclerolaenoides



roject Family	Taxon
Chenopodiaceae	Maireana erioclada
· · ·	
Chenopodiaceae Chenopodiaceae	Maireana glomerifolia Maireana marginata
Chenopodiaceae	Osteocarpum salsuginosum
Chenopodiaceae	Rhagodia drummondii
Chenopodiaceae	Rhagodia preissii subsp. preissii
Chenopodiaceae	Sarcocornia quinqueflora
Chenopodiaceae	Sclerolaena diacantha
Chenopodiaceae	Sclerolaena drummondii
Chenopodiaceae	Sclerolaena parviflora
Chenopodiaceae	Tecticornia doleiformis
Chenopodiaceae	Tecticornia dolinormis
Chenopodiaceae	Tecticornia halocnemoides
Chenopodiaceae	Tecticomia indica
Chenopodiaceae	Tecticornia indica subsp. bidens
Chenopodiaceae	Tecticomia lylei
Chenopodiaceae	Tecticornia moniliformis
Chenopodiaceae	Tecticornia pergranulata subsp. pergranulata
Chenopodiaceae	Tecticornia pergranulata
Chenopodiaceae	Tecticornia syncarpa
Chenopodiaceae	Tecticornia undulata
Chenopodiaceae	Threlkeldia diffusa
Colchicaceae	Wurmbea graniticola
Colchicaceae	Wurmbea tenella
Convolvulaceae	Wilsonia humilis
Crassulaceae	Crassula closiana
Crassulaceae	Crassula colligata subsp. lamprosperma
Crassulaceae	Crassula colorata
Crassulaceae	Crassula decumbens var. decumbens
Crassulaceae	Crassula exserta
Crassulaceae	Crassula extrorsa
Crassulaceae	Crassula natans
Crassulaceae	Crassula peduncularis
Crassulaceae	Crassula tetramera
Cupressaceae	Callitris canescens
Cupressaceae	Callitris preissii
Cupressaceae	Callitris roei
Cyperaceae	Eleocharis acuta
Cyperaceae	Gahnia ancistrophylla
Cyperaceae	Gahnia sp. L (K.R.Newbey 7888)
Cyperaceae	Isolepis australiensis
Cyperaceae	Isolepis cernua
Cyperaceae	Isolepis congrua
Cyperaceae	Isolepis fluitans
Cyperaceae	Isolepis multicaulis
Cyperaceae	Lepidosperma amantiferrum
Cyperaceae	Lepidosperma carphoides
Cyperaceae	Lepidosperma diurnum

Family

Cyperaceae

Dilleniaceae

Dilleniaceae

Dilleniaceae Dilleniaceae

Dilleniaceae

Dilleniaceae

Dilleniaceae

Dilleniaceae

Dilleniaceae

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Droseraceae

Droseraceae

Droseraceae

Droseraceae

Droseraceae

Droseraceae

Hibbertia tuberculata

Drosera browniana

Drosera lowriei

Drosera glanduligera

Drosera macrantha

Drosera menziesii

Drosera moorei Drosera pycnoblasta

Drosera macrantha subsp. macrantha

Drosera andersoniana

Dasypogonaceae

Dasypogonaceae

Dasypogonaceae

	BOTANICA
Taxon	- <u>_</u>
Lepidosperma rigidulum	
Lepidosperma sanguinolentum	
Lepidosperma sp. Bandalup Scabrid (N.Evelegh 10798)	
Lepidosperma sp. P1 small head (M.D.Tindale 166A)	
Lepidosperma tuberculatum	
Lepidosperma viscidum	
Mesomelaena preissii	
Morelotia microcarpa	
Schoenus armeria	
Schoenus brevisetis	
Schoenus calcatus	
Schoenus hexandrus	
Schoenus humilis	
Schoenus nanus	
Schoenus odontocarpus	
Schoenus sesquispicula	
Schoenus sp. A1 Boorabbin (K.L.Wilson 2581)	
Schoenus subflavus	
Calectasia grandiflora	
Calectasia pignattiana	
Calectasia valida	
Hibbertia ancistrophylla	
Hibbertia axillibarba	
Hibbertia eatoniae	
Hibbertia exasperata	
Hibbertia gracilipes	
Hibbertia hemignosta	
Hibbertia lepidocalyx subsp. lepidocalyx	
Hibbertia oligantha	
Hibbertia pachyphylla	
Hibbertia procumbens	
Hibbertia psilocarpa	
Hibbertia pungens	
Hibbertia rostellata	
Hibbertia rupicola	
Hibbertia sp. Mt Holland (B.Ellery BE 1437)	
Hibbertia sp. Wheatbelt (J.R.Wheeler 3955)	
Hibbertia stenophylla	
Hibbertia stowardii	



Family	Taxon	
Droseraceae	Drosera rupicola	
Droseraceae	Drosera sp. Branched styles (S.C.Coffey 193)	
Droseraceae	Drosera subhirtella	
Droseraceae	Drosera zigzagia	
Elaeocarpaceae	Tetratheca aphylla subsp. megacarpa	
Elaeocarpaceae	Tetratheca efoliata	
Elatinaceae	Elatine macrocalyx	
Ericaceae	Acrotriche lancifolia	
Ericaceae	Andersonia parvifolia	
Ericaceae	Astroloma epacridis	
Ericaceae	Astroloma serratifolium	
Ericaceae	Brachyloma geissoloma	
Ericaceae	Brachyloma nguba	
Ericaceae	Brachyloma stenolobum	
Ericaceae	Conostephium drummondii	
Ericaceae	Leucopogon conostephioides	
Ericaceae	Leucopogon cuneifolius	
Ericaceae	Leucopogon dielsianus	
Ericaceae	Leucopogon fimbriatus	
Ericaceae	Leucopogon hamulosus	
Ericaceae	Leucopogon marginatus	
Ericaceae	Leucopogon obtusatus	
Ericaceae	Leucopogon sp. Ironcaps (N.Gibson & K.Brown 3070)	
Ericaceae	Leucopogon sp. Wheatbelt (S.Murray 257)	
Ericaceae	Leucopogon sp. Corrigin (K.Kershaw KK2091)	
Ericaceae	Leucopogon sp. Coujinup (M.A.Burgman 1085)	
Ericaceae	Leucopogon sp. Forrestania (G.F.Craig 2386)	
Ericaceae	Leucopogon sp. Newdegate (M.Hislop 3585)	
Ericaceae	Leucopogon sp. Boorabbin (K.R.Newbey 8374)	
Ericaceae	Leucopogon sp. outer wheatbelt (M.Hislop 30)	
Ericaceae	Lysinema ciliatum	
Ericaceae	Lysinema pentapetalum	
Ericaceae	Styphelia exserta	
Ericaceae	Styphelia serratifolia	
Ericaceae	Styphelia sp. Cascades (R.Davis 11037)	
Ericaceae	Styphelia subulata	
Euphorbiaceae	Bertya dimerostigma	
Euphorbiaceae	Beyeria brevifolia	
Euphorbiaceae	Beyeria minor	
Euphorbiaceae	Beyeria opaca	
Euphorbiaceae	Beyeria sulcata var. sulcata	
Euphorbiaceae	Beyeria sulcata var. brevipes	
Euphorbiaceae	Beyeria sulcata var. gracilis	
Euphorbiaceae	Monotaxis grandiflora var. obtusifolia	
Euphorbiaceae	Monotaxis grandiflora	
Fabaceae	Acacia acanthoclada subsp. acanthoclada	
Fabaceae	Acacia acuminata	
Fabaceae	Acacia acutata	



Family	Taxon
Fabaceae	Acacia ancistrophylla
Fabaceae	Acacia andrewsii
Fabaceae	Acacia asepala
Fabaceae	Acacia assimilis subsp. assimilis
Fabaceae	Acacia assimilis subsp. atroviridis
Fabaceae	Acacia beauverdiana
Fabaceae	Acacia bidentata
Fabaceae	Acacia binata
Fabaceae	Acacia brachyclada
Fabaceae	Acacia brachyphylla var. brachyphylla
Fabaceae	Acacia brumalis
Fabaceae	Acacia burkittii
Fabaceae	Acacia camptoclada
Fabaceae	Acacia castanostegia
Fabaceae	Acacia chrysella
Fabaceae	Acacia chrysopoda
Fabaceae	Acacia coolgardiensis
Fabaceae	Acacia cracentis
Fabaceae	Acacia crispula
Fabaceae	Acacia cupularis
Fabaceae	Acacia deficiens
Fabaceae	Acacia densiflora
Fabaceae	Acacia dielsii
Fabaceae	Acacia dissona var. indoloria
Fabaceae	Acacia enervia subsp. enervia
Fabaceae	Acacia eremophila var. eremophila
Fabaceae	Acacia erinacea
Fabaceae	Acacia evenulosa
Fabaceae	Acacia excentrica
Fabaceae	Acacia flavipila var. flavipila
Fabaceae	Acacia flavipila var. ovalis
Fabaceae	Acacia gibbosa
Fabaceae	Acacia hadrophylla
Fabaceae	Acacia hemiteles
Fabaceae	Acacia heterochroa subsp. robertii
Fabaceae	Acacia heteroclita
Fabaceae	Acacia heteroneura var. jutsonii
Fabaceae	Acacia heteroneura
Fabaceae	Acacia heteroneura var. heteroneura
Fabaceae	Acacia hystrix subsp. hystrix
Fabaceae	Acacia intricata
Fabaceae	Acacia jennerae
Fabaceae	Acacia kerryana
Fabaceae	Acacia lachnocarpa
Fabaceae	Acacia lanuginophylla
Fabaceae	Acacia lasiocalyx
Fabaceae	Acacia lasiocarpa var. bracteolata
Fabaceae	Acacia leptopetala
	Acacia lineolata



Family	Taxon
Fabaceae	Acacia mackeyana
Fabaceae	Acacia marramamba
Fabaceae	Acacia merinthophora
Fabaceae	Acacia merrallii
Fabaceae	Acacia moirii subsp. recurvistipula
Fabaceae	Acacia multispicata
Fabaceae	Acacia mutabilis subsp. mutabilis
Fabaceae	Acacia mutabilis
Fabaceae	Acacia neurophylla subsp. erugata
Fabaceae	Acacia neurophylla subsp. neurophylla
Fabaceae	Acacia nigripilosa subsp. nigripilosa
Fabaceae	Acacia nivea
Fabaceae	Acacia nyssophylla
Fabaceae	Acacia oxyclada
Fabaceae	Acacia pachypoda
Fabaceae	Acacia pinguiculosa subsp. teretifolia
Fabaceae	Acacia poliochroa
Fabaceae	Acacia prainii
Fabaceae	Acacia pycnantha
Fabaceae	Acacia rendlei
Fabaceae	Acacia repanda
Fabaceae	Acacia resinosa
Fabaceae	Acacia rigens
Fabaceae	Acacia rostellata
Fabaceae	Acacia sclerophylla var. sclerophylla
Fabaceae	Acacia sessilispica
Fabaceae	Acacia singula
Fabaceae	Acacia sp. Forrestania (D.Angus DA 3001)
Fabaceae	Acacia sp. (NEQ)
Fabaceae	Acacia sp. P176 (B.R.Maslin 5831)
Fabaceae	Acacia sphacelata subsp. sphacelata
Fabaceae	Acacia spinosissima
Fabaceae	Acacia steedmanii subsp. steedmanii
Fabaceae	Acacia subflexuosa
Fabaceae	Acacia sulcata var. platyphylla
Fabaceae	Acacia sulcata
Fabaceae	Acacia tetraneura
Fabaceae	Acacia tetraptera
Fabaceae	Acacia trigonophylla
Fabaceae	Acacia uncinella
Fabaceae	Acacia undosa
Fabaceae	Acacia unifissilis
Fabaceae	Acacia verriculum
Fabaceae	Acacia viscifolia
Fabaceae	Acacia yorkrakinensis subsp. acrita
Fabaceae	Aotus lanea
Fabaceae	Aotus sp. Tortile (G.J.Keighery 3767)
Fabaceae	Aotus sp. Southern Wheatbelt (C.A.Gardner & W.E.Blackall 1412)
Fabaceae	Bossiaea atrata



Family	Taxon
Fabaceae	Chorizema aciculare subsp. aciculare
Fabaceae	Chorizema circinale
Fabaceae	Cullen discolor
Fabaceae	Daviesia argillacea
Fabaceae	Daviesia articulata
Fabaceae	Daviesia benthamii subsp. acanthoclona
Fabaceae	Daviesia brachyphylla
Fabaceae	Daviesia cardiophylla
Fabaceae	Daviesia croniniana
Fabaceae	Daviesia grahamii
Fabaceae	Daviesia hakeoides subsp. subnuda
Fabaceae	Daviesia implexa
Fabaceae	Daviesia intricata subsp. xiphophylla
Fabaceae	Daviesia lancifolia
Fabaceae	Daviesia nematophylla
Fabaceae	Daviesia pachyloma
Fabaceae	Daviesia rhizomata
Fabaceae	Daviesia rhombifolia
Fabaceae	Daviesia rubiginosa
Fabaceae	
Fabaceae	Daviesia scoparia Dillwynia divaricata
Fabaceae	
	Dillwynia sp. Mallee (W.R.Archer 1709959)
Fabaceae	Dillwynia uncinata
Fabaceae	Erichsenia uncinata
Fabaceae	Eutaxia acanthoclada
Fabaceae	Eutaxia hirsuta
Fabaceae	Eutaxia lasiocalyx
Fabaceae	Eutaxia lasiophylla
Fabaceae	Eutaxia nanophylla
Fabaceae	Eutaxia neurocalyx subsp. papillosa
Fabaceae	Eutaxia neurocalyx
Fabaceae	Eutaxia neurocalyx subsp. neurocalyx
Fabaceae	Eutaxia rubricarina
Fabaceae	Eutaxia sp. North Ironcap (P. Armstrong PA 06/898)
Fabaceae	Gastrolobium floribundum
Fabaceae	Gastrolobium melanocarpum
Fabaceae	Gastrolobium nutans
Fabaceae	Gastrolobium obovatum
Fabaceae	Gastrolobium parviflorum
Fabaceae	Gastrolobium racemosum
Fabaceae	Gastrolobium rigidum
Fabaceae	Gastrolobium spinosum
Fabaceae	Gastrolobium stowardii
Fabaceae	Gastrolobium tenue
Fabaceae	Gastrolobium tetragonophyllum
Fabaceae	Gastrolobium venulosum
Fabaceae	Glycyrrhiza acanthocarpa
Fabaceae	Gompholobium baxteri
Fabaceae	Gompholobium gompholobioides



Family	Taxon	
Fabaceae	Gompholobium hendersonii	
Fabaceae	Gompholobium obcordatum	
Fabaceae	Gompholobium viscidulum	
Fabaceae	Isotropis drummondii	
Fabaceae	Jacksonia nematoclada	
Fabaceae	Jacksonia racemosa	
Fabaceae	Jacksonia ramulosa	
Fabaceae	Labichea lanceolata subsp. brevifolia	
Fabaceae	Labichea lanceolata	
Fabaceae	Labichea rossii	
Fabaceae	Labichea stellata	
Fabaceae	Leptosema daviesioides	
Fabaceae	Medicago sativa	
Fabaceae	Mirbelia densiflora	
Fabaceae	Mirbelia dilatata	
Fabaceae	Mirbelia floribunda	
Fabaceae	Mirbelia spinosa	
Fabaceae	Mirbelia taxifolia	
Fabaceae	Mirbelia trichocalyx	
Fabaceae	Paragoodia crenulata	
Fabaceae	Phyllota luehmannii	
Fabaceae	Pultenaea arida	
Fabaceae	Pultenaea daena	
Fabaceae	Pultenaea heterochila	
Fabaceae	Pultenaea indira subsp. monstrosita	
Fabaceae	Pultenaea indira subsp. indira	
Fabaceae	Pultenaea rotundifolia	
Fabaceae	Senna artemisioides subsp. filifolia	
Fabaceae	Senna artemisioides	
Fabaceae	Senna artemisioides subsp. x artemisioides	
Fabaceae	Senna artemisioides subsp. x coriacea	
Fabaceae	Senna pleurocarpa	
Fabaceae	Senna stowardii	
Fabaceae	Sphaerolobium linophyllum	
Fabaceae	Swainsona colutoides	
Fabaceae	Templetonia aculeata	
Fabaceae	Templetonia battii	
Fabaceae	Templetonia ceracea	
Fabaceae	Templetonia rossii	
Fabaceae	Templetonia sulcata	
Fabaceae	Trifolium arvense var. arvense	
Fabaceae	Trifolium campestre	
Fabaceae	Trifolium tomentosum var. tomentosum	
Fabaceae		
Fankeniaceae	Urodon dasyphyllus Frankenia cinerea	
Frankeniaceae	Frankenia desertorum	
Frankeniaceae	Frankenia drummondii	
Frankeniaceae	Frankenia interioris var. parviflora	
Frankeniaceae	Frankenia interioris	



Family	Taxon
Frankeniaceae	Frankenia sessilis
Frankeniaceae	Frankenia tetrapetala
Gentianaceae	Centaurium erythraea
Gentianaceae	Centaurium tenuiflorum
Geraniaceae	Erodium cicutarium
Geraniaceae	Erodium cygnorum
Geraniaceae	Geranium retrorsum
Geraniaceae	Pelargonium havlasae
Goodeniaceae	Anthotium rubriflorum
Goodeniaceae	Coopernookia polygalacea
Goodeniaceae	Coopernookia strophiolata
Goodeniaceae	Dampiera angulata
Goodeniaceae	Dampiera angulata subsp. Peak Charles (K.R.Newbey 5402)
Goodeniaceae	Dampiera eriocephala
Goodeniaceae	Dampiera haematotricha subsp. haematotricha
Goodeniaceae	Dampiera juncea
Goodeniaceae	Dampiera lavandulacea
Goodeniaceae	Dampiera obliqua
Goodeniaceae	Dampiera oligophylla
Goodeniaceae	Dampiera sacculata
Goodeniaceae	Dampiera sp. Forrestania (F.Lullfitz L 4034)
Goodeniaceae	Dampiera stenostachya
Goodeniaceae	Dampiera wellsiana
Goodeniaceae	Goodenia affinis
Goodeniaceae	Goodenia berardiana
Goodeniaceae	Goodenia cycnopotamica
Goodeniaceae	Goodenia discophora
Goodeniaceae	Goodenia dyeri
Goodeniaceae	Goodenia elderi
Goodeniaceae	Goodenia etheira
Goodeniaceae	Goodenia helmsii
Goodeniaceae	Goodenia incana
Goodeniaceae	Goodenia krauseana
Goodeniaceae	Goodenia laevis subsp. humifusa
Goodeniaceae	Goodenia laevis
Goodeniaceae	Goodenia occidentalis
Goodeniaceae	Goodenia pinifolia
Goodeniaceae	Goodenia pusilliflora
Goodeniaceae	Goodenia reinwardtii
Goodeniaceae	Goodenia scapigera subsp. scapigera
Goodeniaceae	Goodenia trichophylla
Goodeniaceae	Goodenia tripartita
Goodeniaceae	Goodenia viscida
Goodeniaceae	Goodenia watsonii subsp. watsonii
Goodeniaceae	Goodenia watsonii
Goodeniaceae	Lechenaultia biloba
Goodeniaceae	Lechenaultia brevifolia
Goodeniaceae	Lechenaultia formosa
Goodeniaceae	Lechenaultia papillata

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Family	Taxon
Goodeniaceae	Scaevola argentea
Goodeniaceae	Scaevola bursariifolia
Goodeniaceae	Scaevola cuneiformis
Goodeniaceae	Scaevola densifolia
Goodeniaceae	Scaevola humifusa
Goodeniaceae	Scaevola restiacea subsp. restiacea
Goodeniaceae	Scaevola restiacea
Goodeniaceae	Scaevola spinescens
Goodeniaceae	Scaevola tortuosa
Goodeniaceae	Velleia cycnopotamica
Goodeniaceae	Velleia trinervis
Goodeniaceae	Verreauxia dyeri
Gyrostemonaceae	Codonocarpus cotinifolius
Gyrostemonaceae	Gyrostemon ditrigynus
Gyrostemonaceae	Gyrostemon racemiger
Gyrostemonaceae	Gyrostemon subnudus
Haemodoraceae	Conostylis argentea
Haemodoraceae	Conostylis bealiana
Haemodoraceae	Conostylis petrophiloides
Haemodoraceae	Haemodorum discolor
Haloragaceae	Glischrocaryon angustifolium
Haloragaceae	Glischrocaryon aureum
Haloragaceae	Glischrocaryon flavescens
Haloragaceae	Glischrocaryon roei
Haloragaceae	Gonocarpus confertifolius var. helmsii
Haloragaceae	Gonocarpus confertifolius
Haloragaceae	Gonocarpus nodulosus
Haloragaceae	Gonocarpus trichostachyus
Haloragaceae	Haloragis hamata
Haloragaceae	Haloragodendron glandulosum
Haloragaceae	Myriophyllum amphibium
Haloragaceae	Myriophyllum integrifolium
Haloragaceae	Myriophyllum verrucosum
Hemerocallidaceae	Dianella revoluta var. divaricata
Hemerocallidaceae	Tricoryne tenella
Hydrocharitaceae	Najas marina
Hydrocharitaceae	Ottelia ovalifolia
Hydrocharitaceae	Vallisneria nana
Hypoxidaceae	Pauridia glabella var. glabella
Isoetaceae	Isoetes australis
Isoetaceae	Isoetes brevicula
Isoetaceae	Isoetes caroli
Isoetaceae	Isoetes muelleri
Juncaceae	Juncus aridicola
Juncaceae	Juncus bufonius
Juncaceae	Juncus subsecundus
Juncaginaceae	Cycnogeton huegelii
Juncaginaceae	Triglochin calcitrapa
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Family	Taxon
Juncaginaceae	Triglochin longicarpa
Juncaginaceae	Triglochin minutissima
Juncaginaceae	Triglochin mucronata
Juncaginaceae	Triglochin sp. A Flora of Australia (G.J.Keighery 2477)
Lamiaceae	Brachysola coerulea
Lamiaceae	Cyanostegia angustifolia
Lamiaceae	Cyanostegia corifolia
Lamiaceae	Cyanostegia lanceolata
Lamiaceae	Dasymalla terminalis
Lamiaceae	Dicrastylis capitellata
Lamiaceae	Dicrastylis corymbosa
Lamiaceae	Dicrastylis obovata
Lamiaceae	Dicrastylis parvifolia
Lamiaceae	Hemigenia dielsii
Lamiaceae	Hemigenia humilis
Lamiaceae	Hemigenia obovata
Lamiaceae	Hemigenia scabra
Lamiaceae	Hemigenia sp. Newdegate (E.Bishop 75)
Lamiaceae	Hemigenia teretiuscula
Lamiaceae	Hemigenia westringioides
Lamiaceae	Hemiphora elderi
Lamiaceae	Hemiphora lanata
Lamiaceae	Lachnostachys bracteosa
Lamiaceae	Lachnostachys verbascifolia var. verbascifolia
Lamiaceae	Microcorys elatoides
Lamiaceae	Microcorys ericifolia
Lamiaceae	Microcorys exserta
Lamiaceae	Microcorys lenticularis
Lamiaceae	Microcorys obovata
Lamiaceae	Microcorys sp. Forrestania (V. English 2004)
Lamiaceae	Microcorys wilsoniana
Lamiaceae	Pityrodia hemigenioides
Lamiaceae	Pityrodia lepidota
Lamiaceae	Pityrodia scabra subsp. dendrotricha
Lamiaceae	Teucrium diabolicum
Lamiaceae	Teucrium eremaeum
Lamiaceae	Teucrium myriocladum
Lamiaceae	Teucrium sessiliflorum
Lamiaceae	Westringia cephalantha var. cephalantha
Lamiaceae	Westringia cephalantha
Lamiaceae	Westringia cephalantha var. caterva
Lamiaceae	Westringia rigida
Lauraceae	Cassytha aurea var. hirta
Lauraceae	Cassytha glabella
Lauraceae	Cassytha glabella f. dispar
Lauraceae	Cassytha melantha
Lauraceae	Cassytha nodiflora
Lauraceae	Cassytha pomiformis





Family	Taxon	
Lentibulariaceae	Utricularia australis	
Loganiaceae	Logania micrantha	
Loganiaceae	Orianthera exilis	
Loganiaceae	Orianthera judithiana	
Loganiaceae	Orianthera tortuosa	
Malvaceae	Alyogyne hakeifolia	
Malvaceae	Alyogyne sp. Hyden (G.S.Durell GD127)	
Malvaceae	Alyogyne sp. Great Victoria Desert (D.J.Edinger 6212)	
Malvaceae	Androcalva aphrix	
Malvaceae	Androcalva melanopetala	
Malvaceae	Commersonia craurophylla	
Malvaceae	Guichenotia anota	
Malvaceae	Guichenotia asteriskos	
Malvaceae	Guichenotia sarotes	
Malvaceae	Lasiopetalum compactum	
Malvaceae	Lasiopetalum ferraricollinum	
Malvaceae	Lawrencia berthae	
Malvaceae	Lawrencia glomerata	
Malvaceae	Lawrencia repens	
Malvaceae	Lawrencia squamata	
Malvaceae	Lysiosepalum hexandrum	
Malvaceae	Radyera farragei	
Malvaceae	Seringia adenogyna	
Malvaceae	Seringia cacaobrunnea	
Malvaceae	Seringia velutina	
Malvaceae	Thomasia gardneri	
Malvaceae	Thomasia sarotes	
Marsileaceae	Marsilea costulifera	
Marsileaceae	Marsilea drummondii	
Marsileaceae	Marsilea hirsuta	
Marsileaceae	Marsilea mutica	
Marsileaceae	Pilularia novae-hollandiae	
Menyanthaceae	Ornduffia umbricola	
Myrtaceae	Aluta appressa	
Myrtaceae	Astus subroseus	
Myrtaceae	Baeckea grandibracteata	
Myrtaceae	Baeckea muricata	
Myrtaceae	Baeckea preissiana	
Myrtaceae	Baeckea sp. Lake Cronin (K.R.Newbey 9191)	
Myrtaceae	Balaustion pulcherrimum	
Myrtaceae	Beaufortia bracteosa	
Myrtaceae	Beaufortia orbifolia	
Myrtaceae	Beaufortia puberula	
Myrtaceae	Beaufortia schaueri	
Myrtaceae	Callistemon phoeniceus	
Myrtaceae	Calothamnus gilesii	
Myrtaceae	Calothamnus quadrifidus subsp. seminudus	
Myrtaceae	Calothamnus quadrifidus	
Myrtaceae	Calothamnus quadrifidus subsp. petraeus	



Family	Taxon	
Myrtaceae	Calothamnus quadrifidus subsp. quadrifidus	
Myrtaceae	Calothamnus validus	
Myrtaceae	Calytrix breviseta subsp. stipulosa	
Myrtaceae	Calytrix duplistipulata	
Myrtaceae	Calytrix habrantha	
Myrtaceae	Calytrix leschenaultii	
Myrtaceae	Calytrix merrelliana	
Myrtaceae	Calytrix sapphirina	
Myrtaceae	Chamelaucium ciliatum	
Myrtaceae	Chamelaucium megalopetalum	
Myrtaceae	Chamelaucium pauciflorum	
Myrtaceae	Chamelaucium sp. Bendering (T.J.Alford 110)	
Myrtaceae	Chamelaucium sp. Victoria (J.Coleby-Williams 99)	
Myrtaceae	Chamelaucium virgatum	
Myrtaceae	Cyathostemon ambiguus	
Myrtaceae	Cyathostemon heterantherus	
Myrtaceae	Cyathostemon sp. Jyndabinbin Rocks (K.R.Newbey 7689)	
Myrtaceae	Darwinia diosmoides	
Myrtaceae	Darwinia luehmannii	
Myrtaceae	Darwinia sp. Lake Cobham (K.Newbey 3262)	
Myrtaceae	Darwinia sp. Lake Cobham (K.Newbey 3202) Darwinia sp. Karonie (K.Newbey 8503)	
Myrtaceae	Eremaea pauciflora var. pauciflora	
Myrtaceae	Eremaea pauciflora	
	Ericomyrtus serpyllifolia	
Myrtaceae Myrtaceae	Encomynus serpyiniona Eucalyptus aequioperta	
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Myrtaceae	Eucalyptus alipes	
Myrtaceae	Eucalyptus arachnaea	
Myrtaceae	Eucalyptus aspratilis	
Myrtaceae	Eucalyptus austrina MS	
Myrtaceae	Eucalyptus burracoppinensis	
Myrtaceae	Eucalyptus calycogona subsp. calycogona	
Myrtaceae	Eucalyptus calycogona	
Myrtaceae	Eucalyptus capillosa subsp. polyclada	
Myrtaceae	Eucalyptus capillosa	
Myrtaceae	Eucalyptus celastroides subsp. virella	
Myrtaceae	Eucalyptus celastroides	
Myrtaceae	Eucalyptus cerasiformis	
Myrtaceae	Eucalyptus cometae-vallis	
Myrtaceae	Eucalyptus comitae-vallis	
Myrtaceae	Eucalyptus concinna	
Myrtaceae	Eucalyptus cylindriflora	
Myrtaceae	Eucalyptus cylindrocarpa	
Myrtaceae	Eucalyptus deflexa	
Myrtaceae	Eucalyptus delicata	
Myrtaceae	Eucalyptus densa	
Myrtaceae	Eucalyptus densa subsp. densa	
Myrtaceae	Eucalyptus dissimulata	
Myrtaceae	Eucalyptus distuberosa subsp. distuberosa	
Myrtaceae	Eucalyptus eremophila	



Family	Taxon	
Myrtaceae	Eucalyptus eremophila subsp. eremophila	
Myrtaceae	Eucalyptus eremophila subsp. pterocarpa	
Myrtaceae	Eucalyptus exigua	
Myrtaceae	Eucalyptus extensa	
Myrtaceae	Eucalyptus flocktoniae	
Myrtaceae	Eucalyptus flocktoniae subsp. flocktoniae	
Myrtaceae	Eucalyptus flocktoniae subsp. hebes	
Myrtaceae	Eucalyptus georgei subsp. fulgida	
Myrtaceae	Eucalyptus georgei subsp. georgei	
Myrtaceae	Eucalyptus gracilis	
Myrtaceae	Eucalyptus histophylla	
Myrtaceae	Eucalyptus horistes	
Myrtaceae	Eucalyptus improcera	
Myrtaceae	Eucalyptus incerata	
Myrtaceae	Eucalyptus incrassata	
Myrtaceae	Eucalyptus kondininensis	
Myrtaceae	Eucalyptus kumarlensis	
Myrtaceae	Eucalyptus leptopoda subsp. leptopoda	
Myrtaceae	Eucalyptus leptopoda subsp. ioptopoda Eucalyptus leptopoda subsp. subluta	
Myrtaceae	Eucalyptus livida	
-	Eucalyptus India Eucalyptus longicornis	
Myrtaceae		
Myrtaceae	Eucalyptus longissima	
Myrtaceae	Eucalyptus loxophleba subsp. lissophloia	
Myrtaceae	Eucalyptus luteola	
Myrtaceae	Eucalyptus melanoxylon	
Myrtaceae	Eucalyptus myriadena	
Myrtaceae	Eucalyptus myriadena subsp. parviflora	
Myrtaceae	Eucalyptus myriadena subsp. myriadena	
Myrtaceae	Eucalyptus neutra	
Myrtaceae	Eucalyptus obesa	
Myrtaceae	Eucalyptus oleosa subsp. oleosa	
Myrtaceae	Eucalyptus olivina	
Myrtaceae	Eucalyptus pauciflora subsp. debeuzevillei	
Myrtaceae	Eucalyptus phaenophylla subsp. phaenophylla	
Myrtaceae	Eucalyptus phaenophylla	
Myrtaceae	Eucalyptus phaenophylla subsp. interjacens	
Myrtaceae	Eucalyptus phenax subsp. phenax	
Myrtaceae	Eucalyptus phenax	
Myrtaceae	Eucalyptus pileata	
Myrtaceae	Eucalyptus pilularis	
Myrtaceae	Eucalyptus platycorys	
Myrtaceae	Eucalyptus pleurocarpa	
Myrtaceae	Eucalyptus polita	
Myrtaceae	Eucalyptus protensa	
Myrtaceae	Eucalyptus ravida	
Myrtaceae	Eucalyptus recta	
Myrtaceae	Eucalyptus retusa	
Myrtaceae	Eucalyptus rigidula	
Myrtaceae	Eucalyptus rugosa	



roject Family	Taxon
Myrtaceae	Eucalyptus rugulata
Myrtaceae	Eucalyptus salicola
Myrtaceae	Eucalyptus salmonophloia
Myrtaceae	Eucalyptus salubris
Myrtaceae	Eucalyptus scyphocalyx subsp. scyphocalyx
Myrtaceae	Eucalyptus scyphocalyx
Myrtaceae	Eucalyptus sheathiana
Myrtaceae	Eucalyptus sp. Southern wheatbelt (D.Nicolle & M.French DN 5507)
Myrtaceae	Eucalyptus spathulata
Myrtaceae	Eucalyptus sporadica
Myrtaceae	Eucalyptus steedmanii
Myrtaceae	Eucalyptus subangusta subsp. subangusta
Myrtaceae	Eucalyptus suggrandis
Myrtaceae	Eucalyptus suggrandis subsp. promiscua
Myrtaceae	Eucalyptus tenera
Myrtaceae	Eucalyptus tenuis
Myrtaceae	Eucalyptus tephroclada
Myrtaceae	Eucalyptus transcontinentalis
Myrtaceae	Eucalyptus urna
Myrtaceae	Eucalyptus vegrandis
Myrtaceae	Eucalyptus virella
Myrtaceae	Eucalyptus vittata
Myrtaceae	Eucalyptus yilgarnensis
Myrtaceae	Euryomyrtus leptospermoides
Myrtaceae	Euryomyrtus maidenii
Myrtaceae	Homalocalyx pulcherrimus
Myrtaceae	Hysterobaeckea pterocera
Myrtaceae	Kunzea jucunda
Myrtaceae	Leptospermum erubescens
Myrtaceae	Leptospermum fastigiatum
Myrtaceae	Leptospermum inelegans
Myrtaceae	Leptospermum nitens
Myrtaceae	Leptospermum roei
Myrtaceae	Leptospermum spinescens
Myrtaceae	Malleostemon tuberculatus
Myrtaceae	Melaleuca acuminata subsp. acuminata
Myrtaceae	Melaleuca acuminata
Myrtaceae	Melaleuca adnata
Myrtaceae	Melaleuca apodocephala
Myrtaceae	Melaleuca atroviridis
Myrtaceae	Melaleuca brevifolia
Myrtaceae	Melaleuca brophyi
Myrtaceae	Melaleuca calyptroides
Myrtaceae	Melaleuca carrii
Myrtaceae	Melaleuca cliffortioides
Myrtaceae	Melaleuca condylosa
Myrtaceae	Melaleuca cordata
Myrtaceae	Melaleuca cucullata
Myrtaceae	Melaleuca depauperata



roject Family	Toyon
	Taxon
Myrtaceae	Melaleuca eleuterostachya
Myrtaceae	Melaleuca elliptica
Myrtaceae	Melaleuca exuvia
Myrtaceae	Melaleuca glaberrima
Myrtaceae	Melaleuca halmaturorum
Myrtaceae	Melaleuca hamata
Myrtaceae	Melaleuca hamulosa
Myrtaceae	Melaleuca johnsonii
Myrtaceae	Melaleuca lanceolata
Myrtaceae	Melaleuca lateriflora
Myrtaceae	Melaleuca lateriflora subsp. lateriflora
Myrtaceae	Melaleuca laxiflora
Myrtaceae	Melaleuca macronychia subsp. trygonoides
Myrtaceae	Melaleuca macronychia
Myrtaceae	Melaleuca marginata
Myrtaceae	Melaleuca ochroma
Myrtaceae	Melaleuca pauperiflora subsp. pauperiflora
Myrtaceae	Melaleuca pauperiflora subsp. fastigiata
Myrtaceae	Melaleuca pauperiflora
Myrtaceae	Melaleuca pentagona
Myrtaceae	Melaleuca phoidophylla
Myrtaceae	Melaleuca platycalyx
Myrtaceae	Melaleuca podiocarpa
Myrtaceae	Melaleuca procera
Myrtaceae	Melaleuca pungens
Myrtaceae	Melaleuca quadrifaria
Myrtaceae	Melaleuca rigidifolia
Myrtaceae	Melaleuca sapientes
Myrtaceae	Melaleuca scalena
Myrtaceae	Melaleuca sheathiana
Myrtaceae	Melaleuca societatis
Myrtaceae	Melaleuca sparsiflora
Myrtaceae	Melaleuca spicigera
Myrtaceae	Melaleuca strobophylla
Myrtaceae	Melaleuca subfalcata
Myrtaceae	Melaleuca teuthidoides
Myrtaceae	Melaleuca thapsina
Myrtaceae	Melaleuca thyoides
Myrtaceae	Melaleuca tuberculata var. tuberculata
Myrtaceae	Melaleuca uncinata
Myrtaceae	Melaleuca villosisepala
Myrtaceae	Micromyrtus erichsenii
Myrtaceae	Micromyrtus obovata
Myrtaceae	Micromyrtus racemosa
Myrtaceae	Micromyrtus triptycha subsp. Ironcap (N.Gibson & K.Brown 3082)
Myrtaceae	Oxymyrrhine plicata
Myrtaceae	Regelia inops
Myrtaceae	Rinzia carnosa
Myrtaceae	Rinzia sessilis
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Family	Taxon
Myrtaceae	Rinzia torquata
Myrtaceae	Taxandria spathulata
Myrtaceae	Thryptomene australis subsp. australis
Myrtaceae	Thryptomene australis
Myrtaceae	Thryptomene kochii
Myrtaceae	Thryptomene salina
Myrtaceae	Verticordia acerosa var. preissii
Myrtaceae	Verticordia chrysantha
Myrtaceae	Verticordia chrysanthella
Myrtaceae	Verticordia densiflora var. cespitosa
Myrtaceae	Verticordia eriocephala
Myrtaceae	Verticordia gracilis
Myrtaceae	Verticordia inclusa
Myrtaceae	Verticordia insignis subsp. compta
Myrtaceae	Verticordia mitchelliana subsp. implexior
Myrtaceae	Verticordia mitchelliana
Myrtaceae	Verticordia multiflora subsp. solox
Myrtaceae	Verticordia pennigera
Myrtaceae	Verticordia picta
Myrtaceae	Verticordia plumosa var. incrassata
Myrtaceae	Verticordia pritzelii
Myrtaceae	Verticordia roei subsp. roei
Myrtaceae	Verticordia sieberi var. curta
Myrtaceae	Verticordia sieberi
Myrtaceae	Verticordia stenopetala
Myrtaceae	Verticordia tumida subsp. therogana
Olacaceae	Olax benthamiana
Onagraceae	Epilobium billardiereanum
Orchidaceae	Caladenia attingens subsp. gracillima
Orchidaceae	Caladenia brevisura
Orchidaceae	Caladenia dimidia
Orchidaceae	Caladenia doutchiae
Orchidaceae	Caladenia hirta subsp. rosea
Orchidaceae	Caladenia horistes
Orchidaceae	Caladenia microchila
Orchidaceae	Caladenia pachychila
Orchidaceae	Caladenia paradoxa
Orchidaceae	Caladenia polychroma
Orchidaceae	Caladenia roei
Orchidaceae	Caladenia sigmoidea
Orchidaceae	Caladenia vulgata
Orchidaceae	Caladenia x exoleta
Orchidaceae	Caleana triens
Orchidaceae	Cyanicula amplexans
Orchidaceae	Cyrtostylis robusta
Orchidaceae	Diuris brachyscapa
Orchidaceae	Diuris hazeliae
Orchidaceae	Diuris picta
Orchidaceae	Ericksonella saccharata



Family	Taxon
Orchidaceae	Eriochilus dilatatus
Orchidaceae	Genoplesium nigricans
Orchidaceae	Microtis alba
Orchidaceae	Microtis eremicola
Orchidaceae	Microtis graniticola
Orchidaceae	Microtis media subsp. media
Orchidaceae	Pheladenia deformis
Orchidaceae	Prasophyllum gracile
Orchidaceae	Prasophyllum sargentii
Orchidaceae	Pterostylis aff. barbata
Orchidaceae	Pterostylis arbuscula
Orchidaceae	Pterostylis aspera
Orchidaceae	Pterostylis brunneola
Orchidaceae	Pterostylis ciliata
Orchidaceae	Pterostylis cycnocephala
Orchidaceae	Pterostylis echinulata
Orchidaceae	Pterostylis elegantissima
Orchidaceae	Pterostylis galgula
Orchidaceae	Pterostylis insectifera
Orchidaceae	Pterostylis mutica
Orchidaceae	Pterostylis occulta
Orchidaceae	Pterostylis picta
Orchidaceae	Pterostylis recurva
Orchidaceae	Pterostylis roensis
Orchidaceae	Pterostylis sanguinea
Orchidaceae	Pterostylis sargentii
Orchidaceae	Pterostylis scabra
Orchidaceae	Pterostylis setulosa
Orchidaceae	Pterostylis spathulata
Orchidaceae	Pterostylis timothyi
Orchidaceae	Thelymitra antennifera
Orchidaceae	Thelymitra campanulata
Orchidaceae	Thelymitra graminea
Orchidaceae	Thelymitra petrophila
Orchidaceae	Thelymitra sargentii
Orchidaceae	Thelymitra speciosa
Orobanchaceae	Parentucellia latifolia
Phrymaceae	Glossostigma drummondii
Phyllanthaceae	Poranthera microphylla
Picrodendraceae	Stachystemon brachyphyllus
Pittosporaceae	Bentleya diminuta
Pittosporaceae	Billardiera coriacea
Pittosporaceae	Billardiera fusiformis
Pittosporaceae	Cheiranthera filifolia
Pittosporaceae	Marianthus bicolor
Pittosporaceae	Pittosporum angustifolium
Plantaginaceae	Plantago coronopus
Plantaginaceae	Plantago debilis
Plantaginaceae	Plantago drummondii



Family	Taxon
Plantaginaceae	Plantago turrifera
Poaceae	Aira caryophyllea
Poaceae	Amphipogon strictus
Poaceae	Amphipogon turbinatus
Poaceae	Anthosachne scabra
Poaceae	Austrostipa acrociliata
Poaceae	Austrostipa elegantissima
Poaceae	Austrostipa hemipogon
Poaceae	Austrostipa juncifolia
Poaceae	Austrostipa nitida
Poaceae	Austrostipa platychaeta
Poaceae	Austrostipa puberula
Poaceae	Austrostipa pycnostachya
Poaceae	Austrostipa scabra
Poaceae	Austrostipa scabra subsp. scabra
Poaceae	Austrostipa trichophylla
Poaceae	Austrostipa variabilis
Poaceae	Avellinia michelii
Poaceae	Bromus arenarius
Poaceae	Bromus catharticus
Poaceae	Bromus rubens
Poaceae	Ehrharta longiflora
Poaceae	Eragrostis dielsii
Poaceae	Hordeum leporinum
Poaceae	Lachnagrostis filiformis
Poaceae	Lolium rigidum
Poaceae	Neurachne alopecuroidea
Poaceae	Parapholis incurva
Poaceae	Pentameris airoides
Poaceae	Pentameris airoides subsp. airoides
Poaceae	Rostraria cristata
Poaceae	Rostraria pumila
Poaceae	Rytidosperma acerosum
Poaceae	Rytidosperma caespitosum
Poaceae	Rytidosperma setaceum
Poaceae	Schismus barbatus
Poaceae	Spartochloa scirpoidea
Poaceae	Triodia scariosa
Poaceae	Tripogonella loliiformis
Poaceae	Vulpia bromoides
Poaceae	Vulpia myuros f. myuros
Poaceae	Vulpia myuros f. megalura
Polygalaceae	Comesperma calcicola
Polygalaceae	Comesperma calymega
Polygalaceae	Comesperma drummondii
Polygalaceae	Comesperma polygaloides
Polygalaceae	Comesperma scoparium
Polygalaceae	Comesperma volubile
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Family	Taxon
Polygonaceae	Muehlenbeckia adpressa
Polygonaceae	Muehlenbeckia diclina
Portulacaceae	Calandrinia calyptrata
Portulacaceae	Calandrinia eremaea
Portulacaceae	Calandrinia granulifera
Portulacaceae	Calandrinia lehmannii
Portulacaceae	Calandrinia polyandra
Portulacaceae	Calandrinia sp. Gypsum (F.Obbens & L.Hancock FO 10/14)
Potamogetonaceae	Althenia preissii
Potamogetonaceae	Potamogeton drummondii
Potamogetonaceae	Stuckenia pectinata
Primulaceae	Lysimachia arvensis
Proteaceae	Adenanthos argyreus
Proteaceae	Adenanthos flavidiflorus
Proteaceae	Adenanthos gracilipes
Proteaceae	Banksia audax
Proteaceae	Banksia cirsioides
Proteaceae	Banksia densa var. densa
Proteaceae	Banksia elderiana
Proteaceae	Banksia erythrocephala var. erythrocephala
Proteaceae	Banksia laevigata subsp. fuscolutea
Proteaceae	Banksia laevigata
Proteaceae	Banksia pallida
Proteaceae	Banksia purdieana
Proteaceae	Banksia rufa subsp. flavescens
Proteaceae	Banksia rufa subsp. rufa
Proteaceae	Banksia sphaerocarpa var. dolichostyla
Proteaceae	Banksia violacea
Proteaceae	Banksia viscida
Proteaceae	Banksia zygocephala
Proteaceae	Conospermum amoenum
Proteaceae	Conospermum bracteosum
Proteaceae	Conospermum brownii
Proteaceae	Conospermum croniniae
Proteaceae	Conospermum leianthum subsp. leianthum
Proteaceae	Conospermum sigmoideum
Proteaceae	Grevillea acacioides
Proteaceae	Grevillea acuaria
Proteaceae	Grevillea anethifolia
Proteaceae	Grevillea aneura
Proteaceae	Grevillea beardiana
Proteaceae	Grevillea biformis subsp. biformis
Proteaceae	Grevillea cagiana
Proteaceae	Grevillea ceratocarpa
Proteaceae	Grevillea decipiens
Proteaceae	Grevillea didymobotrya subsp. didymobotrya
Proteaceae	Grevillea eremophila
Proteaceae	Grevillea eryngioides
	Grevillea excelsior



roject Family	Taxon
Proteaceae	Grevillea hookeriana subsp. apiciloba
Proteaceae	Grevillea huegelii
Proteaceae	Grevillea incrassata
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Proteaceae	Grevillea insignis subsp. elliotii
Proteaceae	Grevillea insignis subsp. insignis
Proteaceae	Grevillea insignis
Proteaceae	Grevillea lissopleura
Proteaceae	Grevillea lullfitzii
Proteaceae	Grevillea marriottii
Proteaceae	Grevillea neodissecta
Proteaceae	Grevillea oligantha
Proteaceae	Grevillea oncogyne
Proteaceae	Grevillea petrophiloides
Proteaceae	Grevillea pilosa subsp. redacta
Proteaceae	Grevillea pilosa subsp. pilosa
Proteaceae	Grevillea prostrata
Proteaceae	Grevillea pterosperma
Proteaceae	Grevillea 'RF05'
Proteaceae	Grevillea shuttleworthiana subsp. obovata
Proteaceae	Grevillea shuttleworthiana subsp. shuttleworthiana
Proteaceae	Grevillea shuttleworthiana
Proteaceae	Grevillea teretifolia
Proteaceae	Grevillea wittweri
Proteaceae	Grevillea yorkrakinensis
Proteaceae	Hakea commutata
Proteaceae	Hakea corymbosa
Proteaceae	Hakea cygna subsp. cygna
Proteaceae	Hakea erecta
Proteaceae	Hakea francisiana
Proteaceae	Hakea incrassata
Proteaceae	Hakea kippistiana
Proteaceae	Hakea laurina
Proteaceae	Hakea meisneriana
Proteaceae	Hakea multilineata
Proteaceae	Hakea newbeyana
Proteaceae	Hakea pandanicarpa subsp. crassifolia
Proteaceae	Hakea pandanicarpa subsp. pandanicarpa
Proteaceae	Hakea pandanicarpa
Proteaceae	Hakea pendens
Proteaceae	Hakea platysperma
Proteaceae	Hakea preissii
Proteaceae	Hakea scoparia subsp. scoparia
Proteaceae	Hakea scoparia
Proteaceae	Hakea subsulcata
Proteaceae	Hakea trifurcata
Proteaceae	Isopogon buxifolius
Proteaceae	Isopogon gardneri
Proteaceae	Isopogon pruinosus subsp. glabellus
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roject	-
Family	Taxon
Proteaceae	Isopogon scabriusculus subsp. stenophyllus
Proteaceae	Isopogon scabriusculus
Proteaceae	Isopogon villosus
Proteaceae	Lambertia inermis
Proteaceae	Persoonia angustiflora
Proteaceae	Persoonia coriacea
Proteaceae	Persoonia cymbifolia
Proteaceae	Persoonia helix
Proteaceae	Persoonia inconspicua
Proteaceae	Persoonia quinquenervis
Proteaceae	Persoonia saundersiana
Proteaceae	Persoonia striata
Proteaceae	Persoonia teretifolia
Proteaceae	Petrophile arcuata
Proteaceae	Petrophile circinata
Proteaceae	Petrophile ericifolia subsp. ericifolia
Proteaceae	Petrophile glauca
Proteaceae	Petrophile media
Proteaceae	Petrophile merrallii
Proteaceae	Petrophile seminuda
Proteaceae	Petrophile stricta
Proteaceae	Stirlingia simplex
Proteaceae	Synaphea divaricata
Proteaceae	Synaphea favosa
Proteaceae	Synaphea interioris
Proteaceae	Synaphea polymorpha
Proteaceae	Synaphea spinulosa subsp. major
Proteaceae	Synaphea spinulosa
Pteridaceae	Cheilanthes lasiophylla
Pteridaceae	Cheilanthes sieberi subsp. sieberi
Restionaceae	Chordifex sphacelatus
Restionaceae	Desmocladus lateriflorus
Restionaceae	Desmocladus myriocladus
Restionaceae	Hypolaena humilis
Restionaceae	Lepidobolus chaetocephalus
Rhamnaceae	Cryptandra apetala var. anomala
Rhamnaceae	Cryptandra dielsii
Rhamnaceae	Cryptandra intonsa
Rhamnaceae	Cryptandra leucopogon
Rhamnaceae	Cryptandra minutifolia subsp. brevistyla
Rhamnaceae	Cryptandra minutifolia subsp. minutifolia
Rhamnaceae	Cryptandra minutifolia
Rhamnaceae	Cryptandra monticola
Rhamnaceae	Cryptandra myriantha
Rhamnaceae	Cryptandra nutans
Rhamnaceae	Cryptandra polyclada subsp. polyclada
Rhamnaceae	Cryptandra recurva
Rhamnaceae	Cryptandra spyridioides
Rhamnaceae	Cryptandra wilsonii



roject Family	Tayan
	Taxon
Rhamnaceae	Granitites intangendus
Rhamnaceae	Spyridium microcephalum
Rhamnaceae	Spyridium mucronatum subsp. mucronatum
Rhamnaceae	Spyridium polycephalum
Rhamnaceae	Stenanthemum bremerense
Rhamnaceae	Stenanthemum liberum
Rhamnaceae	Stenanthemum notiale subsp. notiale
Rhamnaceae	Stenanthemum stipulosum
Rhamnaceae	Trymalium myrtillus subsp. myrtillus
Rhamnaceae	Trymalium myrtillus
Rubiaceae	Opercularia liberiflora
Rubiaceae	Opercularia vaginata
Ruppiaceae	Ruppia polycarpa
Rutaceae	Boronia crenulata
Rutaceae	Boronia fabianoides subsp. rosea
Rutaceae	Boronia fabianoides
Rutaceae	Boronia inornata subsp. inornata
Rutaceae	Boronia inornata subsp. leptophylla
Rutaceae	Boronia inornata
Rutaceae	Boronia revoluta
Rutaceae	Boronia sp. (Windsor Tableland)
Rutaceae	Boronia ternata var. promiscua
Rutaceae	Boronia ternata var. ternata
Rutaceae	Boronia ternata
Rutaceae	Boronia westringioides
Rutaceae	Cyanothamnus baeckeaceus subsp. baeckeaceus
Rutaceae	Cyanothamnus coerulescens subsp. coerulescens
Rutaceae	Cyanothamnus coerulescens subsp. spicatus
Rutaceae	Cyanothamnus coerulescens subsp. spinescens
Rutaceae	Cyanothamnus fabianoides subsp. roseus
Rutaceae	Cyanothamnus westringioides
Rutaceae	Drummondita hassellii
Rutaceae	Microcybe albiflora
Rutaceae	Microcybe ambigua
Rutaceae	Microcybe multiflora subsp. multiflora
Rutaceae	Microcybe pauciflora
Rutaceae	Phebalium brachycalyx
Rutaceae	Phebalium filifolium
Rutaceae	Phebalium megaphyllum
Rutaceae	Phebalium obovatum
Rutaceae	Phebalium tuberculosum
Rutaceae	Philotheca rhomboidea
Santalaceae	Choretrum glomeratum
Santalaceae	Exocarpos aphyllus
Santalaceae	Exocarpos sparteus
Santalaceae	Leptomeria pachyclada
Santalaceae	Leptomeria preissiana
Santalaceae	Santalum acuminatum
Santalaceae	Santalum murrayanum



Family	Taxon
Santalaceae	Santalum spicatum
Sapindaceae	Dodonaea adenophora
Sapindaceae	Dodonaea amblyophylla
Sapindaceae	Dodonaea bursariifolia
Sapindaceae	Dodonaea caespitosa
Sapindaceae	Dodonaea ceratocarpa
Sapindaceae	Dodonaea glandulosa
Sapindaceae	Dodonaea microzyga var. acrolobata
Sapindaceae	Dodonaea pinifolia
Sapindaceae	Dodonaea ptarmicifolia
Sapindaceae	Dodonaea stenozyga
Sapindaceae	Dodonaea viscosa subsp. angustissima
Sapindaceae	Dodonaea viscosa subsp. spatulata
Sapindaceae	Dodonaea viscosa
Sapindaceae	Dodonaea viscosa
Scrophulariaceae	Calamphoreus inflatus
Scrophulariaceae	Eremophila biserrata
Scrophulariaceae	Eremophila calorhabdos
Scrophulariaceae	Eremophila decipiens subsp. decipiens
Scrophulariaceae	Eremophila decipiens
Scrophulariaceae	Eremophila dempsteri
Scrophulariaceae	Eremophila densifolia subsp. pubiflora
Scrophulariaceae	Eremophila densifolia subsp. capitata
Scrophulariaceae	Eremophila densifolia
Scrophulariaceae	Eremophila densifolia subsp. densifolia
Scrophulariaceae	Eremophila deserti
Scrophulariaceae	Eremophila drummondii
Scrophulariaceae	Eremophila glabra subsp. glabra
Scrophulariaceae	Eremophila glabra subsp. Forrestania (G.F.Craig 5897)
Scrophulariaceae	Eremophila ionantha
Scrophulariaceae	Eremophila laanii
Scrophulariaceae	Eremophila labrosa
Scrophulariaceae	Eremophila latrobei
Scrophulariaceae	Eremophila lucida
Scrophulariaceae	Eremophila maculata subsp. brevifolia
Scrophulariaceae	Eremophila oppositifolia subsp. angustifolia
Scrophulariaceae	Eremophila psilocalyx
Scrophulariaceae	Eremophila racemosa
Scrophulariaceae	Eremophila rugosa
Scrophulariaceae	Eremophila serpens
Scrophulariaceae	Eremophila subfloccosa subsp. lanata
Scrophulariaceae	Eremophila subfloccosa
Scrophulariaceae	Eremophila verticillata
Scrophulariaceae	Eremophila viscida
Solanaceae	Cyphanthera microphylla
Solanaceae	Duboisia hopwoodii
Solanaceae	Lycium australe
Solanaceae	Nicotiana occidentalis
Solanaceae	Nicotiana rotundifolia



Family	Taxon
Solanaceae	Solanum capsiciforme
Solanaceae	Solanum hoplopetalum
Solanaceae	Solanum plicatile
Solanaceae	Solanum simile
Solanaceae	Symonanthus aromaticus
Stylidiaceae	Levenhookia leptantha
Stylidiaceae	Stylidium breviscapum
Stylidiaceae	Stylidium despectum
Stylidiaceae	Stylidium dichotomum
Stylidiaceae	Stylidium dielsianum
Stylidiaceae	Stylidium involucratum
Stylidiaceae	Stylidium limbatum
Stylidiaceae	Stylidium petiolare
Stylidiaceae	Stylidium repens
Stylidiaceae	Stylidium salmoneum
Stylidiaceae	Stylidium sejunctum
Stylidiaceae	Stylidium thylax
Stylidiaceae	Stylidium validum
Stylidiaceae	Stylidium zeicolor
Thymelaeaceae	Pimelea aeruginosa
Thymelaeaceae	Pimelea angustifolia
Thymelaeaceae	Pimelea argentea
Thymelaeaceae	Pimelea brevifolia subsp. brevifolia
Thymelaeaceae	Pimelea brevifolia
Thymelaeaceae	Pimelea erecta
Thymelaeaceae	Pimelea graniticola
Thymelaeaceae	Pimelea imbricata var. piligera
Thymelaeaceae	Pimelea suaveolens subsp. flava
Violaceae	Hybanthus epacroides
Violaceae	Hybanthus floribundus subsp. floribundus
Violaceae	Hybanthus floribundus
Xanthorrhoeaceae	Xanthorrhoea nana
Zygophyllaceae	Roepera glauca

TERRESTRIAL VERTEBRATE FAUNA



Class	Family	Taxon	Vernacular Name
Amphibia	Hylidae	Litoria cyclorhyncha	Spotted-thighed Frog
Amphibia	Limnodynastidae	Heleioporus albopunctatus	Western Spotted Frog
Amphibia	Limnodynastidae	Limnodynastes dorsalis	Western Banjo Frog
Amphibia	Limnodynastidae	Neobatrachus albipes	White-footed Frog
Amphibia	Limnodynastidae	Neobatrachus kunapalari	Kunapalari Frog
Amphibia	Limnodynastidae	Neobatrachus pelobatoides	Humming Frog
Amphibia	Limnodynastidae	Neobatrachus sutor	Shoemaker Frog
Amphibia	Myobatrachidae	Crinia pseudinsignifera	Bleating Froglet
Amphibia	Myobatrachidae	Pseudophryne occidentalis	Orange-crowned Toadlet
Aves	Acanthizidae	Acanthiza (Acanthiza) apicalis	Red-rumped Tit
Aves	Acanthizidae	Acanthiza (Geobasileus) chrysorrhoa	Yellow-tail
Aves	Acanthizidae	Acanthiza (Geobasileus) inornata	Masters' Tit
Aves	Acanthizidae	Acanthiza (Geobasileus) uropygialis	Chestnut-rumped Tit
Aves	Acanthizidae	Calamanthus campestris	Rock Field-lark
Aves	Acanthizidae	Gerygone fusca	Fuscous Warbler
Aves	Acanthizidae	Hylacola cauta	Shy Heathwren
Aves	Acanthizidae	Hylacola cauta whitlocki	
Aves	Acanthizidae	Pyrrholaemus brunneus	Redthroat
Aves	Acanthizidae	Sericornis (Sericornis) frontalis	White-fronted Scrubwren
Aves	Acanthizidae	Smicrornis brevirostris	Brown Weebill
Aves	Accipitridae	Accipiter (Leucospiza) fasciatus	Grey-headed Goshawk
Aves	Accipitridae	Accipiter (Paraspizias) cirrocephalus	Collared Sparrowhawk
Aves	Accipitridae	Aquila (Uroaetus) audax	Wedge-tailed Eagle
Aves	Accipitridae	Circus assimilis	Spotted Harrier
Aves	Accipitridae	Elanus axillaris	Black-shouldered Kite
Aves	Accipitridae	Haliastur sphenurus	Whistling Eagle-hawk
Aves	Accipitridae	Hamirostra melanosternon	Black-breasted Buzzard
Aves	Accipitridae	Hieraaetus (Hieraaetus) morphnoides	Little Eagle
Aves	Accipitridae	Lophoictinia isura	Square-tailed Kite
Aves	Aegothelidae	Aegotheles (Aegotheles) cristatus	Australian Owlet-nightjar
Aves	Alcedinidae	Dacelo (Dacelo) novaeguineae	Kookaburra
Aves	Alcedinidae	Todiramphus (Cyanalcyon) pyrrhopygius	Red-backed Kingfisher
Aves	Alcedinidae	Todiramphus (Todiramphus) sanctus	Sacred Kingfisher
Aves	Anatidae	Anas (Anas) superciliosa superciliosa	-
Aves	Anatidae	Anas (Nettion) castanea	Chestnut Teal
Aves	Anatidae	Anas (Nettion) gracilis	Oceanic Teal
Aves	Anatidae	Anas rhynchotis	Australasian Shoveler
Aves	Anatidae	Aythya (Nyroca) australis	Brownhead
Aves	Anatidae	Biziura lobata	Musk Duck
Aves	Anatidae	Chenonetta jubata	Australian Wood Duck
Aves	Anatidae	Cygnus (Chenopis) atratus	Black Swan
Aves	Anatidae	Malacorhynchus membranaceus	Pink-eared Duck
Aves	Anatidae	Tadorna (Casarca) tadornoides	Chestnut Sheldrake
Aves	Anseranatidae	Anseranas semipalmata	Magpie Goose
Aves	Ardeidae	Ardea pacifica	White-necked Heron
Aves	Ardeidae	Egretta novaehollandiae	Matuka
Aves	Ardeidae	Nycticorax caledonicus	Crane

Prepared by Botanica Consulting



Class	Family	Taxon	Vernacular Name
Aves	Artamidae	Artamus (Angroyan) cinereus	Black-faced Woodswallow
Aves	Artamidae	Artamus (Angroyan) cyanopterus	Dusky Woodswallow
Aves	Artamidae	Artamus (Campbellornis) personatus	Masked Woodswallow
Aves	Artamidae	Cracticus nigrogularis	Pied Butcherbird
Aves	Artamidae	Cracticus torquatus	Grey Butcherbird
Aves	Artamidae	Gymnorhina tibicen	Australian Magpie
Aves	Artamidae	Strepera (Neostrepera) versicolor	Grey Currawong
Aves	Cacatuidae	Calyptorhynchus latirostris	Carnaby's Cockatoo
Aves	Cacatuidae	Eolophus roseicapilla	Galah
Aves	Cacatuidae	Nymphicus hollandicus	Cockatiel
Aves	Cacatuidae	Zanda baudinii	Baudin's Black-cockatoo
Aves	Campephagidae	Coracina (Coracina) novaehollandiae	Black-faced Cuckoo-shrike
Aves	Campephagidae	Lalage (Lalage) tricolor	Australian White-winged Triller
Aves	Caprimulgidae	Eurostopodus (Eurostopodus) argus	Spotted Nightjar
Aves	Casuariidae	Dromaius novaehollandiae	Emu
Aves	Charadriidae	Charadrius (Charadrius)	
Aves	Charadriidae	Charadrius (Charadrius) ruficapillus	Red-capped Plover
Aves	Charadriidae	Elseyornis melanops	Black-fronted Dotterel
Aves	Charadriidae	Thinornis rubricollis	Hooded Plover
Aves	Charadriidae	Vanellus (Lobivanellus) tricolor	Banded Lapwing
Aves	Cinclosomatidae	Cinclosoma (Malleeavis) castanotum	Chestnut Quailthrush (chestnut- backed Quailthrush)
Aves	Cinclosomatidae	Cinclosoma (Malleeavis) clarum	
Aves	Climacteridae	Climacteris (Climacteris) rufus	Rufous Treecreeper
Aves	Columbidae	Ocyphaps lophotes	Crested Pigeon
Aves	Columbidae	Phaps (Phaps) chalcoptera	Common Bronzewing
Aves	Columbidae	Phaps (Phaps) elegans	Brush Bronzewing
Aves	Corvidae	Corvus bennetti	Little Crow
Aves	Corvidae	Corvus coronoides	Australian Raven
Aves	Corvidae	Corvus orru	Torresian Crow
Aves	Cuculidae	Cacomantis (Vidgenia) flabelliformis	Fan-tailed Cuckoo
Aves	Cuculidae	Chalcites basalis	Horsfield's Bronze-cuckoo
Aves	Cuculidae	Chalcites lucidus	Shining Bronze-cuckoo
Aves	Cuculidae	Chalcites osculans	Black-eared Cuckoo
Aves	Cuculidae	Heteroscenes pallidus	Pallid Cuckoo
Aves	Dicaeidae	Dicaeum (Dicaeum) hirundinaceum	Mistletoebird
Aves	Estrildidae	Taeniopygia guttata	Zebra Finch
Aves	Falconidae	Falco (Falco) longipennis	Australian Hobby
Aves	Falconidae	Falco (Hierofalco) peregrinus	Duck Hawk
Aves	Falconidae	Falco (leracidea) berigora	Chicken Hawk
Aves	Falconidae	Falco (Tinnunculus) cenchroides	Wala
Aves	Falcunculidae	Falcunculus frontatus	Crested Shrike-tit
Aves	Hirundinidae	Cheramoeca leucosterna	White-backed Swallow
Aves	Hirundinidae	Hirundo (Hirundo) neoxena	Welcome Swallow
Aves	Hirundinidae	Petrochelidon (Hylochelidon) nigricans	Tree Martin
Aves	Hirundinidae	Petrochelidon (Petrochelidon) ariel	Fairy Martin
Aves	Locustellidae	Cincloramphus (Cincloramphus) cruralis	Brown Songlark
Aves	Locustellidae	Cincloramphus (Maclennania) mathewsi	Rufous Songlark
Aves	Maluridae	Malurus (Leggeornis) assimilis	

Prepared by Botanica Consulting



Class	Family	Taxon	Vernacular Name
Aves	Maluridae	Malurus (Leggeornis) lamberti	Variegated Fairy-wren
Aves	Maluridae	Malurus (Leggeornis) pulcherrimus	Blue-breasted Fairy-wren
Aves	Maluridae	Malurus (Malurus) splendens	Splendid Fairy-wren
Aves	Maluridae	Malurus (Musciparus) leucopterus	White-winged Fairy-wren
Aves	Maluridae	Stipiturus malachurus	Southern Emu-wren
Aves	Maluridae	Stipiturus malachurus westernensis	
Aves	Megapodiidae	Leipoa ocellata	Malleefowl
Aves	Meliphagidae	Acanthagenys rufogularis	Spiny-cheeked Honeyeater
Aves	Meliphagidae	Anthochaera (Anellobia) lunulata	Western Wattlebird
Aves	Meliphagidae	Anthochaera (Anthochaera) carunculata	Red Wattlebird
Aves	Meliphagidae	Certhionyx (Certhionyx) variegatus	Pied Honeyeater
Aves	Meliphagidae	Epthianura (Epthianura) albifrons	White-fronted Chat
Aves	Meliphagidae	Epthianura (Parepthianura) tricolor	Crimson Chat
Aves	Meliphagidae	Gavicalis virescens	Singing Honeyeater
Aves	Meliphagidae	Gliciphila melanops	Tawny-crowned Honeyeater
Aves	Meliphagidae	Lichenostomus cratitius	Purple-gaped Honeyeater
Aves	Meliphagidae	Lichmera (Lichmera) indistincta	Brown Honeyeater
Aves	Meliphagidae	Manorina (Myzantha) flavigula	Yellow-throated Miner
Aves	Meliphagidae	Melithreptus (Eidopsarus) brevirostris	Brown-headed Honeyeater
Aves	Meliphagidae	Nesoptilotis leucotis	White-eared Honeyeater
Aves	Meliphagidae	Phylidonyris (Meliornis) niger	White-cheeked Honeyeater
Aves	Meliphagidae	Phylidonyris (Meliornis) novaehollandiae	New Holland Honeyeater
Aves	Meliphagidae	Ptilotula ornata	Yellow-plumed Honeyeater
Aves	Meliphagidae	Purnella albifrons	White-fronted Honeyeater
Aves	Meliphagidae	Sugomel nigrum	Black Honeyeater
Aves	Meropidae	Merops (Merops) ornatus	Rainbow Bee-eater
Aves	Monarchidae	Grallina cyanoleuca	Magpie-lark
Aves	Monarchidae	Myiagra (Seisura) inquieta	Restless Flycatcher
Aves	Motacillidae	Anthus (Anthus) novaeseelandiae	Australian Pipit
Aves	Neosittidae	Daphoenositta (Neositta) chrysoptera	Varied Sittella
Aves	Oreoicidae	Oreoica gutturalis	Crested Bellbird
Aves	Otididae	Ardeotis australis	Plain Turkey
Aves	Pachycephalidae	Colluricincla (Colluricincla) harmonica	Grey Shrike-thrush
Aves	Pachycephalidae	Pachycephala (Alisterornis) rufiventris	Rufous Whistler
Aves	Pachycephalidae	Pachycephala (Pachycephala) pectoralis	Golden Whistler
Aves	Pachycephalidae	Pachycephala (Pachycephala) pectoralis fuliginosa	
Aves	Pachycephalidae	Pachycephala (Timixos) inornata	Gilbert's Whistler
Aves	Pardalotidae	Pardalotus (Pardalotinus) striatus	Striated Pardalote
Aves	Pardalotidae	Pardalotus (Pardalotus) punctatus	Spotted Pardalote
Aves	Pardalotidae	Pardalotus (Pardalotus) punctatus punctatus	
Aves	Petroicidae	Drymodes brunneopygia	Southern Scrub-robin
Aves	Petroicidae	Eopsaltria (Eopsaltria) griseogularis	Western Yellow Robin
Aves	Petroicidae	Melanodryas (Melanodryas) cucullata	Hooded Robin
Aves	Petroicidae	Microeca (Microeca) fascinans	Jacky Winter
Aves	Petroicidae	Petroica (Petroica) goodenovii	Red-capped Robin
Aves	Phalacrocoracidae	Microcarbo melanoleucos	Little Cormorant
Aves	Phalacrocoracidae	Phalacrocorax (Phalacrocorax) sulcirostris	Little Black Cormorant



Class	Family	Taxon	Vernacular Name
Aves	Phasianidae	Coturnix (Coturnix) pectoralis	Grey Quail
Aves	Phasianidae	Synoicus ypsilophora ypsilophora	Tasmanian Swamp Quail
Aves	Podargidae	Podargus strigoides	Tawny Frogmouth
Aves	Podicipedidae	Podiceps cristatus	Crested Grebe
Aves	Podicipedidae	Poliocephalus poliocephalus	Hoary-headed Dabchick
Aves	Podicipedidae	Tachybaptus novaehollandiae	Australian Little Grebe
Aves	Pomatostomidae	Pomatostomus (Morganornis) superciliosus	White-browed Babbler
Aves	Psittacidae	Barnardius zonarius	Australian Ringneck
Aves	Psittacidae	Melopsittacus undulatus	Budgerigar
Aves	Psittacidae	Neophema (Neonanodes) elegans	Elegant Parrot
Aves	Psittacidae	Parvipsitta porphyrocephala	Purple-crowned Lorikeet
Aves	Psittacidae	Platycercus (Violania) icterotis	Western Rosella
Aves	Psittacidae	Polytelis anthopeplus	Regent Parrot
Aves	Psittacidae	Psephotus (Psephotellus) varius	Mulga Parrot
Aves	Rallidae	Fulica atra	Eurasian Coot
Aves	Rallidae	Tribonyx ventralis	Black-tailed Native Hen
Aves	Recurvirostridae	Himantopus himantopus	Pied Stilt
Aves	Rhipiduridae	Rhipidura (Rhipidura) albiscapa	Grey Fantail
Aves	Rhipiduridae	Rhipidura (Rhipidura) albiscapa albicauda	
Aves	Rhipiduridae	Rhipidura (Sauloprocta) leucophrys	Willie Wagtail
Aves	Scolopacidae	Calidris (Erolia) acuminata	Sharp-tailed Sandpiper
Aves	Strigidae	Ninox (Ninox) novaeseelandiae	Southern Boobook
Aves	Threskiornithidae	Threskiornis moluccus	Black-necked Ibis
Aves	Threskiornithidae	Threskiornis spinicollis	Letter Bird
Aves	Tytonidae	Tyto javanica	Eastern Barn Owl
Aves	Zosteropidae	Zosterops lateralis	Silvereye
Aves	Zosteropidae	Zosterops lateralis chloronotus	
Aves	Zosteropidae	Zosterops luteus	Yellow White-eye
Mammalia	Burramyidae	Cercartetus concinnus	Western Pygmy-possum
Mammalia	Camelidae	Camelus dromedarius	One-humped Camel
Mammalia	Canidae	Vulpes vulpes	Fox
Mammalia	Dasyuridae	Ningaui yvonneae	Southern Ningaui
Mammalia	Dasyuridae	Sminthopsis crassicaudata	Fat-tailed Dunnart
Mammalia	Dasyuridae	Sminthopsis fuliginosus	Dusky Dunnart
Mammalia	Dasyuridae	Sminthopsis gilberti	Gilbert's Dunnart
Mammalia	Dasyuridae	Sminthopsis granulipes	White-tailed Dunnart
Mammalia	Felidae	Felis catus	Cat
Mammalia	Molossidae	Ozimops petersi	Inland Free-tailed Bat
Mammalia	Muridae	Mus musculus	House Mouse
Mammalia	Muridae	Notomys mitchellii	Mitchell's Hopping-mouse
Mammalia	Muridae	Pseudomys albocinereus	Ash-grey Mouse
Mammalia	Tachyglossidae	Tachyglossus aculeatus	Short-beaked Echidna
Mammalia	Tachyglossidae	Tachyglossus aculeatus acanthion	
Mammalia	Vespertilionidae	Chalinolobus gouldii	Gould's Wattled Bat
Mammalia	Vespertilionidae	Chalinolobus morio	Chocolate Wattled Bat
Mammalia	Vespertilionidae	Nyctophilus geoffroyi	Lesser Long-eared Bat
Mammalia	Vespertilionidae	Vespadelus regulus	Southern Forest Bat
Reptilia	Agamidae	Ctenophorus chapmani	Southern Heath Dragon



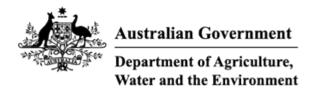
Class	Family	Taxon	Vernacular Name
Reptilia	Agamidae	Ctenophorus cristatus	Crested Dragon
Reptilia	Agamidae	Ctenophorus maculatus griseus	
Reptilia	Agamidae	Ctenophorus ornatus	Ornate Dragon
Reptilia	Agamidae	Ctenophorus salinarum	Claypan Dragon
Reptilia	Agamidae	Moloch horridus	Thorny Devil
Reptilia	Agamidae	Pogona minor minor	
Reptilia	Carphodactylidae	Underwoodisaurus milii	Thick-tailed Gecko
Reptilia	Diplodactylidae	Crenadactylus horni	Central Uplands Clawless Gecko
Reptilia	Diplodactylidae	Crenadactylus ocellatus	South-western Clawless Gecko
Reptilia	Diplodactylidae	Diplodactylus calcicolus	South Coast Gecko
Reptilia	Diplodactylidae	Diplodactylus granariensis granariensis	Western Stone Gecko
Reptilia	Diplodactylidae	Diplodactylus pulcher	Fine-faced Gecko
Reptilia	Diplodactylidae	Hesperoedura reticulata	Reticulated Velvet Gecko
Reptilia	Diplodactylidae	Lucasium maini	Main's Ground Gecko
Reptilia	Diplodactylidae	Strophurus spinigerus inornatus	
Reptilia	Elapidae	Echiopsis curta	Bardick
Reptilia	Elapidae	Neelaps bimaculatus	Black-naped Snake
Reptilia	Elapidae	Paroplocephalus atriceps	Lake Cronin Snake
Reptilia	Elapidae	Pseudonaja affinis affinis	Toogitj
Reptilia	Elapidae	Simoselaps bertholdi	Jan's Banded Snake
Reptilia	Elapidae	Suta gouldii	Gould's Hooded Snake
Reptilia	Elapidae	Suta nigriceps	Mitchell's Short-tailed Snake
Reptilia	Gekkonidae	Gehyra variegata	Tree Dtella
Reptilia	Pygopodidae	Delma australis	Marble-faced Delma
Reptilia	Pygopodidae	Delma fraseri	Fraser's Delma
Reptilia	Pygopodidae	Lialis burtonis	Burton's Snake-lizard
Reptilia	Pythonidae	Morelia spilota	Diamond Python
Reptilia	Scincidae	Cryptoblepharus	
Reptilia	Scincidae	Ctenotus atlas	Southern Mallee Ctenotus
Reptilia	Scincidae	Ctenotus impar	Odd-striped Ctenotus
Reptilia	Scincidae	Ctenotus schomburgkii	Schomburgk's Ctenotus
Reptilia	Scincidae	Cyclodomorphus melanops elongatus	Mallee Slender Blue-tongue Lizard
Reptilia	Scincidae	Egernia richardi	Bright Crevice-skink
Reptilia	Scincidae	Hemiergis initialis initialis	
Reptilia	Scincidae	Lerista distinguenda	Dwarf Four-toed Slider
Reptilia	Scincidae	Lerista picturata	Southern Robust Slider
Reptilia	Scincidae	Liopholis inornata	Desert Skink
Reptilia	Scincidae	Liopholis multiscutata	Southern Sand-skink
Reptilia	Scincidae	Menetia greyii	Common Dwarf Skink
Reptilia	Scincidae	Morethia butleri	Woodland Morethia Skink
Reptilia	Scincidae	Morethia obscura	Shrubland Morethia Skink
Reptilia	Scincidae	Tiliqua occipitalis	Western Blue-tongue
Reptilia	Scincidae	Tiliqua rugosa	Boggi
Reptilia	Typhlopidae	Anilios australis	Southern Blind Snake
Reptilia	Typhlopidae	Anilios bituberculatus	Prong-snouted Blind Snake
Reptilia	Typhlopidae	Anilios pinguis	Fat Blind Snake
Reptilia	Varanidae	Varanus gouldii	Gould's Goanna
Reptilia	Varanidae	Varanus rosenbergi	Heath Monitor



APPENDIX I: EPBC PROTECTED MATTERS SEARCH (40KM BUFFER)

BOTANICA

CONSULTING



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. Please see the caveat for interpretation of information provided here.

Report created: 18-Oct-2022

Summary Details Matters of NES Other Matters Protected by the EPBC Act Extra Information Caveat Acknowledgements

Summary

Matters of National Environment 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 (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	23
Listed Migratory Species:	7

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

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 <u>permit</u> 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 Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	11
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

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

State and Territory Reserves:	9
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	9
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

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.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text
Eucalypt Woodlands of the Western Australian Wheatbelt	Critically Endangered	Community likely to occur within area
Listed Threatened Species		[Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act. Number is the current name ID.

Scientific Name	Threatened Category	Presence Text
BIRD		
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Falco hypoleucos		
Grey Falcon [929]	Vulnerable	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
Zanda latirostris listed as Calyptorhynch	us latirostris	
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to

[Resource Information]



occur within area

MAMMAL

Dasyurus geoffroii

Chuditch, Western Quoll [330]

Vulnerable

Species or species habitat known to occur within area

Scientific Name	Threatened Category	Presence Text
Phascogale calura		
Red-tailed Phascogale, Red-tailed Wambenger, Kenngoor [316]	Vulnerable	Species or species habitat likely to occur within area
Pseudomys shortridgei Heath Mouse, Dayang, Heath Rat [77]	Endangered	Species or species habitat may occur within area
PLANT		
Acacia lanuginophylla Woolly Wattle [55575]	Endangered	Species or species habitat known to occur within area
Banksia sphaerocarpa var. dolichostyla Ironcaps Banksia, Ironcap Banksia [10518]	Vulnerable	Species or species habitat known to occur within area
<u>Boronia revoluta</u> Ironcap Boronia [9167]	Endangered	Species or species habitat known to occur within area
Caladenia graniticola Pingaring Spider-orchid, Granite Spider- orchid [84996]	Endangered	Species or species habitat likely to occur within area
<u>Caladenia hoffmanii</u> Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat may occur within area
Calectasia pignattiana Stilted Tinsel Lily [82018]	Vulnerable	Species or species habitat known to occur within area
Eremophila verticillata Whorled Eremophila [7032]	Endangered	Species or species habitat likely to occur within area

Eucalyptus recta Silver Mallet [56430]

Endangered

Species or species habitat known to occur within area

<u>Eucalyptus steedmanii</u> Steedmans Gum [15393]

Vulnerable

Species or species habitat known to occur within area

Scientific Name	Threatened Category	Presence Text
Grevillea involucrata		
Lake Varley Grevillea [4631]	Endangered	Species or species habitat may occur within area
Paragoodia crenulata		
[86387]	Critically Endangered	Species or species habitat known to occur within area
Roycea pycnophylloides		
Saltmat [21161]	Endangered	Species or species habitat likely to occur within area
Tetratheca aphylla		
Bungalbin Tetratheca [2915]	Vulnerable	Species or species habitat known to occur within area
Tribonanthes purpurea		
Granite Pink [16244]	Vulnerable	Species or species habitat likely to occur within area
Verticordia staminosa var. cylindracea		
Granite Featherflower [55823]	Endangered	Species or species habitat likely to occur within area
Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
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]

Calidris acuminata Sharp-tailed Sandpiper [874] Species or species habitat may occur within area

Species or species habitat may occur within area

Opionstific Norma		Duese a Tout
Scientific Name	Threatened Category	Presence Text
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
<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]		Species or species habitat may occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos		
Common Sandpiper [59309]		Species or species habitat may occur within area
<u>Apus pacificus</u>		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis		
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine 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 overfly marine area

Calidris melanotos

Pectoral Sandpiper [858]

Species or species habitat may occur within area overfly marine area

Scientific Name

Threatened Category

Presence Text

<u>Chalcites osculans as Chrysococcyx osculans</u> Black-eared Cuckoo [83425]

<u>Merops ornatus</u>

Rainbow Bee-eater [670]

Motacilla cinerea Grey Wagtail [642]

Thinornis cucullatus as Thinornis rubricollis Hooded Plover, Hooded Dotterel [87735]

Tringa nebularia Common Greenshank, Greenshank [832] Species or species habitat known to occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Species or species habitat known to occur within area overfly marine area

Species or species habitat may occur within area overfly marine area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	
Bushfire Rock	Nature Reserve	WA	
Jackson	Nature Reserve	WA	
Lake Cronin	Nature Reserve	WA	
Lake Hurlstone	Nature Reserve	WA	

Marble Rocks	Nature Reserve	WA
Tapper Road	Nature Reserve	WA
Unnamed WA09927	Nature Reserve	WA
Unnamed WA28047	Nature Reserve	WA
Unnamed WA29451	Nature Reserve	WA

Nationally Important Wetlands



Wetland Name	State
Lake Cronin	WA

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Controlled action			
Develop a Nickel Sulphide Open Cut Mine, Underground Mine, and Associated Infra	2008/4443	Controlled Action	Post-Approval
Earl Grey Lithium Project	2017/7950	Controlled Action	Post-Approval
Forrestania Nickel Project - Spotted Quoll-Cosmic Boy Haul Road	2011/6003	Controlled Action	Post-Approval
New Morning Underground Nickel Deposit Project	2021/8971	Controlled Action	Referral Decision
Not controlled action			
Forrestania Nickel Project Flying Fox T5 and water pipeline	2006/2904	Not Controlled Action	Completed
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed
<u>Tenement M77/1245, Norseman</u> Road, Sand Pit (North Pit), WA	2014/7167	Not Controlled Action	Completed
Not controlled action (particular manne	er)		
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and 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

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

Where little information is available for a 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 detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

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

listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
seals which have only been mapped for breeding sites near the Australian continent

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

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

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-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

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Please feel free to provide feedback via the Contact Us page.

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