

CROWN PRINCE PROJECT

Reconnaissance Flora and Basic Fauna Assessment

Prepared for Ora Gold Ltd
August 2024



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Document Information

Prepared for: Ora Gold Ltd.
Project Name: Crown Prince Project
Tenements: M51/886, M51/889
Job Reference: Reconnaissance Flora and Vegetation Survey and Basic Fauna Assessment
Job Number: 2024/071
Date: 23/08/2024
Version: Final

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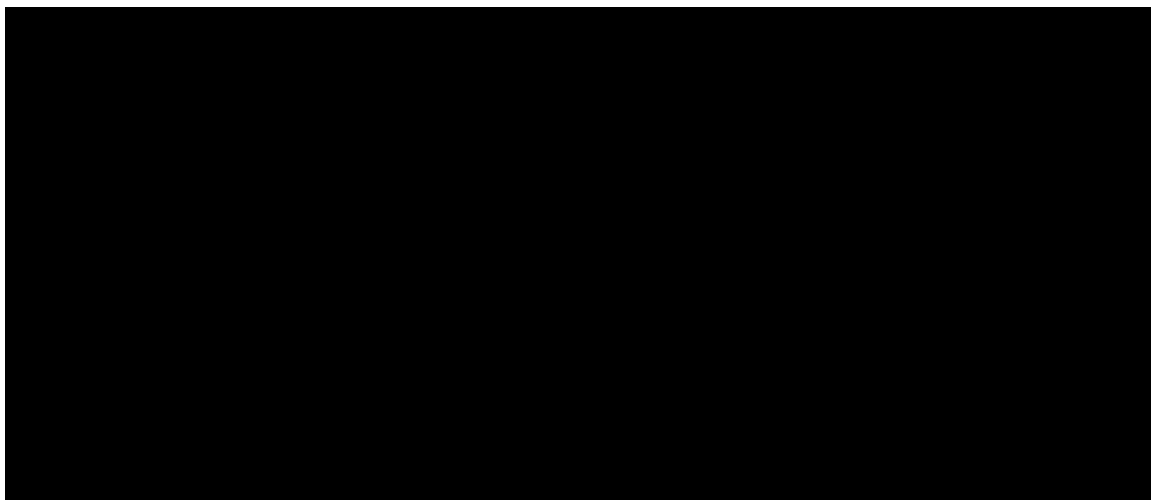
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Cover Photo: Vegetation within the Crown Prince project area (26/06/2024)



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EXECUTIVE SUMMARY

Botanica Consulting Pty Ltd (Botanica) was commissioned by Ora Gold Limited to undertake a reconnaissance flora/ vegetation survey and basic fauna survey of their Crown Prince project area (referred to as the 'survey area'). It is located approximately 15 km north-west of Meekatharra, Western Australia. The survey area is split into two blocks on either side of the Meekatharra-Mount Clere Road and is in total approximately 394 ha in extent. This assessment is intended to support approvals for the Ora Gold Ltd Crown Prince Project.

The survey area lies within the Western Murchison (MUR1) subregion of the Murchison Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA). The survey area is located within the Yoothapina Pastoral Lease in the Shire of Meekatharra.

Botanica conducted flora/ vegetation and basic fauna survey on the 26th of June 2024. The area was surveyed by Jennifer Jackson (Senior Botanist, BSc Environmental Management (Honours)). The area was traversed on foot and by 4WD.

The field survey identified 80 vascular flora taxa within the survey area. These taxa represented 44 genera across 26 families. Twenty annual species were observed during the survey. Six weed species were recorded within the survey. These species are not listed as Declared Pests on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management (BAM) Act 2007* or as Weeds of National Significance.

One Priority flora species was identified in the survey area. *Grevillea inconspicua* (P4) was observed growing in a drainage line. No Threatened flora was identified within the survey area.

A total of four broad-scale vegetation communities were identified within the survey area. Native vegetation within the survey area was categorised as 'Good'. Impacts to vegetation within the survey area include access tracks, historical and current mining and exploration activities, and grazing by large feral herbivores.

No Threatened, Priority or otherwise significant ecological communities were identified within the survey area. No Environmentally Sensitive Areas were identified within the survey area. There are no wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

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 evidence of significant fauna species were observed during the survey.

1 INTRODUCTION

Botanica Consulting Pty Ltd (Botanica) was commissioned by Ora Gold Ltd. to undertake a reconnaissance flora/vegetation survey and basic fauna assessment of their Crown Prince project area (referred to as the 'survey area'). The survey area was split into two blocks on either side of the Meekatharra-Mount Clere Road of approximately 189 ha (M51/889) and 204 ha (M51/886) in extent (total extent approximately 394 ha). The survey area is located approximately 15 km north-west of Meekatharra, Western Australia (Figure 1-1). This assessment is intended to support approvals for the Ora Gold Ltd Crown Prince Project.

1.1 Objectives

The flora assessment was conducted in accordance with the requirements of a reconnaissance flora 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 target area (literature review, database and map-based searches);
- identify significant flora, vegetation and ecological communities;
- conduct a field survey to verify / ground truth the desktop assessment findings;
- undertake floristic community mapping to a scale appropriate for the bioregion and described according to the National Vegetation Information System (NVIS) structure and floristics;
- undertake vegetation condition mapping;
- assess the project area's plant species diversity, density, composition, structure and weed cover, using NVIS classification system for vegetation description;
- identify Matters of National Environmental Significance (MNES) protected under the EPBC Act; and
- determine the State legislative context of environmental aspects required for the assessment.

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;
- 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.

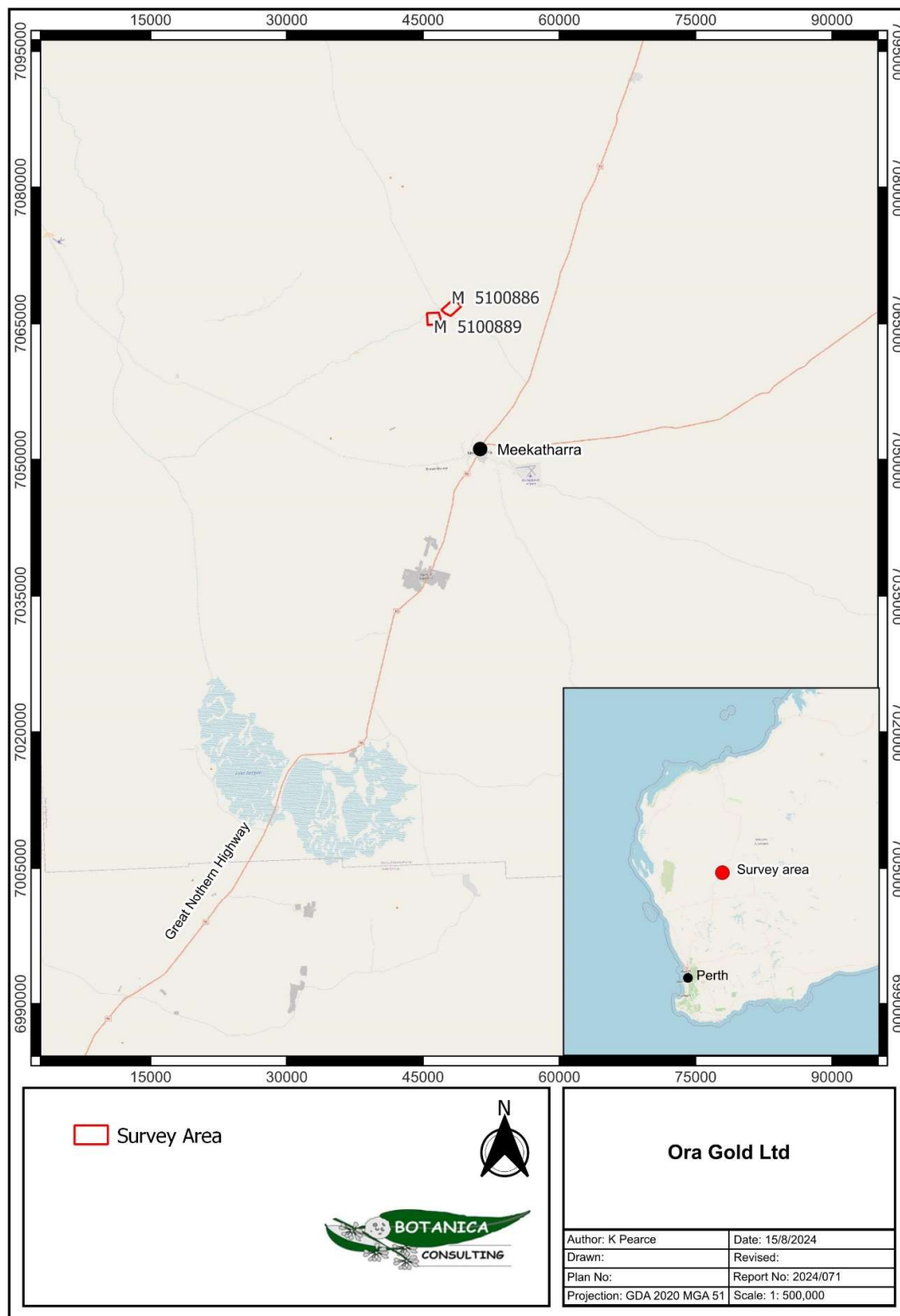


Figure 1-1: Regional map of the survey area

2 BIOPHYSICAL ENVIRONMENT

2.1 Regional Environment

The survey area lies within the Eremaean Province of Western Australia (WA). Based on the Interim Biogeographic Regionalisation of Australia (IBRA, Version 7) (DotEE, 2012) the survey area is located within the Murchison Bioregion of WA. This bioregion is further divided into subregions with the survey area located within the Western Murchison (MUR2) subregion of the Murchison Bioregion (Figure 2-1).

The landscape of the Murchison Bioregion comprises low hills, mesas of duricrust separated by flat colluvium and alluvial plains (Commonwealth Government, 2020). It is dominated by the Archaean (over 2500 million years ago) granite greenstone terrain of the Yilgarn Craton (Commonwealth Government, 2008). Alluvial soils and sands mantle the granitic and greenstone units of the Yilgarn Craton. These soils are shallow, sandy and infertile. Underlying the soils in low areas is a red-brown siliceous hard pan (Curry *et al.* 1994). The soils in the eastern half of the bioregion are typically red sands, calcareous red earth soil, duplex soil and clays. There are 41 vegetation associations (hummock grasslands, succulent steppe or low woodlands) that have at least 85 per cent of their total area in the bioregion. The bioregion is rich and diverse in both its flora and fauna, but most species are wide ranging and usually occur in adjoining regions (McKenzie, May and McKenna, 2002).

The Western Murchison comprises the northern part of the 'Murchison' Terrains of the Yilgarn Craton. It is characterised by mulga low woodlands, often rich in ephemerals (usually with bunch grasses), on outcrop and fine textured Quaternary alluvial and eluvial surfaces (extensive hardpan washplains that dominate and characterise the subregion) mantling granitic and greenstone strata of the northern part of the Yilgarn Craton. Surfaces associated with the occluded drainage occur throughout with hummock grasslands on Quaternary sandplains, saltbush shrublands on calcareous soils and Tecticornia low shrublands on saline alluvia (Desmond, Cowan and Chant, 2001).

2.2 Land Use

The dominant land uses of the Western Murchison subregion include grazing native pastures (96.2%), unallocated crown land and crown reserves (2.81%) and conservation (0.06%). Mining has not been scored as these still come under Pastoral leases (Desmond, Cowan and Chant, 2001). The survey area is located within the Yoothapina Pastoral Lease in the Shire of Meekatharra.

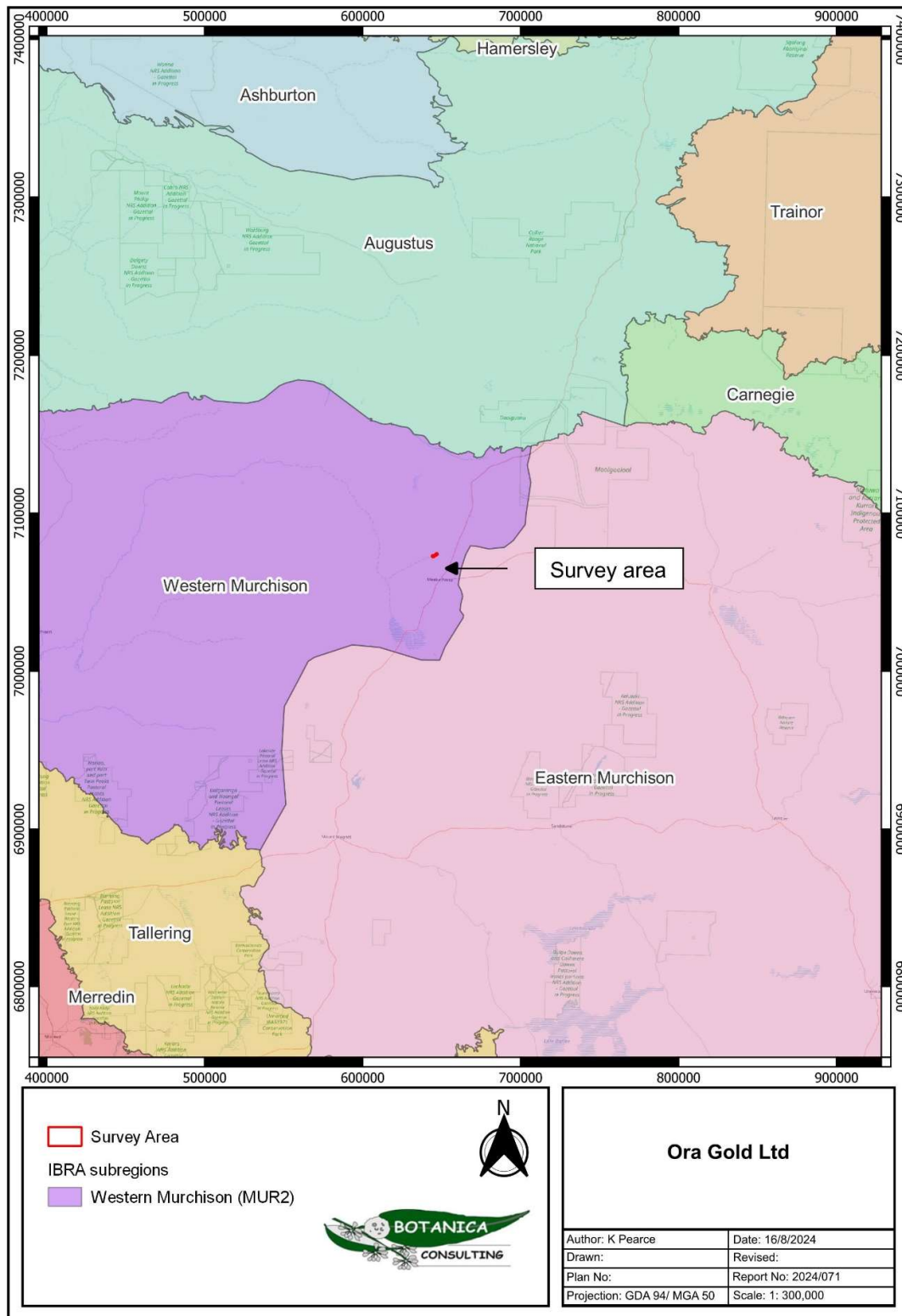


Figure 2-1: Map of IBRA Bioregions in relation to the survey area

2.3 Soil Landscape Systems

The survey area lies within the Murchison Province, which consists of hardpan wash plains and sandplains (with some stony plains, hills, mesas and salt lakes) on the granitic rocks and greenstone of the Yilgarn Craton. The Murchison Province is located in the inland Mid-west and northern Goldfields between three Springs, the Gascoyne River, Wiluna, Cosmo Newberry and Menzies. Soil types consist of red loamy earths, red sandy earths, red shallow loams, red deep sands and red-brown hardpan shallow loams with some red shallow sands and red shallow sandy duplexes present. Vegetation communities are predominately Mulga shrublands with spinifex grasslands, with areas of bowgada shrublands, Eucalypt woodlands and halophytic shrublands (Tille, 2006).

The Murchison Province is further divided into soil-landscape zones, with the survey area located within the Upper Murchison Zone (272). The Upper Murchison Zone comprises of hardpan wash plains (with stony plains, sandplains, hills and mesas) on granite and gneiss of the Yilgarn Craton with red-brown hardpan shallow loams, red shallow loams, red loamy earths and red sands. Soils include red sandy earths, red deep sands, red shallow loams and red loamy earths with some red-brown hardpan shallow loams, salt lake soils and red shallow sandy duplexes. Vegetation is dominated by Mulga shrublands, with some halophytic shrublands. This zone is located in the north-western Murchison between Lake Nerramyne, Meekatharra, Cue and the Gascoyne River. (Tille, 2006).

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 area located within two soil landscape systems, as described in Table 2-1 and shown in Figure 2-2.

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

Soil Landscape System	Description	Extent within Survey Area
Wiluna System	Low greenstone hills with occasional lateritic breakaways and broad stony slopes, lower saline stony plains and broad drainage tracts; supporting sparse mulga and other acacia shrublands with patches of halophytic shrubs	363 ha (92.2%)
Yandil System	Flat hardpan wash plains with mantles of small pebbles and gravels; supporting groved mulga shrublands and occasional wanderrie grasses.	31 ha (7.8%)
Total		394 ha (100%)

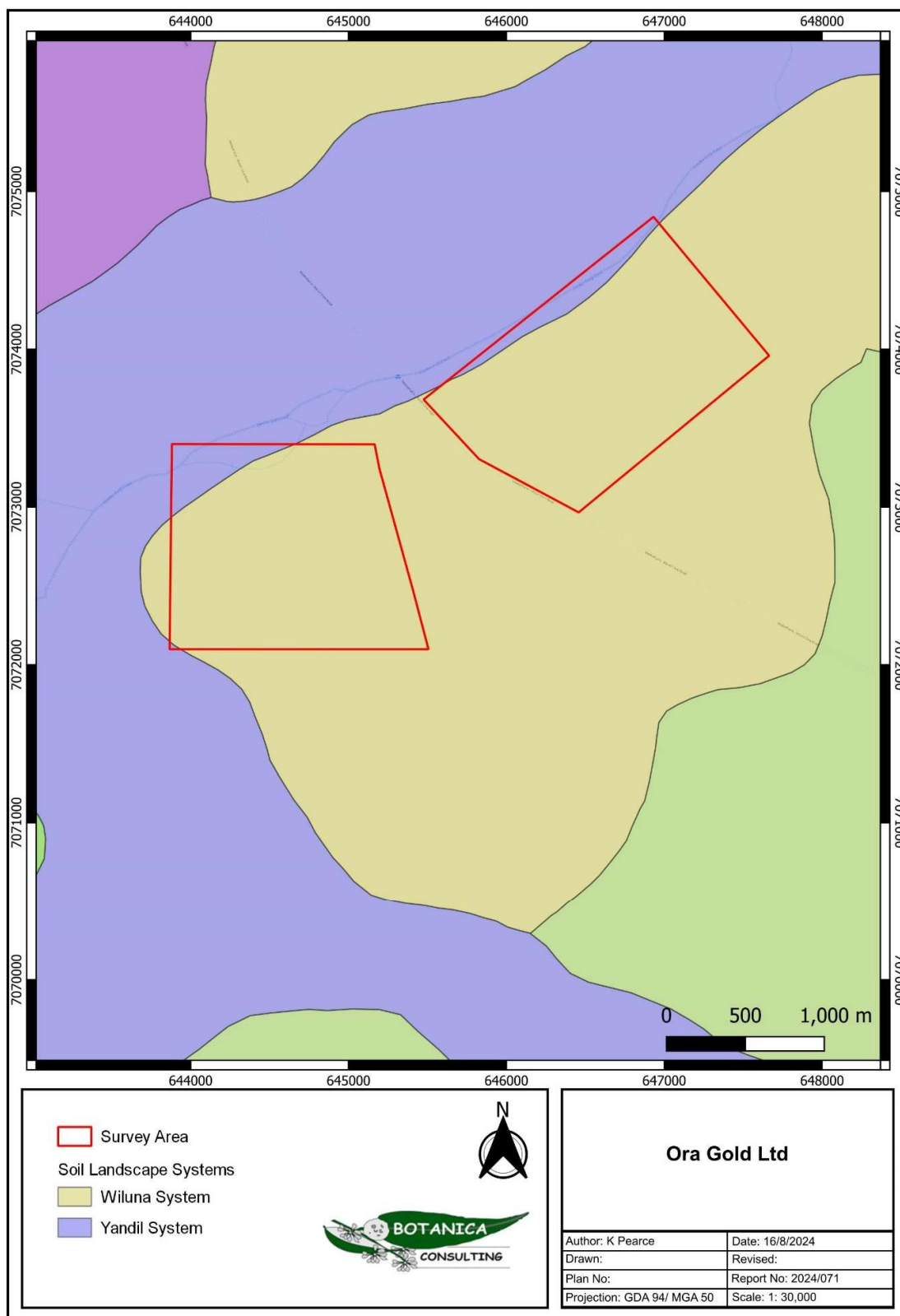


Figure 2-2: Map of soil landscape systems within the survey area

2.4 Regional Vegetation

Vegetation of the Murchison Bioregion is predominantly Mulga low woodlands on plains, often rich in ephemerals, which reduce to scrub on hills. It is also characterised by hummock grasslands, Saltbush shrublands and Samphire shrublands (Beard, 1990; McKenzie, May, and McKenna, 2002).

2.4.1 Pre-European Vegetation

The Pre-European vegetation association spatial mapping dataset (DPIRD, 2018) identified two vegetation associations as occurring within the survey area (Figure 2-3). The association description and their remaining extent, as specified in the 2018 Statewide Vegetation Statistics (DBCA, 2019) are provided in Table 2-2. 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). Both vegetation associations retain >99% of their pre-European extent, and development within the survey area will not significantly reduce the current extent of these vegetation associations.

The most extensive vegetation type in Western Australia is the *Acacia aneura* (mulga) low woodland, open low woodland and sparse woodland, covering over 36 million ha. These low woodlands of mulga and associated species (mainly *Acacias*) are distributed throughout the Murchison, Gascoyne, Great Victoria Desert, Central Ranges and Pilbara Bioregions and they also extend into the Gibson Desert, Little Sandy Desert, Nullarbor and Yalgoo Bioregions (Beard *et al*, 2013).

Table 2-2: Pre-European vegetation associations within the survey area

Vegetation Association	Pre-European extent remaining	% Protected for Conservation	Floristic Description	Extent within Survey Area
Upper Murchison 29	99.97%	0	Low woodland, open low woodland or sparse woodland of Mulga (<i>Acacia aneura</i>) and associated species.	45.4 ha (11.5%)
Upper Murchison 18	99.73%	0	Low woodland, open low woodland or sparse woodland of Mulga (<i>Acacia aneura</i>) and associated species.	348.6 ha (88.5%)
Total				394 ha (100%)

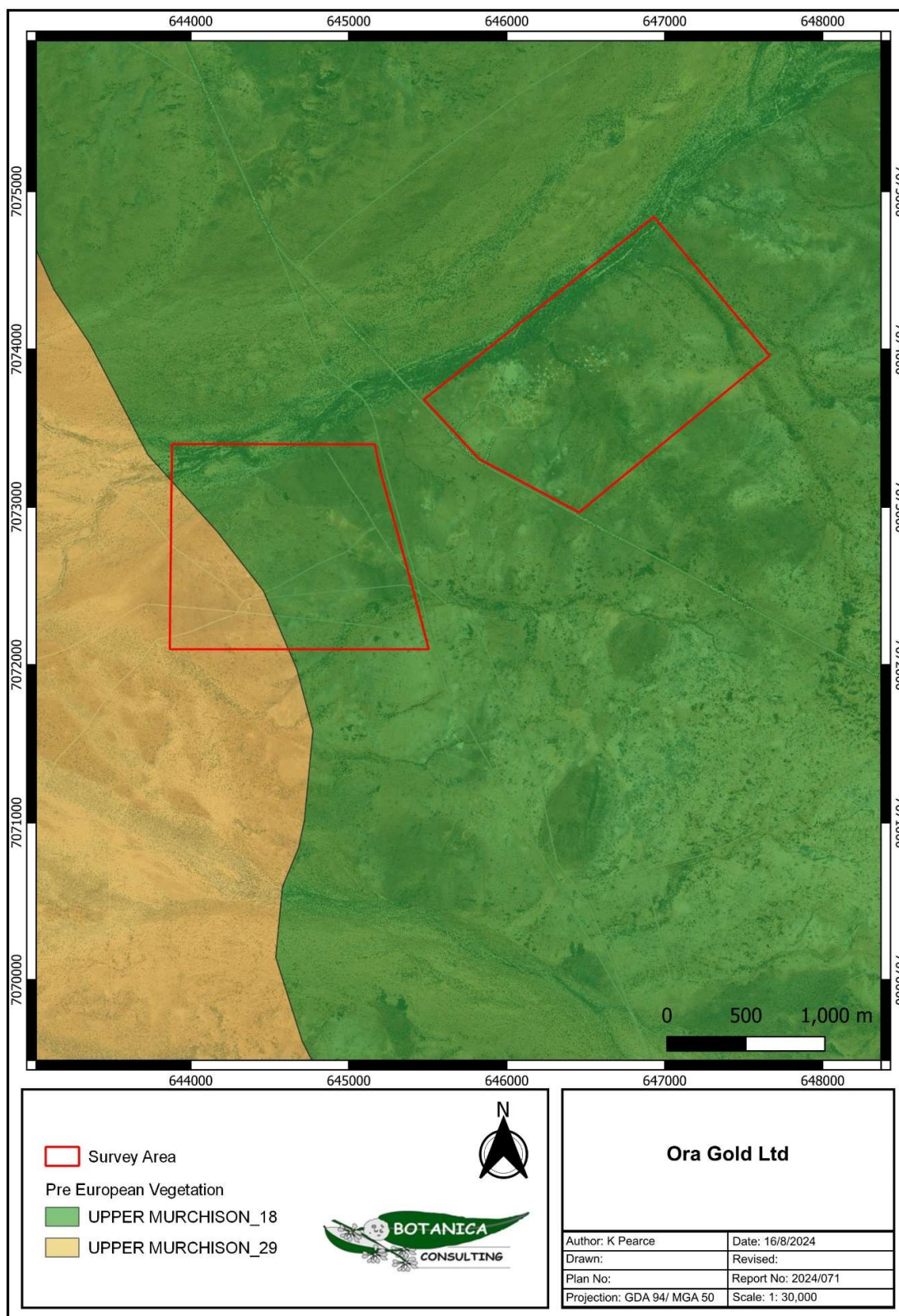


Figure 2-3: Pre-European vegetation systems within the survey area

2.5 Climate

The climate of the Western Murchison subregion is characterised as an arid climate with bimodal rainfall that usually falls in winter (Desmond, Cowan and Chant, 2001). Rainfall data for the Meekatharra Airport weather station (#7045), located approximately 20 km south-east of the survey area, is shown in Figure 2-4. The Meekatharra Airport weather station has an annual rainfall average of 233.8 mm. The rainfall for January and April 2024 was above average. Rainfall for June 2024 was significantly higher than the average, 46 mm of this fell prior to the survey being done (BoM, 2024a).

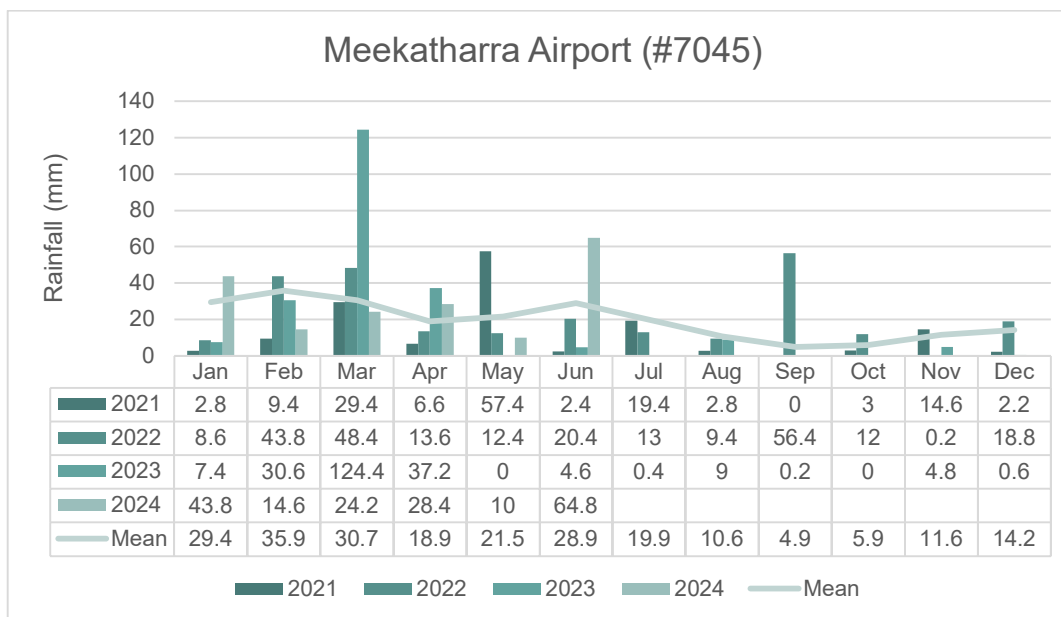


Figure 2-4: Climate data for Meekatharra Airport (#7045) (BoM, 2024)

2.6 Conservation Values

No Threatened Ecological Communities (TEC) or Priority Ecological Communities (PEC) listed under the Commonwealth EPBC Act, or the Western Australian BC Act are known to occur within the survey area. There are six PECs within 40 km of the survey area (Table 2-3, Figure 2-5).

Table 2-3: Priority Ecological Communities within a 40 km radius of the survey area

Community	Conservation Status	Description (DBCA, 2023)	Locality
Yagahong Land System	Priority 3	Rough greenstone ridges, hills and cobble-strewn footslopes supporting mulga shrublands.	Four occurrences within 40 km of the survey area, the nearest is approximately 7 km to the west of the survey area.
Austin Land System	Priority 3	Saline stony plains with low rises and drainage foci supporting low halophytic shrublands with scattered mulga; occurs mainly adjacent to lakes Austin and Annean below greenstone hill systems.	The nearest occurrence is approximately 7 km to the south of the survey area.

Community	Conservation Status	Description (DBCA, 2023)	Locality
Belele calcrete groundwater assemblage type on Murchison palaeodrainage on Belele Station	Priority 1	Unique assemblages of invertebrates have been identified in the groundwater calcretes.	Located approximately 32 km west of the survey area.
Trillbar Land System	Priority 3	Gently sloping stony plains with low rises of metamorphic rocks and gilgaied drainage foci; supports more or less saline shrublands of snakewood, mulga, bluebush and samphire with patches of tussock grassland.	Located approximately 28 km southeast of the survey area.
Karalundi calcrete groundwater assemblage type on Murchison palaeodrainage on Karalundi Station	Priority 1	Unique assemblages of invertebrates have been identified in the groundwater calcretes.	Located approximately 36 km northeast of the survey area.
Killara North calcrete groundwater assemblage types on Murchison palaeodrainage on Killara Station	Priority 1	Unique assemblages of invertebrates have been identified in the groundwater calcretes.	Located approximately 38 km northeast of the survey area.

There are no Ramsar wetlands or wetlands of national importance (ANCA Wetlands) within the survey area or within 40 km of the survey area. Lake Annean (Lake Nannine) is a wetland of national importance but is located 50 km south of the survey area. There are no Environmentally Sensitive Areas (ESA) as listed under the EP Act within the survey area, or within 40 km of the survey area (Figure 2-5).

There are no DBCA-managed lands, gazetted or proposed Reserves within the survey area, or within 40 km of the survey area. The nearest Legislated Reserve is the Lakeside Conservation Park (R54420), approximately 130 km south west of the survey area.

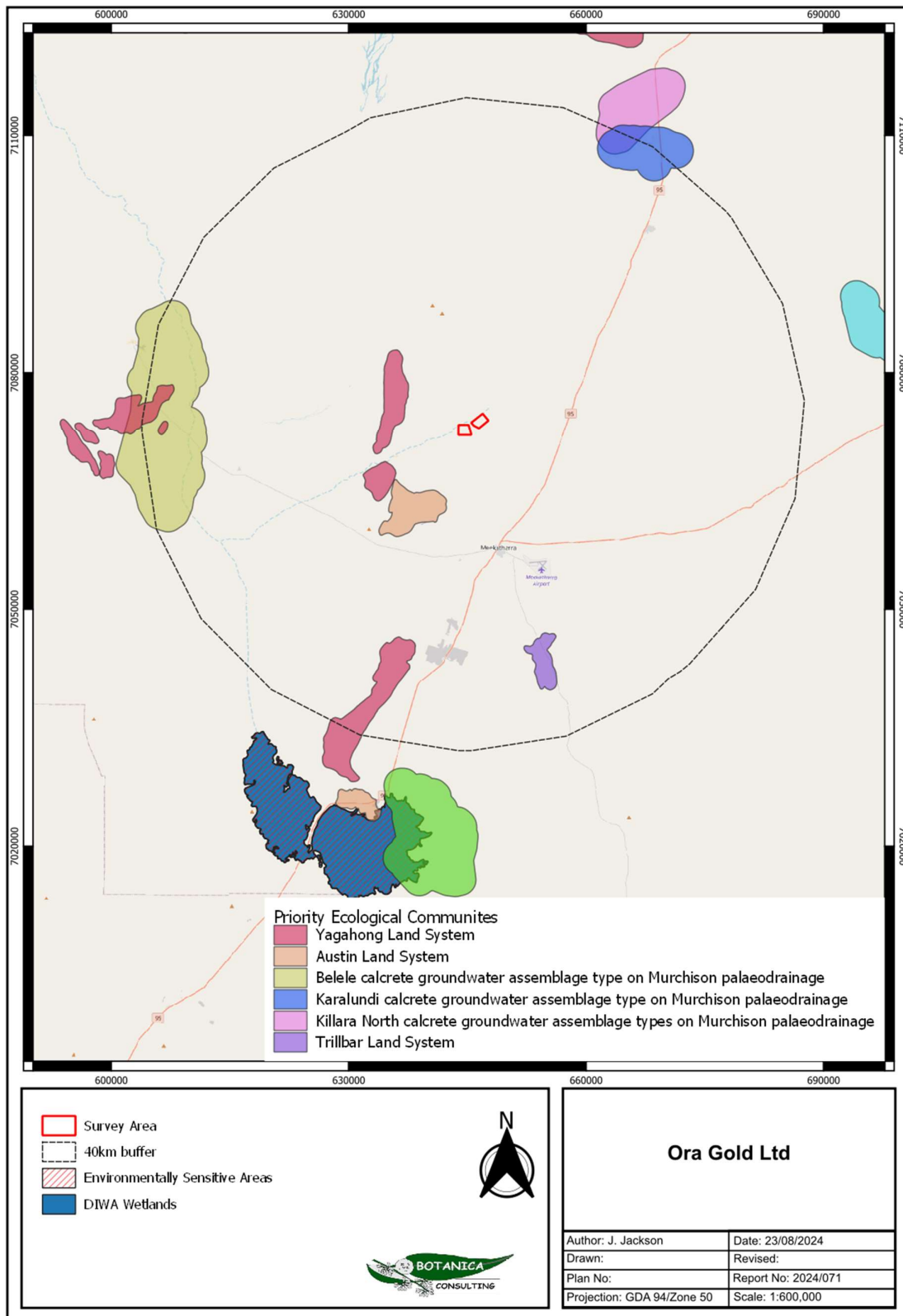


Figure 2-5: Conservation Values in relation to the survey area

2.7 Hydrology

The survey area is in the Murchison River Catchment. One Major and several minor ephemeral drainage lines intersect the survey area (Figure 2-6). The Garden Gully Creek is listed as a Major ephemeral drainage line and intersects the northern part of the survey area (Crossman and Li, 2015).

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, 2024b) database, there are no known or potential aquatic GDEs within the survey area. There are two potential terrestrial GDEs in the survey area (Table 2-4, Figure 2-6).

Table 2-4: Potential terrestrial groundwater dependent ecosystems (BoM, 2024b)

Ecosystem Description	GDE Potential based on national assessment (BoM, 2024b)
Low greenstone hills with occasional lateritic breakaways and broad stony slopes, lower saline stony plains and broad drainage tracts.	Low potential
Flat hardpan wash plains with mantles of small pebbles and gravels; supporting groved mulga shrublands and occasional wanderrie grasses.	Low potential

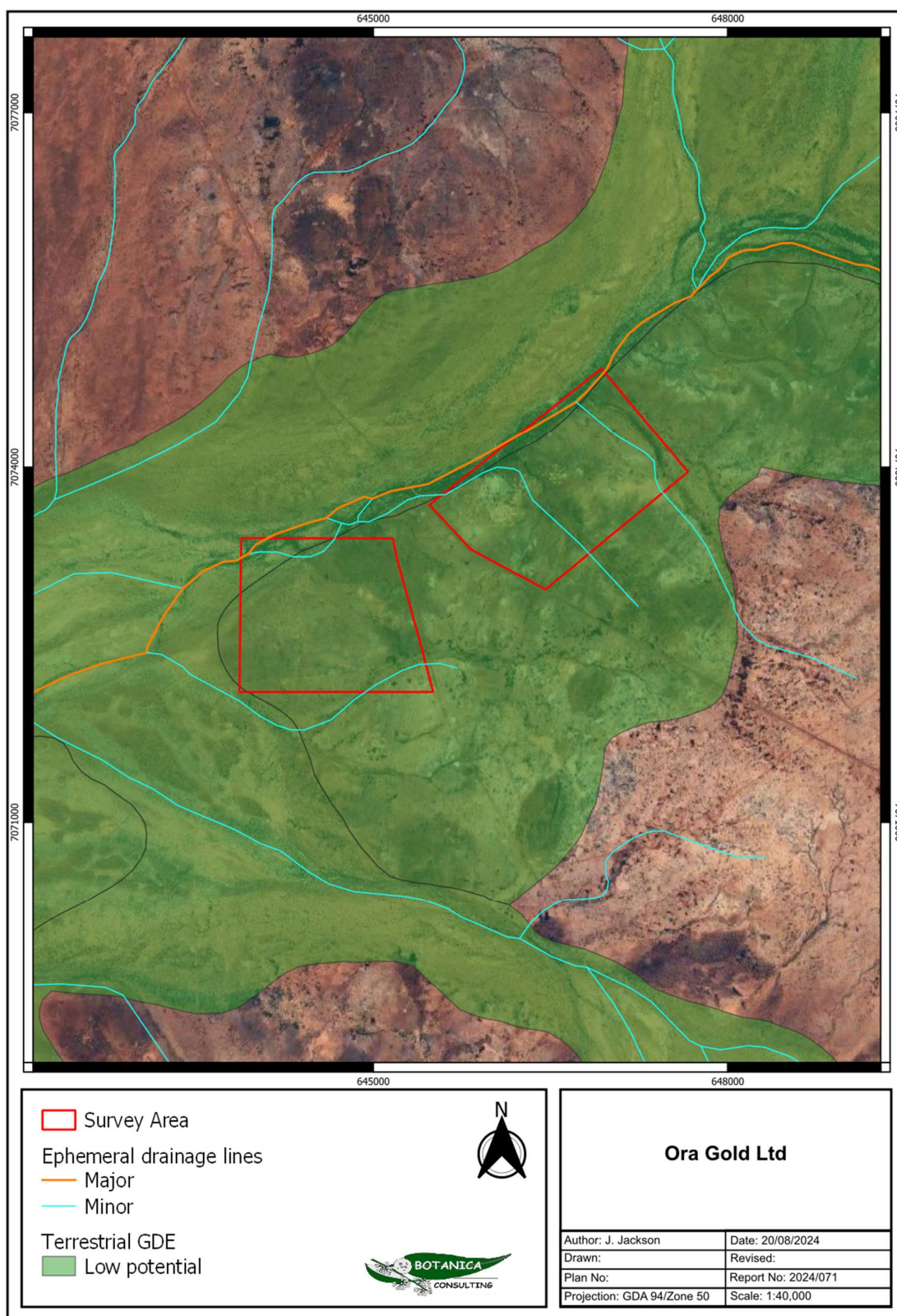


Figure 2-6: Regional hydrology of the survey area

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 (2021). *Desktop Flora and Fauna Assessment: Murchison Exploration Project*. Unpublished report prepared for Evolution Mining Group, April 2021.
- MWH (2015). *Lake Annean Flora and Fauna Assessment*. Unpublished report prepared for Metals X Ltd, September 2015.
- MWH (2017). *Aladdin Project: Reconnaissance Flora and Fauna Assessment*. Unpublished report prepared for Westgold Resources Ltd., March 2017.
- Native Vegetation Solutions (2018). *Reconnaissance Flora and Vegetation Survey, Golden Shamrock Prospect, Central Murchison Gold Project*. Unpublished Report for Westgold Resources Ltd., May 2018.

Database search requests for significant flora (ref: 62-0824FL) (DBCA, 2024b), fauna (ref: 44-0824FA) (DBCA, 2024c) and communities (ref: 40-0824EC) (DBCA, 2024d) were submitted to DBCA for records within the survey area, with a 40 km buffer applied.

In addition to the literature review and DBCA database search requests, searches of the following online databases were also undertaken (using the survey area and 40 km buffer as stated above) to aid in the compilation of a list of potential significant flora and fauna within the survey area:

- Atlas of Living Australia (ALA) database (ALA, 2024);
- Dandjoo database (DBCA, 2024a); and
- EPBC Protected Matters search tool (DCCEEW, 2024).

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 (DCCEEW);
- 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/ Fauna list. A non-legislative list maintained by DBCA for management purposes (fauna list released 30th April 2024, flora list released 1st May 2024).

The EPBC Act also requires the compilation of a list of migratory species that are recognised under international treaties including the:

- Japan Australia Migratory Bird Agreement 1981 (JAMBA)¹;
- China Australia Migratory Bird Agreement 1998 (CAMBA);
- Republic of Korea-Australia Migratory Bird Agreement 2007 (ROKAMBA); and
- Bonn Convention 1979 (The Convention on the Conservation of Migratory Species of Wild Animals).

Most but not all migratory bird species listed in the annexes to these bilateral agreements are protected in Australia as Matters of National Environmental Significance (MNES) under the EPBC Act. Descriptions of conservation significant species and communities are provided in APPENDIX A.

¹ Most but not all species listed under JAMBA are also specially protected under Specially Protected Species of the BC Act.

3.2 Flora and Vegetation Field Assessment

Botanica conducted a reconnaissance flora/ vegetation and basic fauna surveys on the 26th June 2024. This was conducted by Jennifer Jackson (Senior Botanist, BSc Environmental Management (Honours)) and Kiefer Millet (Field Technician). The area was traversed on foot and by 4WD.

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.

The survey was conducted using a series of survey sites (relevés) as shown in Figure 3-1. At each relevé site, the area was walked on foot to observe and record all flora species. The distance surveyed at each relevé varied dependent on the diversity/ variability of species and landforms/ vegetation types. At each relevé, 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.

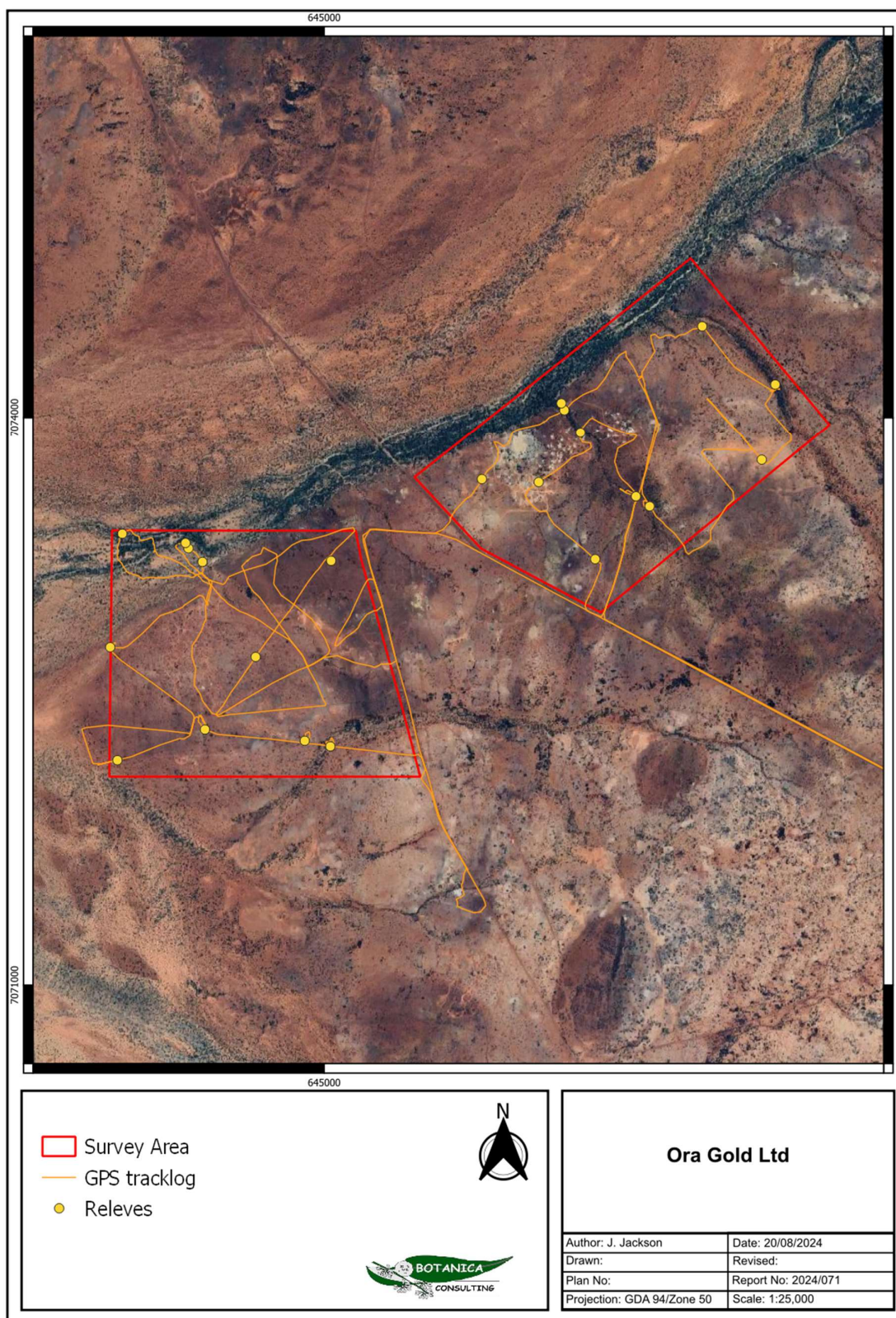


Figure 3-1 GPS tracklog of the 2024 survey effort

3.3 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.

3.4 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.

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 Eastern Murchison 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 non-sedentary/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.

3.5 Scientific Licences

Table 3-1: Scientific Licenses of Botanica Staff coordinating the survey

Licensed Staff	Permit Number	Date of Expiry
Jennifer Jackson	FB62000309-02 (Licence to take flora for scientific purposes)	11/01/2027

3.6 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. The survey area was accessible by numerous access tracks.
Competency/ Experience	Not a constraint	The Botanica personnel that conducted the survey were regarded as suitably qualified and experienced. Coordinating Staff: Jennifer Jackson (Senior Environmental Consultant). Data Interpretation: Jim Williams (Botanist), Kym Pearce and Jennifer Jackson.
Timing of survey, weather & season	Not a constraint	Fieldwork was undertaken outside the EPA's recommended primary survey time period for the Eremaean Province (i.e., 6-8 weeks following winter rainfall). Above average rainfall was received in April 2024, eight weeks prior to the survey and immediately prior to the survey in June.
Area disturbance	Not a constraint	The majority of native vegetation survey area was in completely degraded to good condition.
Survey Effort/ Extent	Not a constraint	Survey intensity was appropriate for the size/significance of the area with a reconnaissance survey completed to identify vegetation types/fauna habitats and conservation significant species/communities.
Availability of contextual information at a regional and local scale	Not a constraint	BoM, DWER, DPIRD, DBCA and DCCEE databases were reviewed to obtain appropriate regional desktop information on the biophysical environment of the local region. Botanica has conducted numerous surveys within the Murchison 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.
Completeness	Not a constraint	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. 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

4.1.1 Flora

The Dandjoo database search (DBCA, 2024a) identified 640 vascular flora species as previously being recorded within 40 km of the survey area. The full list of vascular flora identified by the desktop search is contained in Appendix B.

4.1.2 Introduced Flora

The desktop review identified 19 introduced flora (weed) species as previously being recorded within 40 km of the survey area (DBCA, 2024a). Of these, one species is listed as a Declared Pest on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management (BAM) Act 2007* and also as a Weed of National Significance (WONS) (Table 4-1).

Table 4-1: Introduced flora known to occur within 40 km of the survey area

Taxon	Common Name	Declared Pest	WONS
<i>Brassica tournefortii</i>	Mediterranean Turnip	N	N
<i>Cenchrus ciliaris</i>	Buffel grass	N	N
<i>Cenchrus setiger</i>	Birdwood grass	N	N
<i>Chenopodium murale</i>	Nettle-leaf Goosefoot	N	N
<i>Cuscuta epithymum</i>	Lesser dodder	N	N
<i>Hordeum glaucum</i>	Northern Barley Grass	N	N
<i>Malva parviflora</i>	Marshmallow	N	N
<i>Opuntia stricta</i>	Common Prickly Pear	Y	Y
<i>Papaver hybridum</i>	Rough poppy	N	N
<i>Portulaca pilosa</i>	Djanggara	N	N
<i>Rostraria pumila</i>	Tiny bristle-grass	N	N
<i>Rumex vesicarius</i>	Ruby dock	N	N
<i>Schinus molle var. areira</i>	Peppercorn	N	N
<i>Schismus arabicus</i>	Araby grass	N	N
<i>Sisymbrium erysimoides</i>	Smooth mustard	N	N
<i>Sisymbrium irio</i>	London rocket	N	N
<i>Sisymbrium orientale</i>	Indian Hedge Mustard	N	N
<i>Solanum nigrum</i>	Black Berry Nightshade	N	N
<i>Sonchus oleraceus</i>	Common Sowthistle	N	N

4.1.3 Significant Flora

Assessment of the DBCA's Threatened and Priority Flora database records (Ref: 62-0824FL) (DBCA, 2024b), EPBC Protected Matters (DCCEEW, 2024), Dandjoo database (DBCA, 2024a) and previous relevant literature identified one Threatened Flora and 15 Priority Flora as occurring within a 40 km radius of the survey area.

These taxa were assessed for distribution and known habitat to determine their likelihood of occurrence within the survey area (Table 4-2). The locations of the DBCA database records are illustrated spatially in Figure 4-1.

Table 4-2: Significant flora potentially occurring within the survey area

Taxon	Rank			Habitat Description	Assessment
	EPBC	BC Act	DBCA		
<i>Acacia speckii</i>			P4	Rocky soils over granite, basalt or dolerite. Rocky hills or rises.	Unlikely, no habitat fitting this description in the survey area.
<i>Calytrix verruculosa</i>	-	-	P3	Sandy clay. Shallow hardpan plain.	Possible.
<i>Drummondita miniata</i>			P3	Laterite. Breakaways.	Unlikely, no breakaways in the survey area.
<i>Eremophila fasciata</i>			P3	Stony hill.	Unlikely, no habitat fitting this description in the survey area.
<i>Eremophila retropila</i>	-	-	P1	Gravelly loam. Stony flats.	Possible.
<i>Euploca mitchellii</i>			P1	Rocky hills.	Unlikely, no rocky hills in the survey area.
<i>Goodenia berringbinensis</i>			P4	Red sandy loam. Along watercourses.	Possible.
<i>Grevillea inconspicua</i>	-	-	P4	Along drainage lines on rocky outcrops, creeklines.	Possible.
<i>Hemigenia virescens</i>			P3	Yellow-red sandy clay.	Unlikely, no habitat fitting this description in the survey area.
<i>Homalocalyx echinulatus</i>			P3	Laterite. Breakaways, sandstone hills.	Unlikely, no habitat fitting this description in the survey area.
<i>Indigofera rotula</i>			P3	Red loamy banks of watercourses.	Possible.
<i>Lepidium xylodes</i>	-	-	P1	Gravelly loam, clayey sand.	Possible.
<i>Menkea draboides</i>	-	-	P3	Red sand or clay, granite.	Possible.
<i>Pityrodia augustensis</i>	VU	VU		Amongst rocks on slopes or in drainage lines.	Not likely, nearest known population is >300 km to the north west.
<i>Ptilotus lazaridis</i>			P3	Clay loam. Floodplains.	Possible.
<i>Ptilotus luteolus</i>			P3	Hillslopes.	Unlikely, no hillslopes in the survey area.

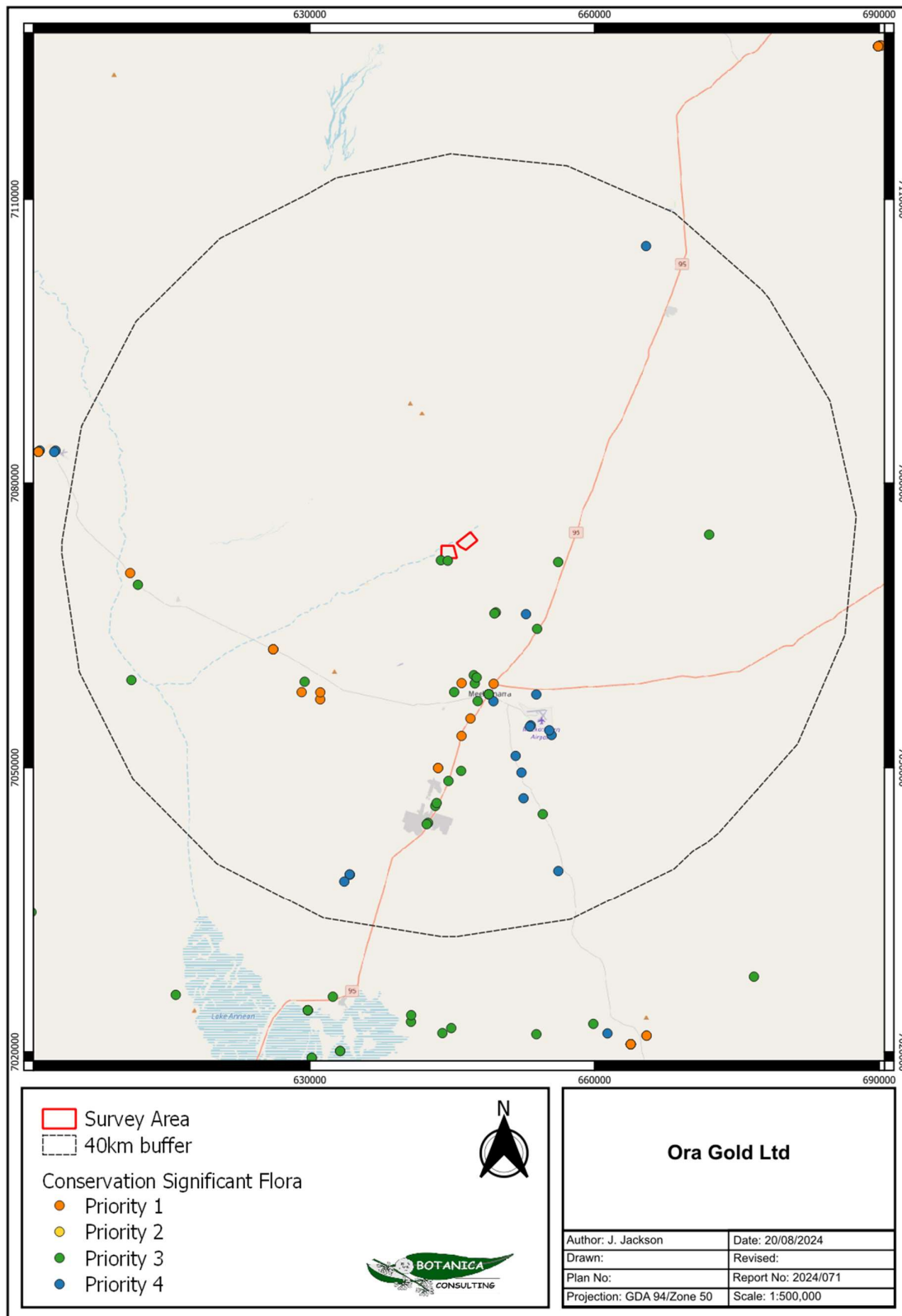


Figure 4-1: Significant flora within the desktop search area

4.1.4 Fauna

The combined Dandjoo database search (DBCA, 2024a) and ALA spatial portal results (ALA, 2024) identified a total of 204 terrestrial vertebrate fauna taxa within 40 km of the survey area, consisting of 154 bird, 10 mammal, 38 reptile and two amphibian taxa. The full list of vertebrate fauna identified by the desktop search is contained in Appendix B.

4.1.4.1 Conservation Significant Fauna

The desktop review (DBCA 2024b, DCCEEW 2024) identified nine terrestrial vertebrate species and one invertebrate species of conservation significance as previously being recorded in the regional area, consisting of eight Threatened and one otherwise specially protected species. In addition, several 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. The assessment identified two significant fauna species as possibly occurring in the survey area (Table 4-3).

Table 4-3: Conservation significant fauna previously recorded within 40 km of the survey area

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	Priority		
Reptile	<i>Liopholis kintorei</i> Great desert skink	VU	-	-	Endemic to the Australian arid zone in the western deserts region (DCCEEW, 2024).	The PMST report suggests that the species or species habitat may occur in the buffer area. Would not occur. Nearest mainland population is >280 km to the northeast.
Bird	<i>Aphelocephala leucopsis</i> Southern whiteface	VU	-	-	Occur across most of mainland Australia south of the tropics, Southern whitefaces live in a wide range of open woodlands and shrublands where there is an understorey of grasses or shrubs, or both (DCCEEW, 2024).	Unlikely, no DBCA records of any sightings within 40 km of the survey area. The PMST report suggests that the species or species habitat may occur in the area.
	<i>Falco hypoleucos</i> Grey falcon	VU	VU	-	occurs in arid and semi-arid Australia, including the Murray-Darling Basin, Eyre Basin, central Australia and Western Australia, frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses (DCCEEW, 2024).	Possible- area may form part of larger home range.
	<i>Leipoa ocellata</i> Mallee fowl	VU	VU	-	Scrublands and woodlands dominated by mallee and wattle species (DCCEEW, 2024).	Unlikely, no DBCA records of any sightings within 40 km of the survey area. The PMST report suggests that the species or species habitat may occur in the area.
	<i>Falco peregrinus</i> Peregrine falcon	-	OS	-	Known to inhabit open grasslands, wooded areas (ALA, 2024).	Possible- area may form part of larger home range.
	<i>Calidris acuminata</i> Sharp-tailed Sandpiper	VU	MI		Intertidal mudflats, also freshwater swamps and saltwater lakes (ALA, 2024).	Would not occur, no habitat in the survey area.
	<i>Calidris ferruginea</i> Curlew Sandpiper	CR	CR		Intertidal mudflats, also freshwater swamps and saltwater lakes (ALA, 2024).	Would not occur, no habitat in the survey area.
	<i>Pezoporus occidentalis</i> Night parrot	EN	CR	-	Broad habitat requirements include areas of old-growth spinifex (<i>Triodia</i>) for roosting and nesting, together with foraging habitats that are likely to include various native grasses and herbs and may or may not contain shrubs or low trees. (DPaW, 2017).	Would not occur. Considered to be regionally extinct.

Class	Taxon	Conservation Status			Habitat Description	Likelihood of Occurrence
		EPBC Act	BC Act	Priority		
	Migratory Shorebirds (inc Common sandpiper, Red necked stint)	MI	IA	-	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, salt pans and hypersaline salt lakes inland (DotEE, 2018).	No suitable habitat (wetlands) present within the survey area. Would not occur.
Invertebrate	<i>Idiosoma nigrum</i> Shield-backed trapdoor spider	VU	EN	-	Dry woodlands east of the Darling Scarp and north to Moore River (ALA, 2024).	The PMST report suggests that the species or species habitat may occur in the buffer area. Would not occur. Nearest mainland populations are >250 km to the southwest.

4.2 Field Assessment

4.2.1 Flora

The field survey identified 80 vascular flora taxa within the survey area. These taxa represented 44 genera across 26 families, with the most diverse families being Fabaceae (17 species), Chenopodiaceae (ten species) and Scrophulariaceae (nine species), followed by dominant genera include *Acacia* (12 species) and *Eremophila* (nine species). Twenty annual species were observed during the survey. The full field species inventory is listed in Appendix C.

4.2.1.1 Introduced Flora

Six introduced flora (weeds) species were observed within the survey area during the survey (Table 4-4). These were observed in disturbed areas and along tracks, and their locations were not marked. 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.

Table 4-4: Introduced flora species within the survey area

Family	Taxon	Common Name
Aizoaceae	<i>Mesembryanthemum crystallinum</i>	Iceplant
Asteraceae	<i>Bidens bipinnata</i>	Bipinnate Beggartick
Brassicaceae	<i>Sisymbrium irio</i>	London rocket
Cucurbitaceae	<i>Cucumis myriocarpus</i>	Paddy Melon
Poaceae	<i>Cenchrus ciliaris</i>	Buffel grass
Zygophyllaceae	<i>Tribulus terrestris</i>	Caltrop

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.

One Priority flora species was observed within the survey area, *Grevillea inconspicua* (P4) (Table 4-5 and Figure 4-2). Approximately 30 plants were seen growing in a dry drainage line.

Grevillea inconspicua is known from more than 30 populations (WAHERB, 1998-) and is known to occur in two IBRA subregions, the Eastern Murchison and Western Murchison. There are seven populations within approximately 100 km of the survey area (DBCA, 2024a), and according to Florabase (WAHERB, 1998-) the species covers a range of more than 50,000 km².

No Threatened or otherwise significant flora species were identified within the survey area.

Table 4-5: Significant flora recorded within the survey area

Taxon	Conservation Code	Description	Image
<i>Grevillea inconspicua</i>	Priority 4	Intricately branched, spreading shrub, 0.6-2 m high. Flowers are white/pink-white, flowers from June to August (WAHERB, 1998-). Known from numerous populations in the Western and Eastern Murchison sub-regions. Approximately 30 plants were observed in a drainage line.	

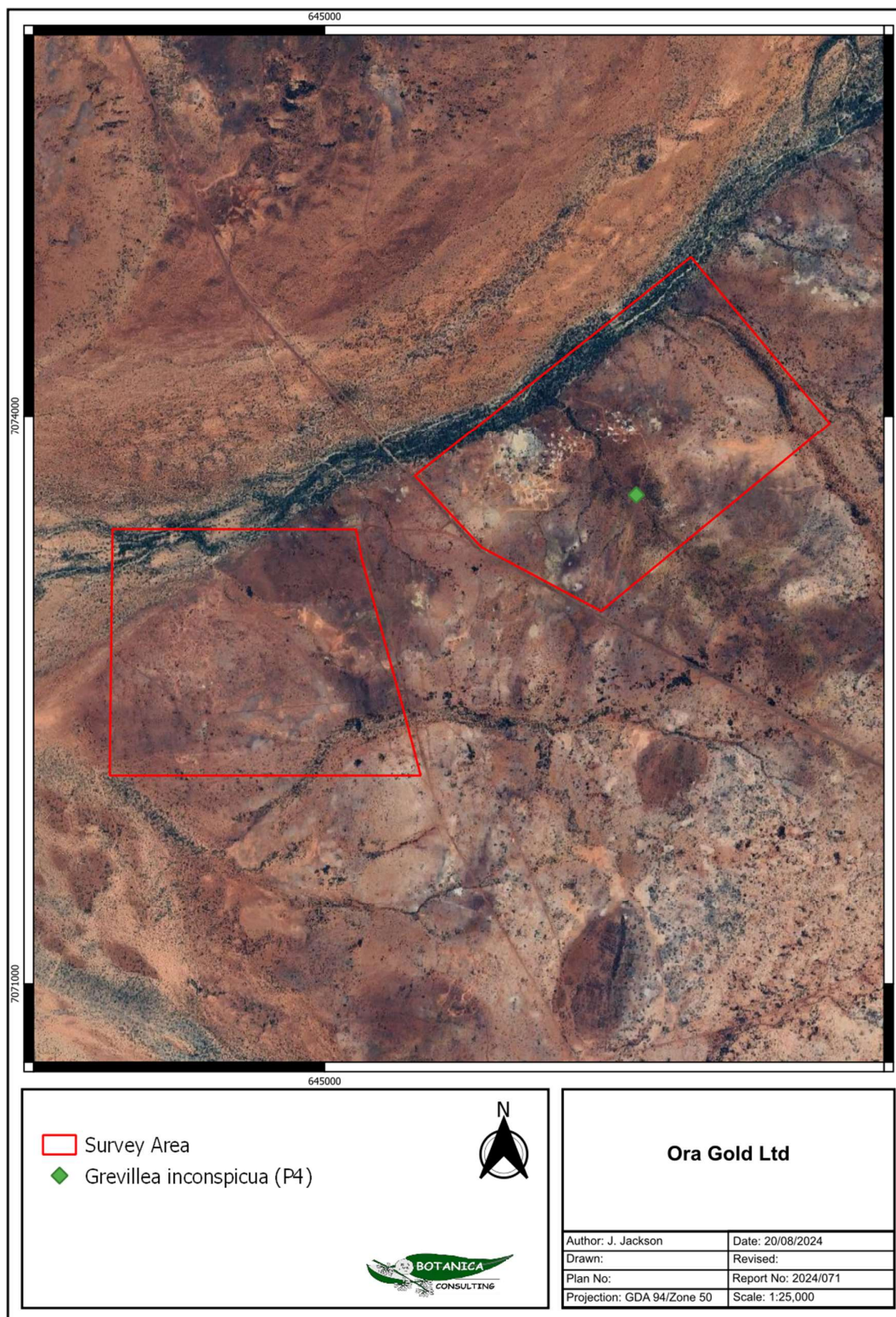


Figure 4-2: Location of Priority flora in the survey area

4.2.2 Vegetation Communities

A total of four broad-scale vegetation communities were identified within the survey area. Vegetation community descriptions and extent are listed below in Table 4-6 and illustrated spatially in Figure 4-3. These vegetation types were identified within two landform types and comprised of three major vegetation groups. Vegetation community descriptions and extents were determined from field survey results, aerial imagery interpretation and extrapolation of the communities.

The survey found RP-AOW1 was the most widespread community in the survey area, occupying 175 ha (44.4 %), while DD-EFW1 was the most restricted with 16 ha (4 %). The most diverse vegetation type was DD-AFW1 with 49 species (61%), while the least diverse was DD-EFW1 and CLP-AOW1 both with 14 species (17.5%).

Table 4-6: Summary of vegetation types within the survey area

Landform	NVIS Vegetation Group	Veg Code	Vegetation Type	Area (ha)	Area (%)	Image	
Plain	Acacia open woodlands (MVG 13)	RP-AOW1	Mid woodland of <i>Acacia pruinocarpa</i> and <i>Acacia incurvaneura</i> over mid open shrubland of <i>Acacia grasbyi</i> , <i>Eremophila galeata</i> and <i>Senna</i> sp. Meekatharra over low sparse shrubland of <i>Maireana triptera</i> and <i>Enchylaena tomentosa</i> on rocky plain.	175	44.4		
	Acacia open woodlands (MVG 13)	CLP-AOW1	Mid woodland of <i>Acacia incurvaneura</i> over mid shrubland of <i>Eremophila compacta</i> over low sparse shrubland of <i>Solanum lasiophyllum</i> and <i>Aristida contorta</i> on clay loam plain.	115	29.3		

Landform	NVIS Vegetation Group	Veg Code	Vegetation Type	Area (ha)	Area (%)	Image
Drainage depression	Acacia forests and woodlands (MVG 6)	DD-AFW1	Mid open forest of <i>Acacia incurvaneura</i> over mid open shrubland of <i>Acacia tetragonophylla</i> , <i>Eremophila galeata</i> and <i>Senna</i> sp. Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> in drainage depression.	63	16	
	Eucalypt woodlands (MVG 5)	DD-EFW1	Mid open forest of <i>Eucalyptus camaldulensis</i> over mid open shrubland of <i>Acacia tetragonophylla</i> , <i>Eremophila galeata</i> and <i>Senna</i> sp. Meekatharra over low sparse shrubland of <i>Ptilotus obovatus</i> and <i>Solanum lasiophyllum</i> in drainage depression.	16	4.0	
Cleared areas				25	6.3	
Total				394	100	

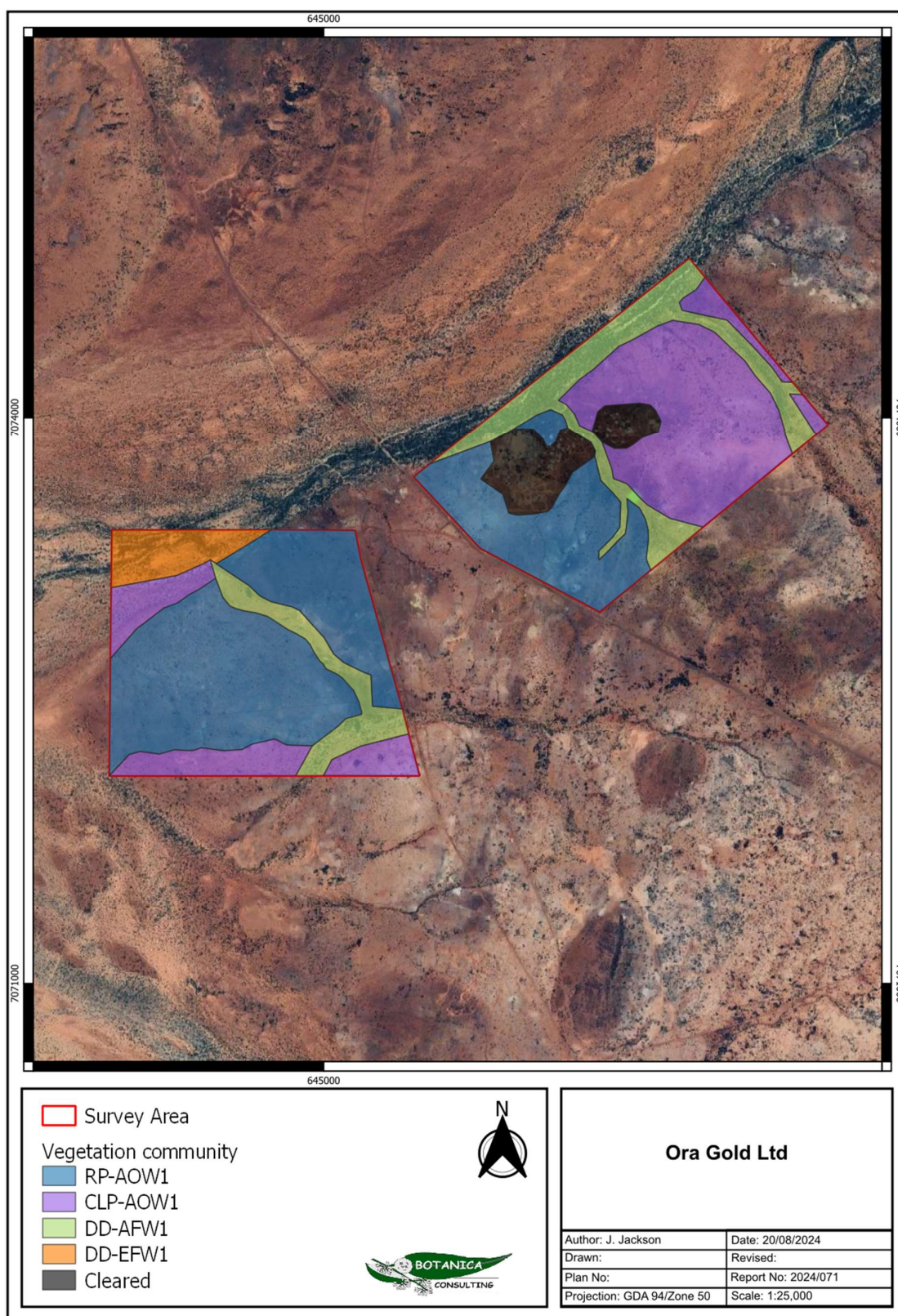


Figure 4-3: Vegetation types within the survey area

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 'good', with cleared areas considered completely degraded (Table 4-7, Figure 4-4). Vegetation condition rating descriptions are listed in Appendix B. Impacts to vegetation within the survey area include access tracks, historical and current mining and exploration disturbances and heavy grazing.

Table 4-7: Vegetation condition rating within the survey area

Condition rating	Description	Area (ha)	Area (%)
Good	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.	369	93.7%
Completely degraded	Areas that are completely or almost completely without native species in the structure of their vegetation; i.e. areas that are cleared or 'parkland cleared' with their flora comprising weed or crop species with isolated native trees or shrubs.	25	6.3%
TOTAL		394	100



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.

4.2.5 Fauna

4.2.5.1 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 4-9 provides the area and a visual representation of fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-5.

Table 4-8 provides a list of opportunistic observations of fauna species were made during the field survey with a total of 12 fauna species observed.

Table 4-8: Fauna species observed during the field survey

Taxon	Common Name	Comments
Avifauna		
<i>Aquila audax</i>	Wedge-tailed eagle	Observed
<i>Barnardius zonarius</i>	Ringneck parrot	Observed
<i>Corvus orru</i>	Torresian crow	Heard
<i>Geopelia cuneata</i>	Diamond Dove	Observed
<i>Lichmera indistincta</i>	Brown honey eater	Observed
<i>Oreocia gutturalis</i>	Crested bellbird	Heard
<i>Phaps chalcoptera</i>	Common bronzewing	Observed
<i>Psephotellus varius</i>	Mulga Parrot	Observed
<i>Taeniopygia castanotis</i>	Zebra finch	Observed
Mammals		
<i>Bos taurus</i>	Cattle	Tracks and Scats Observed
<i>Oryctolagus cuniculus</i>	Rabbit	Scats Observed
<i>Macropus sp.</i>	Kangaroo and/or Euro	Tracks and Scats Observed

Table 4-9: Main terrestrial fauna habitats within the survey area

Fauna Habitat	Description	Representative Fauna Attributes	Example Image
<i>Acacia</i> open woodland on rocky or clay-loam plain Area= 290 ha (73.6%)	Open <i>Acacia</i> woodland over <i>Eremophila</i> shrubland	• Ground not particularly suited to burrowing species. • Low diversity vegetation strata supporting a reduced avifauna assemblage. • Low vegetation density and low leaf litter supporting some small reptiles.	

Fauna Habitat	Description	Representative Fauna Attributes	Example Image
<i>Acacia</i> and/or <i>Eucalypt</i> woodland in drainage line Area=79 ha (20%)	Closed <i>Acacia</i> and/or <i>Eucalypt</i> woodland over mixed <i>Acacia</i> and <i>Eremophila</i> shrubland	• Ground moderately suited to burrowing species in some areas. • Moderate diversity vegetation strata supporting a good avifauna assemblage. • Moderate vegetation density and moderate leaf litter supporting small reptiles.	

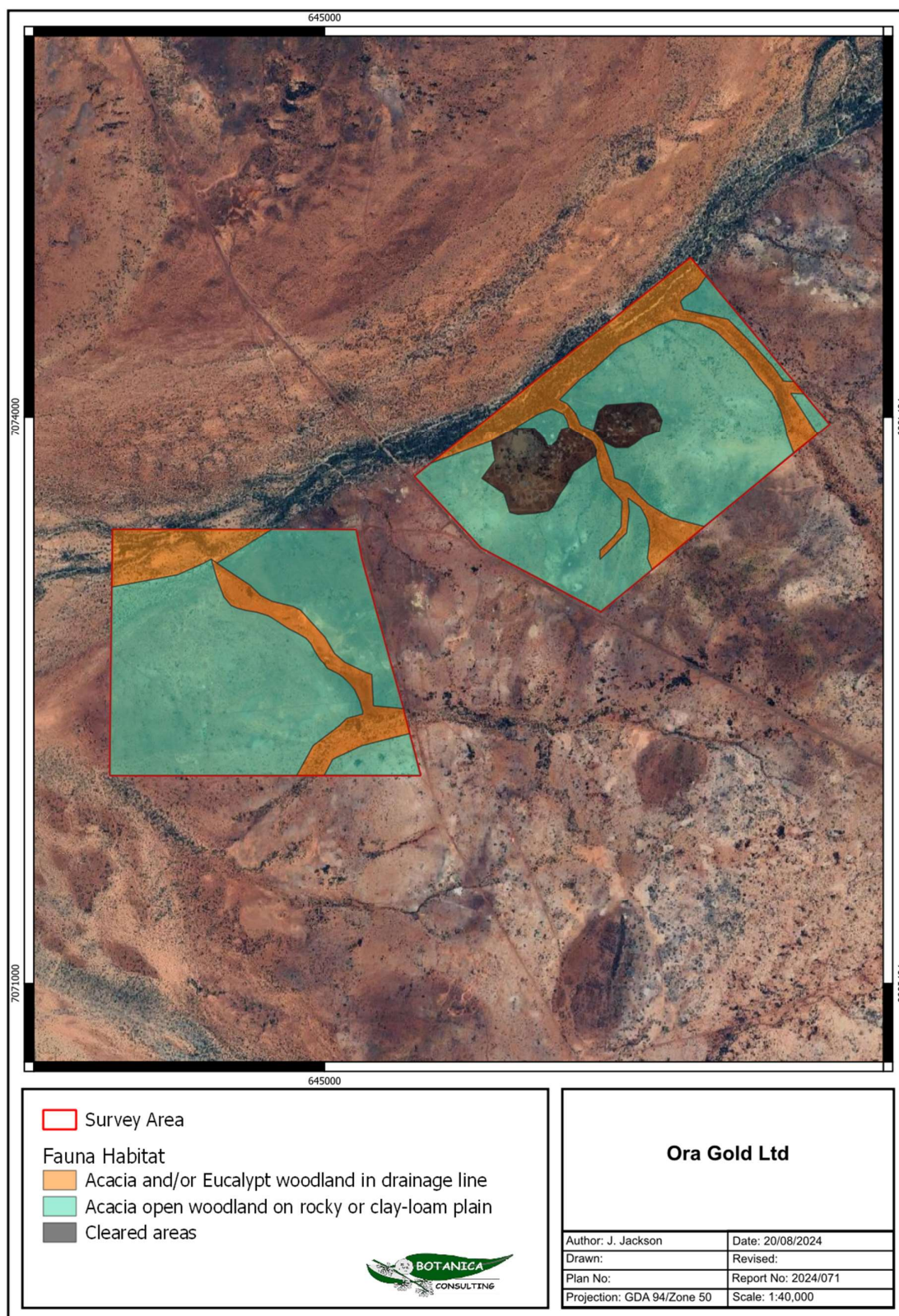


Figure 4-5: Fauna habitats within the survey area

4.2.5.2 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 evidence of significant fauna species was observed during the 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:

- **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.

- **Peregrine Falcon (*Falco peregrinus*) - OS (DBCA)**

This species is sparsely recorded throughout inland Australia. Suitable habitat may be present but is unlikely to represent critical habitat.

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 DCCEW to list threatened taxa and ecological communities into categories based on the criteria set out in the Act (www.environment.gov.au/epbc/index.html). 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 DEMIRS. 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. No Environmentally Sensitive Areas 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 DBCA lists 'Priority' species and communities which are under consideration for declaration as 'Threatened' under the BC Act. These Priority species/ communities have no formal legal protection until they are endorsed by the Minister as being Threatened. No PECs as listed by DBCA were identified within the survey area. One Priority Flora taxon was observed within the survey area: *Grevillea inconspicua* (P4).

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

There are no gazetted or proposed conservation reserves within the survey area. The nearest Legislated Reserve is the Lakeside Conservation Park (R54420), approximately 130 km south west of the survey area.

5 DISCUSSION AND CONCLUSIONS

The field survey identified 80 vascular flora taxa within the survey area. These taxa represented 44 genera across 26 families. Twenty annual species were observed during the survey. Six weed species were recorded within the survey. These species are not listed as Declared Pests on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management (BAM) Act 2007* or as Weeds of National Significance.

One Priority flora species was identified in the survey area. *Grevillea inconspicua* (P4) was observed growing in a drainage line. This taxon is apparently widespread across the Murchison Bioregion. No other Priority flora, Threatened flora or otherwise significant flora species were identified within the survey area.

A total of four broad-scale vegetation communities were identified within the survey area. These vegetation communities are considered to be of low biological diversity and are well represented outside the survey area.

Native vegetation within the survey area was categorised as 'Good' with cleared areas considered completely degraded. Impacts to vegetation within the survey area include access tracks, historical and current mining and exploration activities, and grazing by large feral herbivores.

No Threatened, Priority or otherwise significant ecological communities were identified within the survey area. No Environmentally Sensitive Areas were identified within the survey area. There are no wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) within the survey area.

The vegetation types identified in the survey area mostly aligned with the Ecosystem descriptions provided by the BoM *Atlas of Groundwater Dependent Ecosystems (BoM, 2024b)*, however it is difficult to determine how dependant these communities are on groundwater, they are more likely to obtain their water requirements from surface water.

Two broad scale terrestrial fauna habitats were identified as occurring within the survey area. No evidence of significant fauna species were observed during the survey.

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APPENDIX A: CONSERVATION RATINGS BC ACT AND EPBC ACT

Definitions of Conservation Significant Species

Code	Category
State categories of Threatened and Priority species	
Threatened Species (T) 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).	
CR	Critically Endangered Threatened species considered to be “facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines”. Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for critically endangered fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for critically endangered flora.
EN	Endangered Threatened species considered to be “facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines”. Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for endangered fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for endangered flora.
VU	Vulnerable Threatened species considered to be “facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines”. Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for vulnerable flora.
Extinct species Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.	
EX	Extinct Species where “ <i>there is no reasonable doubt that the last member of the species has died</i> ”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act). Published as presumed extinct under schedule 4 of the Wildlife Conservation (Specially Protected Fauna) Notice 2018 for extinct fauna or the Wildlife Conservation (Rare Flora) Notice 2018 for extinct flora.
EW	Extinct in the Wild Species that “ <i>is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form</i> ”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act). Currently there are no Threatened fauna or Threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.
Specially protected species Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection. Species that are listed as Threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.	
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

Code	Category
	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>.
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 (Specially Protected Fauna) Notice 2018</i>.
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 (Specially Protected Fauna) Notice 2018</i>.
Priority species Possibly Threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of Priority for survey and evaluation of conservation status so that consideration can be given to their declaration as Threatened Fauna or Flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring. Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.	
P1	Priority 1: Poorly-known species Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
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 but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
P3	Priority 3: Poorly-known species Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
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.
Commonwealth categories of Threatened species	
EX	Extinct

Code	Category
	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 wild in the near future, as determined in accordance with the prescribed criteria.
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 Dependent Taxa 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.

Definitions of conservation significant communities

Category Code	Category
State categories of Threatened Ecological Communities (TEC)	
PD	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:
	- 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.
CR	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:
	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;
EN	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:
	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.

Category Code	Category
VU	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:
	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.
Commonwealth 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 Ecological Communities	
P1	Poorly-known ecological communities 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.
P2	Poorly-known ecological communities 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.
P3	Poorly known ecological communities 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.
P5	Conservation Dependent ecological communities 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: 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 C: LIST OF SPECIES IDENTIFIED WITHIN THE SURVEY AREA

(A) denotes annual flora; (W) denotes weed species.

Family	Genus	Species	RP-AOW1	DD-AFW1	DD-EFW1	CLP-AOW1
Aizoaceae	<i>Mesembryanthemum</i>	<i>crystallinum</i> (A) (W)	*			
Amaranthaceae	<i>Ptilotus</i>	<i>exaltatus</i> (A)	*			
Amaranthaceae	<i>Ptilotus</i>	<i>obovatus</i>	*	*	*	*
Amaranthaceae	<i>Ptilotus</i>	<i>roei</i>	*	*		
Amaranthaceae	<i>Ptilotus</i>	<i>rotundifolius</i>	*			
Asteraceae	<i>Bidens</i>	<i>bipinnata</i> (W)		*		
Boraginaceae	<i>Trichodesma</i>	<i>zeylanicum</i> (A)		*		
Brassicaceae	<i>Sisymbrium</i>	<i>irio</i> (A) (W)	*			
Chenopodiaceae	<i>Atriplex</i>	<i>codonocarpa</i> (A)	*			
Chenopodiaceae	<i>Dysphania</i>	<i>kalpari</i> (A)	*	*	*	
Chenopodiaceae	<i>Dysphania</i>	<i>melanocarpa</i> (A)	*			
Chenopodiaceae	<i>Enchylaena</i>	<i>tomentosa</i>	*			*
Chenopodiaceae	<i>Maireana</i>	<i>georgei</i>	*			*
Chenopodiaceae	<i>Maireana</i>	<i>triptera</i>	*			*
Chenopodiaceae	<i>Rhagodia</i>	<i>eremaea</i>	*			*
Chenopodiaceae	<i>Salsola</i>	<i>australis</i> (A)	*			*
Chenopodiaceae	<i>Sclerolaena</i>	<i>cuneata</i>	*			
Chenopodiaceae	<i>Sclerolaena</i>	<i>diacantha</i>	*	*		*
Convolvulaceae	<i>Duperreya</i>	<i>commixta</i>	*	*		
Cucurbitaceae	<i>Cucumis</i>	<i>myriocarpus</i> (W)	*	*		
Cyperaceae	<i>Bulbostylis</i>	<i>barbata</i>		*	*	

Family	Genus	Species	RP-AOW1	DD-AFW1	DD-EFW1	CLP-AOW1
Cyperaceae	<i>Cyperus</i>	<i>iria</i>		*	*	
Euphorbiaceae	<i>Euphorbia</i>	<i>boophthona</i> (A)		*	*	
Euphorbiaceae	<i>Euphorbia</i>	<i>drummondii</i> (A)	*	*	*	*
Fabaceae	<i>Acacia</i>	<i>acuminata</i>		*		
Fabaceae	<i>Acacia</i>	<i>aptaneura</i>	*			
Fabaceae	<i>Acacia</i>	<i>caesaneura</i>	*			*
Fabaceae	<i>Acacia</i>	<i>exocarpoides</i>		*		
Fabaceae	<i>Acacia</i>	<i>grasbyi</i>	*			
Fabaceae	<i>Acacia</i>	<i>incurvaneura</i>	*	*	*	*
Fabaceae	<i>Acacia</i>	<i>murrayana</i>		*		
Fabaceae	<i>Acacia</i>	<i>pruinocarpa</i>	*			
Fabaceae	<i>Acacia</i>	<i>quadrimarginea</i>	*	*		
Fabaceae	<i>Acacia</i>	<i>ramulosa</i> var. <i>linophylla</i>				*
Fabaceae	<i>Acacia</i>	<i>tetragonophylla</i>	*	*	*	
Fabaceae	<i>Acacia</i>	<i>victoriae</i>	*			
Fabaceae	<i>Senna</i>	<i>artemisioides</i> subsp. <i>helmsii</i>		*		*
Fabaceae	<i>Senna</i>	<i>artemisioides</i> subsp. <i>×artemisioides</i>		*		
Fabaceae	<i>Senna</i>	<i>artemisioides</i> subsp. <i>×sturtii</i>	*			
Fabaceae	<i>Senna</i>	<i>glutinosa</i> subsp. <i>chatelainiana</i>	*			
Fabaceae	<i>Senna</i>	<i>sp.</i> Meekatharra (E. Bailey 1-26)	*	*	*	
Haloragaceae	<i>Haloragis</i>	<i>odontocarpa</i> (A)		*	*	
Lamiaceae	<i>Teucrium</i>	<i>teucriiflorum</i>	*	*		
Loranthaceae	<i>Amyema</i>	<i>fitzgeraldii</i>	*	*		*
Malvaceae	<i>Abutilon</i>	<i>cryptopetalum</i>		*	*	
Malvaceae	<i>Hibiscus</i>	<i>burtonii</i>		*		
Malvaceae	<i>Sida</i>	<i>calyxhymenia</i>		*	*	
Malvaceae	<i>Sida</i>	<i>spodochroma</i>		*		
Marsileaceae	<i>Marsilea</i>	<i>hirsuta</i>			*	
Montiaceae	<i>Calandrinia</i>	<i>eremaea</i> (A)		*		
Montiaceae	<i>Calandrinia</i>	<i>ptychosperma</i> (A)		*	*	

Family	Genus	Species	RP-AOW1	DD-AFW1	DD-EFW1	CLP-AOW1
Myrtaceae	<i>Calytrix</i>	<i>carinata</i>		*		
Myrtaceae	<i>Eucalyptus</i>	<i>camaldulensis</i> subsp. <i>obtusata</i>		*	*	
Poaceae	<i>Aristida</i>	<i>contorta</i> (A)	*	*	*	*
Poaceae	<i>Cenchrus</i>	<i>ciliaris</i> (W)		*		
Poaceae	<i>Cymbopogon</i>	<i>ambiguus</i>			*	
Poaceae	<i>Enneapogon</i>	<i>caerulescens</i> (A)	*			*
Poaceae	<i>Enteropogon</i>	<i>ramosus</i>		*	*	
Poaceae	<i>Eragrostis</i>	<i>dielsii</i> (A)		*	*	
Poaceae	<i>Eragrostis</i>	<i>eriopoda</i>				*
Poaceae	<i>Eriachne</i>	<i>pulchella</i> (A)	*			*
Portulacaceae	<i>Portulaca</i>	<i>oleracea</i> (A)	*			
Proteaceae	<i>Grevillea</i>	<i>berryana</i>	*	*		*
Proteaceae	<i>Grevillea</i>	<i>inconspicua</i> (Priority 4)		*		
Proteaceae	<i>Hakea</i>	<i>lorea</i>		*	*	
Rubiaceae	<i>Psydrax</i>	<i>latifolia</i>	*	*	*	
Rubiaceae	<i>Psydrax</i>	<i>suaveolens</i>		*		
Santalaceae	<i>Santalum</i>	<i>spicatum</i>		*		
Scrophulariaceae	<i>Eremophila</i>	<i>compacta</i>				*
Scrophulariaceae	<i>Eremophila</i>	<i>exilifolia</i>	*	*		
Scrophulariaceae	<i>Eremophila</i>	<i>fraseri</i> subsp. <i>fraseri</i>	*	*	*	
Scrophulariaceae	<i>Eremophila</i>	<i>galeata</i>	*			*
Scrophulariaceae	<i>Eremophila</i>	<i>latrobei</i> subsp. <i>latrobei</i>	*	*		*
Scrophulariaceae	<i>Eremophila</i>	<i>linearis</i>	*			
Scrophulariaceae	<i>Eremophila</i>	<i>longifolia</i>	*	*	*	
Scrophulariaceae	<i>Eremophila</i>	<i>macmillaniana</i>	*			
Scrophulariaceae	<i>Eremophila</i>	<i>phyllopoda</i>	*	*		
Solanaceae	<i>Solanum</i>	<i>lasiophyllum</i>	*	*	*	*
Zygophyllaceae	<i>Tribulus</i>	<i>astrocarpus</i> (A)	*			*
Zygophyllaceae	<i>Tribulus</i>	<i>terrestris</i> (A) (W)	*			*

APPENDIX D: PRIORITY FLORA LOCATIONS (GDA 2020)

Taxon	Easting	Northing	Comments
<i>Grevillea inconspicua</i> (P4)	646644.1	7073581.5	Approximately 30 plants observed.

APPENDIX E: DANDJOO AND ALA SEARCH RESULTS(40KM)

Vascular Flora

Accepted Name
<i>Abutilon cryptopetalum</i> (F.Muell.) Benth.
<i>Abutilon fraseri</i> (Hook.) Walp.
<i>Acacia acuminata</i> Benth.
<i>Acacia aneura</i> Benth.
<i>Acacia aptaneura</i> Maslin & J.E.Reid
<i>Acacia ayersiana</i> Maconochie
<i>Acacia brachystachya</i> Benth.
<i>Acacia burkittii</i> Benth.
<i>Acacia caesaneura</i> Maslin & J.E.Reid
<i>Acacia citrinoviridis</i> Tindale & Maslin
<i>Acacia coolgardiensis</i> Maiden
<i>Acacia craspedocarpa</i> F.Muell.
<i>Acacia cuthbertsonii</i> Luehm.
<i>Acacia cuthbertsonii</i> Luehm. subsp. <i>cuthbertsonii</i>
<i>Acacia cuthbertsonii</i> subsp. <i>linearis</i> R.S.Cowan & Maslin
<i>Acacia cyperophylla</i> Benth. var. <i>cyperophylla</i>
<i>Acacia demissa</i> R.S.Cowan & Maslin
<i>Acacia effusifolia</i> Maslin & Buscumb
<i>Acacia exocarpoides</i> W.Fitzg.
<i>Acacia fuscaneura</i> Maslin & J.E.Reid
<i>Acacia grasbyi</i> Maiden
<i>Acacia incurvaneura</i> Maslin & J.E.Reid
<i>Acacia kempeana</i> F.Muell.
<i>Acacia ligulata</i> Benth.
<i>Acacia macraneura</i> Maslin & J.E.Reid
<i>Acacia mulganeura</i> Maslin & J.E.Reid
<i>Acacia murrayana</i> Benth.
<i>Acacia paraneura</i> Randell
<i>Acacia pruinocarpa</i> Tindale
<i>Acacia pteraneura</i> Maslin & J.E.Reid
<i>Acacia pyrifolia</i> DC.
<i>Acacia pyrifolia</i> DC. var. <i>pyrifolia</i>
<i>Acacia quadrimarginea</i> F.Muell.
<i>Acacia ramulosa</i> var. <i>linophylla</i> (W.Fitzg.) Pedley
<i>Acacia ramulosa</i> W.Fitzg. var. <i>ramulosa</i>
<i>Acacia rhodophloia</i> Maslin
<i>Acacia sclerosperma</i> F.Muell.
<i>Acacia sclerosperma</i> F.Muell. subsp. <i>sclerosperma</i>
<i>Acacia sclerosperma</i> subsp. <i>glaucescens</i> A.R.Chapm. & Maslin
<i>Acacia sibirica</i> S.Moore
<i>Acacia</i> sp. <i>Wiluna</i> (B.R. Maslin 7090)
<i>Acacia speckii</i> R.S.Cowan & Maslin
<i>Acacia subtessarogona</i> Tindale & Maslin
<i>Acacia synchronica</i> Maslin
<i>Acacia tetragonophylla</i> F.Muell.
<i>Acacia thomae</i> Maslin
<i>Acacia tysonii</i> Luehm.

Accepted Name
Acacia victoriae Benth.
Acacia victoriae Benth. subsp. victoriae
Acacia victoriae subsp. victoriae Benth.
Acacia wanyu Tindale
Acacia xanthocarpa R.S.Cowan & Maslin
Accepted name (dwc:acceptedNameUsage)
Actinobole oldfieldianum P.S.Short
Actinobole uliginosum (A.Gray) H.Eichler
Alternanthera angustifolia R.Br.
Alternanthera denticulata R.Br. var. denticulata
Aluta maisonneuvei (F.Muell.) Rye & Trudgen
Aluta maisonneuvei (F.Muell.) Rye & Trudgen subsp. maisonneuvei
Aluta maisonneuvei subsp. auriculata (F.Muell.) Rye & Trudgen
Amyema fitzgeraldii (Blakely) Danser
Amyema gibberula (Tate) Danser var. gibberula
Amyema nestor (S.Moore) Danser
Androcalva luteiflora (E.Pritz.) C.F.Wilkins & Whitlock
Angianthus cyathifer P.S.Short
Angianthus tomentosus J.C.Wendl.
Anthotroche pannosa Endl.
Areocleome oxalidea (F.Muell.) R.L.Barrett & Roalson
Argemone ochroleuca Sweet subsp. ochroleuca
Aristida contorta F.Muell.
Aristida holathera Domin var. holathera
Aristida inaequiglumis Domin
Aristida obscura Henrard
Asteridea chaetopoda (F.Muell.) Kroner
Atriplex amnicola Paul G.Wilson
Atriplex codonocarpa Paul G.Wilson
Atriplex lindleyi subsp. inflata (F.Muell.) Paul G.Wilson
Atriplex semilunaris Aellen
Atriplex vesicaria Benth.
Austrostipa elegantissima (Labill.) S.W.L.Jacobs & J.Everett
Austrostipa nitida (Summerh. & C.E.Hubb.) S.W.L.Jacobs & J.Everett
Austrostipa scabra (Lindl.) S.W.L.Jacobs & J.Everett
Boerhavia repleta Hewson
Brachyscome ciliaris (Labill.) Less.
Brachyscome simulans P.S.Short
Brassica tournefortii Gouan
Brunonia australis R.Br.
Bulbostylis barbata (Rottb.) C.B.Clarke
Calandrinia balonensis Lindl.
Calandrinia creethae Morrison
Calandrinia eremaea Ewart
Calandrinia lehmannii Endl.
Calandrinia monosperma Obbens
Calandrinia papillata Syeda
Calandrinia polyandra Benth.
Calandrinia Ptychosperma F.Muell.
Calandrinia pumila (Benth.) F.Muell.
Calandrinia reticulata Syeda
Calandrinia schistorhiza Morrison
Calandrinia sp. Bungalbin (G.J. Keighery & N. Gibson 1956)
Calandrinia stagnensis J.M.Black
Calandrinia translucens Obbens
Callitris columellaris F.Muell.
Calocephalus beardii P.S.Short
Calocephalus francisii (F.Muell.) Benth.
Calocephalus knappii (F.Muell.) Ewart & Jean White

Accepted Name
<i>Calocephalus multiflorus</i> (Turcz.) Benth.
<i>Calocephalus pilbarensis</i> P.S.Short
<i>Calotis hispidula</i> (F.Muell.) F.Muell.
<i>Calotis multicaulis</i> (Turcz.) Druce
<i>Calotis plumulifera</i> F.Muell.
<i>Calytrix amethystina</i> Craven
<i>Calytrix desolata</i> S.Moore
<i>Calytrix uncinata</i> Craven
<i>Calytrix verruculosa</i> Craven
<i>Cenchrus ciliaris</i> L.
<i>Cenchrus setiger</i> Vahl
<i>Centipeda thespidioides</i> F.Muell.
<i>Centrolepis cephaliformis</i> Reader subsp. <i>cephaloformis</i>
<i>Cephalopterum drummondii</i> A.Gray
<i>Chamelaucium gracile</i> F.Muell.
<i>Chara behriana</i> A.Braun
<i>Cheilanthes lasiophylla</i> Pic.Serm.
<i>Cheilanthes sieberi</i> Kunze subsp. <i>sieberi</i>
<i>Cheilanthes sieberi</i> subsp. <i>sieberi</i> Kunze
<i>Chenopodium gaudichaudianum</i> (Moq.) Paul G.Wilson
<i>Chenopodium murale</i> L.
<i>Chrysocephalum gilesii</i> (F.Muell.) Paul G.Wilson
<i>Chrysocephalum puteale</i> (S.Moore) Paul G.Wilson
<i>Chthonocephalus pseudevax</i> Steetz
<i>Chthonocephalus viscosus</i> P.S.Short
<i>Codonocarpus cotinifolius</i> (Desf.) F.Muell.
<i>Convolvulus clementii</i> Domin
<i>Corymbia candida</i> K.D.Hill & L.A.S.Johnson
<i>Corymbia candida</i> K.D.Hill & L.A.S.Johnson subsp. <i>candida</i>
<i>Corymbia candida</i> subsp. <i>candida</i> K.D.Hill & L.A.S.Johnson
<i>Corymbia ferriticola</i> (Brooker & Edgecombe) K.D.Hill & L.A.S.Johnson
<i>Corymbia lenziana</i> (D.J.Carr & S.G.M.Carr) K.D.Hill & L.A.S.Johnson
<i>Cotula australis</i> (Spreng.) Hook.f.
<i>Crassula colorata</i> var. <i>acuminata</i> (Reader) Toelken
<i>Cullen cinereum</i> (Lindl.) J.W.Grimes
<i>Cuscuta epithymum</i> (L.) L.
<i>Cymbopogon ambiguus</i> (Hack.) A.Camus
<i>Cymbopogon obtectus</i> S.T.Blake
<i>Cynanchum floribundum</i> R.Br.
<i>Cynodon prostratus</i> (C.A.Gardner & C.E.Hubb.) P.M.Peterson
<i>Cyperus betchei</i> subsp. <i>commiscens</i> K.L.Wilson
<i>Cyperus bulbosus</i> Vahl
<i>Cyperus concinnus</i> R.Br.
<i>Cyperus dactyloides</i> Benth.
<i>Cyperus gymnocallos</i> Steud.
<i>Cyperus iria</i> L.
<i>Cyperus squarrosus</i> L.
<i>Dactyloctenium radulans</i> (R.Br.) P.Beauv.
<i>Daucus glochidiatus</i> (Labill.) Fisch., C.A.Mey. & Ave-Lall.
<i>Dichanthium sericeum</i> (R.Br.) A.Camus subsp. <i>sericeum</i>
<i>Dichanthium sericeum</i> subsp. <i>humilius</i> (J.M.Black) B.K.Simon
<i>Dicrastylis sessilifolia</i> Munir
<i>Dielitzia tysonii</i> P.S.Short
<i>Digitaria brownii</i> (Roem. & Schult.) Hughes
<i>Diplachne fusca</i> subsp. <i>muelleri</i> (Benth.) P.M.Peterson & N.Snow
<i>Dissocarpus paradoxus</i> (R.Br.) Ulbr.
<i>Dodonaea pachyneura</i> F.Muell.
<i>Dodonaea petiolaris</i> F.Muell.
<i>Drosera finlaysonianae</i> Arn.

Accepted Name
Drummondita miniata (C.A.Gardner) Paul G.Wilson
Duboisia hopwoodii (F.Muell.) F.Muell.
Duperreya commixta (Staples) Staples
Duperreya sericea Gaudich.
Dysphania glandulosa Paul G.Wilson
Dysphania glomulifera subsp. eremaea Paul G.Wilson
Dysphania kalpari Paul G.Wilson
Dysphania melanocarpa (J.M.Black) Mosyakin & Clemants
Dysphania rhadinostachya (F.Muell.) A.J.Scott
Dysphania rhadinostachya subsp. inflata (Aellen) Paul G.Wilson
Dysphania saxatilis (Paul G.Wilson) Mosyakin & Clemants
Eleocharis pallens S.T.Blake
Enchylaena tomentosa R.Br. var. tomentosa
Enneapogon caeruleus (Gaudich.) N.T.Burb.
Enneapogon polyphyllus (Domin) N.T.Burb.
Eragrostis cumingii Steud.
Eragrostis dielsii Pilg.
Eragrostis eriopoda Benth.
Eragrostis falcata (Gaudich.) Steud.
Eragrostis filicaulis Lazarides
Eragrostis kennedyae F.Turner
Eragrostis lanipes C.E.Hubb.
Eragrostis leptocarpa Benth.
Eragrostis pergracilis S.T.Blake
Eragrostis setifolia Nees
Eragrostis sp. Erect spikelets (P.K. Latz 2122)
Eragrostis tenellula (Kunth) Steud.
Eremophea spinosa (Ewart & O.B.Davies) Paul G.Wilson
Eremophila clarkei A.F.Oldfield & F.Muell.
Eremophila compacta subsp. fecunda Chinnock
Eremophila enata Chinnock
Eremophila eriocalyx F.Muell.
Eremophila exilifolia F.Muell.
Eremophila fasciata Chinnock
Eremophila flabellata Chinnock
Eremophila foliosissima Kraenzl.
Eremophila forrestii F.Muell. subsp. forrestii
Eremophila forrestii subsp. forrestii F.Muell.
Eremophila forrestii subsp. hastieana (W.Fitzg.) Chinnock
Eremophila fraseri F.Muell.
Eremophila fraseri F.Muell. subsp. fraseri
Eremophila fraseri subsp. parva Chinnock
Eremophila freelingii F.Muell.
Eremophila galeata Chinnock
Eremophila georgei Diels
Eremophila gilesii F.Muell.
Eremophila gilesii F.Muell. subsp. gilesii
Eremophila gilesii subsp. variabilis Chinnock
Eremophila glabra (R.Br.) Ostenf. subsp. glabra
Eremophila glabra subsp. tomentosa Chinnock
Eremophila glutinosa Chinnock
Eremophila granitica S.Moore
Eremophila hygrophana Chinnock
Eremophila jucunda Chinnock subsp. jucunda
Eremophila jucunda subsp. jucunda Chinnock
Eremophila jucunda subsp. pulcherrima Chinnock
Eremophila lachnocalyx C.A.Gardner
Eremophila latrobei F.Muell.
Eremophila latrobei F.Muell. subsp. latrobei

Accepted Name
<i>Eremophila latrobei</i> subsp. <i>glabra</i> (L.S.Sm.) Chinnock
<i>Eremophila latrobei</i> subsp. <i>latrobei</i> F.Muell.
<i>Eremophila linearis</i> Chinnock
<i>Eremophila longifolia</i> (R.Br.) F.Muell.
<i>Eremophila mackinlayi</i> subsp. <i>spathulata</i> Chinnock
<i>Eremophila macmillaniana</i> C.A.Gardner
<i>Eremophila maculata</i> subsp. <i>brevifolia</i> (Benth.) Chinnock
<i>Eremophila maitlandii</i> Benth.
<i>Eremophila malacoides</i> Chinnock
<i>Eremophila margarethae</i> S.Moore
<i>Eremophila oppositifolia</i> subsp. <i>angustifolia</i> (S.Moore) Chinnock
<i>Eremophila pantonii</i> F.Muell.
<i>Eremophila phyllopoda</i> Chinnock
<i>Eremophila phyllopoda</i> Chinnock subsp. <i>phyllopoda</i>
<i>Eremophila phyllopoda</i> subsp. <i>phyllopoda</i> Chinnock
<i>Eremophila platycalyx</i> F.Muell.
<i>Eremophila platycalyx</i> F.Muell. subsp. <i>platycalyx</i>
<i>Eremophila platycalyx</i> subsp. <i>Granites</i> (D.J. Edinger & G. Marsh DJE 4782)
<i>Eremophila platycalyx</i> subsp. <i>platycalyx</i> F.Muell.
<i>Eremophila platycalyx</i> subsp. <i>Yalgoo</i> (A. Markey & S. Dillon 3337)
<i>Eremophila pterocarpa</i> W.Fitzg. subsp. <i>pterocarpa</i>
<i>Eremophila punctata</i> Chinnock
<i>Eremophila retropila</i> Chinnock
<i>Eremophila serrulata</i> (A.DC.) Druce
<i>Eremophila setacea</i> Chinnock
<i>Eremophila simulans</i> Chinnock subsp. <i>simulans</i>
<i>Eremophila simulans</i> subsp. <i>lapidensis</i> Chinnock
<i>Eremophila spathulata</i> W.Fitzg.
<i>Eremophila spectabilis</i> C.A.Gardner subsp. <i>spectabilis</i>
<i>Eremophila spectabilis</i> subsp. <i>brevis</i> Chinnock
<i>Eremophila spectabilis</i> subsp. <i>spectabilis</i> C.A.Gardner
<i>Eremophila spuria</i> Chinnock
<i>Eremophila strongylophylla</i> F.Muell.
<i>Eremophila youngii</i> F.Muell. subsp. <i>youngii</i>
<i>Eremophila youngii</i> subsp. <i>youngii</i> F.Muell.
<i>Eriachne aristidea</i> F.Muell.
<i>Eriachne benthamii</i> Hartley
<i>Eriachne flaccida</i> Hartley
<i>Eriachne helmsii</i> Hartley
<i>Eriachne ovata</i> Nees
<i>Eriachne pulchella</i> Domin
<i>Erodium cygnorum</i> Nees
<i>Erymophyllum compactum</i> Paul G.Wilson
<i>Erymophyllum ramosum</i> (A.Gray) Paul G.Wilson
<i>Erymophyllum ramosum</i> (A.Gray) Paul G.Wilson subsp. <i>ramosum</i>
<i>Erymophyllum ramosum</i> subsp. <i>ramosum</i> (A.Gray) Paul G.Wilson
<i>Erymophyllum tenellum</i> (Turcz.) Paul G.Wilson
<i>Eucalyptus brevifolia</i> F.Muell.
<i>Eucalyptus camaldulensis</i> subsp. <i>obtusa</i> (Blakely) Brooker & M.W.McDonald
<i>Eucalyptus camaldulensis</i> subsp. <i>refulgens</i> Brooker & M.W.McDonald
<i>Eucalyptus carnei</i> C.A.Gardner
<i>Eucalyptus kingsmillii</i> (Maiden) Maiden & Blakely
<i>Eucalyptus leptopoda</i> subsp. <i>elevata</i> L.A.S.Johnson & K.D.Hill
<i>Eucalyptus striatocalyx</i> W.Fitzg.
<i>Eucalyptus trivalva</i> Blakely
<i>Eucalyptus vitrix</i> L.A.S.Johnson & K.D.Hill
<i>Eulalia aurea</i> (Bory) Kunth
<i>Euphorbia boophthona</i> C.A.Gardner
<i>Euphorbia porcata</i> Halford & W.K.Harris

Accepted Name
<i>Euphorbia tannensis</i> subsp. <i>eremophila</i> (A.Cunn.) Hassall
<i>Euploca heterantha</i> (F.Muell.) M.W.Frohl. & M.W.Chase
<i>Euploca inexplicita</i> (Craven) M.W.Frohl. & M.W.Chase
<i>Euploca mitchellii</i> (Craven) M.W.Frohl. & M.W.Chase
<i>Euploca ovalifolia</i> (Forssk.) Diane & Hilger
<i>Exocarpos aphyllus</i> R.Br.
<i>Frankenia pauciflora</i> DC.
<i>Frankenia setosa</i> W.Fitzg.
<i>Gilruthia osbornei</i> Ewart & Jean White
<i>Glycine canescens</i> F.J.Herm.
<i>Gnephosis arachnoidea</i> Turcz.
<i>Gnephosis brevifolia</i> (A.Gray) Benth.
<i>Gnephosis tenuissima</i> Cass.
<i>Gomphrena verecunda</i> R.W.Davis
<i>Gonocarpus nodulosus</i> Nees
<i>Goodenia berardiana</i> (Gaudich.) Carolin
<i>Goodenia berringbinensis</i> Carolin
<i>Goodenia collaris</i> (F.Muell.) K.A.Sheph.
<i>Goodenia cynopotamica</i> (F.Muell.) K.A.Sheph.
<i>Goodenia discophora</i> (F.Muell.) K.A.Sheph.
<i>Goodenia glabrata</i> (Carolin) K.A.Sheph.
<i>Goodenia havilandii</i> Maiden & Betche
<i>Goodenia kingiana</i> Carolin
<i>Goodenia macropectra</i> (F.Muell.) Carolin
<i>Goodenia maideniana</i> W.Fitzg.
<i>Goodenia mimuloides</i> S.Moore
<i>Goodenia occidentalis</i> Carolin
<i>Goodenia peacockiana</i> Carolin
<i>Goodenia quasilibera</i> Carolin
<i>Goodenia reinwardtii</i> (de Vriese) K.A.Sheph.
<i>Goodenia rosea</i> (S.Moore) K.A.Sheph.
<i>Goodenia</i> sp. Midwest (K.A. Shepherd & C.F. Wilkins KS 1609)
<i>Goodenia tenuiloba</i> F.Muell.
<i>Goodenia wilunensis</i> Carolin
<i>Grevillea deflexa</i> F.Muell.
<i>Grevillea inconspicua</i> Diels
<i>Grevillea nematophylla</i> subsp. <i>supraplana</i> Makinson
<i>Grevillea sarissa</i> S.Moore
<i>Grevillea sarissa</i> subsp. <i>succincta</i> McGill.
<i>Grevillea stenostachya</i> C.A.Gardner
<i>Grevillea striata</i> R.Br.
<i>Gunniopsis propinqua</i> Chinnock
<i>Gymnema graniticola</i> (P.I.Forst.) P.I.Forst.
<i>Hakea lorea</i> (R.Br.) R.Br.
<i>Hakea loreus</i> subsp. <i>loreus</i> (R.Br.) R.Br.
<i>Hakea preissii</i> Meisn.
<i>Hakea recurva</i> Meisn.
<i>Hakea recurva</i> subsp. <i>arida</i> (Diels) W.R.Barker & R.M.Barker
<i>Halgania cyanea</i> Lindl.
<i>Halgania cyanea</i> var. <i>Allambi</i> Stn (B.W. Strong 676)
<i>Halgania gustafsenii</i> F.Muell.
<i>Haloragis gossei</i> F.Muell.
<i>Haloragis gossei</i> F.Muell. var. <i>gossei</i>
<i>Haloragis odontocarpa</i> F.Muell.
<i>Haloragis odontocarpa</i> forma <i>pterocarpa</i> Orchard
<i>Haloragis trigonocarpa</i> F.Muell.
<i>Hamieria kempeana</i> (F.Muell.) R.M.Barker
<i>Hamieria kempeana</i> subsp. <i>muelleri</i> (R.M.Barker) R.M.Barker
<i>Helipterum craspedioides</i> W.Fitzg.

Accepted Name
Hemigenia tomentosa G.R.Guerin
Hemigenia virescens G.R.Guerin
Hibiscus burtonii F.M.Bailey
Hibiscus sp. Belele (D.W. Goodall 3417)
Hibiscus sp. Gardneri (A.L. Payne PRP 1435)
Hibiscus sturtii Hook.
Hibiscus sturtii var. forrestii F.Muell.
Hibiscus sturtii var. grandiflorus Benth.
Homalocalyx staminosus (F.Muell.) Craven
Hordeum glaucum Steud.
Hyalosperma glutinosum subsp. venustum (S.Moore) Paul G.Wilson
Indigofera brevidens Benth.
Indigofera chamaeclada Peter G.Wilson & Rowe subsp. chamaeclada
Indigofera georgei E.Pritz.
Indigofera kingiana Peter G.Wilson & Rowe
Indigofera monophylla DC.
Indigofera rotula Peter G.Wilson
Ipomoea calobra W.Hill & F.Muell.
Iseilema membranaceum (Lindl.) Domin
Isoetopsis graminifolia Turcz.
Isolepis australiensis (Maiden & Betcher) K.L.Wilson
Isolepis congrua Nees
Isotropis forrestii F.Muell.
Isotropis iophyta Wege & R.W.Davis
Lactuca serriola L.
Lactuca serriola L. forma serriola
Lawrencella davenportii (F.Muell.) Paul G.Wilson
Lawrencella rosea Lindl.
Lawrencia densiflora (Baker f.) Melville
Lawrencia helmsii (F.Muell. & Tate) Lander
Leichhardtia australis R.Br.
Lemooria burkittii (Benth.) P.S.Short
Lemphoria andreaana (F.Muell.) Al-Shehbaz & Lysak
Lepidium echinatum Hewson
Lepidium muelleri-ferdinandi Thell.
Lepidium oxytrichum Sprague
Lepidium phlebopetalum (F.Muell.) F.Muell.
Lepidium platypetalum Hewson
Lepidium xylodes Hewson
Leptosema chambersii F.Muell.
Levenhookia chippendalei F.L.Erickson & J.H.Willis
Levenhookia leptantha Benth.
Lobelia heterophylla Labill.
Lobelia heterophylla Labill. subsp. heterophylla
Lotus cruentus Court
Lysiana murrayi (F.Muell. & Tate) Tiegh.
Macgregoria racemigera F.Muell.
Maireana amoena (Diels) Paul G.Wilson
Maireana carnososa (Moq.) Paul G.Wilson
Maireana convexa Paul G.Wilson
Maireana georgei (Diels) Paul G.Wilson
Maireana melanocoma (F.Muell.) Paul G.Wilson
Maireana planifolia (F.Muell.) Paul G.Wilson
Maireana pyramidata (Benth.) Paul G.Wilson
Maireana thesioides (C.A.Gardner) Paul G.Wilson
Maireana tomentosa Moq.
Maireana tomentosa subsp. tomentosa Moq.
Maireana trichoptera (J.M.Black) Paul G.Wilson
Maireana triptera (Benth.) Paul G.Wilson

Accepted Name
Maireana villosa (Lindl.) Paul G.Wilson
Malva parviflora L.
Marsilea drummondii A.Braun
Marsilea hirsuta R.Br.
Menkea australis Lehm.
Menkea draboides (Hook.f.) Benth.
Menkea sphaerocarpa F.Muell.
Menkea villosula (F.Muell. & Tate) J.M.Black
Micromyrtus sulphurea W.Fitzg.
Millotia perpusilla (Turcz.) P.S.Short
Minuria leptophylla DC.
Mirbelia microphylla (Turcz.) Benth.
Mirbelia rhagodioides Crisp & J.M.Taylor
Monachather paradoxus Steud.
Muelleranthus trifoliolatus (F.Muell.) A.T.Lee
Myoporum montanum R.Br.
Myriocephalus gueriniae F.Muell.
Myriocephalus oldfieldii (F.Muell.) Paul G.Wilson
Myriocephalus pygmaeus (A.Gray) P.S.Short
Myriocephalus rudallii Benth.
Nelica maderaspatensis (L.) Raf.
Neurachne alopecuroidea R.Br.
Neurachne minor S.T.Blake
Nicotiana cavicola N.T.Burb.
Nicotiana gascoynica M.W.Chase & Christenh.
Nicotiana murchisonica M.W.Chase & Christenh.
Nicotiana obliqua (N.T.Burb.) M.W.Chase & Christenh.
Nicotiana pila M.W.Chase & Christenh.
Nicotiana rosulata (S.Moore) Domin
Nicotiana rotundifolia Lindl.
Nicotiana simulans N.T.Burb.
Nicotiana stenocarpa H.-M.Wheeler
Olearia stuartii (F.Muell.) Benth.
Ophioglossum lusitanicum L.
Opuntia stricta (Haw.) Haw.
Papaver hybridum L.
Parietaria cardiostegia Greuter
Paspalidium clementii (Domin) C.E.Hubb.
Paspalidium gracile (R.Br.) Hughes
Peplidium aithocheilum W.R.Barker
Peplidium sp. C Evol. Fl. Fauna Arid Aust. (N.T. Burbidge & A. Kanis 8158)
Pigea floribunda Lindl.
Pimelea microcephala R.Br.
Pimelea microcephala R.Br. subsp. microcephala
Pimelea microcephala subsp. microcephala R.Br.
Pimelea trichostachya Lindl.
Pittosporum angustifolium Lodd., G.Lodd. & W.Lodd.
Plantago drummondii Decne.
Pluchea dentex Benth.
Podolepis gardneri G.L.Davis
Pogonolepis stricta Steetz
Polycarpaea corymbosa (L.) Lam.
Portulaca cyclophylla F.Muell.
Portulaca oleracea L.
Portulaca pilosa L.
Prostanthera albiflora B.J.Conn
Prostanthera campbellii F.Muell.
Prostanthera wilkieana F.Muell.
Psydax latifolia (Benth.) S.T.Reynolds & R.J.F.Hend.

Accepted Name
Psydrax rigidula S.T.Reynolds & R.J.F.Hend.
Psydrax suaveolens (S.Moore) S.T.Reynolds & R.J.F.Hend.
Ptilotus actinocladus T.Hammer & R.W.Davis
Ptilotus aervoides (F.Muell.) F.Muell.
Ptilotus albidus (C.A.Gardner) Benl
Ptilotus chamaecladus Diels
Ptilotus divaricatus (Gaudich.) F.Muell.
Ptilotus drummondii var. minor (Nees) Benl
Ptilotus exaltatus Nees
Ptilotus gaudichaudii (Steud.) J.M.Black
Ptilotus gomphrenoides Benth.
Ptilotus grandiflorus F.Muell.
Ptilotus helipteroides (F.Muell.) F.Muell.
Ptilotus lazaridis Benl
Ptilotus luteolus (Benl & H.Eichler) R.W.Davis
Ptilotus macrocephalus (R.Br.) Poir.
Ptilotus nobilis (Lindl.) F.Muell.
Ptilotus obovatus (Gaudich.) F.Muell.
Ptilotus obovatus (Gaudich.) F.Muell. var. obovatus
Ptilotus polystachyus (Gaudich.) F.Muell.
Ptilotus roei (Benth.) F.Muell.
Ptilotus rotundifolius (F.Muell.) F.Muell.
Ptilotus schwartzii (F.Muell.) Tate
Ptilotus schwartzii Tate var. schwartzii
Ptilotus xerophilus T.Hammer & R.W.Davis
Rhodanthe battii (F.Muell.) Paul G.Wilson
Rhodanthe charsleyae (F.Muell.) Paul G.Wilson
Rhodanthe chlorocephala subsp. rosea (Hook.) Paul G.Wilson
Rhodanthe chlorocephala subsp. splendida (Hemsl.) Paul G.Wilson
Rhodanthe citrina (Benth.) Paul G.Wilson
Rhodanthe floribunda (DC.) Paul G.Wilson
Rhodanthe humboldtiana (Gaudich.) Paul G.Wilson
Rhodanthe maryonii (S.Moore) Paul G.Wilson
Rhodanthe propinqua (W.Fitzg.) Paul G.Wilson
Rhodanthe sphaerocephala Paul G.Wilson
Rhodanthe sterilescens (F.Muell.) Paul G.Wilson
Rhodanthe stricta (Lindl.) Paul G.Wilson
Roebuckiella cheilocarpa (F.Muell.) P.S.Short var. cheilocarpa
Roebuckiella cilicarpa (W.Fitzg.) P.S.Short
Roebuckiella oncocarpa (Diels) P.S.Short
Roebuckiella similis (P.S.Short) P.S.Short
Roepera aurantiaca Lindl. subsp. aurantiaca
Roepera eichleri (R.M.Barker) Beier & Thulin
Roepera kochii (Tate) Beier & Thulin
Roepera tetraptera (R.M.Barker) Beier & Thulin
Rostraria pumila (Desf.) Tzvelev
Rumex vesicarius L.
Salsola australis R.Br.
Samolus repens (J.R.Forst. & G.Forst.) Pers.
Santalum lanceolatum R.Br.
Santalum spicatum (R.Br.) A.DC.
Scaevola spinescens R.Br.
Scaevola tomentosa Gaudich.
Schinus molle var. areira (L.) DC.
Schismus arabicus Nees
Schoenia ayersii (F.Muell.) J.M.Black
Schoenia cassiniana (Gaudich.) Steetz
Schoenoplectiella dissachantha (S.T.Blake) Lye
Sclerolaena burbridgeae (Ising) A.J.Scott

Accepted Name
<i>Sclerolaena cuneata</i> Paul G.Wilson
<i>Sclerolaena densiflora</i> (W.Fitzg.) A.J.Scott
<i>Sclerolaena deserticola</i> Paul G.Wilson
<i>Sclerolaena diacantha</i> (Nees) Benth.
<i>Sclerolaena divaricata</i> (R.Br.) Domin
<i>Sclerolaena eriacantha</i> (F.Muell.) Ulbr.
<i>Sclerolaena fimbriolata</i> (F.Muell.) A.J.Scott
<i>Sclerolaena gardneri</i> (Ising) A.J.Scott
<i>Sclerolaena glabra</i> (F.Muell.) Domin
<i>Sclerolaena lanicuspis</i> (F.Muell.) Benth.
<i>Sclerolaena patentispis</i> (R.H.Anderson) Ulbr.
<i>Sclerolaena tetragona</i> Paul G.Wilson
<i>Senecio glossanthus</i> (Sond.) Belcher
<i>Senna artemisioides</i> (DC.) Randell
<i>Senna artemisioides</i> subsp. <i>filifolia</i> Randell
<i>Senna artemisioides</i> subsp. <i>helmsii</i> (Symon) Randell
<i>Senna artemisioides</i> subsp. <i>oligophylla</i> (F.Muell.) Randell
<i>Senna artemisioides</i> subsp. <i>x artemisioides</i> (DC.) Randell
<i>Senna artemisioides</i> subsp. <i>x petiolaris</i> Randell
<i>Senna artemisioides</i> subsp. <i>x sturtii</i> (R.Br.) Randell
<i>Senna artemisioides</i> subsp. <i>zygophylla</i> (Benth.) Randell
<i>Senna charlesiana</i> (Symon) Randell
<i>Senna glaucifolia</i> (Randell) Randell
<i>Senna glutinosa</i> (DC.) Randell
<i>Senna glutinosa</i> subsp. <i>chatelainiana</i> (Gaudich.) Randell
<i>Senna glutinosa</i> subsp. <i>pruinosa</i> (F.Muell.) Randell
<i>Senna glutinosa</i> subsp. <i>x luerssenii</i> (Domin) Randell
<i>Senna pleurocarpa</i> var. <i>pleurocarpa</i> (F.Muell.) Randell
<i>Senna</i> sp. Austin (A. Strid 20210)
<i>Senna</i> sp. Meekatharra (E. Bailey 1-26)
<i>Senna stricta</i> (Randell) Randell
<i>Seringia exastia</i> (C.F.Wilkins) C.F.Wilkins & Whitlock
<i>Setaria dielsii</i> R.A.W.Herm.
<i>Sida ammophila</i> J.H.Willis
<i>Sida calyxhymenia</i> DC.
<i>Sida ectogama</i> W.R.Barker & R.M.Barker
<i>Sida fibulifera</i> Lindl.
<i>Sida intricata</i> F.Muell.
<i>Sida petrophila</i> F.Muell.
<i>Sida platycalyx</i> Benth.
<i>Sida</i> sp. <i>Excedentifolia</i> (J.L. Egan 1925)
<i>Siemssenia capillaris</i> Steetz
<i>Sisymbrium erysimoides</i> Desf.
<i>Sisymbrium irio</i> L.
<i>Sisymbrium orientale</i> L.
<i>Solanum austropiceum</i> A.R.Bean
<i>Solanum lachnophyllum</i> Symon
<i>Solanum lasiophyllum</i> Poir.
<i>Solanum nigrum</i> L.
<i>Solanum orbiculatum</i> Poir.
<i>Solanum orbiculatum</i> Poir. subsp. <i>orbiculatum</i>
<i>Solanum sturtianum</i> F.Muell.
<i>Sonchus oleraceus</i> L.
<i>Spergularia marina</i> (L.) Besser
<i>Sporobolus australasicus</i> Domin
<i>Stackhousia muricata</i> Lindl.
<i>Stenanthemum petraeum</i> Rye
<i>Stenopetalum anfractum</i> E.A.Shaw
<i>Stenopetalum filifolium</i> Benth.

Accepted Name
<i>Stenopetalum lineare</i> DC. var. <i>lineare</i>
<i>Stenopetalum nutans</i> F.Muell.
<i>Stenopetalum pedicellare</i> Benth.
<i>Stenopetalum sphaerocarpum</i> F.Muell.
<i>Streptoglossa cylindriceps</i> (J.M.Black) Dunlop
<i>Streptoglossa liatroides</i> (Turcz.) Dunlop
<i>Stylidium longibracteatum</i> Carlquist
<i>Stylobasium spathulatum</i> Desf.
<i>Swainsona affinis</i> (A.T.Lee) Joy Thomps.
<i>Swainsona canescens</i> (Lindl.) F.Muell.
<i>Swainsona elegans</i> A.T.Lee
<i>Swainsona elegantoides</i> (A.T.Lee) Joy Thomps.
<i>Swainsona formosa</i> (G.Don) Joy Thomps.
<i>Swainsona gracilis</i> Benth.
<i>Swainsona kingii</i> F.Muell.
<i>Swainsona leeana</i> J.Z.Weber
<i>Swainsona oroboides</i> Benth.
<i>Swainsona paucifoliolata</i> Joy Thomps.
<i>Swainsona pedunculata</i> A.T.Lee
<i>Swainsona pterostylis</i> (DC.) Bakh.f.
<i>Swainsona tenuis</i> E.Pritz.
<i>Synaptantha tillaeacea</i> (F.Muell.) Hook.f.
<i>Synaptantha tillaeacea</i> (F.Muell.) Hook.f. var. <i>tillaeacea</i>
<i>Taplinia saxatilis</i> Lander
<i>Tecticornia cymbiformis</i> K.A.Sheph. & Paul G.Wilson
<i>Tecticornia disarticulata</i> (Paul G.Wilson) K.A.Sheph. & Paul G.Wilson
<i>Tecticornia doliiformis</i> (Paul G.Wilson) K.A.Sheph. & Paul G.Wilson
<i>Tecticornia indica</i> subsp. <i>bidens</i> (Nees) K.A.Sheph. & Paul G.Wilson
<i>Tecticornia</i> sp. Yoothapina Station (A.A. Mitchell 883)
<i>Tetragonia cristata</i> A.M.Prescott
<i>Tetragonia moorei</i> M.Gray
<i>Teucrium teucriiflorum</i> (F.Muell.) Kattari & Salmaki
<i>Themeda avenacea</i> (F.Muell.) Maiden & Betche
<i>Themeda triandra</i> Forssk.
<i>Thryptomene decussata</i> (W.Fitzg.) J.W.Green
<i>Thyridolepis multiculmis</i> (Pilg.) S.T.Blake
<i>Thysanotus manglesianus</i> Kunth
<i>Thysanotus</i> sp. Eremaean (S. van Leeuwen 1067)
<i>Thysanotus speckii</i> Brittan
<i>Trachymene ornata</i> (Endl.) Druce
<i>Tragus australianus</i> S.T.Blake
<i>Trianthema glossostigma</i> F.Muell.
<i>Trianthema triquetrum</i> Willd.
<i>Tribulus astrocarpus</i> F.Muell.
<i>Tribulus forrestii</i> F.Muell.
<i>Tribulus platypterus</i> Benth.
<i>Tribulus suberosus</i> R.M.Barker
<i>Trichanthodium skirrophorum</i> Sond.
<i>Trichodesma zeylanicum</i> (Burm.f.) R.Br.
<i>Trichodesma zeylanicum</i> (Burm.f.) R.Br. var. <i>zeylanicum</i>
<i>Trichodesma zeylanicum</i> var. <i>zeylanicum</i> (Burm.f.) R.Br.
<i>Triglochin isingiana</i> (J.M.Black) Aston
<i>Triglochin mucronata</i> R.Br.
<i>Triodia melvillei</i> (C.E.Hubb.) Lazarides
<i>Tripogonella loliiformis</i> (F.Muell.) P.M.Peterson & Romasch.
<i>Verticordia interioris</i> A.S.George
<i>Vincetoxicum lineare</i> (Decne.) Meve & Liedtke
<i>Wahlenbergia tumidifructa</i> P.J.Sm.
<i>Waitzia acuminata</i> Steetz

Accepted Name
<i>Waitzia acuminata</i> Steetz var. <i>acuminata</i>
<i>Walshia kendallii</i> (F.Muell.) Jeanes
<i>Wurmbea densiflora</i> (Benth.) T.Macfarlane
<i>Wurmbea tenella</i> (Endl.) Benth.

Terrestrial Fauna

Accepted Name	Kingdom	Phylum	Class
<i>Cyclorana occidentalis</i>	Animalia	Chordata	Amphibia
<i>Litoria rubella</i>	Animalia	Chordata	Amphibia

Accepted Name	Kingdom	Phylum	Class	Common name
<i>Manorina (Myzantha) flavigula</i>	Animalia	Chordata	Aves	Yellow-throated Miner
<i>Taeniopygia guttata</i>	Animalia	Chordata	Aves	Zebra Finch
<i>Grallina cyanoleuca</i>	Animalia	Chordata	Aves	Magpie-lark
<i>Ptilotula penicillata</i>	Animalia	Chordata	Aves	White-plumed Honeyeater
<i>Gavicalis virescens</i>	Animalia	Chordata	Aves	Singing Honeyeater
<i>Acanthagenys rufogularis</i>	Animalia	Chordata	Aves	Spiny-cheeked Honeyeater
<i>Aquila (Uroaetus) audax</i>	Animalia	Chordata	Aves	Wedge-tailed Eagle
<i>Rhipidura (Sauloprocta) leucophrys</i>	Animalia	Chordata	Aves	Willie Wagtail
<i>Ocyphaps lophotes</i>	Animalia	Chordata	Aves	Crested Pigeon
<i>Haliastur spheurnus</i>	Animalia	Chordata	Aves	Whistling Kite
<i>Corvus bennetti</i>	Animalia	Chordata	Aves	Little Crow
<i>Oreocia gutturalis</i>	Animalia	Chordata	Aves	Crested Bellbird
<i>Artamus (Angroyan) cinereus</i>	Animalia	Chordata	Aves	Black-faced Woodswallow
<i>Corvus orru</i>	Animalia	Chordata	Aves	Torresian Crow
<i>Gymnorhina tibicen</i>	Animalia	Chordata	Aves	Australian Magpie
<i>Falco (Tinnunculus) cenchroides</i>	Animalia	Chordata	Aves	Nankeen Kestrel
<i>Cracticus nigrogularis</i>	Animalia	Chordata	Aves	Pied Butcherbird
<i>Hirundo (Hirundo) neoxena</i>	Animalia	Chordata	Aves	Welcome Swallow
<i>Anthus (Anthus) novaeseelandiae</i>	Animalia	Chordata	Aves	Australian Pipit
<i>Petrochelidon (Hylochelidon) nigricans</i>	Animalia	Chordata	Aves	Tree Martin
<i>Eolophus roseicapilla</i>	Animalia	Chordata	Aves	Galah
<i>Chlamydera guttata</i>	Animalia	Chordata	Aves	Western Bowerbird
<i>Petroica (Petroica) goodenovii</i>	Animalia	Chordata	Aves	Red-capped Robin
<i>Dromaius novaehollandiae</i>	Animalia	Chordata	Aves	Emu
<i>Acanthiza (Geobasileus) uropygialis</i>	Animalia	Chordata	Aves	Chestnut-rumped Thornbill
<i>Melopsittacus undulatus</i>	Animalia	Chordata	Aves	Budgerigar
<i>Cracticus torquatus</i>	Animalia	Chordata	Aves	Grey Butcherbird
<i>Falco (Ieracidea) berigora</i>	Animalia	Chordata	Aves	Brown Falcon
<i>Pachycephala (Alisterornis) rufiventris</i>	Animalia	Chordata	Aves	Rufous Whistler
<i>Colluricincla (Colluricincla) harmonica</i>	Animalia	Chordata	Aves	Grey Shrike-thrush
<i>Pomatostomus (Pomatostomus) temporalis</i>	Animalia	Chordata	Aves	Grey-crowned Babbler
<i>Barnardius zonarius</i>	Animalia	Chordata	Aves	Australian Ringneck
<i>Elseymornis melanops</i>	Animalia	Chordata	Aves	Black-fronted Dotterel
<i>Coracina (Coracina) novaehollandiae</i>	Animalia	Chordata	Aves	Black-faced Cuckoo-shrike
<i>Pomatostomus (Morganornis) superciliosus</i>	Animalia	Chordata	Aves	White-browed Babbler
<i>Cincloramphus (Maclellannia) mathewsi</i>	Animalia	Chordata	Aves	Rufous Songlark
<i>Aphelocephala leucopsis</i>	Animalia	Chordata	Aves	Southern Whiteface
<i>Falco (Falco) longipennis</i>	Animalia	Chordata	Aves	Australian Hobby
<i>Melanodryas (Melanodryas) cucullata</i>	Animalia	Chordata	Aves	Hooded Robin
<i>Anas gracilis</i>	Animalia	Chordata	Aves	Grey Teal
<i>Epthianura (Parepthianura) tricolor</i>	Animalia	Chordata	Aves	Crimson Chat
<i>Geopelia cuneata</i>	Animalia	Chordata	Aves	Diamond Dove
<i>Anas (Anas) superciliosa</i>	Animalia	Chordata	Aves	Pacific Black Duck
<i>Artamus (Campbellornis) personatus</i>	Animalia	Chordata	Aves	Masked Woodswallow
<i>Tadorna (Casarca) tadornoides</i>	Animalia	Chordata	Aves	Australian Shelduck
<i>Nymphicus hollandicus</i>	Animalia	Chordata	Aves	Cockatiel
<i>Dicaeum (Dicaeum) hirundinaceum</i>	Animalia	Chordata	Aves	Mistletoebird

Accepted Name	Kingdom	Phylum	Class	Common name
<i>Acanthiza (Milligania) robustirostris</i>	Animalia	Chordata	Aves	Slaty-backed Thornbill
<i>Egretta novaehollandiae</i>	Animalia	Chordata	Aves	White-faced Heron
<i>Acanthiza (Geobasileus) chrysorrhoa</i>	Animalia	Chordata	Aves	Yellow-rumped Thornbill
<i>Todiramphus (Cyanalcyon) pyrrhopygius</i>	Animalia	Chordata	Aves	Red-backed Kingfisher
<i>Cinchoramphus (Cinchoramphus) cruralis</i>	Animalia	Chordata	Aves	Brown Songlark
<i>Phaps (Phaps) chalcoptera</i>	Animalia	Chordata	Aves	Common Bronzewing
<i>Malurus (Leggeornis) assimilis</i>	Animalia	Chordata	Aves	Purple-backed Fairy-wren
<i>Psophodes (Sphenostoma) occidentalis</i>	Animalia	Chordata	Aves	Chiming Wedgebill
<i>Poliiocephalus poliocephalus</i>	Animalia	Chordata	Aves	Hoary-headed Grebe
<i>Malurus (Malurus) splendens</i>	Animalia	Chordata	Aves	Splendid Fairy-wren
<i>Cinclosoma (Samuela) marginatum</i>	Animalia	Chordata	Aves	Western Quail-thrush
<i>Milvus migrans</i>	Animalia	Chordata	Aves	Black Kite
<i>Cheramoeca leucosterna</i>	Animalia	Chordata	Aves	White-backed Swallow
<i>Psephotellus varius</i>	Animalia	Chordata	Aves	Mulga Parrot
<i>Fulica atra</i>	Animalia	Chordata	Aves	Eurasian Coot
<i>Ardea pacifica</i>	Animalia	Chordata	Aves	White-necked Heron
<i>Malacorhynchus membranaceus</i>	Animalia	Chordata	Aves	Pink-eared Duck
<i>Petrochelidon (Petrochelidon) ariel</i>	Animalia	Chordata	Aves	Fairy Martin
<i>Purnella albifrons</i>	Animalia	Chordata	Aves	White-fronted Honeyeater
<i>Todiramphus (Todiramphus) sanctus</i>	Animalia	Chordata	Aves	Sacred Kingfisher
<i>Malurus (Leggeornis) lamberti</i>	Animalia	Chordata	Aves	Variegated Fairy-wren
<i>Gelochelidon nilotica</i>	Animalia	Chordata	Aves	Gull-billed Tern
<i>Cinclosoma (Samuela) castaneothorax</i>	Animalia	Chordata	Aves	Chestnut-breasted Quail-thrush
<i>Certhionyx (Certhionyx) variegatus</i>	Animalia	Chordata	Aves	Pied Honeyeater
<i>Aythya (Nyroca) australis</i>	Animalia	Chordata	Aves	Hardhead
<i>Hieraaetus (Hieraaetus) morphnoides</i>	Animalia	Chordata	Aves	Little Eagle
<i>Cygnus atratus</i>	Animalia	Chordata	Aves	Black Swan
<i>Cladorhynchus leucocephalus</i>	Animalia	Chordata	Aves	Banded Stilt
<i>Neopsephotus bourkii</i>	Animalia	Chordata	Aves	Bourke's Parrot
<i>Chenonetta jubata</i>	Animalia	Chordata	Aves	Australian Wood Duck
<i>Malurus (Musciparus) leucopterus</i>	Animalia	Chordata	Aves	White-winged Fairy-wren
<i>Gerygone fusca</i>	Animalia	Chordata	Aves	Western Gerygone
<i>Podargus strigoides</i>	Animalia	Chordata	Aves	Tawny Frogmouth
<i>Merops (Merops) ornatus</i>	Animalia	Chordata	Aves	Rainbow Bee-eater
<i>Himantopus himantopus</i>	Animalia	Chordata	Aves	Black-winged Stilt
<i>Aphelocephala nigricincta</i>	Animalia	Chordata	Aves	Banded Whiteface
<i>Tachybaptus novaehollandiae</i>	Animalia	Chordata	Aves	Australasian Grebe
<i>Heteroscenes pallidus</i>	Animalia	Chordata	Aves	Pallid Cuckoo
<i>Accipiter (Paraspias) cirrocephalus</i>	Animalia	Chordata	Aves	Collared Sparrowhawk
<i>Falco (Hierofalco) peregrinus</i>	Animalia	Chordata	Aves	Peregrine Falcon
<i>Cacatua (Licmetis) sanguinea</i>	Animalia	Chordata	Aves	Little Corella
<i>Circus assimilis</i>	Animalia	Chordata	Aves	Spotted Harrier
<i>Rhipidura (Rhipidura) albiscapa</i>	Animalia	Chordata	Aves	Grey Fantail
<i>Sugomel niger</i>	Animalia	Chordata	Aves	Black Honeyeater
<i>Columba (Columba) livia</i>	Animalia	Chordata	Aves	Rock Dove
<i>Coracina (Pteropodocys) maxima</i>	Animalia	Chordata	Aves	Ground Cuckoo-shrike
<i>Aegotheles (Aegotheles) cristatus</i>	Animalia	Chordata	Aves	Australian Owlet-nightjar
<i>Calidris (Erolia) acuminata</i>	Animalia	Chordata	Aves	Sharp-tailed Sandpiper
<i>Epthianura (Aurepthianura) aurifrons</i>	Animalia	Chordata	Aves	Orange Chat
<i>Microcarbo melanoleucos</i>	Animalia	Chordata	Aves	Little Pied Cormorant
<i>Ardeotis australis</i>	Animalia	Chordata	Aves	Australian Bustard
<i>Erythronyx cinctus</i>	Animalia	Chordata	Aves	Red-kneed Dotterel
<i>Acanthiza (Geobasileus) iredalei</i>	Animalia	Chordata	Aves	Slender-billed Thornbill
<i>Tringa (Rhyacophilus) glareola</i>	Animalia	Chordata	Aves	Wood Sandpiper
<i>Microeca (Microeca) fascians</i>	Animalia	Chordata	Aves	Jacky Winter
<i>Ptilotula plumula</i>	Animalia	Chordata	Aves	Grey-fronted Honeyeater
<i>Calidris (Ereunetes) ruficollis</i>	Animalia	Chordata	Aves	Red-necked Stint
<i>Platalea (Platibis) flavipes</i>	Animalia	Chordata	Aves	Yellow-billed Spoonbill
<i>Tribonyx ventralis</i>	Animalia	Chordata	Aves	Black-tailed Native-hen

Accepted Name	Kingdom	Phylum	Class	Common name
<i>Falco (Hierofalco) hypoleucos</i>	Animalia	Chordata	Aves	Grey Falcon
<i>Acanthiza (Acanthiza) apicalis</i>	Animalia	Chordata	Aves	Red-rumped Tit
<i>Chlidonias (Pelodes) hybrida</i>	Animalia	Chordata	Aves	Whiskered Tern
<i>Chalcites osculans</i>	Animalia	Chordata	Aves	Black-eared Cuckoo
<i>Corvus coronoides</i>	Animalia	Chordata	Aves	Australian Raven
<i>Ninox (Ninox) novaeseelandiae</i>	Animalia	Chordata	Aves	Southern Boobook
<i>Artamus (Angroyan) minor</i>	Animalia	Chordata	Aves	Little Woodswallow
<i>Daphoenositta (Neositta) chrysoptera</i>	Animalia	Chordata	Aves	Varied Sittella
<i>Hamirostra melanostemon</i>	Animalia	Chordata	Aves	Black-breasted Buzzard
<i>Turnix (Alphatumia) velox</i>	Animalia	Chordata	Aves	Little Button-quail
<i>Pyrrholaemus brunneus</i>	Animalia	Chordata	Aves	Redthroat
<i>Charadrius (Eupoda) veredus</i>	Animalia	Chordata	Aves	Oriental Plover
<i>Lichmera (Lichmera) indistincta</i>	Animalia	Chordata	Aves	Brown Honeyeater
<i>Porzana (Porzana) fluminea</i>	Animalia	Chordata	Aves	Australian Spotted Crane
<i>Burhinus (Burhinus) grallarius</i>	Animalia	Chordata	Aves	Bush Stone-curlew
<i>Chalcites basalis</i>	Animalia	Chordata	Aves	Horsfield's Bronze-cuckoo
<i>Tringa (Glottis) nebularia</i>	Animalia	Chordata	Aves	Common Greenshank
<i>Nycticorax caledonicus</i>	Animalia	Chordata	Aves	Nankeen Night-heron
<i>Chroicocephalus novaehollandiae</i>	Animalia	Chordata	Aves	Silver Gull
<i>Pardalotus (Pardalotinus) striatus</i>	Animalia	Chordata	Aves	Striated Pardalote
<i>Elanus axillaris</i>	Animalia	Chordata	Aves	Black-shouldered Kite
<i>Calidris (Erolia) ferruginea</i>	Animalia	Chordata	Aves	Curlew Sandpiper
<i>Vanellus (Lobivanellus) tricolor</i>	Animalia	Chordata	Aves	Banded Lapwing

Accepted Name	Kingdom	Phylum	Class
<i>Antechinomys laniger</i> (Gould, 1856)	Animalia	Chordata	Mammalia
<i>Antechinomys longicaudatus</i> (Spencer, 1909)	Animalia	Chordata	Mammalia
<i>Bettongia anhydra</i> Finlayson, 1957	Animalia	Chordata	Mammalia
<i>Felis catus</i> Linnaeus, 1758	Animalia	Chordata	Mammalia
<i>Notomys alexis</i> Thomas, 1922	Animalia	Chordata	Mammalia
<i>Osphranter rufus</i> Desmarest, 1822	Animalia	Chordata	Mammalia
<i>Nyctophilus geoffroyi</i> Leach, 1821	Animalia	Chordata	Mammalia
<i>Pseudantechinus woolleyae</i> Kitchener & Caputi, 1988	Animalia	Chordata	Mammalia
<i>Sminthopsis crassicaudata</i> (Gould, 1844)	Animalia	Chordata	Mammalia
<i>Vespadelus baverstocki</i> (Kitchener, Jones & Caputi, 1987)	Animalia	Chordata	Mammalia
<i>Vespadelus finlaysoni</i> (Kitchener, Jones & Caputi, 1987)	Animalia	Chordata	Mammalia
<i>Vulpes vulpes</i> Linnaeus, 1758	Animalia	Chordata	Mammalia

Accepted Name	Kingdom	Phylum	Class
<i>Anilius gypus</i> (Waite, 1918)	Animalia	Chordata	Reptilia
<i>Antaresia childreni</i> (Gray, 1842)	Animalia	Chordata	Reptilia
<i>Brachyuropsis approximans</i> (Glauert, 1954)	Animalia	Chordata	Reptilia
<i>Chelodina steindachneri</i> Siebenrock, 1901	Animalia	Chordata	Reptilia
<i>Ctenophorus caudicinctus</i> (Günther, 1875)	Animalia	Chordata	Reptilia
<i>Ctenophorus nuchalis</i> (De Vis, 1884)	Animalia	Chordata	Reptilia
<i>Ctenophorus reticulatus</i> (Gray, 1845)	Animalia	Chordata	Reptilia
<i>Ctenophorus scutulatus</i> (Stirling & Zietz, 1893)	Animalia	Chordata	Reptilia
<i>Ctenotus helenae</i> Storr, 1969	Animalia	Chordata	Reptilia
<i>Ctenotus leonhardii</i> (Sternfeld, 1919)	Animalia	Chordata	Reptilia
<i>Demansia reticulata</i> (Gray, 1842)	Animalia	Chordata	Reptilia
<i>Diplodactylus pulcher</i> Steindachner, 1870	Animalia	Chordata	Reptilia
<i>Egernia depressa</i> (Günther, 1875)	Animalia	Chordata	Reptilia
<i>Eremiascincus richardsonii</i> (Gray, 1845)	Animalia	Chordata	Reptilia
<i>Gehyra crypta</i> Kealley, Doughty, Pepper, Keogh, Hillyer & Huey, 2018	Animalia	Chordata	Reptilia
<i>Gehyra polka</i> Doughty, Bauer, Pepper, Keogh & Ellis, 2018	Animalia	Chordata	Reptilia
<i>Gehyra variegata</i> (Duméril & Bibron, 1836)	Animalia	Chordata	Reptilia
<i>Gowidon longirostris</i> (Boulenger, 1883)	Animalia	Chordata	Reptilia
<i>Heteronotia binoei</i> (Gray, 1845)	Animalia	Chordata	Reptilia
<i>Lerista eupoda</i> Smith, 1996	Animalia	Chordata	Reptilia

Accepted Name	Kingdom	Phylum	Class
Lerista macropisthopus fusciceps Storr, 1991	Animalia	Chordata	Reptilia
Lerista timida (de Vis, 1888)	Animalia	Chordata	Reptilia
Lucasium squarrosum (Kluge, 1962)	Animalia	Chordata	Reptilia
Menetia greyii Gray, 1845	Animalia	Chordata	Reptilia
Nephrurus wheeleri Loveridge, 1932	Animalia	Chordata	Reptilia
Nephrurus wheeleri wheeleri Loveridge, 1932	Animalia	Chordata	Reptilia
Pseudonaja mengdeni Wells & Wellington, 1985	Animalia	Chordata	Reptilia
Pseudonaja modesta (Günther, 1872)	Animalia	Chordata	Reptilia
Strophurus wellingtonae (Storr, 1988)	Animalia	Chordata	Reptilia
Suta fasciata Rosen, 1905	Animalia	Chordata	Reptilia
Suta monachus (Storr, 1964)	Animalia	Chordata	Reptilia
Tympanocryptis pseudopsephos Doughty, Kealley, Shoo & Melville, 2015	Animalia	Chordata	Reptilia
Varanus caudolineatus Boulenger, 1885	Animalia	Chordata	Reptilia
Varanus panoptes rubidus Storr, 1980	Animalia	Chordata	Reptilia
Varanus panoptes Storr, 1980	Animalia	Chordata	Reptilia

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



Australian Government

Department of Climate Change, Energy,
the Environment and Water

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: 16-Aug-2024

[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:	None
Listed Threatened Species:	9
Listed Migratory Species:	8

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Lands:	10
Commonwealth Heritage Places:	None
Listed Marine Species:	10
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

Extra Information

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

State and Territory Reserves:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	1
EPBC Act Referrals:	2
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 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	Buffer Status
BIRD			
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat known to occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pezoporus occidentalis Night Parrot [59350]	Endangered	Species or species habitat may occur within area	In feature area
PLANT			
Pityrodia augustensis Mt Augustus Foxglove [4962]	Vulnerable	Species or species habitat may occur within area	In buffer area only
REPTILE			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Liopholis kintorei Great Desert Skink, Tjakura, Warrarna, Mulyamiji, Tjalapa, Nampu [83160]	Vulnerable	Species or species habitat may occur within area	In buffer area only
SPIDER			
Idiosoma nigrum Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In buffer area only
Migratory Terrestrial Species			
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

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

Commonwealth Land Name	State	Buffer Status
Unknown		
Commonwealth Land - [51658]	WA	In buffer area only
Commonwealth Land - [51659]	WA	In buffer area only
Commonwealth Land - [51662]	WA	In buffer area only
Commonwealth Land - [51946]	WA	In buffer area only
Commonwealth Land - [51657]	WA	In buffer area only
Commonwealth Land - [51663]	WA	In buffer area only
Commonwealth Land - [51660]	WA	In buffer area only
Commonwealth Land - [51661]	WA	In buffer area only
Commonwealth Land - [51656]	WA	In buffer area only
Commonwealth Land - [51654]	WA	In buffer area only

Listed Marine Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In buffer area only
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat known to occur within area overfly marine area	In feature area
Charadrius veredus Oriental Plover, Oriental Dotterel [882]		Species or species habitat may occur within area overfly marine area	In feature area
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area

Extra Information

Nationally Important Wetlands					[Resource Information]
Wetland Name			State		Buffer Status
Lake Annean (Lake Nannine)			WA		In buffer area only

EPBC Act Referrals					[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status		Buffer Status
Not controlled action					
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed		In feature area
Jack Hills Expansion Project	2011/5853	Not Controlled Action	Completed		In buffer area only

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

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

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

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

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

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