# NORTH DOME PROJECT

## Detailed Flora Basic Fauna Assessment

Prepared for Essential Metals Ltd

January 2024

Prepared by

BOTANICA CONSULTING

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## Document Information

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## Disclaimer



## Quality Assurance

An internal quality review process has been implemented to each project task undertaken by BC. Each document and its contents is carefully reviewed by core members of the Consultancy team and signed off at Director Level prior to issue to the client. Draft documents are submitted to the client for comment and acceptance prior to final production.

Cover Photo: Vegetation within the North Dome project area September 2023

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# EXECUTIVE SUMMARY

Botanica Consulting Pty Ltd (Botanica) was commissioned by Essential Metals Ltd. to undertake a detailed flora/ vegetation survey and basic fauna survey of their North Dome project (referred to as the 'survey area'). The survey area is approximately 2,743 ha in extent and is located approximately 52 km north of Norseman, Western Australia.

The survey area lies within the Eastern Goldfield (COO3) subregion of the Coolgardie Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA). The subregion is considered a centre of endemism for Eucalypts in the Goldfields Woodlands region and is also noted for the diversity of *Acacia* spp. and ephemeral flora communities of the tertiary sandplain shrublands and the valley floors of woodland areas.

The main land tenure in the survey area is Unallocated Crown Land (UCL). The survey area is not located within a pastoral station. There are no proposed nor gazetted conservation reserves.

Botanica conducted a detailed flora/ vegetation and basic fauna survey on the 22$^{nd}$ - 23$^{rd}$ November 2021. The area was traversed on foot and by 4WD vehicle by Jim Williams (Director/Principal Botanist, Diploma of Horticulture) and Jennifer Jackson (Senior Botanist, BSc (Honours) Environmental Management). A total of 28 quadrats (20 m x 20 m) were installed and assessed during the survey effort. The area was revisited, and quadrats reassessed on the 18$^{th}$–19$^{th}$ September 2023 by Jennifer Jackson. A further six quadrats were installed and assessed along the proposed haul road on the 26$^{th}$ October 2023 by Aidan Williams (Botanist, BSc Botany and Conservation Biology).

A total of seven broad-scale vegetation communities were identified within the survey area with the most widespread community being Eucalypt open woodland (CLP-EW3). The field survey identified 110 vascular flora taxa within the survey area. These taxa represented 48 genera across 24 families. The most diverse families in the survey area were (Myrtaceae (16 species), followed by Fabaceae (14 species) and Chenopodiaceae (18 species). Dominant genera include *Eremophila* (15 species), *Eucalyptus* (12 species) and *Acacia* (nine species). Based on the vegetation condition rating vegetation condition within the survey area was categorised as 'very good' to 'good.' Disturbances within the survey area included access tracks, low levels of grazing and historical impacts.

No Threatened flora species as listed under the Western Australian *Biodiversity Conservation (BC) Act 2016* or Commonwealth *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* were recorded within the survey area. The Priority 3 species *Eremophila acutifolia* was recorded within eight quadrats of the survey area.

A total of six introduced (weed) species were recorded within the survey area. None of these species are listed as a Weed of National Significance or a Declared Pest in Western Australia.

Four broad scale terrestrial fauna habitats were identified as occurring within the survey area and two significant fauna species, the Malleefowl and Grey Falcon, both Vulnerable (VU) taxa, were identified as potentially occurring in the survey area.

No evidence for the presence of Malleefowl, including nesting mounds, tracks, or other signs, were recorded within the survey area. No other evidence of significant fauna species were observed during the survey.

No Environmentally Sensitive Areas, wetlands of international importance (Ramsar Wetlands) or national importance (Australian Nature Conservation Agency Wetlands) were identified in the survey area. No Threatened, Priority or otherwise significant ecological communities were identified within the survey area. None of the vegetation types are representative of Groundwater Dependent Ecosystems (GDEs).

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act. The assessment found that the proposed vegetation clearing activities may be at variance with clearing principle (f); is growing, in, or in association with, an environment associated with a watercourse or wetland. There are no permanent or ephemeral water bodies within the survey area. There are also no perennial drainage lines within the survey area, however multiple minor ephemeral drainage lines intersect with the survey area. These minor ephemeral drainage lines were mostly associated with vegetation community *Eucalyptus salmonophloia* and *Eremophila interstans* subsp*. interstans* woodland over *Exocarpos aphyllus, Eremophila dempsteri* and *Grevillea acuaria* shrubland over *Eremophila acutifolia, Atriplex vesicaria and Rhagodia eremaea* low shrubland (CLP-EW1) which represents 15.8% of the total survey area.

# 1 INTRODUCTION

Botanica Consulting Pty Ltd (Botanica) was commissioned by Essential Metals Ltd. to undertake a detailed flora/ vegetation survey and basic fauna survey of their North Dome project (referred to as the 'survey area'). The survey area is approximately 2,743 ha in extent and is located approximately 52 km north of Norseman, Western Australia (Figure 1-1). This assessment is intended to support a Native Vegetation Clearing Permit (NVCP) application for the North Dome project.

## 1.1 Objectives

### *1.1.1 Detailed Flora Survey*

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

- Gather background information on flora and vegetation in the desktop study area (literature review, database, and map-based searches);
- Conduct a field survey to verify / ground truth the desktop study findings through reconnaissance survey;
- Define and map vegetation communities of the survey area to a scale appropriate for the Bioregion and described according to the National Vegetation Information System (NVIS) classification (NVIS Level V – Association);
- Record the species composition (abundance and diversity) of each vegetation community within the survey area and compile a species list for the survey area by vegetation type;
- Provide quadrat-based data from plots representative of each vegetation type (minimum of three quadrats per vegetation type) according to Environmental Protection Authority (EPA) guidelines;
- Assess the species composition of each quadrat;
- Determine the local and regional conservation significance of flora and vegetation within the survey area;
- Identify and record the locations of any conservation significant flora/vegetation within the survey area;
- Identify and record the locations of any introduced flora species (including Declared Pests) within the survey area;
- Provide a map showing the distribution of conservation significant flora/vegetation within the survey area; and
- Define and map the condition of vegetation within the survey area in accordance with the vegetation condition rating scale specified in the Environmental Protection Authority (EPA) *Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment – December 2016* (EPA, 2016a).

### *1.1.2 Basic Fauna Survey*

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

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

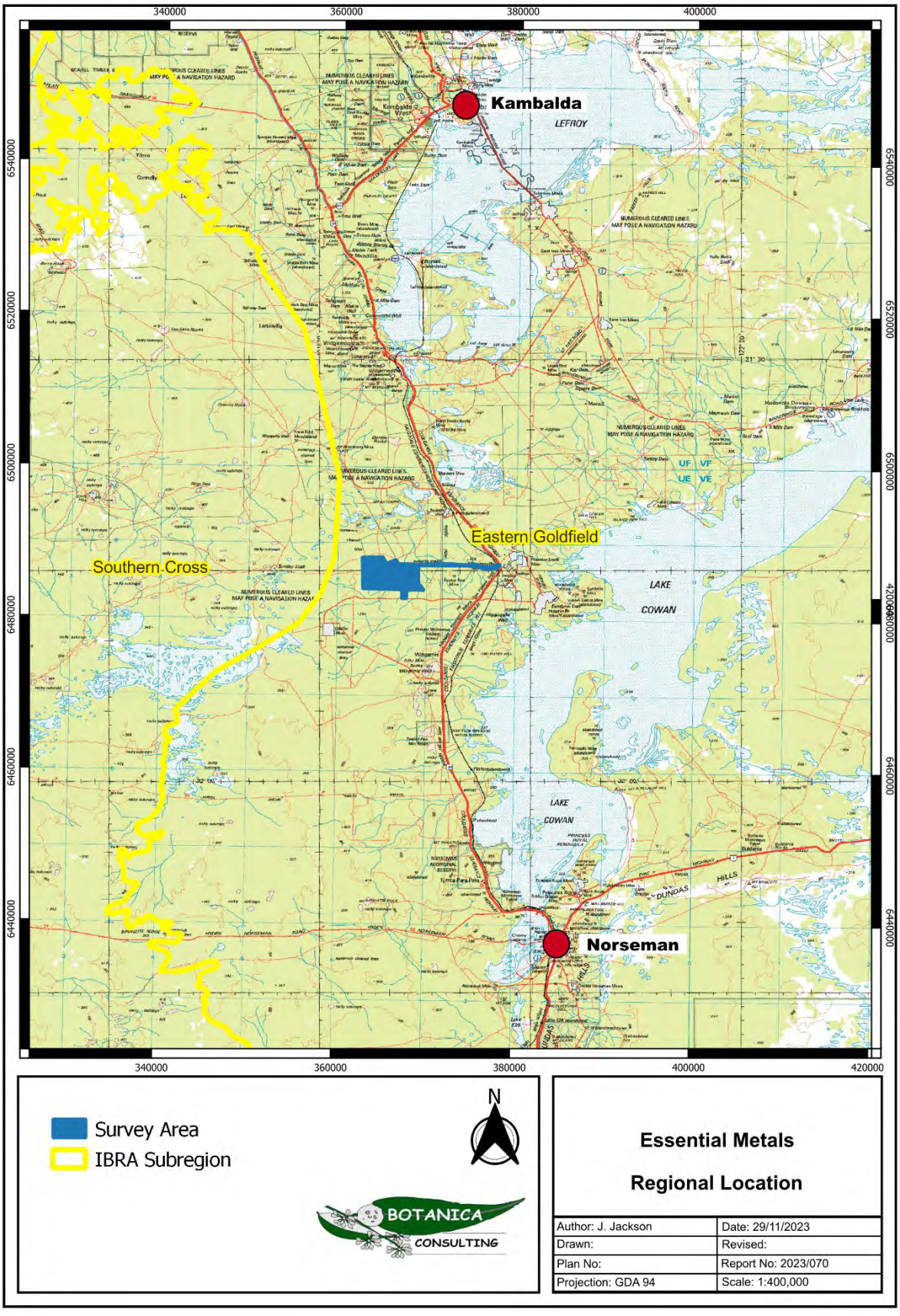



**Figure 1-1: Regional map of the survey area**

# 2 BIOPHYSICAL ENVIRONMENT

## 2.1 Regional Environment

The survey area lies within the Eastern Goldfield (COO3) subregion of the Coolgardie Bioregion, as defined by the Interim Biogeographic Regionalisation of Australia (IBRA).

The Eastern Goldfield subregion (5,102,428 ha) lies on the Yilgarn Craton's Eastern Goldfields Terrain, which is described as gently undulating plains with a subdued relief, interrupted in the west with low hills and ridges of Archaean greenstones and in the east by a horst of Proterozoic basic granulite. The underlying geology is of gneisses and granites eroded into a flat plane covered with tertiary soils and with scattered exposures of bedrock. Calcareous earths are the dominant soil group and cover much of the plains and greenstone areas. A series of large playa lakes in the western half are the remnants of an ancient major drainage line (Cowan 2001).

The vegetation consists of Mallees, Acacia thickets and shrub-heaths on sandplains, with diverse *Eucalyptus* woodlands occurring around salt lakes, on ranges, and in valleys. Salt lakes support dwarf shrublands of samphire. Woodlands and *Dodonaea* shrubland occur on basic granulite of the Fraser Range, and the area is rich in endemic Acacias.

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

## 2.2 Land Use

The dominant land uses of the Eastern Goldfield subregion includes Unallocated Crown Land (UCL) and Crown reserves and pastoral grazing, with conservation areas and mining leases also present (Cowan, 2001). The survey area is not located within a pastoral station.

## 2.3 Soil Landscape Systems

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

The Kalgoorlie Province is further divided into six soil-landscape zones, with the survey area located in the Kambalda Zone.

The Kambalda zone is located in the south-eastern Goldfields between Menzies, Norseman and the Fraser Range and contains flat to undulating plains (with hills, ranges and some salt lakes and stony plains) on greenstone and granitic rocks of the Yilgarn Craton. Soils consist of calcareous loamy earths and red loamy earths with salt lakes soils and some redbrown hardpan shallow loams and red sandy duplexes. Vegetation includes red mallee, blackbutt-salmon gum-gimlet woodlands with mulga and halophytic shrublands (and some spinifex grasslands).

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

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

| Soil Landscape System | Description | Extent within Survey Area |
|---|---|---|
| AC1 | Gently sloping to gently undulating plateau areas, or uplands, on granites, gneisses, and allied rocks, with long gentle slopes and, in places, abrupt erosional scarps | 1471.1 ha (53.5%) |
| Graves System | Basalt and greenstone rises and low hills supporting eucalypt woodlands with prominent saltbush and bluebush understoreys. | 141.3 ha (5.1%) |
| Gumland System | Extensive pedeplains supporting eucalypt woodlands with halophytic and non-halophytic shrub understoreys. | 504.6 ha (18.4%) |
| Moriarty System | Low greenstone rises and stony plains supporting chenopod shrublands with patchy eucalypt overstoreys. | 0.1 ha (0.0%) |
| Nc2 | Gently undulating plains with some gilgai areas, and irregularly broken by small remnants of sand plain, unit AC1, and granitic bosses and tors | 274 ha (10%) |
| Sedgeman System | Gritty surfaced plains with granite outcrop and low granite domes and hills supporting acacia tall shrublands. | 356.7 ha (13%) |

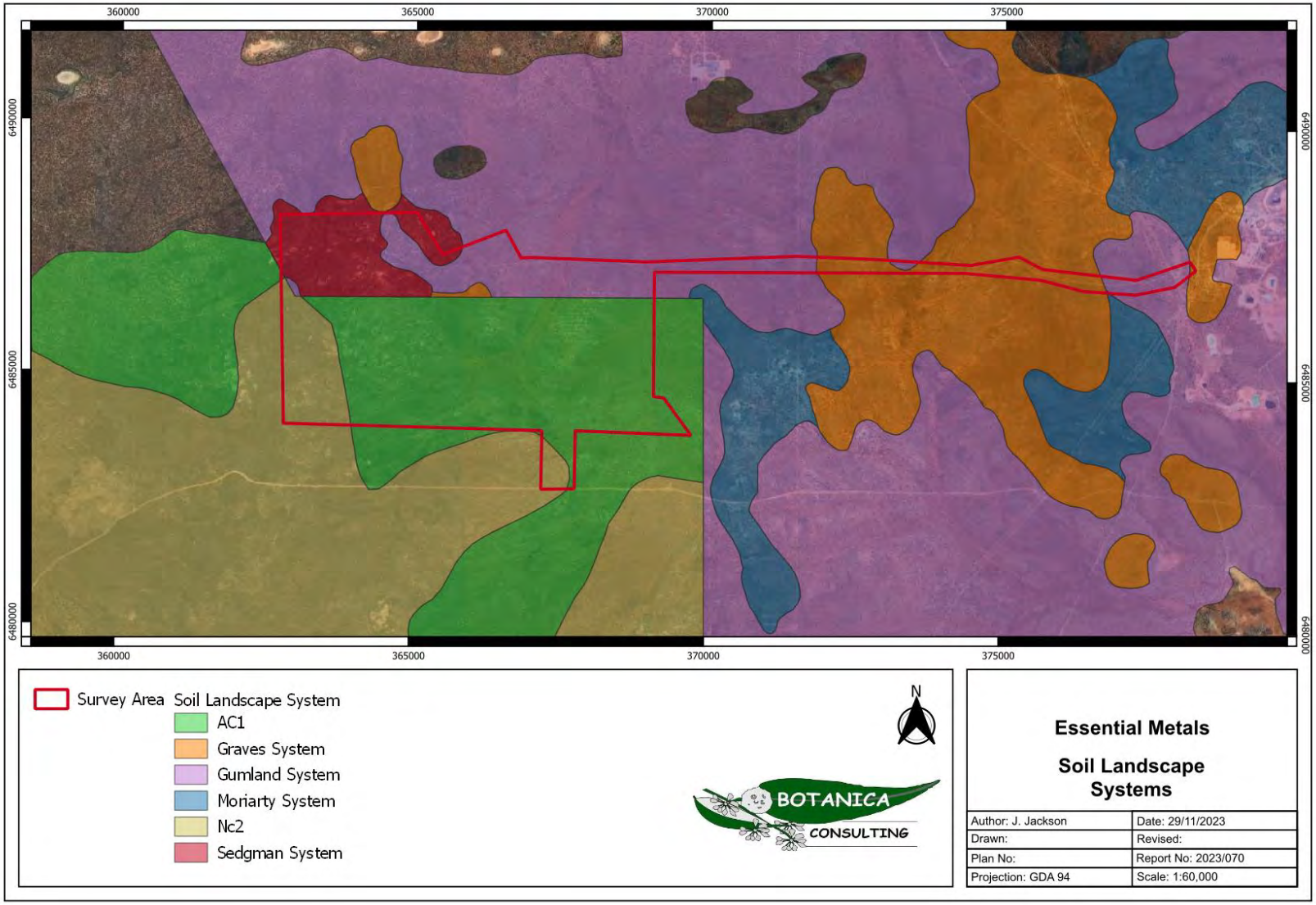



**Figure 2-1: Map of soil landscape systems within the survey area**

## 2.4 Regional Vegetation

In accordance with Tille (2006), the vegetation of the Kambalda Zone is typified by the preponderance of stony plains with acacia shrublands and halophytic shrublands, low hills with eucalypt or acacia woodlands with halophytic undershrubs, stony plains with acacia shrublands and alluvial plains with eucalypt woodlands and halophytic undershrubs rangeland.

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

## 2.5 Conservation Values

The Eastern Goldfield subregion contains 16 vegetation associations, predominately open *Eucalyptus* woodlands, that have at least 85 per cent of their total extent in the bioregion (Cowan 2001). The subregion is considered a centre of endemism for Eucalypts in the Goldfields Woodlands region and is also noted for the diversity of *Acacia* spp. and ephemeral flora communities of the tertiary sandplain shrublands and the valley floors of woodland areas.

The subregion contains one wetland of national importance: Rowles Lagoon System, located approximately 160 km north-west of the survey area. In addition, there are seven wetlands of subregional importance (Cowan, 2001). The closest of these wetlands (Lake Cowan) is located approximately 8 km east of the survey area. Other significant assemblages in the region include plant assemblages of the Fraser Range and the Woodline Hills located approximately 130 km east and 75 km east of the survey area respectively.

No ecosystems listed as threatened under WA State legislation occur within the subregion, but 18 communities and vegetation associations within the subregion are thought to be at risk for a variety of reasons. Grazing from livestock, goats and rabbits and impacts from mining are the main threatening processes in the region, with changed fire regimes, erosion and sedimentation also causing significant impacts.

### *2.5.1 Great Western Woodlands*

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

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

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

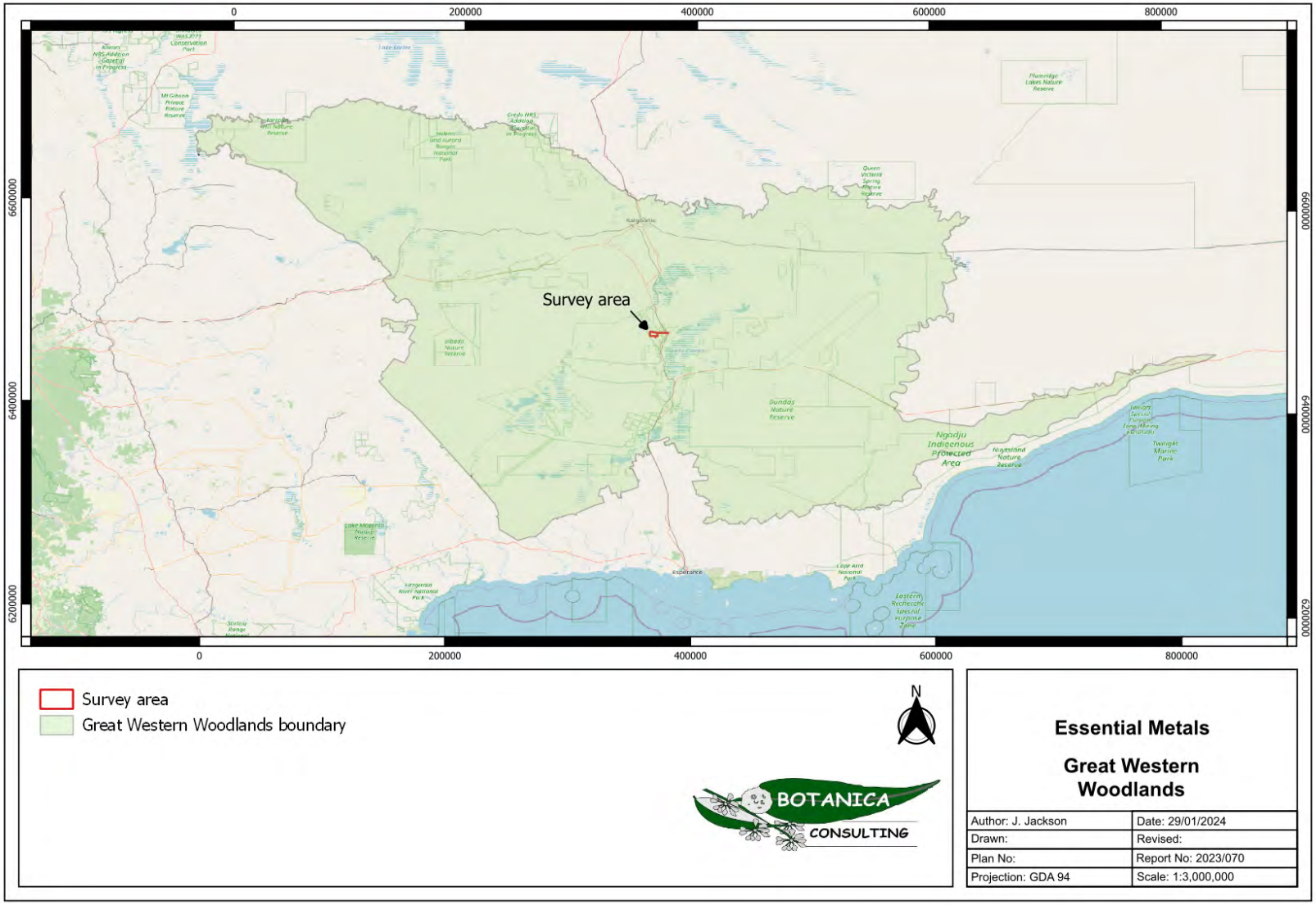
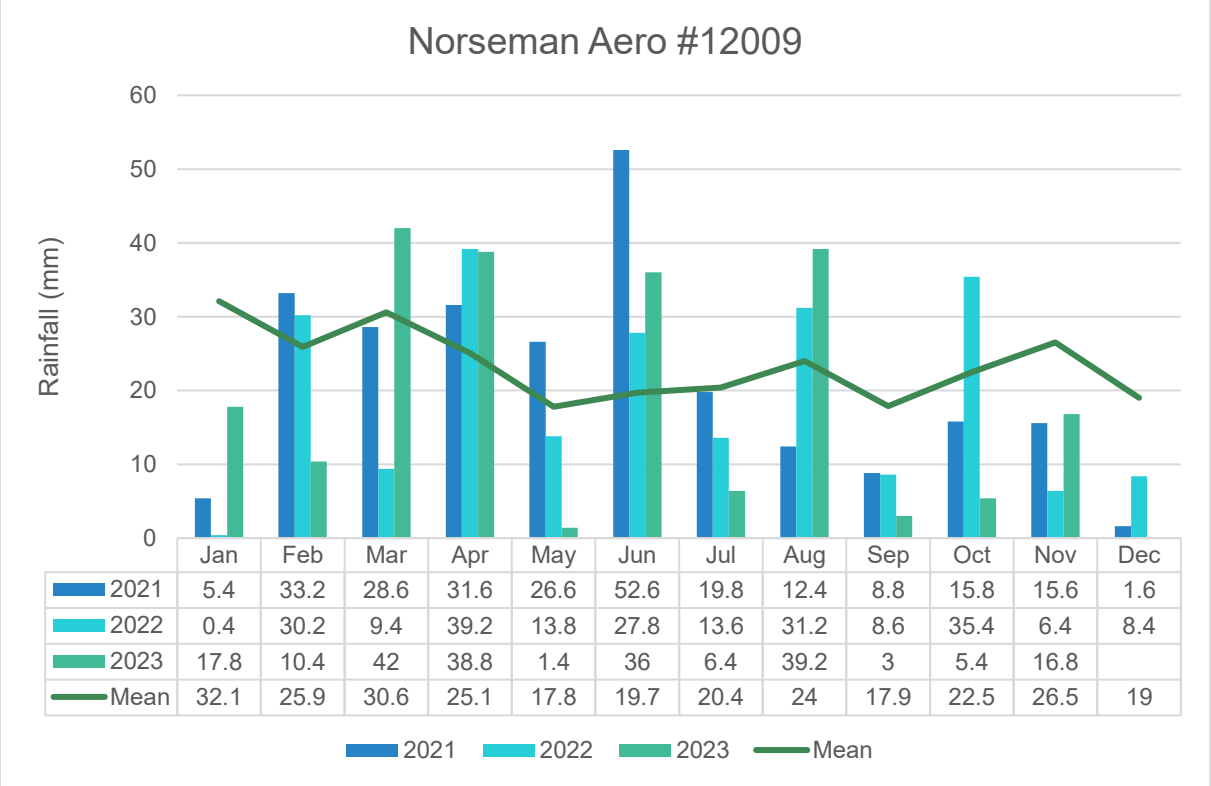



**Figure 2-2: Location of survey area within the Great Western Woodlands**

## 2.6 Climate

The climate of the Eastern Goldfield subregion is characterised as arid to semi-arid with 200-300 mm of rainfall, sometimes in summer but usually in winter (Cowan, 2001). Rainfall data for the Norseman Aero (#12009) weather station, located approximately 52 km south of the survey area, is shown in Figure 2-3. Rainfall prior to the initial survey (August-October 2021) was below the average. Rainfall in August 2023 prior to the subsequent surveys was above average but below average in September and October. Climate conditions may represent a survey constraint, with potentially below-average presence of flowering material and ephemeral species.




| | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2021 | 5.4 | 33.2 | 28.6 | 31.6 | 26.6 | 52.6 | 19.8 | 12.4 | 8.8 | 15.8 | 15.6 | 1.6 |
| 2022 | 0.4 | 30.2 | 9.4 | 39.2 | 13.8 | 27.8 | 13.6 | 31.2 | 8.6 | 35.4 | 6.4 | 8.4 |
| 2023 | 17.8 | 10.4 | 42 | 38.8 | 1.4 | 36 | 6.4 | 39.2 | 3 | 5.4 | 16.8 | |
| Mean | 32.1 | 25.9 | 30.6 | 25.1 | 17.8 | 19.7 | 20.4 | 24 | 17.9 | 22.5 | 26.5 | 19 |

**Figure 2-3: Climate data for Norseman Aero (BoM, 2023)**

## 2.7 Hydrology

According to the Geoscience Australia database (2015), there are no permanent or ephemeral water bodies within the survey area. There are no perennial drainage lines within the survey area, however multiple minor ephemeral drainage lines intersect with the survey area (Figure 2-4).

Groundwater Dependent Ecosystems (GDE) includes biological assemblages of species such as wetlands or woodlands that use groundwater either opportunistically or as their primary water source. For the purposes of this report, a GDE is defined as any vegetation community that derives part of its water budget from groundwater and must be assumed to have some degree of groundwater dependency. In accordance with the BoM *Atlas of Groundwater Dependent Ecosystems* (BoM, 2020b) database, there are three potential terrestrial GDE's within the survey area (Figure 2-4,

Table 2-2). There are no potential aquatic GDE's within the survey area.

**Table 2-2: Potential GDE's within the survey area**

| Geomorphology | Potential | Vegetation Description | Area (ha) | Area (%) |
|---|---|---|---|---|
| Undulating plains with some sandplains, ferruginous breakaways; ridges of metamorphic rocks and granitic hills and rises; calcretes, large salt lakes and dunes along valleys. | Low | Medium woodland; redwood (*Eucalyptus transcontinentalis*) & merrit (*E. flocktoniae*) | 1,824.2 | 66.5 |
| | Moderate | Shrublands; acacia, casuarina & melaleuca thicket | 602.3 | 21.9 |
| | Moderate | Medium woodland; salmon gum & gimlet | 2.8 | 0.1 |
| | | **Total** | **2,429.3** | **88.5** |

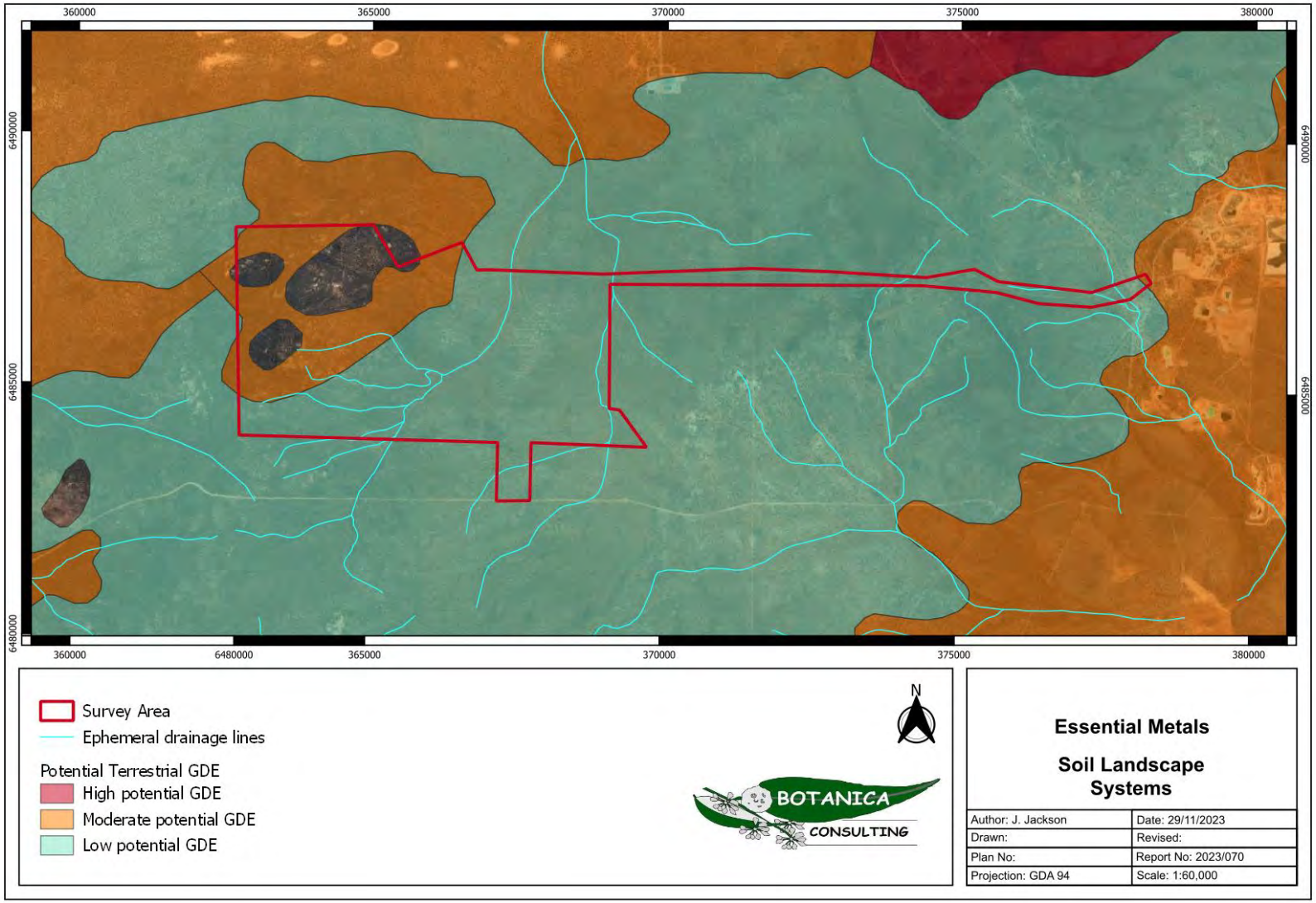



**Figure 2-4: Regional hydrology of the survey area**

# 3 SURVEY METHODOLOGY

## 3.1 Desktop Assessment

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

- Botanica Consulting (2021). *Mt. Edwards Project: Flora, Fauna and Vegetation Assessment*. Unpublished report prepared on behalf of Widgie Nickel Ltd., December 2021.
- Botanica Consulting (2021b). *Reconnaissance Flora/ Vegetation Survey and Basic Fauna Survey Lake Lefroy/ Lake Fore*. Unpublished report prepared on behalf of Mincor Resources NL, August 2020.
- Botanica Consulting (2022). *Baker Project: Detailed Flora and Basic Fauna Assessment.* Unpublished report prepared on behalf of Lunnon Metals Ltd., November 2022.
- Botanica Consulting (2022b). *North Dome Project-Detailed Flora and Basic Fauna Assessment.* Unpublished report prepared on behalf of Essential Metals Ltd., December 2021.
- Newbey, K. R., Dell, J., How, R. A. and Hnatiuk, R. J. (1984). *The Biological Survey of the Eastern Goldfields of Western Australia. Part 2: Widgiemooltha -Zanthus Study Area.* WA Museum, Perth.

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

- DBCA Threatened/ Priority Flora spatial data (DBCA, 2022a).
- Atlas of Living Australia (ALA) database (ALA, 2023); and
- EPBC Protected Matters search tool (DCCEEW, 2023).

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

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

The assessment categorised flora species as follows:

- Unlikely- Suitable habitat is not expected to occur and/or the survey area is outside the known range of the species.
- Possible- Suitable habitat may be present, and the area is within the known range of the species. This option is also used when there is insufficient information to determine the preferred habitat of a species.

- Likely- Suitable habitat is expected to occur and there are records within 10 km of the survey area.
- Previously Recorded- A record for this species is located within the survey area. Field survey will ground truth currently occurring individuals and populations.

It should be noted that these lists are based on observations from a broader area than the assessment area (40 km radius) and therefore may include taxa not present. The databases also often include 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 7th October 2022; flora list released 6th October 2022).

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

### 3.2 Flora and Vegetation Field Assessment

Botanica conducted a detailed flora/ vegetation and basic fauna survey on the 22nd to 23rd November 2021. The area was traversed, on foot and by 4WD and ATV vehicles, by Jim Williams (Director/Principal Botanist, Diploma of Horticulture) and Jennifer Jackson (Senior Botanist, BSc (Honours) Environmental Management). A total of 28 quadrats (20 m x 20 m) were installed and assessed during this survey effort. These quadrats were revisited and rescored on the 18th to 19th September 2023 by Jennifer Jackson.

A further six quadrats (20m x 20m) were installed and assessed on the 26th of October 2023 by Aidan Williams (Botanist, BSc Botany and Conservation Biology). Quadrat locations and the GPS track log of the survey effort are shown in Figure 3-1.

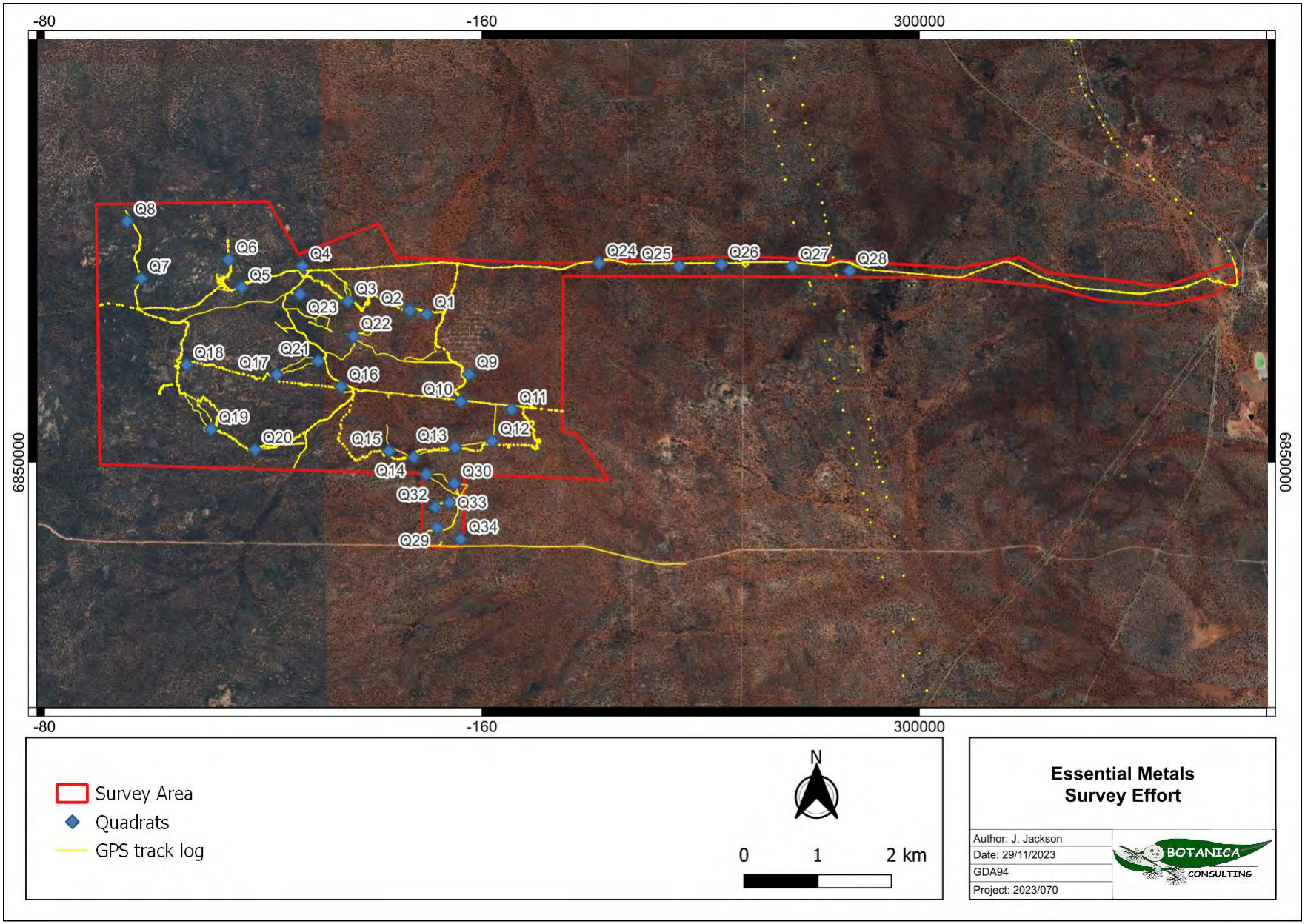



**Figure 3-1: Quadrat locations and GPS track log of the survey effort**

### *3.2.1 Flora Assessment*

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

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

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

## 3.3 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.

### *3.3.1 PATN Analysis*

The PATN software package was used to assess the similarities/ dissimilarities between quadrats based on presence/absence of species. A total of 41 species were excluded from the analysis; 11 annuals and 30 singleton species. A total of 71 taxa recorded within the quadrats were included in the analysis.

The analysis produced a quantitative estimate of the relationship between species composition of each quadrat. The classifications were based upon a Bray-Curtis association matrix using a flexible Unweighted Pair Group Arithmetic Mean (UPGMA) method (with a beta value of -0.1) which standardises the data enabling the analysis to be completed. Semi-strong hybrid (SSH) ordination of the quadrat is then undertaken to show spatial relationships between groups and to elucidate possible environmental correlates with the classification.

The analysis also produced a stress value which is a measure of the 'strength' of the analysis (i.e., how well the quadrats are grouped together into the appropriate floristic groups). The lower the stress value the greater the strength of the analysis with a value of less than 0.3 showing that the analysis appropriately grouped quadrats. A stress value greater than 0.3 suggests that the analysis was unable to group quadrats appropriately due to extraneous variables (i.e., other factors influencing differences in floristic groups other than species composition e.g., fire, clearing disturbance etc.).

### *3.3.2 EstimateS*

EstimateS software was used to estimate species richness present using the Chao2 richness estimator. For any number of samples, the estimator uses the existing pattern of species accumulation to estimate the true number of species at a site. The estimators tend to under-estimate species number when sample size is small, hence the estimated number of true species can be seen to increase with sample size. This software was also used to compute Coleman rarefaction curves estimates which were used to calculate species accumulation curves.

## 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.

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

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

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

- Locally Extinct: Populations no longer occur within a small part of the species natural range, in this case within 10 or 20 km of the survey area. Populations do however persist outside of this area.
- Regionally Extinct: Populations no longer occur in a large part of the species natural range, in this case within the Eastern Goldfields 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 |
|---|---|---|
| Jim Williams | FB62000457(licence to take flora for scientific purposes) | 04/08/2025 |
| Jennifer Jackson | FB62000309 (Licence to take flora for scientific purposes) | 11/01/2024 |
| Aidan Willians | FB62000457(licence to take flora for scientific purposes) | 04/08/2025 |

### *3.5.1 Survey Limitations and Constraints*

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

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

Some species are reported as potentially occurring based on there being suitable habitat (quality and extent) within the survey area or immediately adjacent. The habitat requirements and ecology of many of the species known to occur in the wider area are however often not well understood or documented. It can therefore be difficult to exclude species from the potential list based on a lack of a specific habitats or microhabitats within the survey area. Because 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 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, ATV and on foot. Numerous access tracks were present within the survey area providing ease of access. |
| Competency/ Experience | Not a constraint | The Botanica personnel that conducted the survey were regarded as suitably qualified and experienced.<br>**Coordinating Staff**: Jim Williams (Botanist), Jennifer Jackson (Botanist) Aidan Williams (Botanist)<br>**Data Interpretation**: Jim Williams, Jennifer Jackson, and Kelby Jennings (Senior Environmental Consultant). |
| Timing of survey, weather & season | Minor constraint | Fieldwork was undertaken within the EPA's recommended survey period (September - November) for the South-West and Interzone Province. However, unfavourable climate conditions may impact the presence of flowering material and ephemeral species. |
| Area disturbance | Not a constraint | Most of the survey area was in very good condition and comprised of native vegetation. |
| Survey Effort/ Extent | Not a constraint | Survey intensity was appropriate for the size/significance of the area with a detailed flora survey and basic fauna survey completed to identify vegetation types/ fauna habitats and significant flora, fauna, and vegetation. |
| Availability of contextual information at a regional and local scale | Not a constraint | BoM, DWER, DPIRD, DBCA and DCCEEW databases were reviewed to obtain appropriate regional desktop information on the biophysical environment of the local region.<br>Botanica has conducted numerous surveys within the Coolgardie 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. |

| Variable | Potential Impact on Survey | Details |
|---|---|---|
| Completeness | Not a constraint | In the opinion of Botanica, the survey area was covered sufficiently to identify vegetation assemblages. All observed flora individuals were able to be identified to species level. Fieldwork was undertaken within the EPA's recommended survey period (September - November) for the South-West and Interzone Province.<br>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 ALA desktop search identified 707 vascular flora species as occurring within 40 km of the survey area, representing 229 genera from 68 families. The most diverse families were Myrtaceae (135 species), Fabaceae (84 species) and Asteraceae (74 species). The most dominant genera were *Acacia* (46 species), *Eucalyptus* (79 species) and *Eremophila* (36 species).

### *4.1.2 Introduced Flora*

The desktop review identified 15 introduced flora (weed) species, representing six families, as potentially occurring in the vicinity of the survey area. None of these species are listed as a Declared Pest on the Western Australian Organism List (WAOL) under the *Biosecurity and Agriculture Management* (BAM) *Act 2007.* One species, *Tamarix aphylla*, is listed as a Weed of National Significance.

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

**Table 4-1: Potentially occurring significant weed species.**

| Family | Taxon | Common Name | WAOL Status | Control Category | WONS |
|---|---|---|---|---|---|
| Tamaricaceae | *Tamarix aphylla* | Athel Tamarix | Exempt | No Control Category | Yes |

### *4.1.3 Significant Flora*

The assessment of the DBCA Priority/ Threatened flora database records (DBCA, 2022a), ALA (ALA, 2022) and Protected Matters searches (DCCEEW, 2023) and previous relevant literature identified 48 significant flora species recorded within a 40 km radius of the survey area or within similar habitat. These consist of three Threatened, 16 Priority 1, seven Priority 2, 18 Priority 3 and four Priority 4 taxa (Appendix D).

These taxa were assessed for distribution and known habitat to determine their likelihood of occurrence within the survey area. The assessment did not identify any taxa as likely to occur in the survey area. The assessment identified the Priority 3 species Eremophila acutifolia as being previously recorded within the survey area, and this had been identified in the 2021 survey (Botanica Consulting 2022b). In addition, 11 taxa were identified as possibly occurring in the survey area; consisting of three Priority 1, one Priority two and seven Priority 3 taxa (Table 4-2). The full flora likelihood assessment is listed in Appendix D. 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.**

| Status | Taxon | Habitat (WA Herbarium, 1998-) | Assessment | Likelihood |
|---|---|---|---|---|
| P1 | *Acacia dorsenna* | Rocky sandy loam or clay loam. Low rocky hills. | Within known range of species, habitat may be present | Possible |
| | *Bossiaea aurantiaca* | Red sand, red clay loam. Low-lying, winter-damp sites. | At extreme of known range, habitat may be present | Possible |
| | *Senecio microbasis* | Schist soils. Low hills, disturbed areas in woodlands. | Very little known, previously recorded in local area | Possible |
| P2 | *Acacia kerryana* | Granitic loamy sand, stony clayey loam, or clayey sand. Low stony ridges, undulating plains. | At extreme of known range, habitat may be present | Possible |
| P3 | *Allocasuarina eriochlamys* subsp. *grossa* | Stony loam, laterite clay. Granite outcrops. | Within known range, habitat may be present | Possible |
| | *Austrostipa turbinata* | South south-west facing gently inclined crest of basalt and minor quartz with red-brown shallow sandy clay loam soils. | Widespread range, habitat may be present | Possible |
| | *Chrysocephalum apiculatum* subsp. *norsemanense* | Well-drained, aeolian loamy sand. Moderately exposed, almost flat, broad valley floor. | Within known range, habitat may be present. | Possible |
| | *Eremophila acutifolia* | Broad flat bottom of wide valley. Red brown powdery clay loam. | Previously recorded within survey area | Previously Recorded |
| | *Melaleuca coccinea* | Sandy loam over granite. Granite outcrops, sandplain, river valleys. | Within known range, habitat may be present | Possible |
| | *Phlegmatospermum eremaeum* | Stony loam. | Within known range of species, habitat may be present | Possible |
| | *Stylidium choreanthum* | White/yellow or red sand. Plains. | At extreme of known range, habitat may be present | Possible |

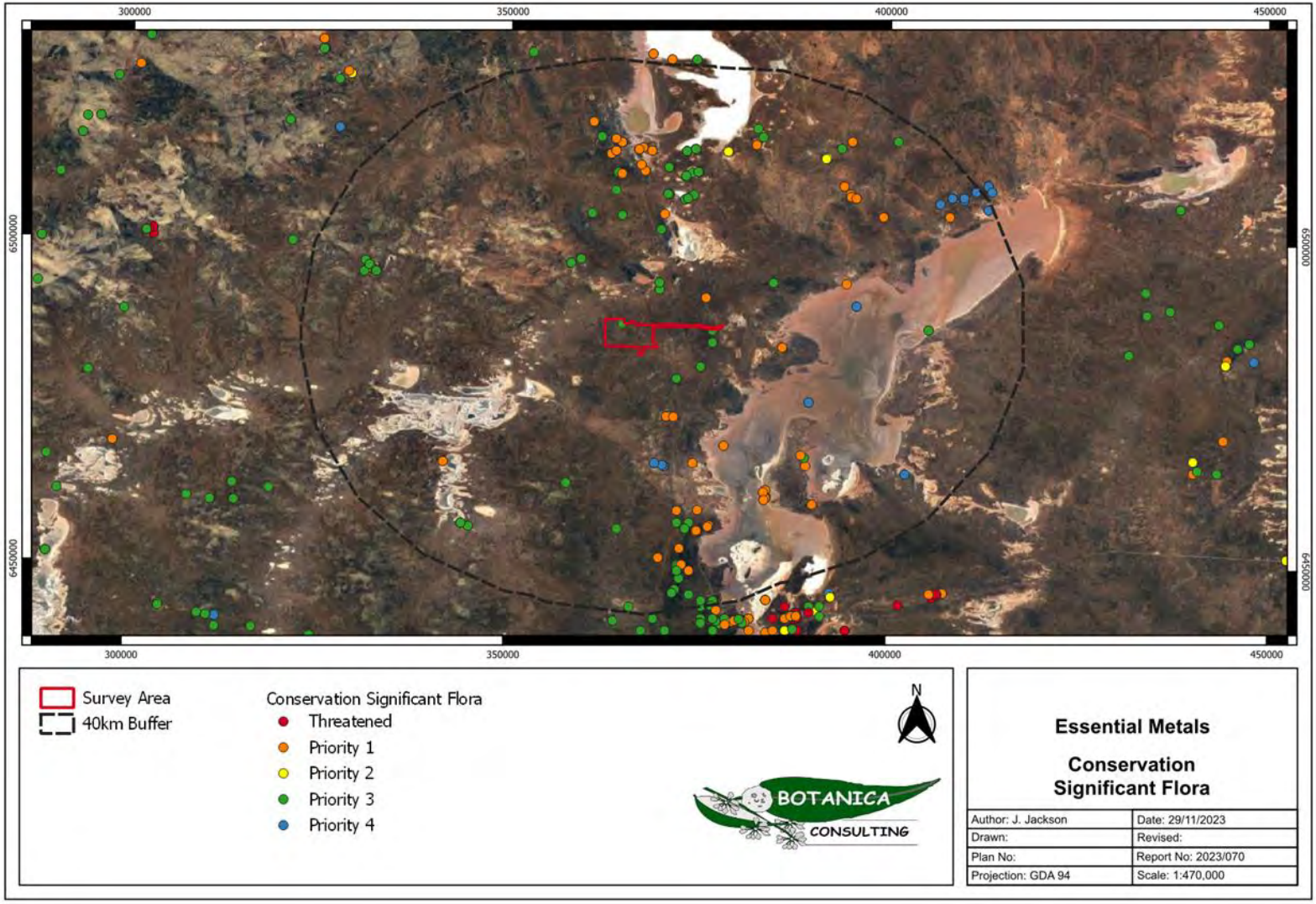



**Figure 4-1: Significant flora within the desktop search area**

### *4.1.4 Vegetation and Ecological Communities*

#### *4.1.4.1 Vegetation Associations*

The Pre-European vegetation association spatial mapping dataset (DPIRD, 2018) identified four vegetation associations as occurring within the survey area (Figure 4-2). The association descriptions and their remaining extent, as specified in the 2018 Statewide Vegetation Statistics (DBCA, 2019b) are provided in Table 4-3. 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). All vegetation associations retain >96% of their pre-European extent, and development within the survey area will not significantly reduce the current extent of these vegetation associations.

**Table 4-3: Pre-European vegetation associations within the survey area**

| Vegetation Association | Current Extent (ha) | Pre-European extent remaining | % Protected for Conservation | Floristic Description | Extent within Survey Area |
|---|---|---|---|---|---|
| Binneringe 8 | 29,804 | 96.94 | 0.93 | Medium woodland; salmon gum & gimlet | 2.8 ha (0.1%) |
| Binneringe 128 | 10,827 | 100 | 2.39 | Bare areas; rock outcrops | 317.6 ha (11.5%) |
| Binneringe 522 | 166,395 | 99.87 | 0.34 | Medium woodland; redwood (*Eucalyptus transcontinentalis*) & merrit (*E. flocktoniae*) | 1824.2 ha (66.5%) |
| Binneringe 1413 | 59,850 | 99.97 | - | Shrublands; acacia, casuarina & melaleuca thicket | 602.3 ha (21.9%) |

#### *4.1.4.2 Significant Ecological Communities*

The Protected Matters search (DCCEEW 2023) did not identify any Threatened Ecological Community as recorded within 40 km of the survey area. Analysis of the Priority Ecological Communities within the Goldfields region (DBCA 2022a) did not identify any additional significant vegetation assemblages as likely or possibly occurring within the survey area.

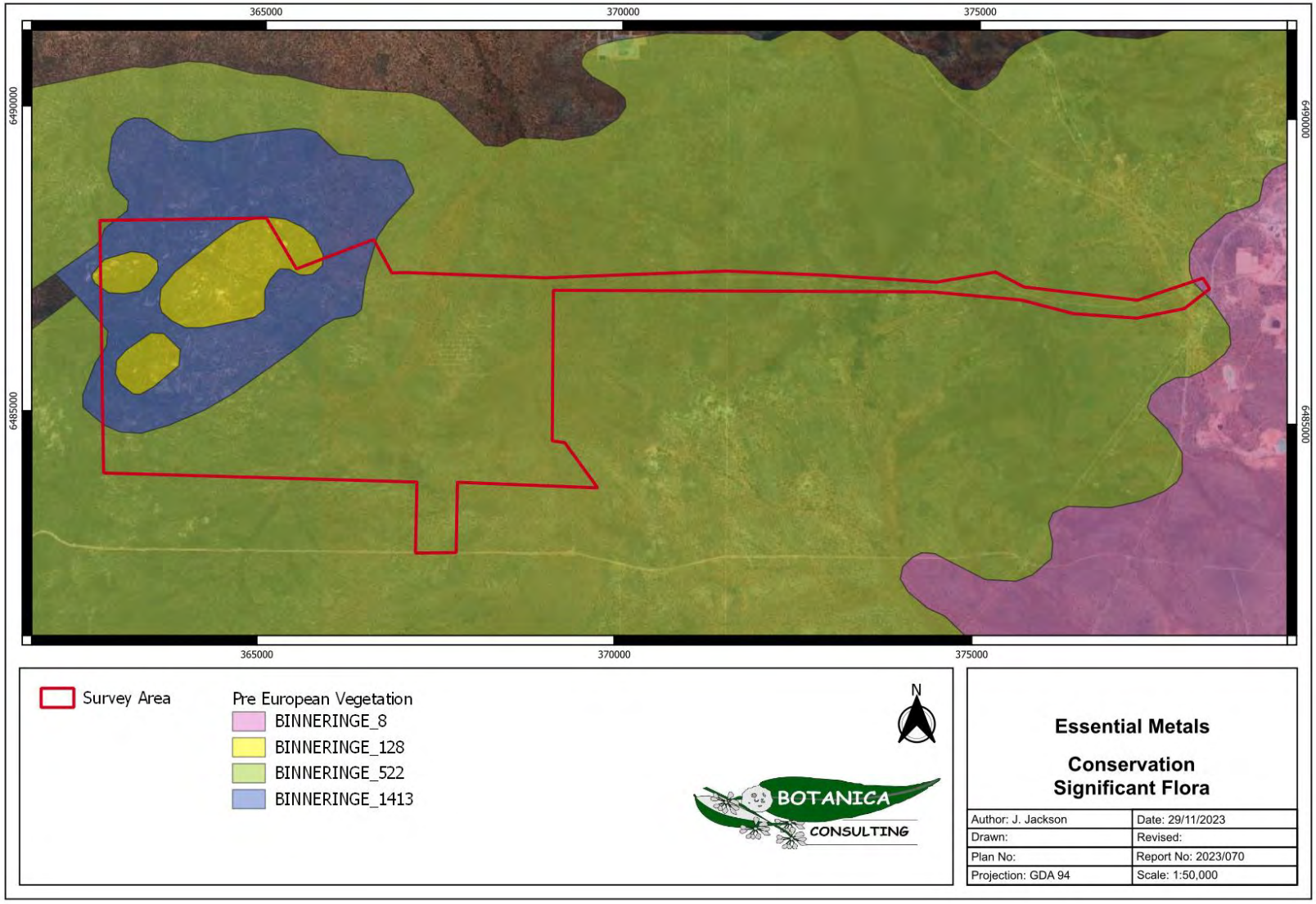



**Figure 4-2: Pre-European vegetation systems within the survey area**

### *4.1.5 Fauna*

According to the results of the ALA database search (ALA, 2022), a total of 229 terrestrial vertebrate fauna taxa have been recorded within 40 km of the survey area, consisting of 149 birds, 10 mammal, 66 reptile and four amphibian taxa.

#### *4.1.5.1 Introduced (Feral) Fauna*

The ALA and EPBC database searches identified 13 feral fauna species, representing nine families, as potentially occurring in the survey area (Table 4-4).

**Table 4-4: Potentially occurring introduced (feral) fauna.**

| Family | Taxon | Common Name |
|---|---|---|
| Bovidae | *Capra hircus* | Goat |
| Camelidae | *Camelus dromedarius* | Dromedary, Camel |
| Canidae | *Canis lupus familiaris* | Domestic Dog |
| | *Vulpus vulpus* | Red Fox |
| Columbidae | *Columba livia* | Domestic Pigeon |
| | *Streptopelia senegalensis* | Laughing Turtle-dove |
| Equiidae | *Equus asinus* | Donkey |
| | *Equus caballus* | Horse |
| Felidae | *Felis catus* | Domestic Cat |
| Leporidae | *Oryctolagus cuniculus* | European Rabbit |
| Muridae | *Mus musculus* | House Mouse |
| | *Rattus rattus* | Black Rat |
| Sturnidae | *Sturnus vulgaris* | Common Starling |

#### *4.1.5.2 Conservation Significant Fauna*

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

Habitat and distribution data was used to determine the likelihood of occurrence within the survey area. The assessment identified two significant fauna species, consisting of two Vulnerable (VU) taxa, as potentially occurring in the survey area (Table 4-5).

**Table 4-5: Potentially occurring significant fauna.**

| Species | Status | Habitat Description | Assessment | Likelihood |
|---|---|---|---|---|
| Grey Falcon *Falco hypoleucos* | VU- | Occurs at low densities across inland Australia. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. Observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter. Prey species are predominately birds, including doves, pigeons, small parrots and cockatoos and finches, but also small mammals and lizards. | Survey area may form part of larger home range. | Possible |
| Malleefowl *Leipoa ocellata* | VU | Scrublands and woodlands dominated by mallee and wattle species (DCCEEW, 2023b). | Few regional records, suitable habitat may be present. | Possible |

## 4.2 Field Assessment

### *4.2.1 Flora*

The field survey identified 110 vascular flora taxa within the survey area. These taxa represented 48 genera across 24 families. The number of flora recorded in the survey area was higher (an increase of seven species) than the previous 2021 survey, most likely due to the increase in survey area which incorporated an additional vegetation community.

The most diverse families in the survey area are (Myrtaceae (16 species), followed by Fabaceae (14 species) and Chenopodiaceae (18 species). Dominant genera include *Eremophila* (15 species), *Eucalyptus* (12 species) and *Acacia* (nine species). A total of six introduced (weed) species were recorded within the survey area. The full field species inventory is listed in Appendix F.

#### *4.2.1.1 Introduced Flora*

A total of six species of introduced flora, representing four families, was recorded within the survey area (Table 4-6). None of these species are listed as a Weed of National Significance or a Declared Pest in Western Australia. These were not recorded in quadrats but were recorded in various locations on tracks, their locations were not recorded.

**Table 4-6: Introduced flora species within the survey area.**

| Family | Taxon | Common Name |
|---|---|---|
| Aizoaceae | *Mesembryanthemum nodiflorum* | Slender Ice-plant |
| Asphodelaceae | *Asphodelus fistulosus* | Onion Weed |
| Asteraceae | *Centaurea melitensis* | Maltese Cockspur |
| | *Erigeron bonariensis* | Fleabane |
| | *Symphyotrichum squamatum* | Bushy Starwort |
| Brassicaceae | *Carrichtera annua* | Ward's Weed |

#### *4.2.1.2 Significant Flora*

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

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

No Threatened flora species were recorded within the survey area.

The Priority 3 species *Eremophila acutifolia* was recorded within eight quadrats, specifically Q1, Q4, Q11, Q12, Q18, Q19, Q25 and Q26 (Figure 1-1). These quadrats were associated with vegetation community CLP-EW3, with some being located in communities CLP-EW1 and RH-EW2.

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

##### 4.2.1.2.1 *Eremophila acutifolia* (P3)

The Priority 3 taxon, *Eremophila acutifolia*, (Plate 1) from the Scrophulariaceae family, is a little-known species that mainly occurs in a restricted region between Lake Lefroy and Lake Cowan (Figure 4-3). Within the local area, it has been recorded as occurring in red clay-loam soils in valley floors and on flat to undulating plains. It is restricted to the Shire of Coolgardie.

**Plate 1: *Eremophila acutifolia* (P3) within the survey area**

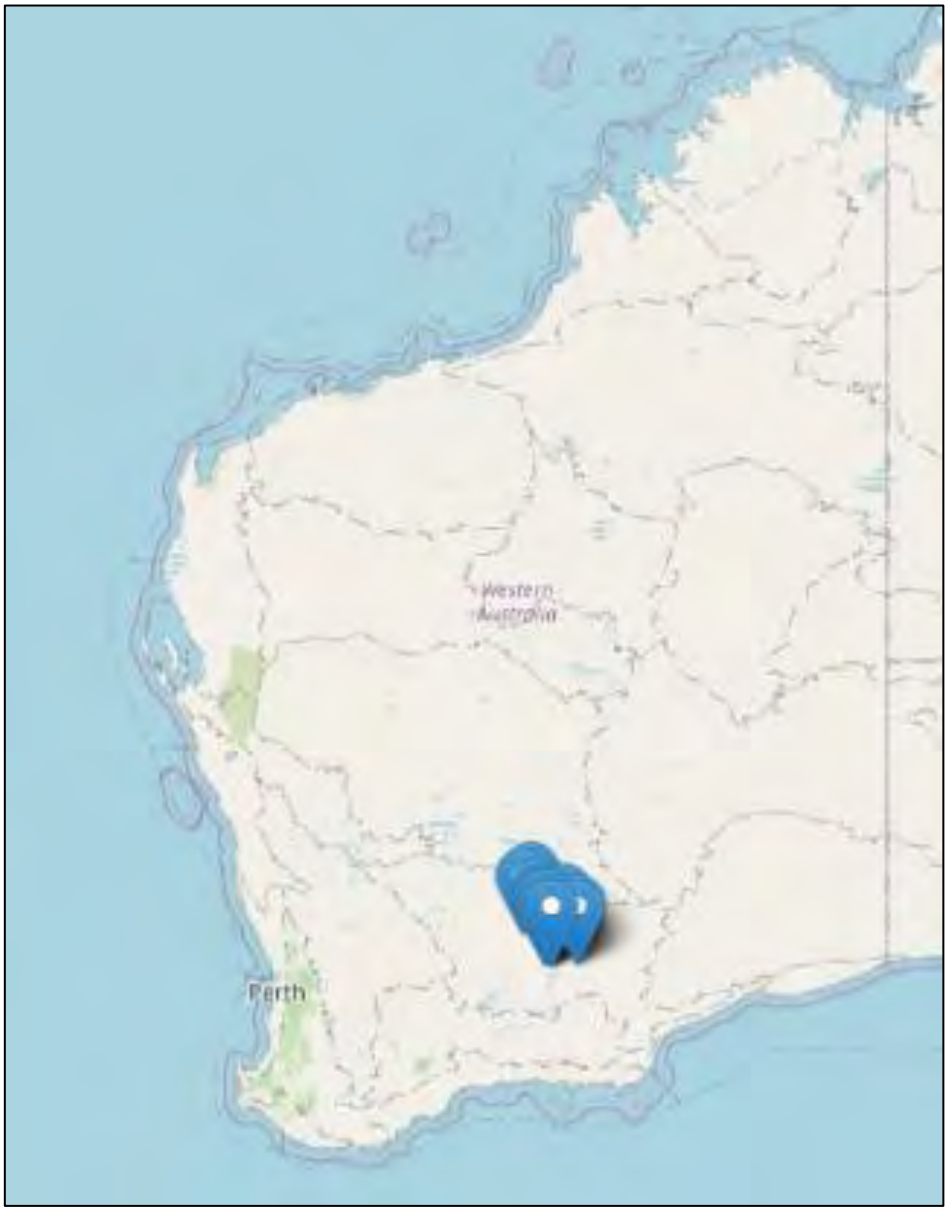



**Figure 4-3: Known distribution of *Eremophila acutifolia* (WA Herbarium, 1998-)**

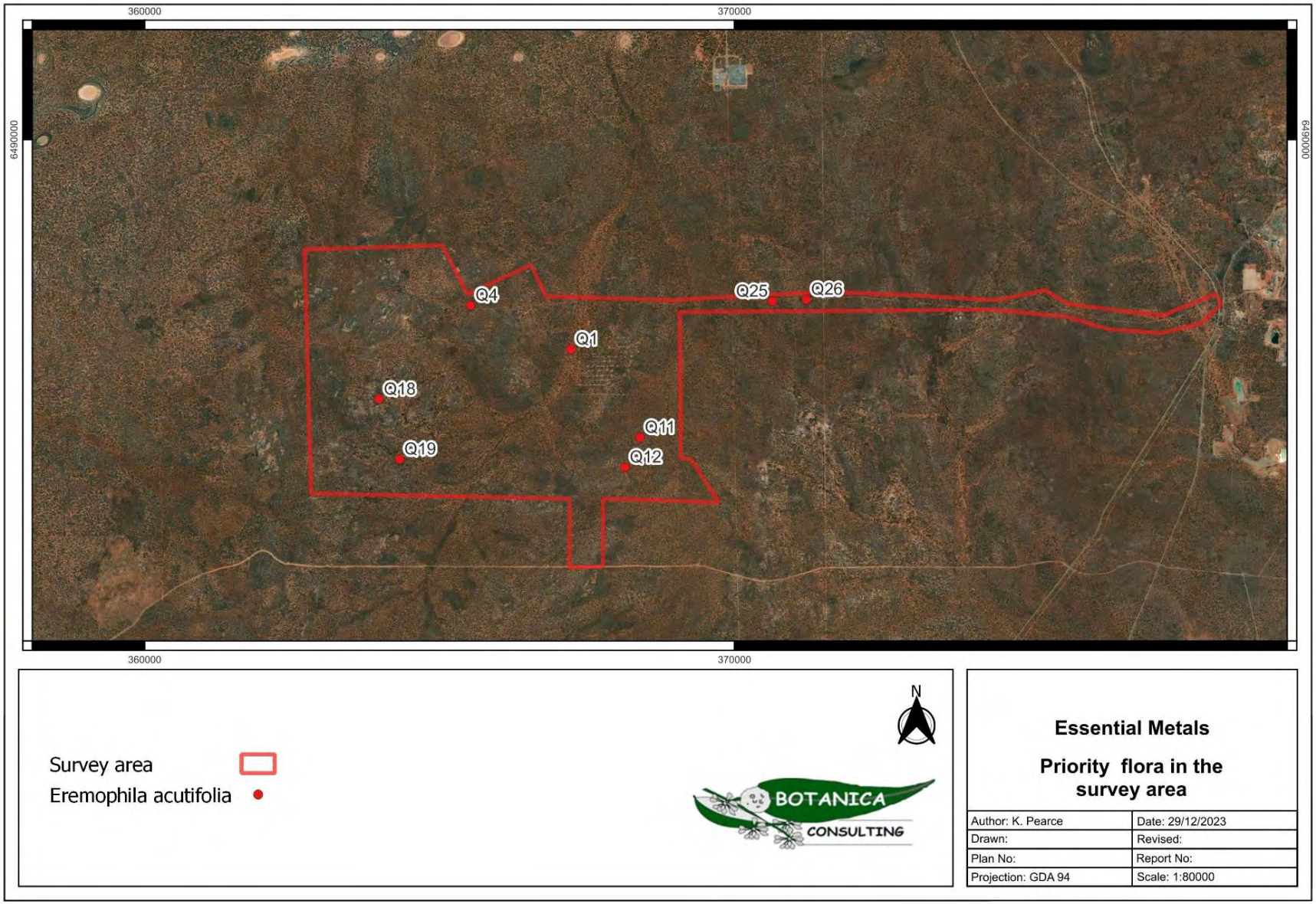



**Figure 4-4: Priority flora recorded within the survey area**

### *4.2.2 Vegetation Communities*

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

The survey found CLP-EW3 was the most widespread community in the survey area, occupying 1,341 ha (48.8%). The most restricted community and found on the edge of the survey area was SCLP-AS1, occupying 3 ha (1.0%). The community with the most flora species was CLP-EW1 with 50 species (35.4%), while the least diverse was SCLP-AS1 with 5 species (3.5%).

**Table 4-7: Summary of vegetation types within the survey area**

| Vegetation Code | NVIS Major Vegetation Group | Vegetation Type | Landform | Image |
|---|---|---|---|---|
| CLP-EW1<br><br>436 ha (15.8%) | *Eucalyptus* open woodland (MVG 5) | *Eucalyptus salmonophloia* and *Eremophila interstans* subsp. *interstans* woodland over *Exocarpos aphyllus, Eremophila dempsteri* and *Grevillea acuaria* shrubland over *Eremophila acutifolia, Atriplex vesicaria and Rhagodia eremaea* low shrubland | Clay-loam plain |  |
| SCLP-EW2<br><br>135 ha (4.9%) | *Eucalyptus* open woodland (MVG 5) | *Eucalyptus urna* and *Santalum acuminatum* woodland over *Melaleuca sheathiana, Exocarpos aphyllus* and *Scaevola spinescens* open shrubland over *Eremophila caerulea* and *Olearia muelleri* low open shrubland | Sandy clay-loam plain |  |
| CLP-EW3<br><br>1341 ha (48.8%) | *Eucalyptus* open woodland (MVG 5) | *Eucalyptus ravida* and *Santalum acuminatum* open woodland over *Exocarpos aphyllus* and *Alyxia buxifolia* open shrubland over *Eremophila acutifolia, Ptilotus holosericeus* and *Wilsonia humilis* low shrubland | Clay-loam plain |  |

| Vegetation Code | NVIS Major Vegetation Group | Vegetation Type | Landform | Image |
|---|---|---|---|---|
| GR-MW1<br><br>309.0 ha (11.2%) | *Eucalyptus* mallee woodland (MVG 14) | *Eucalyptus loxophleba* subsp. *lissophloia, Acacia acuminata* and *Santalum acuminatum* mallee woodland over *Senna artemisioides* subsp. *filifolia, Eremophila alternifolia* and *Dodonaea adenophora* shrubland over *Ptilotus obovatus, Olearia pimelioides* and *Austrostipa elegantissima* low open shrubland/ tussock grassland | Granite Outcrop |  |
| RH-EW1<br><br>267 ha (9.7%) | *Eucalyptus* open woodland (MVG 11) | *Eucalyptus torquata* and *Santalum acuminatum* woodland over *Dodonaea lobulata, Alyxia buxifolia* and *Trymalium myrtillus* subsp. *myrtillus* open shrubland over *Westringia rigida* and *Olearia muelleri* low open shrubland | Rocky hillslope |  |
| RH-EW2<br><br>256 ha (9.3%) | *Eucalyptus* open woodland (MVG 11) | *Eucalyptus lesouefii, Eucalyptus stricklandii* and *Melaleuca pauperiflora* woodland over *Eremophila psilocalyx, Alyxia buxifolia* and *Acacia erinacea* shrubland over *Westringia rigida, Eremophila caerulea* and *Olearia muelleri* low open shrubland | Rocky hillslope |  |

| Vegetation Code | NVIS Major Vegetation Group | Vegetation Type | Landform | Image |
|---|---|---|---|---|
| SCLP-AS1<br><br>3 ha (1%) | Acacia shrubland (MVG 16) | Tall *Acacia yorkrakinensis* shrubland over low *Olearia muelleri* open shrubland over low *Triodia rigidissima* hummock grassland on sandy clay loam plain. | Sandy clay loam plain |  |

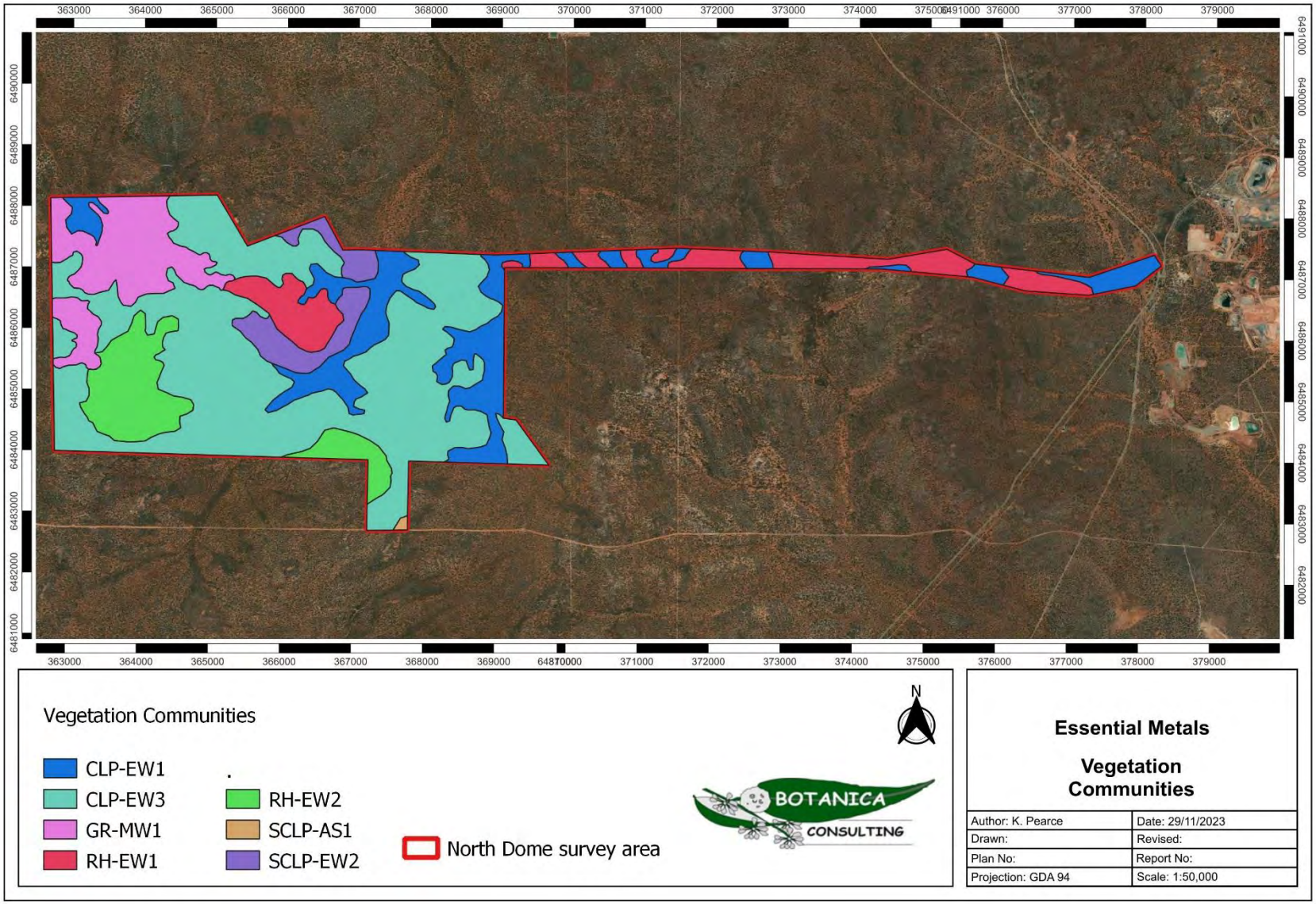



**Figure 4-5: Vegetation types within the survey area**

### *4.2.3 Floristic Composition*

Statistical analysis was conducted on quadrat data obtained from the survey to determine the similarities or differences in floristic composition between vegetation associations. The dendrogram, two-way table and ordination graph generated from the PATN statistical analysis is provided in Appendix G. A list of the 34 quadrats and their respective vegetation associations are provided in Table 4-8. The PATN analysis produced a stress value of 0.2166.

**Table 4-8: Vegetation communities with corresponding quadrats**

| Vegetation Community | Vegetation Code | Quadrats |
|---|---|---|
| *Eucalyptus salmonophloia* and *Eremophila interstans* subsp. *interstans* woodland over *Exocarpos aphyllus, Eremophila dempsteri* and *Grevillea acuaria* shrubland over *Eremophila acutifolia, Atriplex vesicaria and Rhagodia eremaea* low shrubland | CLP-EW1 | Q1, Q8, Q11, Q16, Q25 |
| *Eucalyptus urna* and *Santalum acuminatum* woodland over *Melaleuca sheathiana, Exocarpos aphyllus* and *Scaevola spinescens* open shrubland over *Eremophila caerulea* and *Olearia muelleri* low open shrubland | SCLP-EW2 | Q2, Q21 |
| *Eucalyptus ravida* and *Santalum acuminatum* open woodland over *Exocarpos aphyllus* and *Alyxia buxifolia* open shrubland over *Eremophila acutifolia, Ptilotus holosericeus* and *Wilsonia humilis* low shrubland | CLP-EW3 | Q4, Q9, Q10, Q12, Q13, Q17, Q20, Q29, Q30, Q33 |
| *Eucalyptus loxophleba* subsp. *lissophloia, Acacia acuminata* and *Santalum acuminatum* mallee woodland over *Senna artemisioides* subsp. *filifolia, Eremophila alternifolia* and *Dodonaea adenophora* shrubland over *Ptilotus obovatus, Olearia pimelioides* and *Austrostipa elegantissima* low open shrubland/ tussock grassland | GR-MW1 | Q5, Q6, Q7 |
| *Eucalyptus torquata* and *Santalum acuminatum* woodland over *Dodonaea lobulata, Alyxia buxifolia* and *Trymalium myrtillus* subsp. *myrtillus* open shrubland over *Westringia rigida* and *Olearia muelleri* low open shrubland | RH-EW1 | Q3, Q22, Q23, Q24, Q26, Q27, Q28 |
| *Eucalyptus lesouefii, Eucalyptus stricklandii* and *Melaleuca pauperiflora* woodland over *Eremophila psilocalyx, Alyxia buxifolia* and *Acacia erinacea* shrubland over *Westringia rigida, Eremophila caerulea* and *Olearia muelleri* low open shrubland | RH-EW2 | Q14, Q15, Q18, Q19, Q31, Q32 |
| Tall *Acacia yorkrakinensis* shrubland over low *Olearia muelleri* open shrubland over low *Triodia rigidissima* hummock grassland on sandy clay loam plain. | SCLP-AS1 | Q34 |

A total of six species groups were identified in the analysis (species group A to F) as shown in the two-way table (Appendix G).

The first floristic group comprised of three of the five CLP-EW1 quadrats and all three GR-MW1 quadrats. This floristic group was characterised by species group A and F, with an average species richness of 18 taxa per quadrat (ranged from 13 to 23 taxa per quadrat).

The second floristic group included the two remaining CLP-EW1 quadrats, two of the ten CLP-EW3 quadrats and a single quadrat from RH-EW1 and RH-EW2. This floristic group was similar in composition to the first, being mostly characterised by species A. This floristic group had an average species richness of 10 taxa per quadrat (ranged from five to 14 taxa per quadrat).

The third floristic group comprised of three CLP-EW3 quadrats, both SCLP-EW2 quadrats and one RH-EW1 quadrat. This floristic group was mostly characterised by species group C with an average species richness of 10 taxa per quadrat (ranged from six to 15 taxa per quadrat).

The fourth floristic group comprised of all remaining RH-EW1 quadrats, three of the six RH-EW2 quadrats and three CLP-EW3 quadrats. This floristic group was also characterised by species group C and D, with an average species richness of 16 taxa per quadrat (ranged from 13 to 19 taxa per quadrat).

The fifth floristic group comprised of two remaining CLP-EW3 quadrats and two remaining RH-EW2 quadrats and was also characterised by species group C, with an average species richness of eight taxa per quadrat (ranged from five to ten taxa per quadrat).

The sixth floristic group was represented by a single quadrat (Q34) of the SCLP-AS1 vegetation community.

Results of the PATN analysis indicate a high degree of heterogeneity and intermixing of vegetation types despite differences in landform however field based observations of vegetation type delineations were mostly supported by the results of the PATN analysis.

### *4.2.4 Species Richness and Accumulation Estimates*

A total of 110 species were recorded within the 34 quadrats. The Chao 2 richness estimator provided an estimated species richness of 112 species in 34 sample sites (quadrats). A species accumulation curve was created to display the rate of species accumulation. The $R^2$ value (0.98) suggests that the data “fits” the species accumulation curve shown in Figure 4-6. Species accumulation ranged from ten to three species per quadrat from 1-15 sample sites, and two or one species per quadrat between 16-34 sample sites. Botanica has determined that according to this data enough quadrats were established in the survey area to adequately assess the floristic composition of the area.

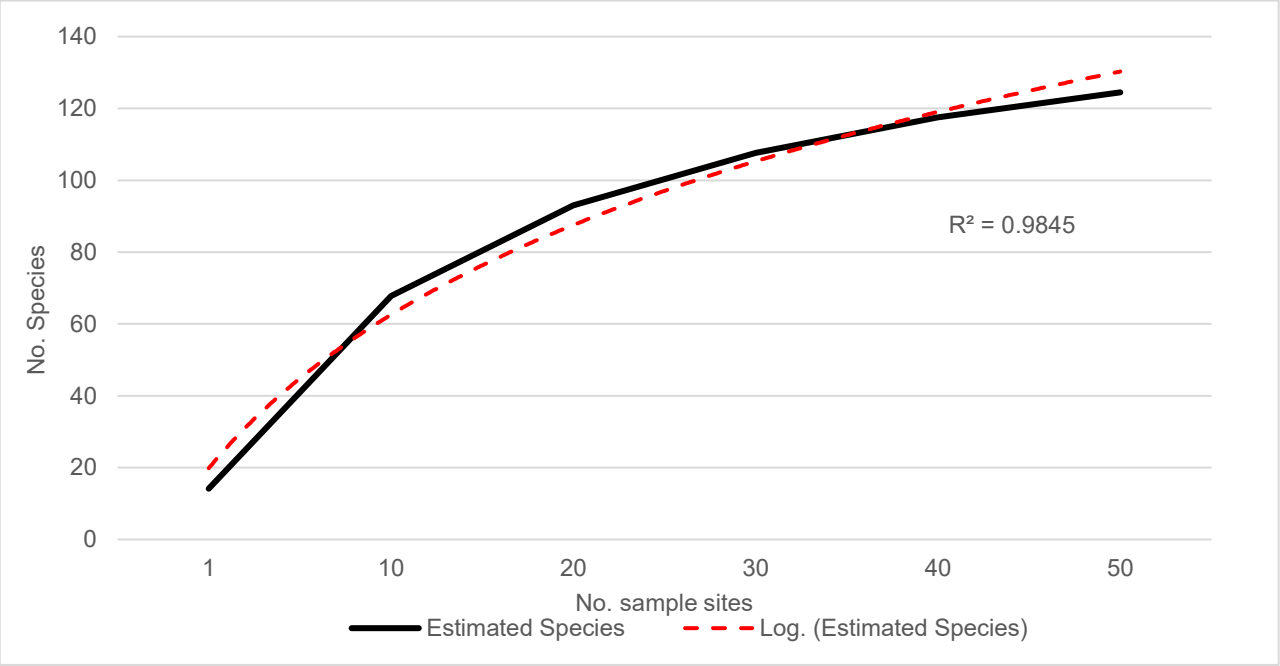



**Figure 4-6: Species accumulation curve**

### *4.2.5 Vegetation Condition*

Based on the vegetation condition rating scale adapted from Keighery (1994) and Trudgen, (1988), native vegetation within the survey area was categorized as 'very good' to 'good'. (Table 4-9, Figure 4-7). Vegetation condition rating descriptions are listed in Appendix H. Disturbances within the survey area included access tracks, low levels of grazing and historical impacts. Of note was a large area in the western section of the survey area where crown decline was observed, this was considered to be due to drought.

**Table 4-9: Vegetation condition rating within the survey area**

| Condition rating | Description | Area (ha) | Area (%) |
|---|---|---|---|
| Very Good | Some relatively slight signs of damage caused by human activities since European settlement. For example, some signs of damage to tree trunks caused by repeated fire, the presence of some relatively non-aggressive weeds, or occasional vehicle tracks. | 2591 | 94.44 |
| 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. | 150 | 5.46 |
| 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. | 3 | 0.1 |
| **TOTAL** | | **2744** | **100** |

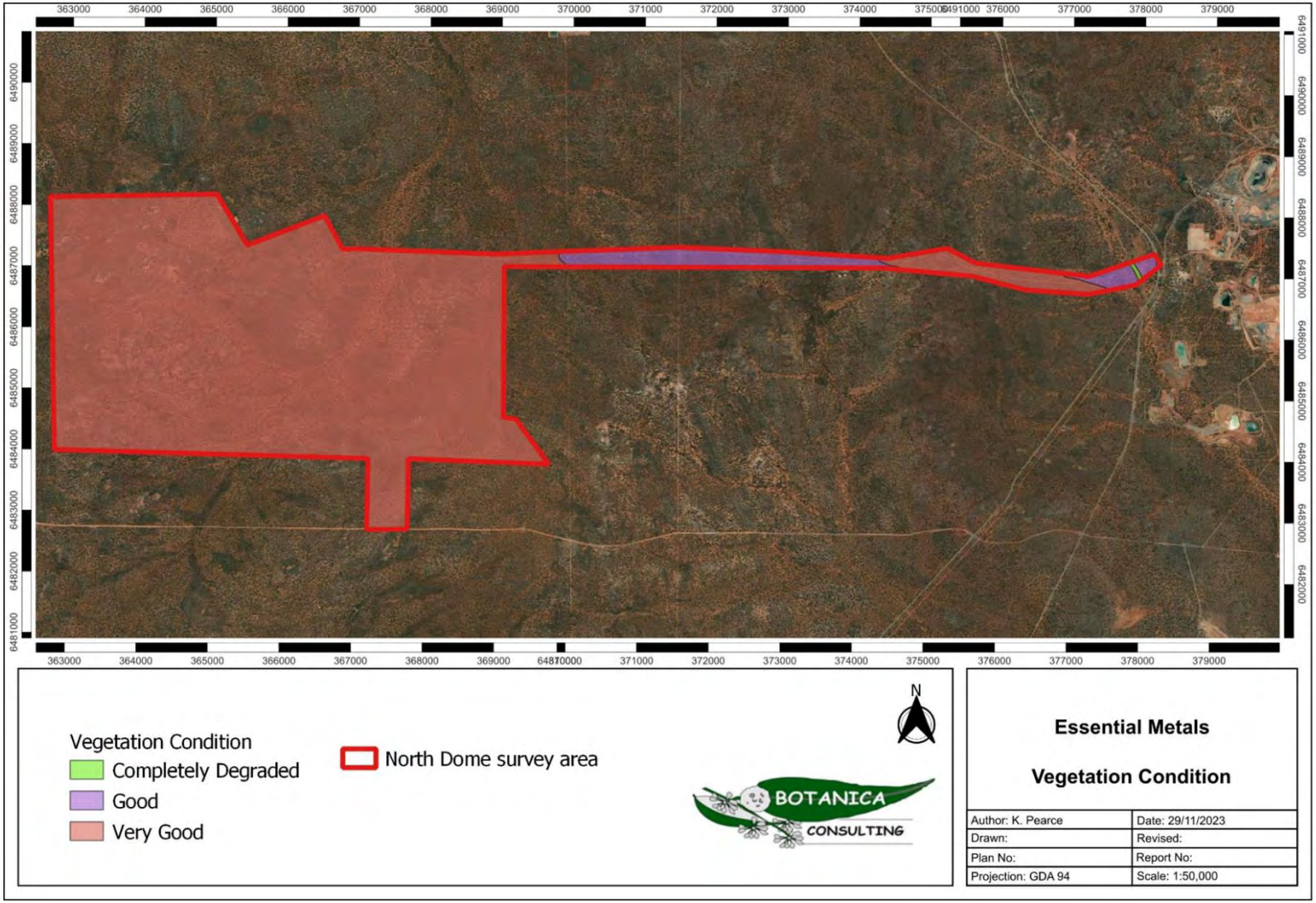



**Figure 4-7: Vegetation condition within the survey area**

### 4.2.6 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.

### 4.2.7 Fauna Habitat

Based on vegetation and associated landforms identified during the flora and vegetation assessment, four broad-scale terrestrial fauna habitats were identified as occurring within the survey area. Table 4-11 provides the area and a visual representation of fauna habitat types, and the extent of fauna habitats is shown spatially in Figure 4-8.

#### 4.2.7.1 Opportunistic Fauna Observations

During the field survey opportunistic observations of fauna species were made with eight fauna species observed (including one introduced fauna*) (Table 4-10).

**Table 4-10: Fauna species observed during the field survey**

| Taxon | Common Name | Comments |
|---|---|---|
| **Birds** | | |
| *Dromaius novahollandiae* | Emu | Tracks observed |
| *Rhipidura leucophrys* | Willie wagtail | Observed |
| *Strepera versicolor* | Grey currawong | Heard |
| *Barnardius zonarius* | Ringneck parrot | Observed |
| **Reptiles** | | |
| *Ctenophorus caudicinctus* | Bicycle dragon | Observed |
| *Tiliqua rugosa* | Bobtail lizard | Observed |
| **Mammals** | | |
| *Macropus sp* | Kangaroo | Tracks observed |
| *Oryctolagus cuniculus* * | Rabbit | Scats observed |

**Table 4-11: Main terrestrial fauna habitats within the survey area**

| Fauna Habitat | Description | Representative Fauna Attributes | Possibly Occurring Conservation Significant Species | Example Image |
|---|---|---|---|---|
| *Eucalyptus* woodland on clay-loam plain<br><br>Area= 1912 ha (69.60%) | *Eucalyptus* woodland over *Eremophila*, *Exocarpos* and *Grevillea* shrubland | • Ground moderately suited to burrowing species.<br>• Low to moderate diversity vegetation strata supporting avifauna assemblage.<br>• Moderate vegetation density and moderate leaf litter. | Malleefowl<br>*Leipoa ocellata*<br><br>Grey Falcon<br>*Falco hypoleucos* |  |
| *Eucalyptus* low mallee woodland on granite outcrop<br><br>Area= 309.0 ha (11.24%) | *Eucalyptus*, *Acacia* and *Santalum* mallee woodland over *Senna* and *Dodonaea* shrubland | • Ground not suited to burrowing species.<br>• Low diversity vegetation strata.<br>• Multiple rocky crevices provide fauna refuge.<br>• Low vegetation density and leaf litter. | Malleefowl<br>*Leipoa ocellata* |  |

| Fauna Habitat | Description | Representative Fauna Attributes | Possibly Occurring Conservation Significant Species | Example Image |
|---|---|---|---|---|
| *Eucalyptus* woodland on rocky hillslope<br><br>Area= 523 ha (19.03%) | *Eucalyptus* open woodland over *Eremophila*, *Acacia* and *Dodonaea* shrubland | • Ground not particularly to burrowing species.<br>• Low diversity vegetation strata<br>• Low vegetation density and low to moderate leaf litter | Malleefowl<br>*Leipoa ocellata* |  |
| Acacia shrubland on sandy clay loam plain<br><br>Area = 3 ha (0.109%) | Tall *Acacia yorkrakinensis* shrubs over low isolated shrubs with some hummock grass. | • Ground moderately suited to burrowing species.<br>• Low diversity vegetation strata<br>• Low vegetation density and with moderate to high levels of leaf litter<br>• Hummock grass provide good habitat for reptiles and small mammals | Malleefowl<br>*Leipoa ocellata* |  |

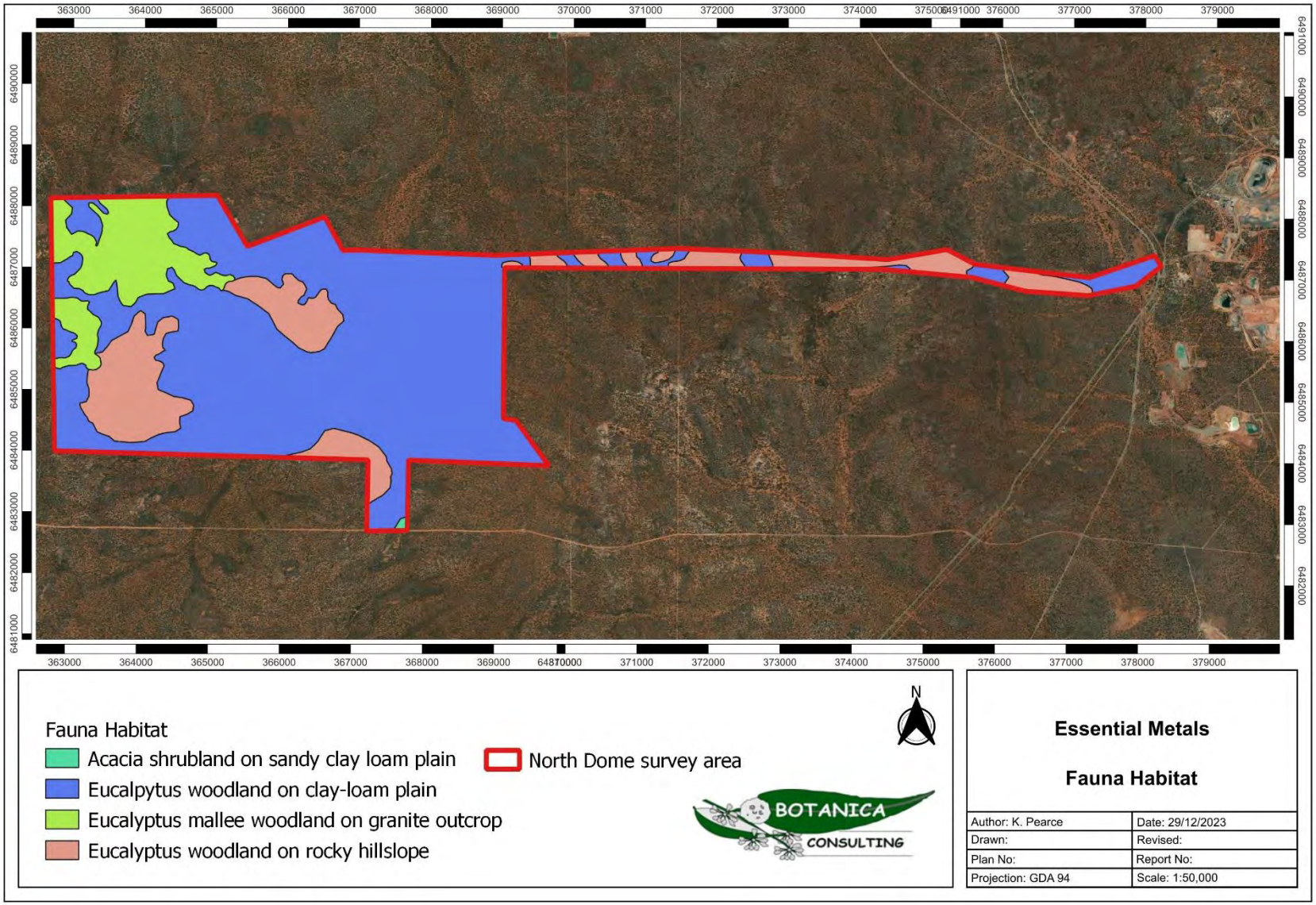



**Figure 4-8: Fauna habitats within the survey area**

### *4.2.8 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 for the presence of Malleefowl, including nesting mounds, tracks, or other signs, were recorded within the survey area. No other 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:

- Malleefowl (*Leipoa ocellata)* - Vulnerable (EPBC Act and BC Act)
  This species is occasionally recorded in the Eastern Goldfield subregion. The majority of habitat within the survey area appears suitable breeding due to the moderate density of the vegetation and leaf litter. However, no evidence of this species occurring within the survey area was recorded. Significant impact unlikely.
- Grey Falcon (*Falco hypoleucos)* - Vulnerable (EPBC Act and BC Act)
  This species is sparsely recorded throughout inland Australia. The survey area likely represents the southern extreme of the range of this species. Suitable habitat may be present but is unlikely to represent critical habitat. Significant impact unlikely.

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

## 4.3 Matters of National Environmental Significance

### *4.3.1 Environment Protection and Biodiversity Conservation Act 1999*

The EPBC Act protects matters of national environmental significance and is used by the Commonwealth DCCEEW 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 DMIRS. Under Section 51A of the *EP Act 1986* native vegetation includes aquatic and terrestrial vegetation indigenous to Western Australia, and intentionally planted vegetation declared by regulation to be native vegetation, but not vegetation planted in a plantation or planted with commercial intent. Section 51A of the *EP Act 1986* defines clearing as "the killing or destruction of; the removal of; the severing or ringbarking of trunks or stems of; or the doing of

substantial damage to some or all of the native vegetation in an area, including the flooding of land, the burning of vegetation, the grazing of stock or an act or activity that results in the above". Exemptions under Schedule 6 of the EP Act and the EP Regulations do not apply in ESAs as declared under Section 51B of the EP Act or TEC listed under State and Commonwealth legislation.

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

### *4.4.2 Biodiversity Conservation Act 2016*

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

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

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

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

## 4.5 Other Areas of Conservation Significance

The 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 Priority species or PEC as listed DBCA 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.

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

The closest conservation reserve is Binaronca Nature Reserve vested with the Conservation Commission of WA for the conservation of flora and fauna, located approximately 4 km north of the survey area. Activities within the survey area are unlikely to impact this reserve.

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

The location of proposed and gazetted conservation reserves, ESAs, and Nationally Important Wetlands in relation to the survey area is provided in Figure 4-9.

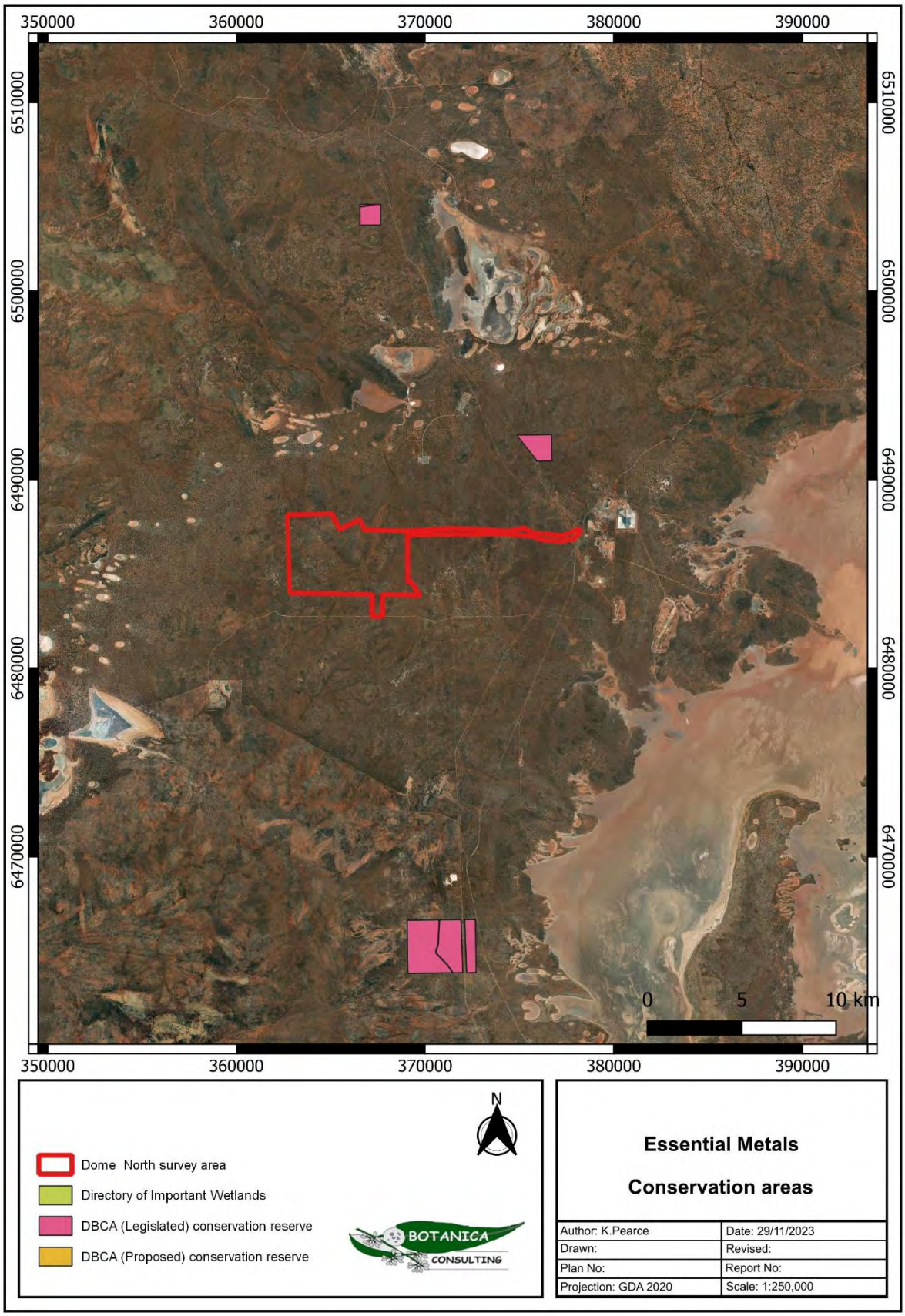



**Figure 4-9: Areas of conservation significance**

## 4.6 Native Vegetation Clearing Principles

Based on the outcomes from the survey undertaken, Botanica assessed the results of the desktop and field survey with regards to the native vegetation clearing principles listed under Schedule 5 of the EP Act (Table 4-12). The assessment found that the proposed vegetation clearing activities may be at variance with clearing principle (f).

**Table 4-12: Assessment against native vegetation clearing principles.**

| Letter | Principle | Assessment | Outcome |
|---|---|---|---|
| **Native vegetation should not be cleared if it:** | | | |
| (a) | comprises a high level of biological diversity. | Vegetation within the survey area is considered to be of low biological diversity and is well represented outside the survey area. | Clearing is unlikely to be at variance with this principle |
| (b) | comprises the whole or part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to WA. | The basic fauna search did not record any evidence for the presence of significant fauna or habitat within the survey area. | Clearing is unlikely to be at variance with this principle |
| (c) | includes, or is necessary for the continued existence of rare flora. | No Threatened Flora taxa, pursuant to the BC Act and the EPBC Act were identified within the survey area. | Clearing is unlikely to be at variance with this principle |
| (d) | comprises the whole or part of or is necessary for the maintenance of a threatened ecological community (TEC). | No Threatened Ecological Communities were identified as potentially occurring within the survey area. | Clearing is unlikely to be at variance with this principle |
| (e) | is significant as a remnant of native vegetation in an area that has been extensively cleared | All vegetation associations retain over 96% of their pre-European extent. | Clearing is unlikely to be at variance with this principle |
| (f) | is growing, in, or in association with, an environment associated with a watercourse or wetland | There are no permanent or ephemeral water bodies within the survey area. There are also no perennial drainage lines within the survey area, however multiple minor ephemeral drainage lines intersect with the survey area. These minor ephemeral drainage lines were mostly associated with vegetation community CLP-EW1 which represents 15.8% of the total survey area. | Clearing may be at variance with this principle |
| (g) | Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation. | The survey area and surrounding region has not been extensively cleared. Clearing within the survey area is not considered likely to lead to land degradation issues such as salinity, water logging or acidic soils. | Clearing is unlikely to be at variance with this principle |
| (h) | Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area. | There are no conservation reserves within or adjacent to the survey area. The nearest Reserve is the Binaronca Nature Reserve located approximately 4 km north of the survey area. | Clearing is unlikely to be at variance with this principle |
| (i) | Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water. | There are no permanent or ephemeral water bodies within the survey area. There are also no perennial drainage lines within the survey area, however multiple minor ephemeral drainage lines intersect with the survey area. These minor ephemeral drainage lines were mostly associated with vegetation community CLP-EW1 which represents 15.8% of the total survey area. Clearing activities are unlikely to impact hydrological systems. | Clearing is unlikely to be at variance with this principle |

| Letter | Principle | Assessment | Outcome |
|---|---|---|---|
| **Native vegetation should not be cleared if it:** | | | |
| (j) | Native vegetation should not be cleared if clearing the vegetation is likely to cause, or exacerbate, the incidence of flooding | Rainfall in the Eastern Goldfields subregion has an average rainfall of 200-300mm and an evaporation rate of 2400 mm. Rainfall data for Kalgoorlie-Boulder indicates that rainfall is spread throughout the year and rainfall events are unlikely to result in localised flooding. Clearing within the survey area is not likely to increase the incidence or intensity of flooding within the survey area or surrounds. | Clearing is unlikely to be at variance with this principle |

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# APPENDIX A:
# CONSERVATION RATINGS BC ACT AND EPBC ACT

### Definitions of Conservation Significant Species

| Code | Category |
|---|---|
| **State categories of Threatened and Priority species** | |
| **Threatened Species (T)**<br>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**<br>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".<br>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**<br>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".<br>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**<br>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".<br>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**<br>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**<br>Species where "*there is no reasonable doubt that the last member of the species has died*", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).<br>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**<br>Species that *"is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).<br>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**<br>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.<br>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**<br>Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act). |

| Code | Category |
|---|---|
| | Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.<br>Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*. |
| CD | **Species of special conservation interest**<br>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).<br>Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*. |
| OS | **Other specially protected species**<br>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).<br>Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*. |
| **Priority species**<br>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.<br>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.<br>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**<br>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**<br>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**<br>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**<br>(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.<br>(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.<br>(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** | |

| Code | Category |
|---|---|
| EX | **Extinct**<br>Taxa where there is no reasonable doubt that the last member of the species has died. |
| EW | **Extinct in the Wild**<br>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**<br>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**<br>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**<br>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**<br>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:<br>(i) the species is a species of fish;<br>(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;<br>(iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory;<br>(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; |
| | The ecological community is highly modified with potential of being rehabilitated in the immediate future. |
| 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; |

| Category Code | Category |
|---|---|
| | 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. |
| 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**<br>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**<br>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**<br>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:
# POTENTIALLY OCCURRING INTRODUCED (WEED) FLORA SPECIES

| Family | Taxon | Common Name | WAOL Status | Control Category | WONS |
|---|---|---|---|---|---|
| Asteraceae | *Centaurea melitensis* | Maltese Cockspur | Permitted - s11 | No Control Category | No |
| | *Hypochaeris glabra* | Smooth Cats-Ear | Permitted - s11 | No Control Category | No |
| | *Monoculus monstrosus* | | Permitted - s11 | No Control Category | No |
| | *Oncosiphon suffruticosum* | Calomba Daisy | Permitted - s11 | No Control Category | No |
| | *Sonchus oleraceus* | Common Sowthistle | Permitted - s11 | No Control Category | No |
| Brassicaceae | *Brassica rapa* | - | Permitted - s11 | No Control Category | No |
| | *Carrichtera annua* | Ward's Weed | Permitted - s11 | No Control Category | No |
| Geraniaceae | *Erodium cicutarium* | Common Storksbill | Permitted - s11 | No Control Category | No |
| Poaceae | *Aira cupaniana* | Silvery Airgrass | Permitted - s11 | No Control Category | No |
| | *Briza minor* | Shivery Grass | Permitted - s11 | No Control Category | No |
| | *Bromus rubens* | Red Brome | Permitted - s11 | No Control Category | No |
| | *Rostraria pumila* | - | Permitted - s11 | No Control Category | No |
| | *Schismus arabicus* | Araby Grass | Permitted - s11 | No Control Category | No |
| Primulaceae | *Lysimachia arvensis* | Pimpernel | Permitted - s11 | No Control Category | No |
| Tamaricaceae | *Tamarix aphylla* | Athel Tamarix | Exempt | No Control Category | Yes |

# APPENDIX C:
# QUADRAT LOCATIONS (NW CORNER) (GDA 2020, ZONE 51J)

| Quadrat | Easting | Northing |
|---|---|---|
| Q1 | 367226 | 6486444 |
| Q2 | 366994 | 6486503 |
| Q3 | 366155 | 6486640 |
| Q4 | 365525 | 6487189 |
| Q5 | 364708 | 6486840 |
| Q6 | 364524 | 6487279 |
| Q7 | 363341 | 6486963 |
| Q8 | 363137 | 6487870 |
| Q9 | 367812 | 6485498 |
| Q10 | 367705 | 6485062 |
| Q11 | 368397 | 6484947 |
| Q12 | 368142 | 6484441 |
| Q13 | 367638 | 6484330 |
| Q14 | 367077 | 6484167 |
| Q15 | 366742 | 6484263 |
| Q16 | 366077 | 6485277 |
| Q17 | 365201 | 6485456 |
| Q18 | 363973 | 6485598 |
| Q19 | 364322 | 6484578 |
| Q20 | 364922 | 6484261 |
| Q21 | 365759 | 6485682 |
| Q22 | 366233 | 6486087 |
| Q23 | 365502 | 6486741 |
| Q24 | 369557 | 6487289 |
| Q25 | 370645 | 6487255 |
| Q26 | 371220 | 6487289 |
| Q27 | 372182 | 6487269 |
| Q28 | 372963 | 6487206 |
| Q29 | 367411 | 6483057 |
| Q30 | 367637 | 6483760 |
| Q31 | 367249 | 6483898 |
| Q32 | 367383 | 6483378 |
| Q33 | 367575 | 6483456 |
| Q34 | 367734 | 6482877 |

# APPENDIX D:
# SIGNIFICANT FLORA LIKELIHOOD ASSESSMENT

| Rank | | | Taxon | Habitat | Assessment | Likelihood |
|---|---|---|---|---|---|---|
| EPBC | BC Act | DBCA | | | | |
| EN | EN | - | *Daviesia microcarpa* | Weathered gravel. | Outside known range of species | Unlikely |
| VU | VU | - | *Eucalyptus platydisca* | Granitic soils, clay. Stony hills. | Outside known range of species | Unlikely |
| VU | VU | - | *Gastrolobium graniticum* | Margins of large granite rock outcrops. | Outside known range of species | Unlikely |
| - | - | P1 | *Acacia dorsenna* | Rocky sandy loam or clay loam. Low rocky hills. | Within known range of species, habitat may be present | Possible |
| - | - | P1 | *Bossiaea aurantiaca* | Red sand, red clay loam. Low-lying, winter-damp sites. | At extreme of known range, habitat may be present | Possible |
| - | - | P1 | *Bossiaea saxosa* | Stony, red soil. Woodlands. | Outside known range of species | Unlikely |
| - | - | P1 | *Calandrinia lefroyensis* | Extensive saline flats. Brown silty loam with some scattered quartz. | Within known range, habitat unlikely to be present | Unlikely |
| - | - | P1 | *Eremophila lucida* | Clay loam, sandy loam. Adjacent to samphire flats & granite outcrops. | Outside known range of species | Unlikely |
| - | - | P1 | *Eremophila perglandulosa* | - | Outside known range of species | Unlikely |
| - | - | P1 | *Eucalyptus distuberosa* subsp. *aerata* | - | Outside known range of species | Unlikely |
| - | - | P1 | *Eucalyptus jimberlanica* | Loam. Valley edges. | Outside known range of species | Unlikely |
| - | - | P1 | *Grevillea phillipsiana* | Red sand, stony loam. Granite hills. | Outside known range of species | Unlikely |
| - | - | P1 | *Lepidosperma lyonsii* | Pale orange skeletal sandy loam with banded ironstone gravel & rock, well-drained shallow stony loamy with quartz. Gentle hill slopes, upper slopes of large hill. | Outside known range of species | Unlikely |
| - | - | P1 | *Philotheca apiculata* | Stony clay loam. Rocky outcrops, hillsides. | Outside known range of species | Unlikely |
| - | - | P1 | *Prostanthera splendens* | Stony loam, shallow soils with ironstone pebbles. Breakaways. | Outside known range of species | Unlikely |
| | | P1 | *Pterostylis xerampelina* | | | |
| - | - | P1 | *Ptilotus rigidus* | Quartz hills. Near salt lakes. | At extreme of known ranmge, little known | Unlikely |
| - | - | P1 | *Senecio microbasis* | Schist soils. Low hills, disturbed areas in woodlands. | Very little known, previously recorded in local area | Possible |
| - | - | P1 | *Tecticornia flabelliformis* | Clay. Saline flats. | Within known range, habitat unlikely to be present | Unlikely |
| - | - | P2 | *Apatelantha insignis* | - | Outside known range of species | Unlikely |
| - | - | P2 | *Bossiaea laxa* | Brown loam over deep granite. Sheltered positions around outcrops. | Outside known range of species | Unlikely |

| Rank | | | Taxon | Habitat | Assessment | Likelihood |
|---|---|---|---|---|---|---|
| EPBC | BC Act | DBCA | | | | |
| - | - | P2 | *Acacia kerryana* | Granitic loamy sand, stony clayey loam, or clayey sand. Low stony ridges, undulating plains. | At extreme of known range, habitat may be present | Possible |
| - | - | P2 | *Eremophila praecox* | Red/brown sandy loam. Undulating plains. | Outside known range of species | Unlikely |
| - | - | P2 | *Goodenia corralina* | Brown loam, granite. Near large outcrop. | Outside known range of species | Unlikely |
| - | - | P2 | *Phebalium clavatum* | Sandy soils. Sandplains. | Outside known range of species | Unlikely |
| - | - | P2 | *Trachymene pyrophila* | Yellow or orange sand. Sandplains; germinating after fire or other disturbances such as mining. | Outside known range of species | Unlikely |
| - | - | P3 | *Acacia dissona* var. *indoloria* | Sand, sandy loam. Undulating plains. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P3 | *Allocasuarina eriochlamys* subsp. *grossa* | Stony loam, laterite clay. Granite outcrops. | Within known range, habitat may be present | Possible |
| - | - | P3 | *Austrostipa blackii* | - | Outside known range of species | Unlikely |
| - | - | P3 | *Austrostipa turbinata* | South south-west facing gently inclined crest of basalt and minor quartz with red-brown shallow sandy clay loam soils. | Widespread range, habitat may be present | Possible |
| - | - | P3 | *Chrysocephalum apiculatum* subsp. *norsemanense* | Well-drained, aeolian loamy sand. Moderately exposed, almost flat, broad valley floor. | Within known range, habitat may be present. | Possible |
| | | P3 | *Cyathostemon* sp. Salmon Gums (B. Archer 769) | Orange sand, white sand or sandy clay over granite, light brown clay with gypsum, saline soils. Flats, dry riverbeds, near claypans. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P3 | *Eremophila acutifolia* | Red clay-loams, valley floors and flat to undulating plains | Previously recorded within survey area | Previously Recorded |
| - | - | P3 | *Eremophila annosocaulis* | Stoney loams, hill slopes and crests | Outside known range of species | Unlikely |
| - | - | P3 | *Eremophila veronica* | Stony clay, clay loam. Lateritic breakaways. | Outside known range of species | Unlikely |
| - | - | P3 | *Eucalyptus brockwayi* | Gravelly sandy loam. Low rocky hills & slopes. | Outside known range of species | Unlikely |
| - | - | P3 | *Eucalyptus pterocarpa* | Red-brown sandy loam, yellow-brown silty loam. Creek edges, rocky slopes. | Outside known range of species | Unlikely |
| - | - | P3 | *Grevillea petrophiloides subsp. remota* | Loamy sand, granite. Base of outcrops, crevices. | Outside known range of species | Unlikely |
| - | - | P3 | *Melaleuca coccinea* | Sandy loam over granite. Granite outcrops, sandplain, river valleys. | Within known range, habitat may be present | Possible |
| - | - | P3 | *Melaleuca macronychia subsp. trygonoides* | Sandy soils. Granite outcrops. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P3 | *Phlegmatospermum eremaeum* | Stony loam. | Within known range of species, habitat may be present | Possible |
| - | - | P3 | *Pityrodia scabra subsp. dendrotricha* | Yellow sand, lake edges | At extreme of known range, habitat unlikely to be present | Unlikely |

| Rank | | | Taxon | Habitat | Assessment | Likelihood |
|---|---|---|---|---|---|---|
| EPBC | BC Act | DBCA | | | | |
| - | - | P3 | *Stylidium choreanthum* | White/yellow or red sand. Plains. | At extreme of known range, habitat may be present | Possible |
| - | - | P3 | *Stylidium pulviniforme* | White sand. Winter-wet areas. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P4 | *Eucalyptus kruseana* | Sandy loam. Granite outcrops & hills. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P4 | *Eucalyptus x brachyphylla* | Sandy loam. Granite outcrops. | Outside known range of species | Unlikely |
| - | - | P4 | *Frankenia glomerata* | White sand. | At extreme of known range, habitat unlikely to be present | Unlikely |
| - | - | P4 | *Myriophyllum petraeum* | Strictly confined to ephemeral rock pools on granite outcrops. | Within known range, habitat unlikely to be present | Unlikely |

# APPENDIX E:
# SIGNIFICANT FAUNA LIKELIHOOD ASSESSMENT

| Species | Conservation Status | | | Habitat Description | Comments | Likelihood |
|---|---|---|---|---|---|---|
| | EPBC Act | BC Act | DBCA Priority | | | |
| Night Parrot *Pezoporus occidentalis* | EN | CR | - | Most habitat records are of Triodia (Spinifex) grasslands and/or chenopod shrublands in the arid and semi-arid zones, or *Astrebla* spp. (Mitchell grass), shrubby samphire and chenopod associations, scattered trees and shrubs, *Acacia aneura* (Mulga) woodland, treeless areas and bare gibber are associated with sightings of the species. Roosting and nesting sites are consistently reported as within clumps of dense vegetation, primarily old and large Spinifex (*Triodia*) clumps, but sometimes other vegetation types (DCCEEW 2023b ). | Outside known range, no suitable habitat expected to occur. | Unlikely |
| Grey Falcon *Falco hypoleucos* | VU | VU | | The Grey Falcon occurs at low densities across inland Australia. The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter. Prey species include small birds including doves, pigeons, small parrots, and finches. Non-avian prey includes small mammals and lizards. | Survey area may form part of larger home range but unlikely to breed in area | Possible |
| Malleefowl *Leipoa ocellata* | VU | VU | - | Scrublands and woodlands dominated by mallee and wattle species (DCCEEW 2023b). | Habitat likely marginal and unsuitable for breeding. Occasional transients only. | Possible |
| Fork-tailed Swift *Apus pacificus* | MI | - | - | Low to very high airspace over varied habitat from rainforest to semi desert (Birdlife Australia, 2019). | Very occasional transients only. | Unlikely |
| Grey Wagtail *Motacilla cinerea* | MI | - | - | Running water in disused quarries, sandy, rocky streams in escarpments and rainforest, sewerage ponds, ploughed fields and airfields (Morecombe 2004). | No suitable habitat. | Would Not Occur |
| Migratory Shorebirds (Various species) | IA/MI | IA/MI | P4 | Prefer muddy edges of shallow fresh or brackish wetlands, with inundated or emergent sedges, grass, saltmarsh, or other low vegetation. This includes lagoons, swamps, lakes and pools near the coast, and dams, waterholes, soaks, bore drains and bore swamps, saltpans, and hypersaline salt lakes inland (DCCEEW 2023b). | No suitable habitat. | Would Not Occur |
| Chuditch *Dasyurus geoffroii* | VU | VU | - | Previously occurred throughout arid and semi-arid Australia but is now restricted to south-west Western Australia. (DCCEEW 2023b). | Considered to be regionally extinct | Unlikely |

# APPENDIX F:
# LIST OF SPECIES IDENTIFIED WITHIN THE SURVEY AREA

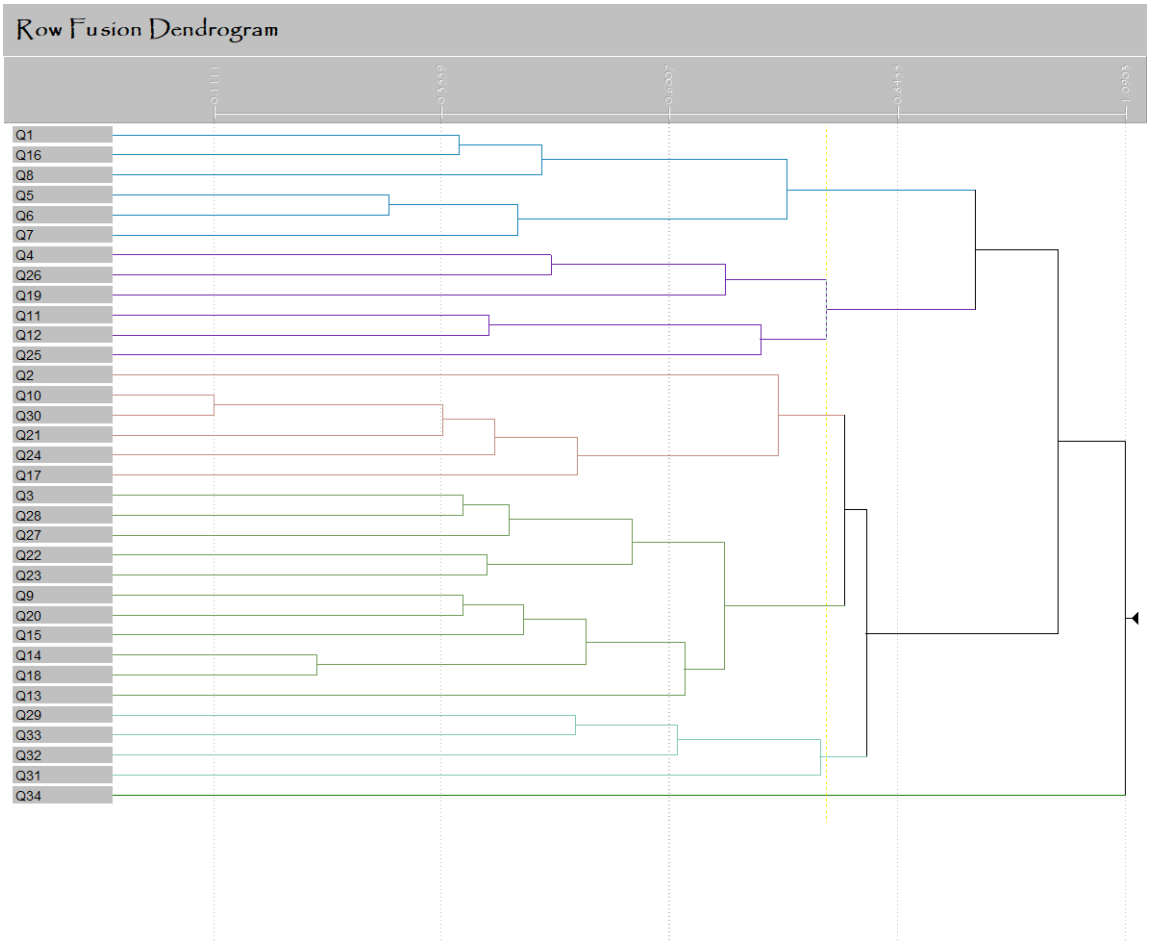
(W) denotes introduced (weed) species; (A) denotes ephemeral (annual) species; (P) denotes Priority species

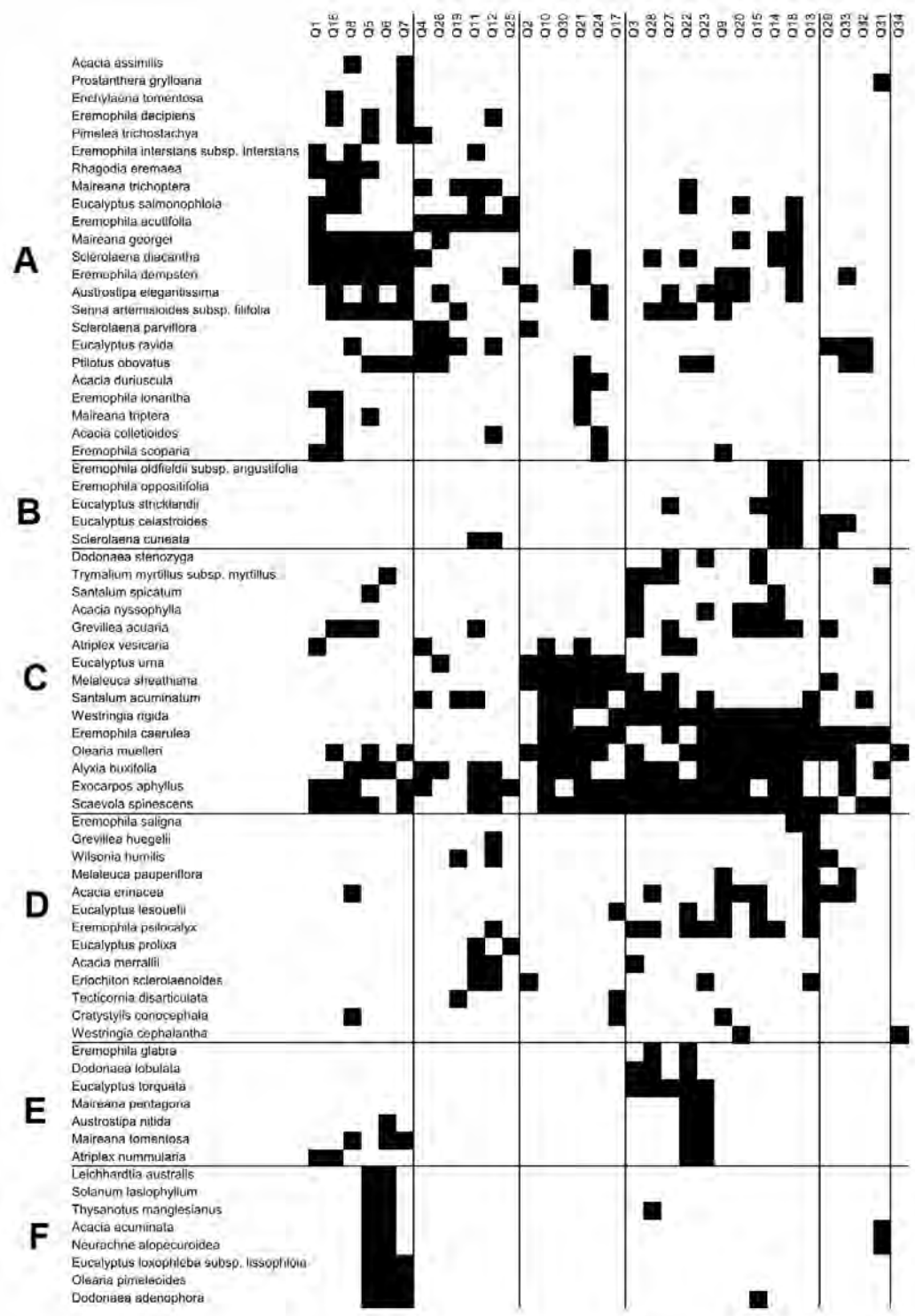
| Family | Taxon | SCLP-AS1 | CLP-EW1 | SCLP-EW2 | CLP-EW3 | GR-MW1 | RH-EW2 | RH-EW1 |
|---|---|---|---|---|---|---|---|---|
| Aizoaceae | *Mesembryanthemum nodiflorum (W)* | | * | | | | | |
| Amaranthaceae | *Ptilotus aervoides (A)* | | * | | | | | |
| | *Ptilotus exaltatus (A)* | | | | * | | | |
| | *Ptilotus holosericeus* | | | | * | | | |
| | *Ptilotus obovatus* | | * | | * | * | * | * |
| Apocynaceae | *Alyxia buxifolia* | | * | * | * | * | * | * |
| | *Leichhardtia australis* | | | | | * | | |
| Asparagaceae | *Thysanotus manglesianus* | | | | | * | | * |
| Asphodelaceae | *Asphodelus fistulosus (W)* | | * | | | | | |
| Asteraceae | *Asteridea athrixioides (A)* | | * | | * | | | |
| | *Cephalipterum drummondii (A)* | | * | | | | | |
| | *Centaurea melitensis (W)* | | * | | | | | |
| | *Cratystylis conocephala* | | * | * | * | | * | |
| | *Erigeron bonariensis (W)* | | * | | | | | |
| | *Olearia muelleri* | * | * | * | * | * | * | * |
| | *Olearia pimeleoides* | | | | | * | | |
| | *Schoenia cassiniana* | | | | | * | | |
| | *Symphyotrichum squamatum (W)* | | * | | | | | |
| | *Waitzia acuminata (A)* | | | | | * | | |
| Brassicaceae | *Carrichtera annua (W)* | | * | | | | | |
| Casuarinaceae | *Casuarina pauper* | | | | | | * | |
| Chenopodiaceae | *Atriplex nummularia* | | * | | | | | * |
| | *Atriplex vesicaria* | | * | * | * | | | * |
| | *Enchylaena tomentosa* | | * | | | | | |
| | *Eriochiton sclerolaenoides* | | | | * | | | * |
| | *Maireana georgei* | | | | * | * | * | |
| | *Maireana lobiflora* | | * | | | | | |
| | *Maireana pentatropis* | | | * | | | | |
| | *Maireana sedifolia* | | | | * | | | |
| | *Maireana tomentosa* | | * | | | | | |
| | *Maireana trichoptera* | | | | * | | | * |
| | *Maireana triptera* | | * | * | | | | |
| | *Rhagodia drummondii* | | * | | | | | |
| | *Rhagodia eremaea* | | * | | | * | | * |
| | *Sclerolaena cuneata* | | | | * | | | |
| | *Sclerolaena diacantha* | | * | | * | | | |
| | *Sclerolaena parviflora* | | | * | * | | | |
| | *Sclerolaena uniflora* | | | | * | | | |
| | *Tecticornia disarticulata* | | | * | * | | | |
| Convolvulaceae | *Wilsonia humilis* | | | | * | | * | |
| Fabaceae | *Acacia acuminata* | | | | | * | * | |
| | *Acacia assimilis* | | * | | | * | | |
| | *Acacia chrysella* | | | | | * | | |
| | *Acacia colletioides* | | * | * | * | | | |
| | *Acacia duriuscula* | | | * | | | | |
| | *Acacia erinacea* | | * | | * | | * | |
| | *Acacia hemiteles* | | * | | * | | | |
| | *Acacia merrallii* | | * | | * | | | * |
| | *Acacia nyssophylla* | | | | | | * | * |

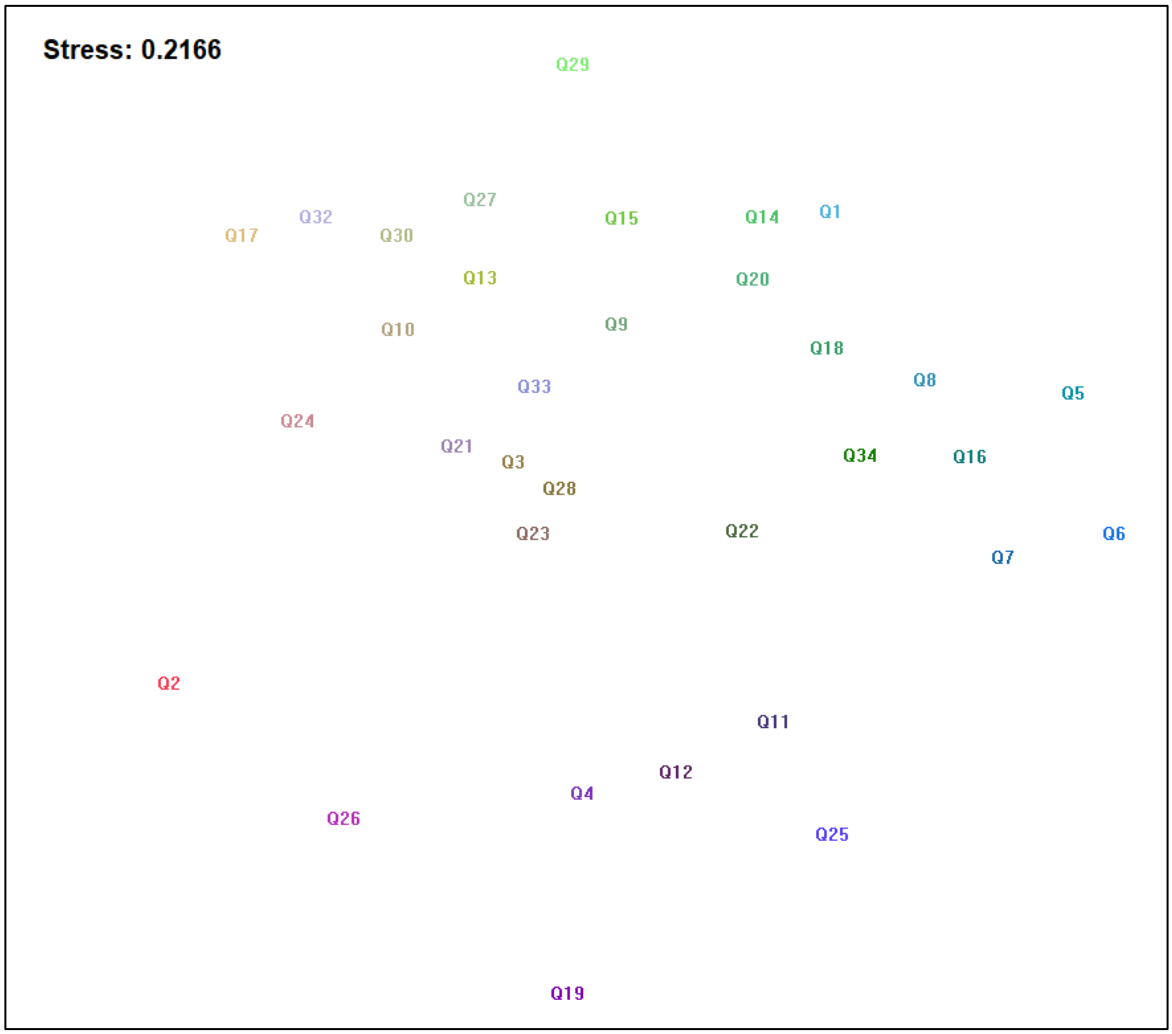
| Family | Taxon | SCLP-AS1 | CLP-EW1 | SCLP-EW2 | CLP-EW3 | GR-MW1 | RH-EW2 | RH-EW1 |
|---|---|---|---|---|---|---|---|---|
| | *Acacia yorkrakinensis* | * | | | | | | |
| | *Daviesia benthamii* | | | * | | | | |
| | *Dillwynia acerosa* | | * | | | | | |
| | *Mirbelia microphylla* | | | | | * | | |
| | *Senna artemisioides* subsp. *filifolia* | | * | | * | * | * | * |
| | *Swainsona canescens* | | | * | | | | |
| | *Templetonia ceracea* | | | | * | | | |
| Goodeniaceae | *Scaevola spinescens* | | * | * | * | * | * | * |
| Hemerocallidaceae | *Dianella revoluta* | | | | | * | | |
| Lamiaceae | *Prostanthera grylloana* | | | | | * | * | |
| | *Westringia cephalantha* | * | | | | | * | |
| | *Westringia rigida* | | | * | | | * | * |
| Myrtaceae | *Eucalyptus celastroides* | | | | * | | | |
| | *Eucalyptus gracilis* | | * | | | | | |
| | *Eucalyptus lesouefii* | | | * | | | * | * |
| | *Eucalyptus loxophleba* subsp. *lissophloia* | | | | | * | | |
| | *Eucalyptus oleosa* | | | | | | * | |
| | *Eucalyptus prolixa* | | * | | | | | |
| | *Eucalyptus ravida* | | * | | * | | * | |
| | *Eucalyptus salmonophloia* | | * | | | | * | * |
| | *Eucalyptus salubris* | | * | | * | | | |
| | *Eucalyptus stricklandii* | | | | | | * | * |
| | *Eucalyptus torquata* | | | | | | | * |
| | *Eucalyptus urna* | | | * | * | | | |
| | *Leptospermum erubescens* | | | | | | | * |
| | *Melaleuca acuminata* | | | | | * | | |
| | *Melaleuca hamata* | | * | | * | | | |
| | *Melaleuca laxiflora* | | | | * | | | |
| | *Melaleuca pauperiflora* | | | | * | | * | |
| | *Melaleuca sheathiana* | | | * | * | | | * |
| Poaceae | *Aristida contorta (A)* | | | | | * | | |
| | *Austrostipa elegantissima* | | * | * | * | * | * | * |
| | *Austrostipa nitida* | | | | | * | | * |
| | *Neurachne alopecuroidea* | | | | | * | * | |
| | *Triodia rigidissima* | * | | | | | | |
| Proteaceae | *Grevillea acuaria* | | * | | * | * | * | * |
| | *Grevillea huegelii* | | | | | | * | |
| | *Grevillea nematophylla* | | | | | | | * |
| Pteridaceae | *Cheilanthes sieberi* | | | | | * | | |
| Rhamnaceae | *Cryptandra graniticola* | * | | | | | | |
| | *Trymalium myrtillus* subsp. *myrtillus* | | | | | * | * | * |
| Rutaceae | *Philotheca tomentella* | | | | | | * | |
| Santalaceae | *Exocarpos aphyllus* | | * | * | * | | * | * |
| | *Santalum acuminatum* | | * | * | * | | * | * |
| | *Santalum spicatum* | | | | | * | * | * |
| Sapindaceae | *Dodonaea adenophora* | | | | | * | | * |
| | *Dodonaea bursariifolia* | | | | | | | * |
| | *Dodonaea lobulata* | | | | | | | * |
| | *Dodonaea stenozyga* | | | | | | | * |
| Scrophulariaceae | *Eremophila acutifolia (P3)* | | * | | * | | * | |
| | *Eremophila alternifolia* | | | | | * | | |
| | *Eremophila caerulea* | | | * | * | | * | * |
| | *Eremophila decipiens* | | * | | | | | |
| | *Eremophila dempsteri* | | * | * | * | * | * | |
| | *Eremophila gibbosa* | | | | | * | | |

| Family | Taxon | SCLP-AS1 | CLP-EW1 | SCLP-EW2 | CLP-EW3 | GR-MW1 | RH-EW2 | RH-EW1 |
|---|---|---|---|---|---|---|---|---|
| | *Eremophila glabra* | | | | | | | * |
| | *Eremophila granitica* | | | | | * | * | |
| | *Eremophila interstans* subsp. *interstans* | | * | | | | | |
| | *Eremophila ionantha* | | * | | | | | |
| | *Eremophila oldfieldii* subsp. *angustifolium* | | | | | | * | |
| | *Eremophila oppositifolia* | | | | | | * | |
| | *Eremophila psilocalyx* | | | | | | * | * |
| | *Eremophila saligna* | | | | | | * | |
| | *Eremophila scoparia* | | * | * | | | * | |
| Solanaceae | *Solanum lasiophyllum* | | | | | * | | |
| | *Solanum nummularium* | | * | | | * | | |
| Thymelaeaceae | *Pimelea microcephala* | | * | | | | | |
| | *Pimelea trichostachya* | | * | | * | * | | |
| Violaceae | *Pigea floribunda* | | | | | | * | * |
| Zygophyllaceae | *Roepera eremaea (A)* | | | | | | * | |
| | *Roepera glauca(A)* | | | | | | | * |
| **Total** | | **5** | **49** | **23** | **41** | **36** | **41** | **37** |

# APPENDIX G:
# PATN ANALYSIS




Q1 Q16 Q8 Q5 Q6 Q7 Q4 Q26 Q19 Q11 Q12 Q25 Q2 Q10 Q30 Q21 Q24 Q17 Q3 Q28 Q27 Q22 Q23 Q9 Q20 Q15 Q14 Q18 Q13 Q29 Q33 Q32 Q31 Q34
A
Acacia assimilis
Prostanthera grylloana
Erichylaena tomentosa
Eremophila decipiens
Pimelea trichostachya
Eremophila interstans subsp. interstans
Rhagodia eremaea
Maireana trichoptera
Eucalyptus salmonophloia
Eremophila acutifolia
Maireana georgei
Sclerolaena diacantha
Eremophila dempsteri
Austrostipa elegantissima
Senna artemisioides subsp. filifolia
Sclerolaena parviflora
Eucalyptus ravida
Ptilotus obovatus
Acacia duriuscula
Eremophila ionantha
Maireana triptera
Acacia colletioides
Eremophila scoparia
B
Eremophila oldfieldii subsp. angustifolia
Eremophila oppositifolia
Eucalyptus stricklandii
Eucalyptus celastroides
Sclerolaena cuneata
C
Dodonaea stenozyga
Trymalium myrtillus subsp. myrtillus
Santalum spicatum
Acacia nyssophylla
Grevillea acuaria
Atriplex vesicaria
Eucalyptus urna
Melaleuca shrathiana
Santalum acuminatum
Westringia rigida
Eremophila caerulea
Olearia muelleri
Alyxia buxifolia
Exocarpos aphyllus
Scaevola spinescens
D
Eremophila saligna
Grevillea huegelii
Wilsonia humilis
Melaleuca pauperiflora
Acacia erinacea
Eucalyptus lesouefii
Eremophila psilocalyx
Eucalyptus prolixa
Acacia merrallii
Eriochiton sclerolaenoides
Tecticornia disarticulata
Cratystylis conocephala
Westringia cephalantha
E
Eremophila glabra
Dodonaea lobulata
Eucalyptus torquata
Maireana pentagona
Austrostipa nitida
Maireana tomentosa
Atriplex nummularia
F
Leichhardtia australis
Solanum lasiophyllum
Thysanotus manglesianus
Acacia acuminata
Neurachne alopecuroidea
Eucalyptus loxophleba subsp. lissophloia
Olearia pimeleoides
Dodonaea adenophora


Stress: 0.2166
Q29
Q27
Q32
Q15
Q14
Q1
Q17
Q30
Q13
Q20
Q10
Q9
Q18
Q33
Q8
Q5
Q24
Q21
Q3
Q34
Q16
Q28
Q23
Q22
Q6
Q7
Q2
Q11
Q12
Q4
Q26
Q25
Q19

# APPENDIX H:
# 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 I:
# QUADRAT DATA SHEETS

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 666-668 |
| **Quadrat No:** Q1 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 367226E, 6486444N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, ironstone/ <2%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** Red-Brown/ Clay loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** <1m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus salmonophloia* | *Exocarpos aphyllus* | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Atriplex nummularia* |
| *Atriplex vesicaria* |
| *Eremophila acutifolia* |
| *Eremophila dempsteri* |
| *Eremophila interstans* subsp. *interstans* |
| *Eremophila ionantha* |
| *Eremophila scoparia* |
| *Eucalyptus gracilis* |
| *Eucalyptus salmonophloia* |
| *Exocarpos aphyllus* |
| *Maireana georgei* |
| *Maireana laxiflora* |
| *Rhagodia eremaea* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 669-671 |
| **Quadrat No:** Q2 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 366994E, 6486503N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Sandstone, ironstone, greenstone/ 2-10%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Sandy Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 3-5 m | **Height:** <1m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** <1% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus urna* | *Melaleuca sheathiana* | *Olearia muelleri* |
| | | |

| **ALL TAXA** |
|---|
| *Austrostipa elegantissima* |
| *Eriochiton sclerolaenoides* |
| *Eucalyptus urna* |
| *Melaleuca sheathiana* |
| *Olearia muelleri* |
| *Sclerolaena parviflora* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 693-695 |
| **Quadrat No:** Q3 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 366155E, 6484640N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Upper slope | | |
| **Coarse fragments on the surface:** Greenstone, limestone/ 10-20%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 30-70% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus torquata* | *Trymalium myrtillus* subsp. *myrtillus* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia merrallii* |
| *Acacia nyssophylla* |
| *Alyxia buxifolia* |
| *Dodonaea bursariifolia* |
| *Dodonaea lobulata* |
| *Eremophila psilocalyx* |
| *Eucalyptus torquata* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Grevillea nematophylla* |
| *Melaleuca sheathiana* |
| *Olearia muelleri* |
| *Santalum acuminatum* |
| *Santalum spicatum* |
| *Scaevola spinescens* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 623-625 |
| **Quadrat No:** Q4 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 365525E, 6487189N | | **Accuracy:** 2m |
| **Aspect:** North East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Ironstone, limestone/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very good | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | *Exocarpos aphyllus* | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Alyxia buxifolia* |
| *Atriplex vesicaria* |
| *Eremophila acutifolia* |
| *Eucalyptus celastroides* |
| *Eucalyptus ravida* |
| *Exocarpos aphyllus* |
| *Maireana trichoptera* |
| *Pimelea trichostachya* |
| *Ptilotus exaltatus* |
| *Ptilotus obovatus* |
| *Santalum acuminatum* |
| *Sclerolaena diacantha* |
| *Sclerolaena parviflora* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 620-622 |
| **Quadrat No:** Q5 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 364708E, 6486840N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Granite/ 2-10%/ 2-6 mm | | |
| **Rock outcrop (abundance/runoff):** 20-50%/ Moderate | | |
| **Soil (profile/field texture/soil surface):** Light Brown/ Sandy Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** <10m | **Height:** 1-3m | **Height:** <0.5m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus loxophleba* subsp. *lissophloia* | *Eremophila dempsteri* | *Ptilotus obovatus* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia acuminata* |
| *Alyxia buxifolia* |
| *Aristida contorta* |
| *Asteridea athrixioides (A)* |
| *Austrostipa elegantissima* |
| *Cephalipterum drummondii (A)* |
| *Dianella revoluta* |
| *Dodonaea adenophora* |
| *Eremophila alternifolia* |
| *Eremophila decipiens* |
| *Eremophila dempsteri* |
| *Eucalyptus loxophleba* subsp. *lissophloia* |
| *Grevillea acuaria* |
| *Leichhardtia australis* |
| *Maireana georgei* |
| *Maireana triptera* |
| *Neurachne alopecuroidea* |
| *Olearia muelleri* |
| *Olearia pimeleoides* |
| *Pimelea trichostachya* |
| *Ptilotus obovatus* |
| *Rhagodia eremaea* |
| *Roepera aurantiaca (A)* |
| *Santalum spicatum* |
| *Scaevola spinescens* |
| *Schoenia cassiniana (A)* |

| |
|---|
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |
| *Solanum lasiophyllum* |
| *Thysanotus manglesianus (A)* |
| *Waitzia acuminata (A)* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 617-619 |
| **Quadrat No:** Q6 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 354524E, 6487279N | | **Accuracy:** 2m |
| **Aspect:** North | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Granite/ 2-10%/ 2-6 mm | | |
| **Rock outcrop (abundance/runoff):** 20-50%/ Moderate | | |
| **Soil (profile/field texture/soil surface):** Light Brown/ Sandy Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 35% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** | **Height:** | **Height:** |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus loxophleba* subsp. *lissophloia* | *Dodonaea adenophora* | *Ptilotus obovatus* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia acuminata* |
| *Alyxia buxifolia* |
| *Austrostipa nitida* |
| *Cephalipterum drummondii (A)* |
| *Cheilanthes sieberi* |
| *Dodonaea adenophora* |
| *Eremophila dempsteri* |
| *Eremophila gibbosa* |
| *Eucalyptus loxophleba* subsp. *lissophloia* |
| *Leichhardtii australis* |
| *Maireana georgei* |
| *Maireana tomentosa* |
| *Mirbelia microphylla* |
| *Neurachne alopecuroidea* |
| *Olearia pimeleoides* |
| *Ptilotus obovatus* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |
| *Solanum lasiophyllum* |
| *Thysanotus manglesianus (A)* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Waitzia acuminata (A)* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 614-616 |
| **Quadrat No:** Q7 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 363341E, 6486963N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Granite/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Sandy Clay Loam | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** 50% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus loxophleba* subsp. *lissophloia* | *Dodonaea adenophora* | *Ptilotus obovatus* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia assimilis* |
| *Acacia chrysophylla* |
| *Austrostipa elegantissima* |
| *Dodonaea adenophora* |
| *Enchylaena tomentosa* |
| *Eremophila decipiens* |
| *Eremophila dempsteri* |
| *Eucalyptus loxophleba* subsp. *lissophloia* |
| *Exocarpos aphyllus* |
| *Maireana georgei* |
| *Maireana tomentosa* |
| *Melaleuca acuminata* |
| *Olearia muelleri* |
| *Olearia pimeleoides* |
| *Pimelea trichostachya* |
| *Prostanthera grylloana* |
| *Ptilotus obovatus* |
| *Rhagodia drummondii* |
| *Scaevola spinescens* |
| *Schoenia cassiniana (A)* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 611-613 |
| **Quadrat No:** Q8 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 363137E, 6487870N | | **Accuracy:** 2m |
| **Aspect:** South | **Fire (yrs):** +5 | **Condition rating:** |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** | | |
| **Rock outcrop (abundance/runoff):** | | |
| **Soil (profile/field texture/soil surface):** | | |
| **Cover leaf litter:** 70% | | |
| **Cover bare ground:** 20% | | |

| Upper stratum | Mid-stratum | Lower stratum |
|---|---|---|
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 15m | **Height:** <3 m | **Height:** <0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | *Exocarpos aphyllus* | *Sclerolaena diacantha* |
| | | |

| ALL TAXA |
|---|
| *Acacia assimilis* |
| *Acacia erinacea* |
| *Alyxia buxifolia* |
| *Cratystylis conocephala* |
| *Dillwynia acerosa* |
| *Eremophila dempsteri* |
| *Eremophila interstans* subsp. *interstans* |
| *Eucalyptus ravida* |
| *Eucalyptus salmonophloia* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana georgei* |
| *Maireana tomentosa* |
| *Maireana trichoptera* |
| *Pimelea microcephala* |
| *Ptilotus aervoides* |
| *Ptilotus exaltatus* |
| *Rhagodia eremaea* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |
| *Solanum nummularium* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 641-643 |
| **Quadrat No:** Q9 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 367812E, 6485498N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Simple slope | | |
| **Coarse fragments on the surface:** Quartz, Laterite, Sandstone/ 2-10%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 75% | | |
| **Cover bare ground:** 15% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus lesouefii* | *Exocarpos aphyllus* | *Eremophila caerulea* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia erinacea* |
| *Alyxia buxifolia* |
| *Austrostipa elegantissima* |
| *Cratystylis conocephala* |
| *Eremophila caerulea* |
| *Eremophila dempsteri* |
| *Eremophila psilocalyx* |
| *Eremophila scoparia* |
| *Eucalyptus lesouefii* |
| *Eucalyptus oleosa* |
| *Exocarpos aphyllus* |
| *Melaleuca pauperiflora* |
| *Olearia muelleri* |
| *Scaevola spinescens* |
| *Senna artemisioides* subsp. *filifolia* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 635-637 |
| **Quadrat No:** Q10 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 367705E, 6485062N | | **Accuracy:** 2m |
| **Aspect:** North | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Simple slope | | |
| **Coarse fragments on the surface:** Laterite, Limestone/ 50-90%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 60% | | |
| **Cover bare ground:** 30% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 3-5 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus urna* | *Melaleuca sheathiana* | *Olearia muelleri* |
| | | |

| **ALL TAXA** |
|---|
| *Alyxia buxifolia* |
| *Atriplex vesicaria* |
| *Eremophila caerulea* |
| *Eucalyptus urna* |
| *Exocarpos aphyllus* |
| *Melaleuca sheathiana* |
| *Olearia muelleri* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 638-640 |
| **Quadrat No:** Q11 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 368397E, 6484947N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, Laterite, Ironstone/ 2-10%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** <1m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus salmonophloia* | *Santalum acuminatum* | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia merrallii* |
| *Alyxia buxifolia* |
| *Asteridea athrixioides (A)* |
| *Eremophila acutifolia* |
| *Eremophila interstans* subsp. *interstans* |
| *Eriochiton sclerolaenoides* |
| *Eucalyptus prolixa* |
| *Eucalyptus salmonophloia* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana trichoptera* |
| *Ptilotus exaltatus (A)* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Sclerolaena cuneata* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 672-674 |
| **Quadrat No:** Q12 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 368142E, 6484441N | | **Accuracy:** 2m |
| **Aspect:** North East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, Ironstone/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 0.5-1 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** <10% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | *Exocarpos aphyllus* | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia colletioides* |
| *Acacia merrallii* |
| *Alyxia buxifolia* |
| *Eremophila acutifolia* |
| *Eremophila decipiens* |
| *Eremophila psilocalyx* |
| *Eriochiton sclerolaenoides* |
| *Eucalyptus ravida* |
| *Exocarpos aphyllus* |
| *Grevillea huegelii* |
| *Maireana trichoptera* |
| *Melaleuca laxiflora* |
| *Ptilotus exaltatus* |
| *Scaevola spinescens* |
| *Sclerolaena cuneata* |
| *Wilsonia humilis* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 675-677 |
| **Quadrat No:** Q13 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 367638E, 6484330N | | **Accuracy:** 2m |
| **Aspect:** South | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Crest | | |
| **Coarse fragments on the surface:** Quartz, Laterite/ 50-90%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil | | |
| **Soil (profile/field texture/soil surface):** Brown | | |
| **Cover leaf litter:** 60% | | |
| **Cover bare ground:** 30% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 3-5 m | **Height:** <1m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus lesouefii* | *Scaevola spinescens* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia erinacea* |
| *Eremophila caerulea* |
| *Eremophila psilocalyx* |
| *Eremophila saligna* |
| *Eriochiton sclerolaenoides* |
| *Eucalyptus lesouefii* |
| *Grevillea huegelii* |
| *Melaleuca pauperiflora* |
| *Olearia muelleri* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Westringia rigida* |
| *Wilsonia humilis* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 678-680 |
| **Quadrat No:** Q14 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 367077E, 6484167N | | **Accuracy:** 2m |
| **Aspect:** South West | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Crest | | |
| **Coarse fragments on the surface:** Laterite/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Moderate | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 35% | | |
| **Cover bare ground:** 50% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 3-5 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus stricklandii* | *Eremophila oppositifolia* | *Olearia muelleri* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia nyssophylla* |
| *Alyxia buxifolia* |
| *Eremophila caerulea* |
| *Eremophila oldfieldii* subsp. *angustifolia* |
| *Eremophila oppositifolia* |
| *Eremophila psilocalyx* |
| *Eucalyptus celastroides* |
| *Eucalyptus stricklandii* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana georgei* |
| *Olearia muelleri* |
| *Philotheca tomentella* |
| *Pigea floribunda* |
| *Santalum spicatum* |
| *Scaevola spinescens* |
| *Sclerolaena cuneata* |
| *Sclerolaena diacantha* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 684-686 |
| **Quadrat No:** Q15 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 366742E, 6484263N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Upper slope - Some crown decline occuring | | |
| **Coarse fragments on the surface:** Laterite, ironstone/ 50-90%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** 2%/ Moderate | | |
| **Soil (profile/field texture/soil surface): - /** Clay Loam | | |
| **Cover leaf litter:** | | |
| **Cover bare ground:** | | |

| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
|---|---|---|
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** <1m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus stricklandii* | *Alyxia buxifolia* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia erinacea* |
| *Acacia nyssophylla* |
| *Alyxia buxifolia* |
| *Dodonaea adenophora* |
| *Dodonaea stenozyga* |
| *Eremophila caerulea* |
| *Eremophila psilocalyx* |
| *Eucalyptus lesouefii* |
| *Eucalyptus stricklandii* |
| *Grevillea acuaria* |
| *Pigea floribunda* |
| *Olearia muelleri* |
| *Scaevola spinescens* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 632-634 |
| **Quadrat No:** Q16 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 366077E, 6485277N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, sandstone/ <2%/ 2-6 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ - | | |
| **Soil (profile/field texture/soil surface):** Red brown/ Clay Loam | | |
| **Cover leaf litter:** 30% | | |
| **Cover bare ground:** 60% | | |

| Upper stratum | Mid-stratum | Lower stratum |
|---|---|---|
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus salmonophloia* | *Eremophila scoparia* | *Olearia muelleri* |
| | | |

| ALL TAXA |
|---|
| *Acacia colletioides* |
| *Atriplex nummularia* |
| *Austrostipa elegantissima* |
| *Enchylaena tomentosa* |
| *Eremophila decipiens* |
| *Eremophila dempsteri* |
| *Eremophila ionantha* |
| *Eremophila scoparia* |
| *Eucalyptus salmonophloia* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana georgei* |
| *Maireana trichoptera* |
| *Maireana triptera* |
| *Olearia muelleri* |
| *Rhagodia eremaea* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 690-692 |
| **Quadrat No:** Q17 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 365021E, 6485456N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Greenstone, sandstone/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 65% | | |
| **Cover bare ground:** 25% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus lesouefii* | *Melaleuca sheathiana* | *Westringia rigida* |
| | | |
| **ALL TAXA** | | |
| *Cratystylis conocephala* | | |
| *Eremophila caerulea* | | |
| *Eucalyptus lesouefii* | | |
| *Eucalyptus urna* | | |
| *Exocarpos aphyllus* | | |
| *Melaleuca sheathiana* | | |
| *Scaevola spinescens* | | |
| *Tecticornia disarticulata* | | |
| *Westringia rigida* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 648-650 |
| **Quadrat No:** Q18 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 363973E, 6485598N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, greenstone/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 70% | | |
| **Cover bare ground:** 20% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus stricklandii* | *Eremophila oppositifolia* | *Olearia muelleri* |
| | | |

| **ALL TAXA** |
|---|
| *Alyxia buxifolia* |
| *Austrostipa elegantissima* |
| *Eremophila acutifolia* |
| *Eremophila caerulea* |
| *Eremophila dempsteri* |
| *Eremophila oldfieldii* susbp. *angustifolia* |
| *Eremophila oppositifolia* |
| *Eremophila saligna* |
| *Eucalyptus celastroides* |
| *Eucalyptus salmonophloia* |
| *Eucalyptus stricklandii* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana georgei* |
| *Olearia muelleri* |
| *Scaevola spinescens* |
| *Sclerolaena cuneata* |
| *Sclerolaena diacantha* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 654-656 |
| **Quadrat No:** Q19 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 364322E, 6484578N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, Ironstone/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** - | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 85% | | |
| **Cover bare ground:** 10% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | *Tecticornia disarticulata* | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Eremophila acutifolia* |
| *Eucalyptus ravida* |
| *Maireana trichoptera* |
| *Ptilotus holosericeus* |
| *Santalum acuminatum* |
| *Senna artemisioides* subsp. *filifolia* |
| *Tecticornia disarticulata* |
| *Wilsonia humilis* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 687-689 |
| **Quadrat No:** Q20 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 364922E, 6484261N | | **Accuracy:** 2m |
| **Aspect:** South | **Fire (yrs):** +5 | **Condition rating:** Good |
| **Landform:** | | |
| **Coarse fragments on the surface:** Ironstone pebbles/ 10-20%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** - | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus salmonophloia* | *Alyxia buxifolia* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia nyssophylla* |
| *Acacia erinacea* |
| *Alyxia buxifolia* |
| *Austrostipa elegantissima* |
| *Eremophila caerulea* |
| *Eremophila dempsteri* |
| *Eucalyptus salmonophloia* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Maireana georgei* |
| *Olearia muelleri* |
| *Scaevola spinescens* |
| *Westringia cephalantha* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 629-631 |
| **Quadrat No:** Q21 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 365759E, 6485682N | | **Accuracy:** 2m |
| **Aspect:** South | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Ironstone, limestone/ 10-20%/ 2-6 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** 50% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 3-5 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** <1% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus urna* | *Melaleuca sheathiana* | *Ptilotus obovatus* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia duriuscula* |
| *Alyxia buxifolia* |
| *Atriplex vesicaria* |
| *Eremophila caerulea* |
| *Eremophila dempsteri* |
| *Eremophila ionantha* |
| *Eucalyptus urna* |
| *Exocarpos aphyllus* |
| *Maireana pentatropis* |
| *Maireana triptera* |
| *Melaleuca sheathiana* |
| *Olearia muelleri* |
| *Ptilotus obovatus* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** |
| **Quadrat No:** Q22 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 366233E, 6486087N | | **Accuracy:** 2m |
| **Aspect:** East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Greenstone/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Moderately | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** 50% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus torquata* | *Eremophila psilocalyx* | *Ptilotus obovatus* |
| | | |

| **ALL TAXA** |
|---|
| *Atriplex nummularia* |
| *Atriplex vesicaria* |
| *Austrostipa nitida* |
| *Dodonaea lobulata* |
| *Eremophila glabra* |
| *Eremophila psilocalyx* |
| *Eucalyptus lesouefii* |
| *Eucalyptus salmonophloia* |
| *Eucalyptus torquata* |
| *Exocarpos aphyllus* |
| *Maireana pentatropis* |
| *Maireana tomentosa* |
| *Maireana trichoptera* |
| *Olearia muelleri* |
| *Ptilotus obovatus* |
| *Roepera glauca* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 626-628 |
| **Quadrat No:** Q23 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 365502E, 6486741N | | **Accuracy:** 2m |
| **Aspect:** North | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Greenstone/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Moderately | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus torquata* | *Alyxia buxifolia* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia nyssophylla* |
| *Alyxia buxifolia* |
| *Atriplex nummularia* |
| *Austrostipa elegantissima* |
| *Austrostipa nitida* |
| *Dodonaea stenozyga* |
| *Eremophila caerulea* |
| *Eremophila psilocalyx* |
| *Eriochiton sclerolaenoides* |
| *Eucalyptus torquata* |
| *Exocarpos aphyllus* |
| *Maireana pentatropis* |
| *Maireana tomentosa* |
| *Olearia muelleri* |
| *Ptilotus obovatus* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 654-656 |
| **Quadrat No:** Q24 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 369557E, 6487289N | | **Accuracy:** 2m |
| **Aspect:** North East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Ironstone pebbles, limestone/ 2-10%/ 2-6 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** Brown/ Sandy Clay Loam | | |
| **Cover leaf litter:** 60% | | |
| **Cover bare ground:** 35% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 3-5 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus urna* | *Melaleuca sheathiana* | *Eremophila caerulea* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia colletioides* |
| *Acacia duriuscula* |
| *Austrostipa elegantissima* |
| *Daviesia benthamii* |
| *Eremophila caerulea* |
| *Eremophila scoparia* |
| *Eucalyptus salubris* |
| *Eucalyptus urna* |
| *Exocarpos aphyllus* |
| *Melaleuca sheathiana* |
| *Olearia muelleri* |
| *Roepera glauca (A)* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Senna artemisioides* subsp. *filifolia* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 657-659 |
| **Quadrat No:** Q25 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 370645E, 6487255N | | **Accuracy:** 2m |
| **Aspect:** North | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Quartz, Ironstone/ 20-50%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** Red-brown/ Clay Loam | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** 40% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus prolixa* | *Eremophila dempsteri* | *Eremophila acutifolia* |
| | | |
| **ALL TAXA** | | |
| *Eremophila acutifolia* | | |
| *Eremophila dempsteri* | | |
| *Eucalyptus prolixa* | | |
| *Eucalyptus salmonophloia* | | |
| *Exocarpos aphyllus* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 660-662 |
| **Quadrat No:** Q26 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 371220E, 6487289N | | **Accuracy:** 2m |
| **Aspect:** North East | **Fire (yrs):** +5 | **Condition rating:** Very Good |
| **Landform:** Flat | | |
| **Coarse fragments on the surface:** Limestone/ 2-10%/ 6-20 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Very Slow | | |
| **Soil (profile/field texture/soil surface):** - / Clay Loam | | |
| **Cover leaf litter:** 90% | | |
| **Cover bare ground:** 10% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** - | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** - | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** - | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | Nothing dominant | *Eremophila acutifolia* |
| | | |

| **ALL TAXA** |
|---|
| *Alyxia buxifolia* |
| *Austrostipa elegantissima* |
| *Eremophila acutifolia* |
| *Eucalyptus ravida* |
| *Eucalyptus urna* |
| *Maireana georgei* |
| *Maireana sedifolia* |
| *Ptilotus holosericeus* |
| *Ptilotus obovatus* |
| *Sclerolaena parviflora* |
| *Templetonia ceracea* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 18/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 663-665 |
| **Quadrat No:** Q27 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 6487269N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Good |
| **Landform:** Upper slope | | |
| **Coarse fragments on the surface**: Laterite/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Moderate | | |
| **Soil (profile/field texture/soil surface):** Red-Brown/ Clay Loam | | |
| **Cover leaf litter:** 60% | | |
| **Cover bare ground:** 30% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** - |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** - |
| **Crown cover:** 30-70% | **Crown cover:** 30-70% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus stricklandii* | *Trymalium myrtillus* subsp. *myrtillus* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Alyxia buxifolia* |
| *Atriplex vesicaria* |
| *Austrostipa elegantissima* |
| *Dodonaea stenozyga* |
| *Eremophila caerulea* |
| *Eucalyptus stricklandii* |
| *Eucalyptus torquata* |
| *Exocarpos aphyllus* |
| *Grevillea acuaria* |
| *Melaleuca sheathiana* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Senna artemisioides* subsp. *filifolia* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 19/09/2023 | **Botanist:** JJ | **Photo number (NW corner):** 696-698 |
| **Quadrat No:** Q28 | **Quadrat size/shape:** 20m x 20m | **Elevation (m):** |
| **Coordinates (GDA2020):** 51 J 372963E, 6487206N | | **Accuracy:** 2m |
| **Aspect:** South East | **Fire (yrs):** +5 | **Condition rating:** Good |
| **Landform:** Upper slope | | |
| **Coarse fragments on the surface**: Quartz, laterite/ 50-90%/ 20-60 mm | | |
| **Rock outcrop (abundance/runoff):** Nil/ Moderate | | |
| **Soil (profile/field texture/soil surface):** Brown/ Clay Loam | | |
| **Cover leaf litter:** 80% | | |
| **Cover bare ground:** 20% | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 5-12 m | **Height:** 1-3 m | **Height:** 0.25-0.5 m |
| **Crown cover:** 30-70% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus torquata* | *Trymalium myrtillus* subsp. *myrtillus* | *Westringia rigida* |
| | | |

| **ALL TAXA** |
|---|
| *Acacia erinacea* |
| *Alyxia buxifolia* |
| *Dodonaea lobulata* |
| *Eremophila glabra* |
| *Eremophila psilocalyx* |
| *Eucalyptus torquata* |
| *Exocarpos aphyllus* |
| *Roepera glauca* |
| *Roepera eremaea* |
| *Santalum acuminatum* |
| *Scaevola spinescens* |
| *Sclerolaena diacantha* |
| *Senna artemisioides* subsp. *filifolia* |
| *Thysanotus manglesianus* |
| *Trymalium myrtillus* subsp. *myrtillus* |
| *Westringia rigida* |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** 624, 623, 626 |
| **Quadrat:** Q29 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 142 |
| **Coordinates (GDA2020):** 367411E 6483057N | | |
| **Aspect:** Flat | **Fire (yrs):** | **Condition rating:** Very good |
| **Landform:** Crest, Flat | | |
| **Coarse fragments on the surface:** No coarse fragments | | |
| **Rock outcrop (abundance/runoff):** No bedrock exposed, No runoff | | |
| **Soil (profile/field texture/soil surface):** Clay Loam | | |
| **Cover leaf litter:** 30% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 20-25 m | **Height:** 3-6 m | **Height:** 0.5-1 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 10-30% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus celastroides* | *Melaleuca sheathiana* | *Scaevola spinescens* |
| **ALL TAXA** | | |
| *Acacia erinacea* | | |
| *Cratystylis conocephala* | | |
| *Eremophila caerulea* subsp. *caerulea* | | |
| *Eucalyptus celastroides* | | |
| *Eucalyptus ravida* | | |
| *Grevillea acuaria* | | |
| *Melaleuca sheathiana* | | |
| *Olearia muelleri* | | |
| *Sclerolaena cuneata* | | |
| *Scaevola spinescens* | | |
| *Templetonia ceracea* | | |
| *Wilsonia humilis* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** phone photos 10:39am x3 |
| **Quadrat:** Q30 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 143 |
| **Coordinates (GDA2020):** 367637E 6483760N | | |
| **Aspect:** Flat | **Fire (yrs):** 20+ | **Condition rating:** Very good |
| **Landform:** Flat, plain | | |
| **Coarse fragments on the surface:** No coarse fragments, no effective disturbance | | |
| **Rock outcrop (abundance/runoff):** No bedrock exposed | | |
| **Soil (profile/field texture/soil surface):** Clay Loam | | |
| **Cover leaf litter:** 50% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub mallee (<8m) | **Growth form:** Shrub |
| **Height:** 12-20 m | **Height:** 6-12 m | **Height:** 0.5-1 m |
| **Crown cover:** 10-30% | **Crown cover:** 30-70% | **Crown cover:** Isolated plants <1 |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus urna* | *Melaleuca sheathiana* | |
| **ALL TAXA** | | |
| *Alyxia buxifolia* | | |
| *Eucalyptus urna* | | |
| *Eremophila caerulea* subsp. *caerulea* | | |
| *Melaleuca sheathiana* | | |
| *Olearia muelleri* | | |
| *Santalum acuminatum* | | |
| *Scaevola spinescens* | | |
| *Westringia rigida* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** phone photos 11:19am |
| **Quadrat:** Q31 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 144 |
| **Coordinates (GDA2020):** 367249E 6483898N | | |
| **Aspect:** SE | **Fire (yrs):** | **Condition rating:** Very good |
| **Landform:** Simple slope**,** Hill slope | | |
| **Coarse fragments on the surface:** Extremely; very abundant, medium gravelly; medium pebbles, subrounded | | |
| **Rock outcrop (abundance/runoff):** No bedrock exposed | | |
| **Soil (profile/field texture/soil surface):** Clay Loam**,** lowslope, gravelly hill | | |
| **Cover leaf litter:** 40% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Shrub | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 3-6 m | **Height:** 3-6 m | **Height:** 0.5-1 m |
| **Crown cover:** | **Crown cover:** >70**%** | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| | *Casuarina pauper* | |
| **ALL TAXA** | | |
| *Acacia acuminata* | | |
| *Alyxia buxifolia* | | |
| *Casuarina pauper* | | |
| *Eremophila caerulea* subsp. *caerulea* | | |
| *Eremophila granitica* | | |
| *Neurachne alopecuroidea* | | |
| *Prostanthera grylloana* | | |
| *Scaevola spinescens* | | |
| *Trymalium myrtillus* subsp. *myrtillus* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** phone photos 12:18 |
| **Quadrat:** Q32 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 146 |
| **Coordinates (GDA2020):** 367383E 6483378N | | |
| **Aspect:** Flat | **Fire (yrs):** | **Condition rating:** |
| **Landform:** Plain | | |
| **Coarse fragments on the surface:** No coarse fragments, No effective disturbance | | |
| **Rock outcrop (abundance/runoff):** No bedrock exposed | | |
| **Soil (profile/field texture/soil surface):** Clay Loam | | |
| **Cover leaf litter:** 60% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 12-20 m | **Height:** 1-3 m | **Height:** 0.5-1 m |
| **Crown cover:** 30-70% | **Crown cover:** <10% | **Crown cover:** <10% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus ravida* | *Santalum acuminatum* | *Eremophila caerulea* subsp. *caerulea* |
| **ALL TAXA** | | |
| *Eucalyptus ravida* | | |
| *Eremophila caerulea* subsp. *caerulea* | | |
| *Ptilotus obovatus* | | |
| *Santalum acuminatum* | | |
| *Scaevola spinescens* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** |
| **Quadrat:** Q33 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 147 |
| **Coordinates (GDA2020):** 367575E 6483456N | | |
| **Aspect:** Flat | **Fire (yrs):** | **Condition rating:** Very good |
| **Landform:** Flat, plain | | |
| **Coarse fragments on the surface:** No coarse fragments, no effective disturbance | | |
| **Rock outcrop (abundance/runoff):** | | |
| **Soil (profile/field texture/soil surface):** Clay Loam | | |
| **Cover leaf litter:** 30% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** Tree | **Growth form:** Shrub | **Growth form:** Shrub |
| **Height:** 12-20m | **Height:** 3-6 m | **Height:** 0.5-1 m |
| **Crown cover:** 10-30% | **Crown cover:** 10-30% | **Crown cover:** 30-70% |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Eucalyptus celastroides* | | *Scaevola spinescens* |
| **ALL TAXA** | | |
| *Acacia erinacea* | | |
| *Alyxia buxifolia* | | |
| *Eremophila dempsteri* | | |
| *Eucalyptus celastroides* | | |
| *Eucalyptus ravida* | | |
| *Eremophila caerulea* subsp. *caerulea* | | |
| *Exocarpos aphyllus* | | |
| *Melaleuca pauperiflora* subsp. *pauperiflora* | | |
| *Olearia muelleri* | | |
| *Ptilotus obovatus* | | |
| *Sclerolaena uniflora* | | |
| *Scaevola spinescens* | | |

| **Project Name: Dome North** | | |
|---|---|---|
| **Date:** 26/10/23 | **Botanist:** AW | **Photo (NW corner):** 267, 268, 269 |
| **Quadrat:** Q34 | **Quadrat size:** 20m x 20m | **Waypoint (NW corner):** 149 |
| **Coordinates (GDA2020):** 367734E 6482877N | | |
| **Aspect:** Flat | **Fire (yrs):** | **Condition rating:** |
| **Landform:** Flat, plain | | |
| **Coarse fragments on the surface:** No coarse fragments, no effective disturbance | | |
| **Rock outcrop (abundance/runoff):** slightly rocky (2-10%) granite exposed | | |
| **Soil (profile/field texture/soil surface):** Sand | | |
| **Cover leaf litter:** 80% | | |
| **Cover bare ground:** | | |
| **Upper stratum** | **Mid-stratum** | **Lower stratum** |
| **Growth form:** shrub | **Growth form:** Shrub | **Growth form:** Hummock grass |
| **Height:** 3-6 m | **Height:** 0.5-1 m | **Height:** |
| **Crown cover:** | **Crown cover:** | **Crown cover:** |
| **Dominant taxa:** | **Dominant taxa:** | **Dominant taxa:** |
| *Acacia yorkrakinensis* | *Olearia muelleri* | *Triodia rigidissima* |
| **ALL TAXA** | | |
| *Acacia yorkrakinensis* | | |
| *Cryptandra graniticola* | | |
| *Olearia muelleri* | | |
| *Triodia rigidissima* | | |
| *Westringia cephalantha* | | |

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

## VASCULAR FLORA

| Family | Taxon |
|---|---|
| Aizoaceae | *Gunniopsis glabra* |
| Aizoaceae | *Gunniopsis intermedia* |
| Aizoaceae | *Gunniopsis rodwayi* |
| Amaranthaceae | *Ptilotus carlsonii* |
| Amaranthaceae | *Ptilotus exiliflorus* |
| Amaranthaceae | *Ptilotus gaudichaudii* |
| Amaranthaceae | *Ptilotus helichrysoides* |
| Amaranthaceae | *Ptilotus holosericeus* |
| Amaranthaceae | *Ptilotus nobilis subsp. nobilis* |
| Amaranthaceae | *Ptilotus obovatus* |
| Amaranthaceae | *Ptilotus rigidus* |
| Amaranthaceae | *Surreya diandra* |
| Apiaceae | *Daucus glochidiatus* |
| Apocynaceae | *Alyxia buxifolia* |
| Apocynaceae | *Marsdenia australis* |
| Apocynaceae | *Vincetoxicum lineare* |
| Araliaceae | *Hydrocotyle rugulosa* |
| Araliaceae | *Trachymene cyanopetala* |
| Araliaceae | *Trachymene ornata* |
| Araliaceae | *Trachymene pyrophila* |
| Asparagaceae | *Chamaexeros fimbriata* |
| Asparagaceae | *Lomandra effusa* |
| Asparagaceae | *Thysanotus manglesianus* |
| Asparagaceae | *Thysanotus speckii* |
| Aspleniaceae | *Pleurosorus rutifolius* |
| Asteraceae | *Actinobole uliginosum* |
| Asteraceae | *Angianthus preissianus* |
| Asteraceae | *Angianthus tomentosus* |
| Asteraceae | *Asteridea athrixioides* |
| Asteraceae | *Blennospora drummondii* |
| Asteraceae | *Brachyscome ciliaris* |
| Asteraceae | *Brachyscome iberidifolia* |
| Asteraceae | *Brachyscome perpusilla* |
| Asteraceae | *Calotis hispidula* |
| Asteraceae | *Centaurea melitensis* |
| Asteraceae | *Cephalipterum drummondii* |
| Asteraceae | *Chrysocephalum apiculatum* subsp. *norsemanense* |
| Asteraceae | *Chrysocephalum puteale* |
| Asteraceae | *Chthonocephalus pseudevax* |
| Asteraceae | *Cratystylis conocephala* |
| Asteraceae | *Cratystylis microphylla* |
| Asteraceae | *Cratystylis subspinescens* |
| Asteraceae | *Erymophyllum ramosum* subsp. *ramosum* |
| Asteraceae | *Gnephosis angianthoides* |
| Asteraceae | *Gnephosis tenuissima* |
| Asteraceae | *Gnephosis tridens* |
| Asteraceae | *Hyalosperma demissum* |
| Asteraceae | *Hyalosperma glutinosum* |
| Asteraceae | *Hyalosperma glutinosum* subsp. *glutinosum* |
| Asteraceae | *Hypochaeris glabra* |
| Asteraceae | *Isoetopsis graminifolia* |
| Asteraceae | *Leiocarpa semicalva* |
| Asteraceae | *Leucochrysum fitzgibbonii* |
| Asteraceae | *Millotia myosotidifolia* |

| Family | Taxon |
|---|---|
| Asteraceae | *Minuria cunninghamii* |
| Asteraceae | *Minuria gardneri* |
| Asteraceae | *Monoculus monstrosus* |
| Asteraceae | *Myriocephalus pygmaeus* |
| Asteraceae | *Notisia intonsa* |
| Asteraceae | *Olearia exiguifolia* |
| Asteraceae | *Olearia muelleri* |
| Asteraceae | *Olearia pimeleoides* |
| Asteraceae | *Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628) |
| Asteraceae | *Olearia trifurcata* |
| Asteraceae | *Oligocarpus calendulaceus* |
| Asteraceae | *Oncosiphon suffruticosum* |
| Asteraceae | *Podolepis aristata* subsp. *affinis* |
| Asteraceae | *Podolepis capillaris* |
| Asteraceae | *Podolepis lessonii* |
| Asteraceae | *Podolepis rugata* subsp. *rugata* |
| Asteraceae | *Podolepis tepperi* |
| Asteraceae | *Podotheca wilsonii* |
| Asteraceae | *Quinetia urvillei* |
| Asteraceae | *Rhodanthe battii* |
| Asteraceae | *Rhodanthe chlorocephala* |
| Asteraceae | *Rhodanthe chlorocephala* subsp. *rosea* |
| Asteraceae | *Rhodanthe floribunda* |
| Asteraceae | *Rhodanthe haigii* |
| Asteraceae | *Rhodanthe laevis* |
| Asteraceae | *Rhodanthe oppositifolia* subsp. *oppositifolia* |
| Asteraceae | *Rhodanthe pygmaea* |
| Asteraceae | *Rhodanthe rubella* |
| Asteraceae | *Rhodanthe stricta* |
| Asteraceae | *Schoenia cassiniana* |
| Asteraceae | *Senecio glossanthus* |
| Asteraceae | *Senecio lacustrinus* |
| Asteraceae | *Senecio microbasis* |
| Asteraceae | *Senecio pinnatifolius* |
| Asteraceae | *Senecio spanomerus* |
| Asteraceae | *Sonchus oleraceus* |
| Asteraceae | *Streptoglossa liatroides* |
| Asteraceae | *Trichanthodium skirrophorum* |
| Asteraceae | *Triptilodiscus pygmaeus* |
| Asteraceae | *Vittadinia dissecta* var. *hirta* |
| Asteraceae | *Waitzia acuminata* |
| Asteraceae | *Waitzia acuminata* var. *acuminata* |
| Asteraceae | *Waitzia fitzgibbonii* |
| Asteraceae | *Waitzia suaveolens* var. *flava* |
| Boraginaceae | *Halgania andromedifolia* |
| Boraginaceae | *Halgania cyanea* |
| Boraginaceae | *Halgania cyanea* var. Charleville (R.W.Purdie+ 111) |
| Boraginaceae | *Halgania cyanea* var. *cyanea* |
| Boraginaceae | *Halgania integerrima* |
| Boraginaceae | *Halgania lavandulacea* |
| Boraginaceae | *Plagiobothrys australasicus* |
| Boryaceae | *Borya constricta* |
| Brassicaceae | *Arabidella chrysodema* |
| Brassicaceae | *Brassica rapa* |
| Brassicaceae | *Carrichtera annua* |
| Brassicaceae | *Lepidium oxytrichum* |
| Brassicaceae | *Lepidium platypetalum* |
| Brassicaceae | *Phlegmatospermum eremaeum* |
| Brassicaceae | *Sisymbrium erysimoides* |

| Family | Taxon |
|---|---|
| Brassicaceae | *Stenopetalum anfractum* |
| Brassicaceae | *Stenopetalum filifolium* |
| Brassicaceae | *Stenopetalum lineare* var. *lineare* |
| Campanulaceae | *Lobelia cleistogamoides* |
| Caryophyllaceae | *Stellaria filiformis* |
| Casuarinaceae | *Allocasuarina acutivalvis* subsp. *acutivalvis* |
| Casuarinaceae | *Allocasuarina campestris* |
| Casuarinaceae | *Allocasuarina corniculata* |
| Casuarinaceae | *Allocasuarina eriochlamys* subsp. *grossa* |
| Casuarinaceae | *Allocasuarina helmsii* |
| Casuarinaceae | *Allocasuarina huegeliana* |
| Casuarinaceae | *Casuarina obesa* |
| Celastraceae | *Stackhousia monogyna* |
| Celastraceae | *Stackhousia* sp. Mt Keith (G.Cockerton & G.O'Keefe 11017) |
| Celastraceae | *Stackhousia* sp. Swollen gynophore (W.R.Barker 2041) |
| Centrolepidaceae | *Centrolepis cephaloformis* subsp. *cephaloformis* |
| Centrolepidaceae | *Centrolepis polygyna* |
| Chenopodiaceae | *Atriplex acutibractea* subsp. *karoniensis* |
| Chenopodiaceae | *Atriplex bunburyana* |
| Chenopodiaceae | *Atriplex codonocarpa* |
| Chenopodiaceae | *Atriplex eardleyae* |
| Chenopodiaceae | *Atriplex nana* |
| Chenopodiaceae | *Atriplex nummularia* |
| Chenopodiaceae | *Atriplex nummularia* subsp. *spathulata* |
| Chenopodiaceae | *Atriplex quadrivalvata* var. *quadrivalvata* |
| Chenopodiaceae | *Atriplex vesicaria* |
| Chenopodiaceae | *Dissocarpus paradoxus* |
| Chenopodiaceae | *Enchylaena tomentosa* |
| Chenopodiaceae | *Eriochiton sclerolaenoides* |
| Chenopodiaceae | *Maireana amoena* |
| Chenopodiaceae | *Maireana appressa* |
| Chenopodiaceae | *Maireana eriosphaera* |
| Chenopodiaceae | *Maireana georgei* |
| Chenopodiaceae | *Maireana marginata* |
| Chenopodiaceae | *Maireana oppositifolia* |
| Chenopodiaceae | *Maireana pentatropis* |
| Chenopodiaceae | *Maireana pyramidata* |
| Chenopodiaceae | *Maireana radiata* |
| Chenopodiaceae | *Maireana suaedifolia* |
| Chenopodiaceae | *Maireana tomentosa* |
| Chenopodiaceae | *Maireana tomentosa* subsp. *tomentosa* |
| Chenopodiaceae | *Maireana trichoptera* |
| Chenopodiaceae | *Rhagodia crassifolia* |
| Chenopodiaceae | *Rhagodia drummondii* |
| Chenopodiaceae | *Salsola australis* |
| Chenopodiaceae | *Sclerolaena articulata* |
| Chenopodiaceae | *Sclerolaena cuneata* |
| Chenopodiaceae | *Sclerolaena diacantha* |
| Chenopodiaceae | *Sclerolaena drummondii* |
| Chenopodiaceae | *Sclerolaena eurotioides* |
| Chenopodiaceae | *Sclerolaena obliquicuspis* |
| Chenopodiaceae | *Sclerolaena parviflora* |
| Chenopodiaceae | *Tecticornia disarticulata* |
| Chenopodiaceae | *Tecticornia flabelliformis* |
| Chenopodiaceae | *Tecticornia halocnemoides* |
| Chenopodiaceae | *Tecticornia halocnemoides* subsp. *halocnemoides* |
| Chenopodiaceae | *Tecticornia indica* subsp. *leiostachya* |
| Chenopodiaceae | *Tecticornia lepidosperma* |
| Chenopodiaceae | *Tecticornia loriae* |

| Family | Taxon |
|---|---|
| Chenopodiaceae | *Tecticornia lylei* |
| Chenopodiaceae | *Tecticornia mellarium* |
| Chenopodiaceae | *Tecticornia moniliformis* |
| Chenopodiaceae | *Tecticornia peltata* |
| Chenopodiaceae | *Tecticornia pergranulata* subsp. *pergranulata* |
| Chenopodiaceae | *Tecticornia pruinosa* |
| Chenopodiaceae | *Tecticornia syncarpa* |
| Colchicaceae | *Wurmbea tenella* |
| Convolvulaceae | *Wilsonia humilis* |
| Crassulaceae | *Crassula colorata* |
| Crassulaceae | *Crassula exserta* |
| Crassulaceae | *Crassula extrorsa* |
| Cupressaceae | *Callitris glaucophylla* |
| Cupressaceae | *Callitris preissii* |
| Cupressaceae | *Callitris tuberculata* |
| Cyperaceae | *Lepidosperma lyonsii* |
| Cyperaceae | *Lepidosperma sanguinolentum* |
| Cyperaceae | *Schoenus nanus* |
| Dilleniaceae | *Hibbertia exasperata* |
| Dilleniaceae | *Hibbertia pungens* |
| Dilleniaceae | *Hibbertia* sp. |
| Droseraceae | *Drosera yilgarnensis* |
| Ericaceae | *Conostephium preissii* |
| Ericaceae | *Conostephium roei* |
| Ericaceae | *Leucopogon* sp. |
| Ericaceae | *Leucopogon* sp. Boorabbin (K.R.Newbey 8374) |
| Ericaceae | *Leucopogon* sp. Clyde Hill (M.A.Burgman 1207) |
| Ericaceae | *Leucopogon* sp. Coolgardie (M.Hislop & F.Hort MH3197) |
| Ericaceae | *Styphelia hamulosa* |
| Ericaceae | *Lysinema ciliatum* |
| Euphorbiaceae | *Bertya dimerostigma* |
| Euphorbiaceae | *Bertya virgata* |
| Euphorbiaceae | *Beyeria lechenaultii* |
| Euphorbiaceae | *Beyeria sulcata* var. *truncata* |
| Euphorbiaceae | *Euphorbia multifaria* |
| Euphorbiaceae | *Euphorbia tannensis* subsp. *eremophila* |
| Euphorbiaceae | *Ricinocarpos muricatus* |
| Euphorbiaceae | *Ricinocarpos stylosus* |
| Fabaceae | *Acacia acanthoclada* subsp. *acanthoclada* |
| Fabaceae | *Acacia acuminata* |
| Fabaceae | *Acacia blaxellii* |
| Fabaceae | *Acacia brachyclada* |
| Fabaceae | *Acacia camptoclada* |
| Fabaceae | *Acacia castanostegia* |
| Fabaceae | *Acacia chrysella* |
| Fabaceae | *Acacia collegialis* |
| Fabaceae | *Acacia cylindrica* |
| Fabaceae | *Acacia deficiens* |
| Fabaceae | *Acacia dempsteri* |
| Fabaceae | *Acacia dissona* var. *indoloria* |
| Fabaceae | *Acacia donaldsonii* |
| Fabaceae | *Acacia dorsenna* |
| Fabaceae | *Acacia duriuscula* |
| Fabaceae | *Acacia enervia* subsp. *enervia* |
| Fabaceae | *Acacia eremophila* var. *eremophila* |
| Fabaceae | *Acacia erinacea* |
| Fabaceae | *Acacia fraternalis* |
| Fabaceae | *Acacia hadrophylla* |
| Fabaceae | *Acacia harveyi* |

| Family | Taxon |
|---|---|
| Fabaceae | *Acacia hemiteles* |
| Fabaceae | *Acacia inamabilis* |
| Fabaceae | *Acacia intricata* |
| Fabaceae | *Acacia jennerae* |
| Fabaceae | *Acacia kerryana* |
| Fabaceae | *Acacia lasiocalyx* |
| Fabaceae | *Acacia ligulata* |
| Fabaceae | *Acacia longispinea* |
| Fabaceae | *Acacia merrallii* |
| Fabaceae | *Acacia multispicata* |
| Fabaceae | *Acacia murrayana* |
| Fabaceae | *Acacia neurophylla* subsp. *neurophylla* |
| Fabaceae | *Acacia nyssophylla* |
| Fabaceae | *Acacia pachypoda* |
| Fabaceae | *Acacia poliochroa* |
| Fabaceae | *Acacia prainii* |
| Fabaceae | *Acacia pritzeliana* |
| Fabaceae | *Acacia quadrimarginea* |
| Fabaceae | *Acacia resinimarginea* |
| Fabaceae | *Acacia resinistipulea* |
| Fabaceae | *Acacia sessilispica* |
| Fabaceae | *Acacia tetragonophylla* |
| Fabaceae | *Acacia triptycha* |
| Fabaceae | *Acacia uncinella* |
| Fabaceae | *Acacia warramaba* |
| Fabaceae | *Bossiaea aurantiaca* |
| Fabaceae | *Bossiaea cucullata* |
| Fabaceae | *Bossiaea laxa* |
| Fabaceae | *Bossiaea leptacantha* |
| Fabaceae | *Bossiaea saxosa* |
| Fabaceae | *Bossiaea walkeri* |
| Fabaceae | *Daviesia argillacea* |
| Fabaceae | *Daviesia benthamii* subsp. *acanthoclona* |
| Fabaceae | *Daviesia pachyloma* |
| Fabaceae | *Daviesia rubiginosa* |
| Fabaceae | *Eutaxia leptophylla* |
| Fabaceae | *Gastrolobium discolor* |
| Fabaceae | *Gastrolobium parviflorum* |
| Fabaceae | *Gastrolobium spinosum* |
| Fabaceae | *Glycine peratosa* |
| Fabaceae | *Glycyrrhiza acanthocarpa* |
| Fabaceae | *Gompholobium gompholobioides* |
| Fabaceae | *Goodia medicaginea* |
| Fabaceae | *Goodia stenocarpa* |
| Fabaceae | *Indigofera australis* subsp. *hesperia* |
| Fabaceae | *Jacksonia arida* |
| Fabaceae | *Kennedia prorepens* |
| Fabaceae | *Leptosema cervicorne* |
| Fabaceae | *Mirbelia depressa* |
| Fabaceae | *Mirbelia microphylla* |
| Fabaceae | *Mirbelia multicaulis* |
| Fabaceae | *Petalostylis cassioides* |
| Fabaceae | *Senna artemisioides* |
| Fabaceae | *Senna artemisioides* subsp. *filifolia* |
| Fabaceae | *Senna artemisioides* subsp. *x coriacea* |
| Fabaceae | *Senna manicula* |
| Fabaceae | *Senna* sp. Pallinup River (J.W.Green 4847) |
| Fabaceae | *Senna stowardii* |
| Fabaceae | *Swainsona beasleyana* |

| Family | Taxon |
|---|---|
| Fabaceae | *Swainsona canescens* |
| Fabaceae | *Swainsona colutoides* |
| Fabaceae | *Swainsona oligophylla* |
| Fabaceae | *Templetonia ceracea* |
| Frankeniaceae | *Frankenia cinerea* |
| Frankeniaceae | *Frankenia desertorum* |
| Frankeniaceae | *Frankenia glomerata* |
| Frankeniaceae | *Frankenia interioris* |
| Frankeniaceae | *Frankenia interioris* var. *interioris* |
| Frankeniaceae | *Frankenia irregularis* |
| Frankeniaceae | *Frankenia pauciflora* var. *pauciflora* |
| Frankeniaceae | *Frankenia setosa* |
| Geraniaceae | *Erodium cicutarium* |
| Geraniaceae | *Erodium crinitum* |
| Goodeniaceae | *Brunonia australis* |
| Goodeniaceae | *Dampiera fasciculata* |
| Goodeniaceae | *Dampiera latealata* |
| Goodeniaceae | *Dampiera lavandulacea* |
| Goodeniaceae | *Dampiera luteiflora* |
| Goodeniaceae | *Dampiera tenuicaulis* var. *tenuicaulis* |
| Goodeniaceae | *Goodenia berardiana* |
| Goodeniaceae | *Goodenia coerulea* |
| Goodeniaceae | *Goodenia concinna* |
| Goodeniaceae | *Goodenia corralina* |
| Goodeniaceae | *Goodenia elderi* |
| Goodeniaceae | *Goodenia havilandii* |
| Goodeniaceae | *Goodenia helmsii* |
| Goodeniaceae | *Goodenia mimuloides* |
| Goodeniaceae | *Goodenia occidentalis* |
| Goodeniaceae | *Scaevola bursariifolia* |
| Goodeniaceae | *Scaevola oxyclona* |
| Goodeniaceae | *Scaevola restiacea* subsp. *divaricata* |
| Goodeniaceae | *Scaevola spinescens* |
| Goodeniaceae | *Scaevola thesioides* subsp. *filifolia* |
| Goodeniaceae | *Verreauxia dyeri* |
| Gyrostemonaceae | *Codonocarpus cotinifolius* |
| Haloragaceae | *Haloragis dura* |
| Haloragaceae | *Haloragis gossei* |
| Haloragaceae | *Haloragis trigonocarpa* |
| Haloragaceae | *Myriophyllum petraeum* |
| Hemerocallidaceae | *Agrostocrinum scabrum* subsp. *scabrum* |
| Hemerocallidaceae | *Dianella revoluta* |
| Hemerocallidaceae | *Dianella revoluta 'DR5000'* |
| Hemerocallidaceae | *Stypandra glauca* |
| Hypericaceae | *Hypericum gramineum* |
| Isoetaceae | *Isoetes australis* |
| Isoetaceae | *Isoetes brevicula* |
| Isoetaceae | *Isoetes inflata* |
| Lamiaceae | *Cyanostegia angustifolia* |
| Lamiaceae | *Cyanostegia microphylla* |
| Lamiaceae | *Dicrastylis parvifolia* |
| Lamiaceae | *Hemiphora elderi* |
| Lamiaceae | *Lachnostachys verbascifolia* var. *paniculata* |
| Lamiaceae | *Newcastelia insignis* |
| Lamiaceae | *Pityrodia chrysocalyx* |
| Lamiaceae | *Pityrodia scabra* subsp. *dendrotricha* |
| Lamiaceae | *Prostanthera althoferi* |
| Lamiaceae | *Prostanthera althoferi* subsp. *althoferi* |
| Lamiaceae | *Prostanthera baxteri* |

| Family | Taxon |
|---|---|
| Lamiaceae | *Prostanthera campbellii* |
| Lamiaceae | *Prostanthera grylloana* |
| Lamiaceae | *Prostanthera incurvata* |
| Lamiaceae | *Prostanthera laricoides* |
| Lamiaceae | *Prostanthera splendens* |
| Lamiaceae | *Prostanthera wilkieana* |
| Lamiaceae | *Salvia verbenaca* |
| Lamiaceae | *Salvia verbenaca* var. *vernalis* |
| Lamiaceae | *Teucrium sessiliflorum* |
| Lamiaceae | *Teucrium* sp. Norseman (T.E.H.Aplin 1851) |
| Lamiaceae | *Westringia cephalantha* |
| Lamiaceae | *Westringia rigida* |
| Lauraceae | *Cassytha glabella f. dispar* |
| Lauraceae | *Cassytha melantha* |
| Loganiaceae | *Orianthera judithiana* |
| Loranthaceae | *Amyema benthamii* |
| Loranthaceae | *Amyema miquelii* |
| Malvaceae | *Alyogyne hakeifolia* |
| Malvaceae | *Androcalva luteiflora* |
| Malvaceae | *Brachychiton gregorii* |
| Malvaceae | *Commersonia craurophylla* |
| Malvaceae | *Hannafordia bissillii* subsp. *latifolia* |
| Malvaceae | *Lasiopetalum compactum* |
| Malvaceae | *Lawrencia repens* |
| Malvaceae | *Lawrencia squamata* |
| Malvaceae | *Malva preissiana* |
| Malvaceae | *Malva weinmanniana* |
| Malvaceae | *Radyera farragei* |
| Malvaceae | *Sida calyxhymenia* |
| Marsileaceae | *Marsilea drummondii* |
| Myrtaceae | *Aluta appressa* |
| Myrtaceae | *Astus subroseus* |
| Myrtaceae | *Astus tetragonus* |
| Myrtaceae | *Balaustion pulcherrimum* |
| Myrtaceae | *Calothamnus gilesii* |
| Myrtaceae | *Calothamnus tuberosus* |
| Myrtaceae | *Calytrix amethystina* |
| Myrtaceae | *Calytrix* sp. |
| Myrtaceae | *Calytrix strigosa* |
| Myrtaceae | *Calytrix tetragona* |
| Myrtaceae | *Calytrix watsonii* |
| Myrtaceae | *Chamelaucium ciliatum* |
| Myrtaceae | *Cyathostemon* sp. Salmon Gums (B.Archer 769) |
| Myrtaceae | *Darwinia diosmoides* |
| Myrtaceae | *Darwinia* sp. Karonie (K.Newbey 8503) |
| Myrtaceae | *Ericomyrtus serpyllifolia* |
| Myrtaceae | *Eucalyptus angustissima* |
| Myrtaceae | *Eucalyptus aspratilis* |
| Myrtaceae | *Eucalyptus brockwayi* |
| Myrtaceae | *Eucalyptus calycogona* |
| Myrtaceae | *Eucalyptus calycogona* subsp. *calycogona* |
| Myrtaceae | *Eucalyptus campaspe* |
| Myrtaceae | *Eucalyptus celastroides* |
| Myrtaceae | *Eucalyptus celastroides* subsp. *celastroides* |
| Myrtaceae | *Eucalyptus clelandiorum* |
| Myrtaceae | *Eucalyptus comitae-vallis* |
| Myrtaceae | *Eucalyptus concinna* |
| Myrtaceae | *Eucalyptus corrugata* |
| Myrtaceae | *Eucalyptus cylindriflora* |

| Family | Taxon |
|---|---|
| Myrtaceae | *Eucalyptus cylindrocarpa* |
| Myrtaceae | *Eucalyptus delicata* |
| Myrtaceae | *Eucalyptus diptera* |
| Myrtaceae | *Eucalyptus distuberosa* subsp. *aerata* |
| Myrtaceae | *Eucalyptus distuberosa* subsp. *distuberosa* |
| Myrtaceae | *Eucalyptus dundasii* |
| Myrtaceae | *Eucalyptus eremophila* |
| Myrtaceae | *Eucalyptus flocktoniae* |
| Myrtaceae | *Eucalyptus flocktoniae* subsp. *flocktoniae* |
| Myrtaceae | *Eucalyptus gracilis* |
| Myrtaceae | *Eucalyptus griffithsii* |
| Myrtaceae | *Eucalyptus grossa* |
| Myrtaceae | *Eucalyptus horistes* |
| Myrtaceae | *Eucalyptus jimberlanica* |
| Myrtaceae | *Eucalyptus kochii* subsp. *borealis* |
| Myrtaceae | *Eucalyptus kruseana* |
| Myrtaceae | *Eucalyptus laevis* |
| Myrtaceae | *Eucalyptus leptophylla* |
| Myrtaceae | *Eucalyptus leptopoda* subsp. *subluta* |
| Myrtaceae | *Eucalyptus lesouefii* |
| Myrtaceae | *Eucalyptus litorea* |
| Myrtaceae | *Eucalyptus livida* |
| Myrtaceae | *Eucalyptus longicornis* |
| Myrtaceae | *Eucalyptus longissima* |
| Myrtaceae | *Eucalyptus loxophleba* subsp. *lissophloia* |
| Myrtaceae | *Eucalyptus melanoxylon* |
| Myrtaceae | *Eucalyptus neutra* |
| Myrtaceae | *Eucalyptus oleosa* |
| Myrtaceae | *Eucalyptus oleosa* subsp. *oleosa* |
| Myrtaceae | *Eucalyptus olivina* |
| Myrtaceae | *Eucalyptus ovularis* |
| Myrtaceae | *Eucalyptus petraea* |
| Myrtaceae | *Eucalyptus pileata* |
| Myrtaceae | *Eucalyptus planipes* |
| Myrtaceae | *Eucalyptus platycorys* |
| Myrtaceae | *Eucalyptus platydisca* |
| Myrtaceae | *Eucalyptus prolixa* |
| Myrtaceae | *Eucalyptus protensa* |
| Myrtaceae | *Eucalyptus pterocarpa* |
| Myrtaceae | *Eucalyptus quadrans* |
| Myrtaceae | *Eucalyptus ravida* |
| Myrtaceae | *Eucalyptus rigidula* |
| Myrtaceae | *Eucalyptus salicola* |
| Myrtaceae | *Eucalyptus salmonophloia* |
| Myrtaceae | *Eucalyptus salubris* |
| Myrtaceae | *Eucalyptus sheathiana* |
| Myrtaceae | *Eucalyptus* sp. Fraser Range (D.Nicolle 2157) |
| Myrtaceae | *Eucalyptus* sp. Southern smooth-bark (D.Nicolle & M.French DN 6916) |
| Myrtaceae | *Eucalyptus spreta* |
| Myrtaceae | *Eucalyptus stricklandii* |
| Myrtaceae | *Eucalyptus tenera* |
| Myrtaceae | *Eucalyptus tenuis* |
| Myrtaceae | *Eucalyptus terebra* |
| Myrtaceae | *Eucalyptus torquata* |
| Myrtaceae | *Eucalyptus tortilis* |
| Myrtaceae | *Eucalyptus transcontinentalis* |
| Myrtaceae | *Eucalyptus urna* |
| Myrtaceae | *Eucalyptus vittata* |
| Myrtaceae | *Eucalyptus vittata - Eucalyptus spreta* |

| Family | Taxon |
|---|---|
| Myrtaceae | *Eucalyptus websteriana* |
| Myrtaceae | *Eucalyptus websteriana* subsp. *norsemanica* |
| Myrtaceae | *Eucalyptus websteriana* subsp. *websteriana* |
| Myrtaceae | *Eucalyptus woodwardii* |
| Myrtaceae | *Eucalyptus x brachyphylla* |
| Myrtaceae | *Eucalyptus yilgarnensis* |
| Myrtaceae | *Euryomyrtus leptospermoides* |
| Myrtaceae | *Homalocalyx thryptomenoides* |
| Myrtaceae | *Kunzea affinis* |
| Myrtaceae | *Kunzea pulchella* |
| Myrtaceae | *Leptospermum erubescens* |
| Myrtaceae | *Leptospermum fastigiatum* |
| Myrtaceae | *Leptospermum incanum* |
| Myrtaceae | *Leptospermum roei* |
| Myrtaceae | *Leptospermum subtenue* |
| Myrtaceae | *Melaleuca acuminata* subsp. *acuminata* |
| Myrtaceae | *Melaleuca atroviridis* |
| Myrtaceae | *Melaleuca cliffortioides* |
| Myrtaceae | *Melaleuca coccinea* |
| Myrtaceae | *Melaleuca elliptica* |
| Myrtaceae | *Melaleuca exuvia* |
| Myrtaceae | *Melaleuca fulgens* subsp. *fulgens* |
| Myrtaceae | *Melaleuca hamata* |
| Myrtaceae | *Melaleuca johnsonii* |
| Myrtaceae | *Melaleuca lanceolata* |
| Myrtaceae | *Melaleuca macronychia* subsp. *trygonoides* |
| Myrtaceae | *Melaleuca pauperiflora* |
| Myrtaceae | *Melaleuca pauperiflora* subsp. *fastigiata* |
| Myrtaceae | *Melaleuca pauperiflora* subsp. *pauperiflora* |
| Myrtaceae | *Melaleuca radula* |
| Myrtaceae | *Melaleuca rigidifolia* |
| Myrtaceae | *Melaleuca sheathiana* |
| Myrtaceae | *Melaleuca subalaris* |
| Myrtaceae | *Melaleuca teuthidoides* |
| Myrtaceae | *Melaleuca thyoides* |
| Myrtaceae | *Melaleuca uncinata* |
| Myrtaceae | *Micromyrtus papillosa* |
| Myrtaceae | *Taxandria spathulata* |
| Myrtaceae | *Thryptomene australis* |
| Myrtaceae | *Thryptomene australis* subsp. *australis* |
| Myrtaceae | *Thryptomene australis* subsp. *brachyandra* |
| Myrtaceae | *Thryptomene kochii* |
| Myrtaceae | *Verticordia eriocephala* |
| Myrtaceae | *Verticordia helmsii* |
| Myrtaceae | *Verticordia insignis* subsp. *compta* |
| Myrtaceae | *Verticordia picta* |
| Nitrariaceae | *Nitraria billardierei* |
| Ophioglossaceae | *Ophioglossum lusitanicum* |
| Orchidaceae | *Caladenia microchila* |
| Orchidaceae | *Caladenia roei* |
| Orchidaceae | *Caladenia sigmoidea* |
| Orchidaceae | *Cyanicula amplexans* |
| Orchidaceae | *Diuris hazeliae* |
| Orchidaceae | *Ericksonella saccharata* |
| Orchidaceae | *Microtis eremaea* |
| Orchidaceae | *Microtis media* subsp. *media* |
| Orchidaceae | *Oligochaetochilus ciliatus* |
| Orchidaceae | *Oligochaetochilus elegantissimus* |
| Orchidaceae | *Oligochaetochilus insectifer* |

| Family | Taxon |
|---|---|
| Orchidaceae | *Oligochaetochilus roensis* |
| Orchidaceae | *Pterostylis allantoidea* |
| Orchidaceae | *Pterostylis insectifera* |
| Orchidaceae | *Pterostylis mutica* |
| Orchidaceae | *Pterostylis nana* |
| Orchidaceae | *Pterostylis roensis* |
| Orchidaceae | *Pterostylis sargentii* |
| Orchidaceae | *Pterostylis tryphera* |
| Orchidaceae | *Pterostylis xerampelina* |
| Phrymaceae | *Glossostigma drummondii* |
| Pittosporaceae | *Billardiera coriacea* |
| Pittosporaceae | *Cheiranthera filifolia* |
| Pittosporaceae | *Pittosporum angustifolium* |
| Pittosporaceae | *Pittosporum phillyreoides* |
| Plantaginaceae | *Plantago debilis* |
| Plantaginaceae | *Plantago drummondii* |
| Poaceae | *Aira cupaniana* |
| Poaceae | *Austrostipa acrociliata* |
| Poaceae | *Austrostipa blackii* |
| Poaceae | *Austrostipa elegantissima* |
| Poaceae | *Austrostipa eremophila* |
| Poaceae | *Austrostipa hemipogon* |
| Poaceae | *Austrostipa nitida* |
| Poaceae | *Austrostipa platychaeta* |
| Poaceae | *Austrostipa scabra* |
| Poaceae | *Austrostipa trichophylla* |
| Poaceae | *Austrostipa variabilis* |
| Poaceae | *Briza minor* |
| Poaceae | *Bromus arenarius* |
| Poaceae | *Bromus rubens* |
| Poaceae | *Cymbopogon obtectus* |
| Poaceae | *Eragrostis dielsii* |
| Poaceae | *Eriachne ovata* |
| Poaceae | *Monachather paradoxus* |
| Poaceae | *Rostraria pumila* |
| Poaceae | *Rytidosperma caespitosum* |
| Poaceae | *Schismus arabicus* |
| Poaceae | *Spartochloa scirpoidea* |
| Poaceae | *Triodia desertorum* |
| Poaceae | *Triodia irritans* |
| Poaceae | *Triodia rigidissima* |
| Poaceae | *Triodia scariosa* |
| Polygalaceae | *Comesperma drummondii* |
| Polygalaceae | *Comesperma scoparium* |
| Polygalaceae | *Comesperma volubile* |
| Polygonaceae | *Duma florulenta* |
| Polygonaceae | *Muehlenbeckia adpressa* |
| Portulacaceae | *Calandrinia baccata* |
| Portulacaceae | *Calandrinia lefroyensis* |
| Portulacaceae | *Calandrinia polyandra* |
| Portulacaceae | *Calandrinia* sp. Gypsum (F.Obbens & L.Hancock FO 10/14) |
| Portulacaceae | *Calandrinia* sp. Needilup (K.R.Newbey 4892) |
| Portulacaceae | *Calandrinia translucens* |
| Primulaceae | *Lysimachia arvensis* |
| Proteaceae | *Grevillea acuaria* |
| Proteaceae | *Grevillea anethifolia* |
| Proteaceae | *Grevillea cagiana* |
| Proteaceae | *Grevillea didymobotrya* subsp. *didymobotrya* |
| Proteaceae | *Grevillea excelsior* |

| Family | Taxon |
|---|---|
| Proteaceae | *Grevillea haplantha* subsp. *haplantha* |
| Proteaceae | *Grevillea huegelii* |
| Proteaceae | *Grevillea nematophylla* subsp. *nematophylla* |
| Proteaceae | *Grevillea oncogyne* |
| Proteaceae | *Grevillea petrophiloides* subsp. *magnifica* |
| Proteaceae | *Grevillea petrophiloides* subsp. *remota* |
| Proteaceae | *Grevillea phillipsiana* |
| Proteaceae | *Grevillea plurijuga* |
| Proteaceae | *Grevillea plurijuga* subsp. *plurijuga* |
| Proteaceae | *Grevillea pterosperma* |
| Proteaceae | *Grevillea teretifolia* |
| Proteaceae | *Hakea francisiana* |
| Proteaceae | *Persoonia coriacea* |
| Proteaceae | *Persoonia helix* |
| Pteridaceae | *Cheilanthes adiantoides* |
| Pteridaceae | *Cheilanthes austrotenuifolia* |
| Pteridaceae | *Cheilanthes lasiophylla* |
| Pteridaceae | *Cheilanthes sieberi subsp. sieberi* |
| Pteridaceae | *Cheilanthes tenuifolia* |
| Ranunculaceae | *Ranunculus pentandrus* var. *platycarpus* |
| Rhamnaceae | *Cryptandra aridicola* |
| Rhamnaceae | *Cryptandra distigma* |
| Rhamnaceae | *Cryptandra graniticola* |
| Rhamnaceae | *Granitites intangendus* |
| Rhamnaceae | *Pomaderris forrestiana* |
| Rhamnaceae | *Trymalium myrtillus* |
| Rhamnaceae | *Trymalium myrtillus* subsp. *myrtillus* |
| Rutaceae | *Boronia fabianoides* |
| Rutaceae | *Boronia fabianoides* subsp. *rosea* |
| Rutaceae | *Boronia inornata* subsp. *inornata* |
| Rutaceae | *Boronia inornata* subsp. *leptophylla* |
| Rutaceae | *Microcybe multiflora* subsp. *multiflora* |
| Rutaceae | *Phebalium clavatum* |
| Rutaceae | *Phebalium lepidotum* |
| Rutaceae | *Phebalium tuberculosum* |
| Rutaceae | *Philotheca apiculata* |
| Rutaceae | *Philotheca coccinea* |
| Rutaceae | *Philotheca tomentella* |
| Santalaceae | *Exocarpos aphyllus* |
| Santalaceae | *Exocarpos sparteus* |
| Santalaceae | *Leptomeria preissiana* |
| Santalaceae | *Santalum acuminatum* |
| Santalaceae | *Santalum spicatum* |
| Sapindaceae | *Dodonaea adenophora* |
| Sapindaceae | *Dodonaea lobulata* |
| Sapindaceae | *Dodonaea microzyga* |
| Sapindaceae | *Dodonaea microzyga* var. *acrolobata* |
| Sapindaceae | *Dodonaea stenozyga* |
| Sapindaceae | *Dodonaea viscosa* |
| Sapindaceae | *Dodonaea viscosa* subsp. *angustissima* |
| Scrophulariaceae | *Diocirea acutifolia* |
| Scrophulariaceae | *Diocirea microphylla* |
| Scrophulariaceae | *Diocirea violacea* |
| Scrophulariaceae | *Eremophila alternifolia* |
| Scrophulariaceae | *Eremophila annosocaulis* |
| Scrophulariaceae | *Eremophila caerulea* |
| Scrophulariaceae | *Eremophila caerulea* subsp. *caerulea* |
| Scrophulariaceae | *Eremophila caperata* |
| Scrophulariaceae | *Eremophila clavata* |

| Family | Taxon |
|---|---|
| Scrophulariaceae | *Eremophila decipiens* |
| Scrophulariaceae | *Eremophila decipiens* subsp. *decipiens* |
| Scrophulariaceae | *Eremophila dempsteri* |
| Scrophulariaceae | *Eremophila deserti* |
| Scrophulariaceae | *Eremophila gibbosa* |
| Scrophulariaceae | *Eremophila glabra* |
| Scrophulariaceae | *Eremophila glabra* subsp. *glabra* |
| Scrophulariaceae | *Eremophila granitica* |
| Scrophulariaceae | *Eremophila interstans* |
| Scrophulariaceae | *Eremophila interstans* subsp. *interstans* |
| Scrophulariaceae | *Eremophila interstans* subsp. *virgata* |
| Scrophulariaceae | *Eremophila ionantha* |
| Scrophulariaceae | *Eremophila lucida* |
| Scrophulariaceae | *Eremophila maculata* |
| Scrophulariaceae | *Eremophila maculata* subsp. *brevifolia* |
| Scrophulariaceae | *Eremophila oldfieldii* subsp. *angustifolia* |
| Scrophulariaceae | *Eremophila oppositifolia* subsp. *angustifolia* |
| Scrophulariaceae | *Eremophila parvifolia* |
| Scrophulariaceae | *Eremophila parvifolia* subsp. *auricampa* |
| Scrophulariaceae | *Eremophila perglandulosa* |
| Scrophulariaceae | *Eremophila praecox* |
| Scrophulariaceae | *Eremophila psilocalyx* |
| Scrophulariaceae | *Eremophila purpurascens* |
| Scrophulariaceae | *Eremophila rugosa* |
| Scrophulariaceae | *Eremophila saligna* |
| Scrophulariaceae | *Eremophila scoparia* |
| Scrophulariaceae | *Eremophila serrulata* |
| Scrophulariaceae | *Eremophila subfloccosa* subsp. *glandulosa* |
| Scrophulariaceae | *Eremophila subfloccosa* subsp. *lanata* |
| Scrophulariaceae | *Eremophila veronica* |
| Scrophulariaceae | *Myoporum platycarpum* subsp. *platycarpum* |
| Solanaceae | *Duboisia hopwoodii* |
| Solanaceae | *Lycium australe* |
| Solanaceae | *Nicotiana goodspeedii* |
| Solanaceae | *Nicotiana rotundifolia* |
| Solanaceae | *Solanum hoplopetalum* |
| Solanaceae | *Solanum lasiophyllum* |
| Solanaceae | *Solanum nummularium* |
| Solanaceae | *Solanum orbiculatum* |
| Solanaceae | *Solanum petrophilum* |
| Solanaceae | *Solanum plicatile* |
| Stylidiaceae | *Stylidium arenicola* |
| Stylidiaceae | *Stylidium choreanthum* |
| Stylidiaceae | *Stylidium dielsianum* |
| Stylidiaceae | *Stylidium ecorne* |
| Stylidiaceae | *Stylidium limbatum* |
| Stylidiaceae | *Stylidium* sp. Mt Bayly (J.A.Wege & C.Wilkins JAW 1986) |
| Thymelaeaceae | *Pimelea argentea* |
| Thymelaeaceae | *Pimelea microcephala* |
| Thymelaeaceae | *Pimelea microcephala* subsp. *microcephala* |
| Thymelaeaceae | *Pimelea spiculigera* var. *thesioides* |
| Thymelaeaceae | *Pimelea subvillifera* |
| Urticaceae | *Parietaria debilis* |
| Violaceae | *Hybanthus cymulosus* |
| Violaceae | *Hybanthus floribundus* subsp. *curvifolius* |
| Zygophyllaceae | *Roepera apiculata* |
| Zygophyllaceae | *Roepera aurantiaca* |
| Zygophyllaceae | *Roepera glauca* |
| Zygophyllaceae | *Roepera halophila* |

| Family | Taxon |
|---|---|
| Zygophyllaceae | *Roepera ovata* |
| Zygophyllaceae | *Roepera reticulata* |
| Zygophyllaceae | *Zygophyllum aurantiacum* subsp. *aurantiacum* |

## TERRESTRIAL VERTEBRATE FAUNA

| Class | Taxon |
|---|---|
| Amphibia | *Pseudophryne occidentalis* |
| Amphibia | *Neobatrachus sutor* |
| Amphibia | *Neobatrachus kunapalari* |
| Amphibia | *Neobatrachus albipes* |
| Aves | *Zosterops lateralis* |
| Aves | *Turnix (Austroturnix) varius* |
| Aves | *Tribonyx ventralis* |
| Aves | *Todiramphus (Todiramphus) sanctus* |
| Aves | *Todiramphus (Cyanalcyon) pyrrhopygius* |
| Aves | *Tadorna (Casarca) tadornoides* |
| Aves | *Tachybaptus novaehollandiae* |
| Aves | *Streptopelia (Spilopelia) senegalensis* |
| Aves | *Strepera (Neostrepera) versicolor* |
| Aves | *Smicrornis brevirostris* |
| Aves | *Smicrornis brevirostris occidentalis* |
| Aves | *Sericornis (Sericornis) frontalis* |
| Aves | *Rhipidura (Sauloprocta) leucophrys* |
| Aves | *Rhipidura (Rhipidura) albiscapa* |
| Aves | *Pyrrholaemus brunneus* |
| Aves | *Purnella albifrons* |
| Aves | *Ptilotula plumula* |
| Aves | *Ptilotula penicillata* |
| Aves | *Ptilotula ornata* |
| Aves | *Psephotus (Psephotus) varius* |
| Aves | *Pomatostomus (Morganornis) superciliosus* |
| Aves | *Polytelis anthopeplus* |
| Aves | *Poliocephalus poliocephalus* |
| Aves | *Platycercus (Violania) icterotis* |
| Aves | *Platycercus (Violania) icterotis xanthogenys* |
| Aves | *Phylidonyris* |
| Aves | *Phylidonyris (Meliornis) novaehollandiae* |
| Aves | *Phaps (Phaps) elegans* |
| Aves | *Phaps (Phaps) chalcoptera* |
| Aves | *Phalacrocorax (Phalacrocorax) sulcirostris* |
| Aves | *Phalacrocorax (Phalacrocorax) carbo* |
| Aves | *Petroica (Petroica) goodenovii* |
| Aves | *Petrochelidon (Petrochelidon) ariel* |
| Aves | *Petrochelidon (Hylochelidon) nigricans* |
| Aves | *Parvipsitta porphyrocephala* |
| Aves | *Pardalotus (Pardalotus) punctatus* |
| Aves | *Pardalotus (Pardalotus) punctatus punctatus* |
| Aves | *Pardalotus (Pardalotinus) striatus* |
| Aves | *Pachycephala (Timixos) inornata* |
| Aves | *Pachycephala (Pachycephala) pectoralis* |
| Aves | *Pachycephala (Pachycephala) pectoralis fuliginosa* |
| Aves | *Pachycephala (Pachycephala) occidentalis* |
| Aves | *Pachycephala (Alisterornis) rufiventris* |
| Aves | *Oreoica gutturalis* |
| Aves | *Oreoica gutturalis gutturalis* |
| Aves | *Ocyphaps lophotes* |
| Aves | *Ninox (Ninox) novaeseelandiae* |
| Aves | *Ninox (Ninox) novaeseelandiae boobook* |
| Aves | *Nesoptilotis leucotis* |
| Aves | *Neophema (Neophema) splendida* |
| Aves | *Myiagra (Seisura) inquieta* |
| Aves | *Microeca (Microeca) fascinans* |
| Aves | *Microcarbo melanoleucos* |
| Aves | *Merops (Merops) ornatus* |

| Class | Taxon |
|---|---|
| Aves | *Melopsittacus undulatus* |
| Aves | *Melithreptus (Eidopsarus) brevirostris* |
| Aves | *Melanodryas (Melanodryas) cucullata* |
| Aves | *Manorina (Myzantha) flavigula* |
| Aves | *Malurus (Musciparus) leucopterus* |
| Aves | *Malurus (Malurus) splendens* |
| Aves | *Malurus (Leggeornis) pulcherrimus* |
| Aves | *Malurus (Leggeornis) assimilis* |
| Aves | *Lichmera (Lichmera) indistincta* |
| Aves | *Lichmera (Lichmera) indistincta indistincta* |
| Aves | *Lichenostomus cratitius* |
| Aves | *Leipoa ocellata* |
| Aves | *Lalage (Lalage) sueurii* |
| Aves | *Hirundo (Hirundo) neoxena* |
| Aves | *Hieraaetus (Hieraaetus) morphnoides* |
| Aves | *Hieraaetus (Hieraaetus) morphnoides morphnoides* |
| Aves | *Haliastur sphenurus* |
| Aves | *Gymnorhina tibicen* |
| Aves | *Grallina cyanoleuca* |
| Aves | *Gliciphila melanops* |
| Aves | *Gerygone fusca* |
| Aves | *Gavicalis virescens* |
| Aves | *Falco (Tinnunculus) cenchroides* |
| Aves | *Falco (Ieracidea) berigora* |
| Aves | *Falco (Hierofalco) peregrinus macropus* |
| Aves | *Falco (Hierofalco) hypoleucos* |
| Aves | *Falco (Falco) longipennis* |
| Aves | *Eurostopodus (Eurostopodus) argus* |
| Aves | *Epthianura (Epthianura) albifrons* |
| Aves | *Eopsaltria (Eopsaltria) griseogularis* |
| Aves | *Eopsaltria (Eopsaltria) griseogularis griseogularis* |
| Aves | *Eopsaltria (Eopsaltria) australis* |
| Aves | *Eolophus roseicapilla* |
| Aves | *Elseyornis melanops* |
| Aves | *Egretta novaehollandiae* |
| Aves | *Drymodes brunneopygia* |
| Aves | *Dromaius novaehollandiae* |
| Aves | *Dicaeum (Dicaeum) hirundinaceum* |
| Aves | *Daphoenositta (Neositta) chrysoptera* |
| Aves | *Cracticus torquatus* |
| Aves | *Cracticus torquatus leucopterus* |
| Aves | *Cracticus nigrogularis* |
| Aves | *Coturnix (Coturnix) pectoralis* |
| Aves | *Corvus orru* |
| Aves | *Corvus coronoides* |
| Aves | *Corvus bennetti* |
| Aves | *Coracina (Pteropodocys) maxima* |
| Aves | *Coracina (Coracina) novaehollandiae* |
| Aves | *Columba (Columba) livia* |
| Aves | *Colluricincla (Colluricincla) harmonica* |
| Aves | *Colluricincla (Colluricincla) harmonica rufiventris* |
| Aves | *Colluricincla (Colluricincla) harmonica brunnea* |
| Aves | *Climacteris (Climacterobates) affinis* |
| Aves | *Climacteris (Climacteris) rufa* |
| Aves | *Climacteris (Climacteris) picumnus* |
| Aves | *Cladorhynchus leucocephalus* |
| Aves | *Circus assimilis* |
| Aves | *Cinclosoma (Malleeavis) clarum* |
| Aves | *Cinclosoma (Malleeavis) castanotum* |

| Class | Taxon |
|---|---|
| Aves | *Cincloramphus (Cincloramphus) cruralis* |
| Aves | *Chenonetta jubata* |
| Aves | *Charadrius (Charadrius) ruficapillus* |
| Aves | *Chalcites* |
| Aves | *Chalcites osculans* |
| Aves | *Chalcites lucidus* |
| Aves | *Chalcites basalis* |
| Aves | *Calamanthus cautus* |
| Aves | *Calamanthus campestris montanellus* |
| Aves | *Cacomantis (Vidgenia) pallidus* |
| Aves | *Cacomantis (Vidgenia) flabelliformis* |
| Aves | *Barnardius zonarius* |
| Aves | *Barnardius zonarius zonarius* |
| Aves | *AVES* |
| Aves | *Artamus (Campbellornis) personatus* |
| Aves | *Artamus (Angroyan) minor* |
| Aves | *Artamus (Angroyan) cyanopterus* |
| Aves | *Artamus (Angroyan) cinereus* |
| Aves | *Ardea (Bubulcus) ibis* |
| Aves | *Aquila (Uroaetus) audax* |
| Aves | *Aphelocephala leucopsis* |
| Aves | *Anthus (Anthus) novaeseelandiae* |
| Aves | *Anthochaera (Anthochaera) carunculata* |
| Aves | *Anthochaera (Anthochaera) carunculata woodwardi* |
| Aves | *Anas (Nettion) gracilis* |
| Aves | *Anas (Anas) superciliosa* |
| Aves | *Aegotheles (Aegotheles) cristatus* |
| Aves | *Accipiter (Paraspizias) cirrocephalus* |
| Aves | *Accipiter (Leucospiza) fasciatus* |
| Aves | *Acanthiza (Geobasileus) uropygialis* |
| Aves | *Acanthiza (Geobasileus) iredalei* |
| Aves | *Acanthiza (Geobasileus) chrysorrhoa* |
| Aves | *Acanthiza (Acanthiza) apicalis* |
| Aves | *Acanthiza (Acanthiza) apicalis whitlocki* |
| Aves | *Acanthiza (Acanthiza) apicalis apicalis* |
| Aves | *Acanthagenys rufogularis* |
| Mammalia | *Sminthopsis ooldea* |
| Mammalia | *Sminthopsis fuliginosus* |
| Mammalia | *Sminthopsis dolichura* |
| Mammalia | *Pseudomys hermannsburgensis* |
| Mammalia | *Pseudomys bolami* |
| Mammalia | *Notomys mitchellii* |
| Mammalia | *Ningaui yvonneae* |
| Mammalia | *Mus musculus* |
| Mammalia | *Macropus fuliginosus* |
| Mammalia | *Cercartetus concinnus* |
| Reptilia | *Varanus gouldii* |
| Reptilia | *Varanus gouldii gouldii* |
| Reptilia | *Underwoodisaurus milii* |
| Reptilia | *Tympanocryptis pseudopsephos* |
| Reptilia | *Tympanocryptis cephalus* |
| Reptilia | *Tiliqua rugosa* |
| Reptilia | *Suta* |
| Reptilia | *Suta fasciata* |
| Reptilia | *Strophurus strophurus* |
| Reptilia | *Strophurus assimilis* |
| Reptilia | *Simoselaps* |
| Reptilia | *Simoselaps bertholdi* |
| Reptilia | *Pygopus lepidopodus* |

| Class | Taxon |
|---|---|
| Reptilia | *Pseudonaja modesta* |
| Reptilia | *Pseudonaja mengdeni* |
| Reptilia | *Pseudonaja affinis affinis* |
| Reptilia | *Pseudechis australis* |
| Reptilia | *Pogona minor minor* |
| Reptilia | *Parasuta nigriceps* |
| Reptilia | *Parasuta gouldii* |
| Reptilia | *Nephrurus laevissimus* |
| Reptilia | *Morethia obscura* |
| Reptilia | *Morethia butleri* |
| Reptilia | *Morethia adelaidensis* |
| Reptilia | *Morelia spilota imbricata* |
| Reptilia | *Moloch horridus* |
| Reptilia | *Menetia greyii* |
| Reptilia | *Lucasium maini* |
| Reptilia | *Liopholis multiscutata* |
| Reptilia | *Lialis burtonis* |
| Reptilia | *Lerista tridactyla* |
| Reptilia | *Lerista timida* |
| Reptilia | *Lerista taeniata* |
| Reptilia | *Lerista picturata* |
| Reptilia | *Heteronotia binoei* |
| Reptilia | *Hesperoedura reticulata* |
| Reptilia | *Hemiergis initialis initialis* |
| Reptilia | *Gehyra variegata* |
| Reptilia | *Eremiascincus richardsonii* |
| Reptilia | *Egernia formosa* |
| Reptilia | *Diplodactylus pulcher* |
| Reptilia | *Diplodactylus granariensis granariensis* |
| Reptilia | *Demansia psammophis psammophis* |
| Reptilia | *Delma fraseri* |
| Reptilia | *Delma butleri* |
| Reptilia | *Delma australis* |
| Reptilia | *Cyclodomorphus melanops elongatus* |
| Reptilia | *Ctenotus uber uber* |
| Reptilia | *Ctenotus inornatus* |
| Reptilia | *Ctenotus atlas* |
| Reptilia | *Ctenophorus scutulatus* |
| Reptilia | *Ctenophorus salinarum* |
| Reptilia | *Ctenophorus reticulatus* |
| Reptilia | *Ctenophorus ornatus* |
| Reptilia | *Ctenophorus fordi* |
| Reptilia | *Ctenophorus cristatus* |
| Reptilia | *Ctenophorus caudicinctus* |
| Reptilia | *Cryptoblepharus plagiocephalus* |
| Reptilia | *Cryptoblepharus buchananii* |
| Reptilia | *Crenadactylus ocellatus* |
| Reptilia | *Christinus marmoratus* |
| Reptilia | *Brachyurophis semifasciatus* |
| Reptilia | *Brachyurophis fasciolatus fasciolatus* |
| Reptilia | *Anilios bituberculatus* |
| Reptilia | *Anilios bicolor* |
| Reptilia | *Anilios australis* |

# APPENDIX K:
# EPBC PROTECTED MATTERS SEARCH (40KM BUFFER)

# APPENDIX L:
# QUADRAT PHOTOS

| | | | |
|---|---|---|---|
| Quadrat 1<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 1<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 2<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 2<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 3<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 3<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 4<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 4<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 5<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 5<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 6<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 6<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 7<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 7<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 8<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 8<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 9<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 9<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 10 2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 10 2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 11 2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 11 2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 12 2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 12 2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 13<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 13<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 14<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 14<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 15<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 15<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 16<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 16<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 17<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 17<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 18<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 18<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 19<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 19<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 20<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 20 2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 21 2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 21 2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 22<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 22<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 23<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 23<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 24<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 24<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 25<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 25<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 26<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 26<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 27<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 27<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 28<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 28<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 29<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 30<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 31<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

| | | | |
|---|---|---|---|
| Quadrat 32<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 33<br>2021 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |
| Quadrat 34<br>2023 |  |  |  |
| **Direction** | **East** | **South-East** | **South** |

## Attachment 5: Priority Flora Impact Assessment

# PRIORITY FLORA IMPACT ASSESSMENT

The Pioneer Dome Lithium Project (the Project) is a proposed open-cut lithium mining operation located approximately 52km north of Norseman in the Eastern Goldfields Region of Western Australia (Attachment 1). The Project tenements include: L15/473 and M15/1896.

The proposed mining activities will involve the development of three open pits and three waste rock landforms (WRLs), a ROM pad, workshop/fuel storage, explosives magazine, administration office, camp, access roads, solar farm, and haul roads. Future mining operations may include an onsite processing plant and tailings storage facility.

The TOTAL area of clearing proposed is 314ha within a 1418ha footprint (the Clearing Permit Area is shown in Attachment 2).

Botanica Consulting conducted a detailed flora/vegetation and basic fauna survey on the 22nd - 23rd of November 2021. A total of 28 quadrats (20m x 20m) were installed and assessed during the survey effort. The area was revisited, and quadrats were reassessed on the 18th and 19th of September 2023. A further six quadrats were installed and assessed along the proposed haul road (L15/473) on the 26th of October 2023.

The assessment of the DBCA Priority / Threatened flora database records (DBCA, 2022) identified the Priority 3 (P3) species *Eremophila acutifolia* as previously recorded within the survey area.

During the field assessments, the species was recorded within eight of the 34 quadrats within the survey area; approximately 96 plants were identified in total in groups of ~12 plants. Four of these quadrats (Q1, Q11, Q12, and Q18) are within the proposed Clearing Permit Area. Noting that *E. acutifolia* was absent from ten other quadrats within the proposed Clearing Permit Area.

The Clearing Permit Area was initially going to represent the whole tenement area but has since been reduced to mitigate impacts to priority flora where possible.

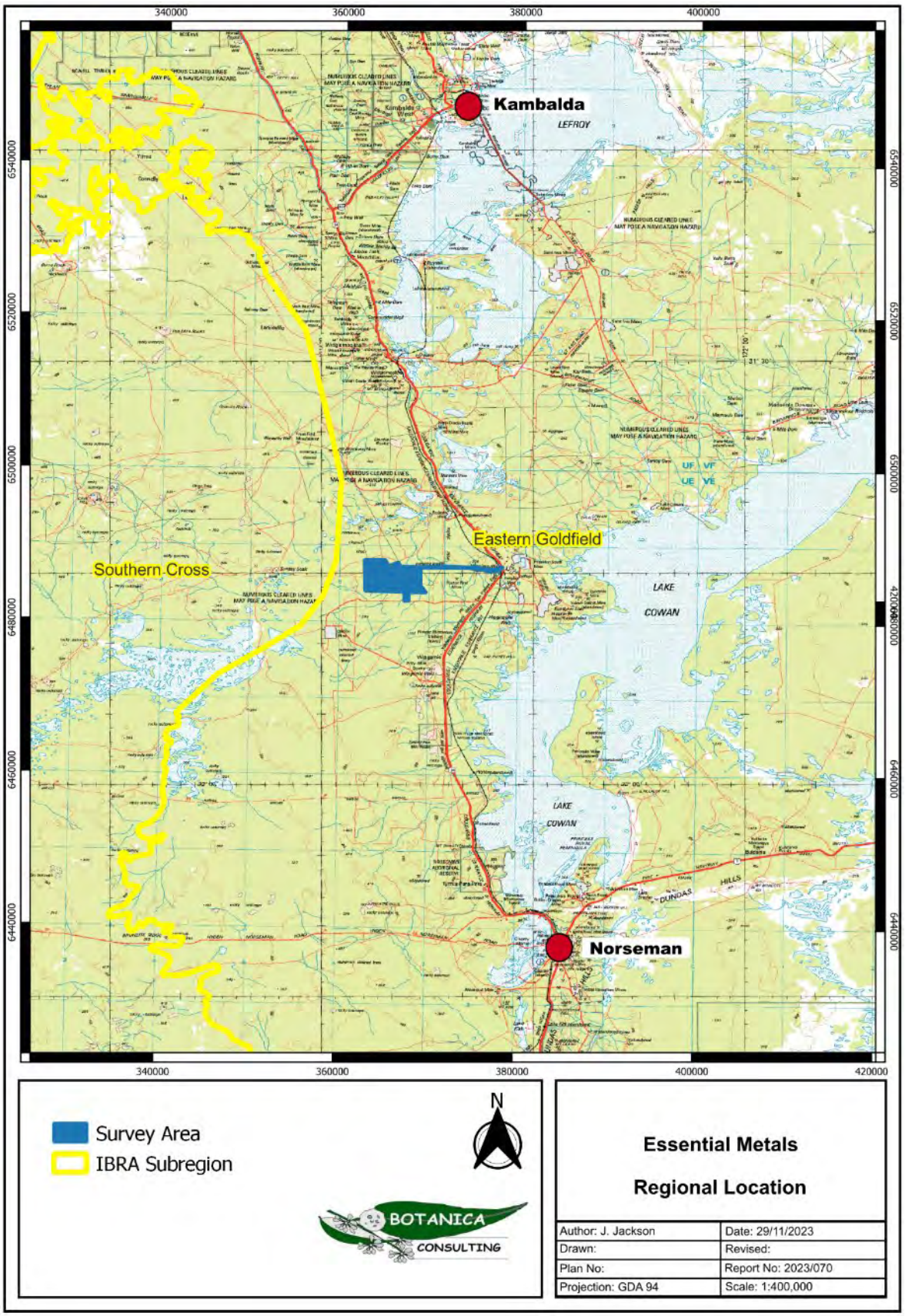
The preliminary site layout plan directly intersected four quadrats where *E. acutifolia* (P3) had been recorded (Attachment 3). Consequently, the site layout plan was modified to avoid quadrats containing E. acutifolia (P3) where possible. In the current site layout, the quadrats containing *E. acutifolia* (P3) at risk of being intersected have been reduced to two (Attachment 4). Locations of *E. acutifolia* (P3) recorded by Botanica Consulting are presented in Attachment 3 and 4.

Based on the current site layout, the impact assessment (Attachment 5) indicates that the proposed clearing will impact approximately 24 *E. acutifolia* (P3) plants, equating to a 25% impact on the local population, noting that the species is regionally abundant, with numerous populations identified in

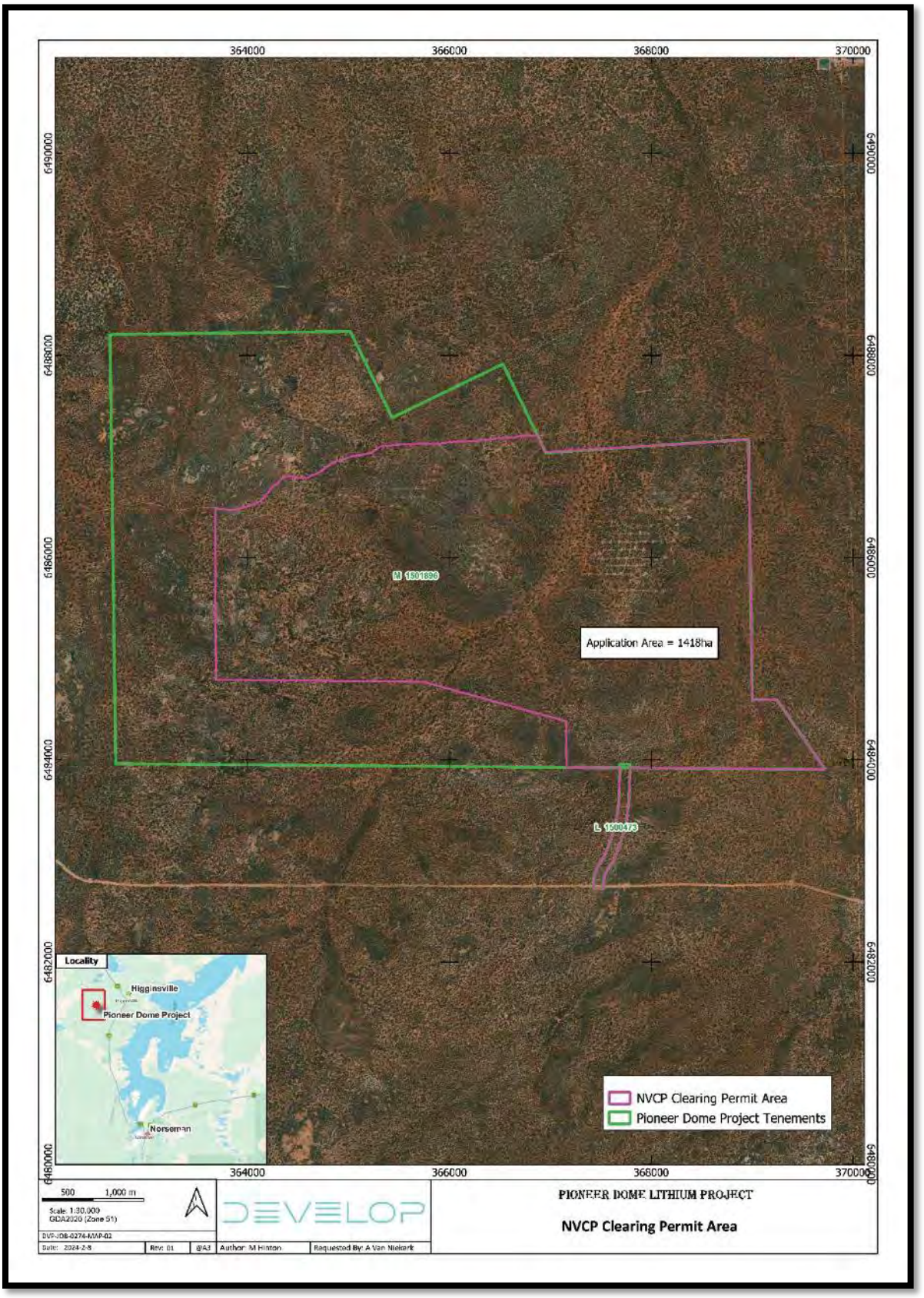
nearby tenements owned by Karora Resources. Regional locations of *E. acutifolia* (P3) recorded by the Herbarium of WA (ALA, 2024) are presented in Attachment 6.

**Thus the proposed clearing at North Dome is unlikely to significantly impact this Priority Flora.**

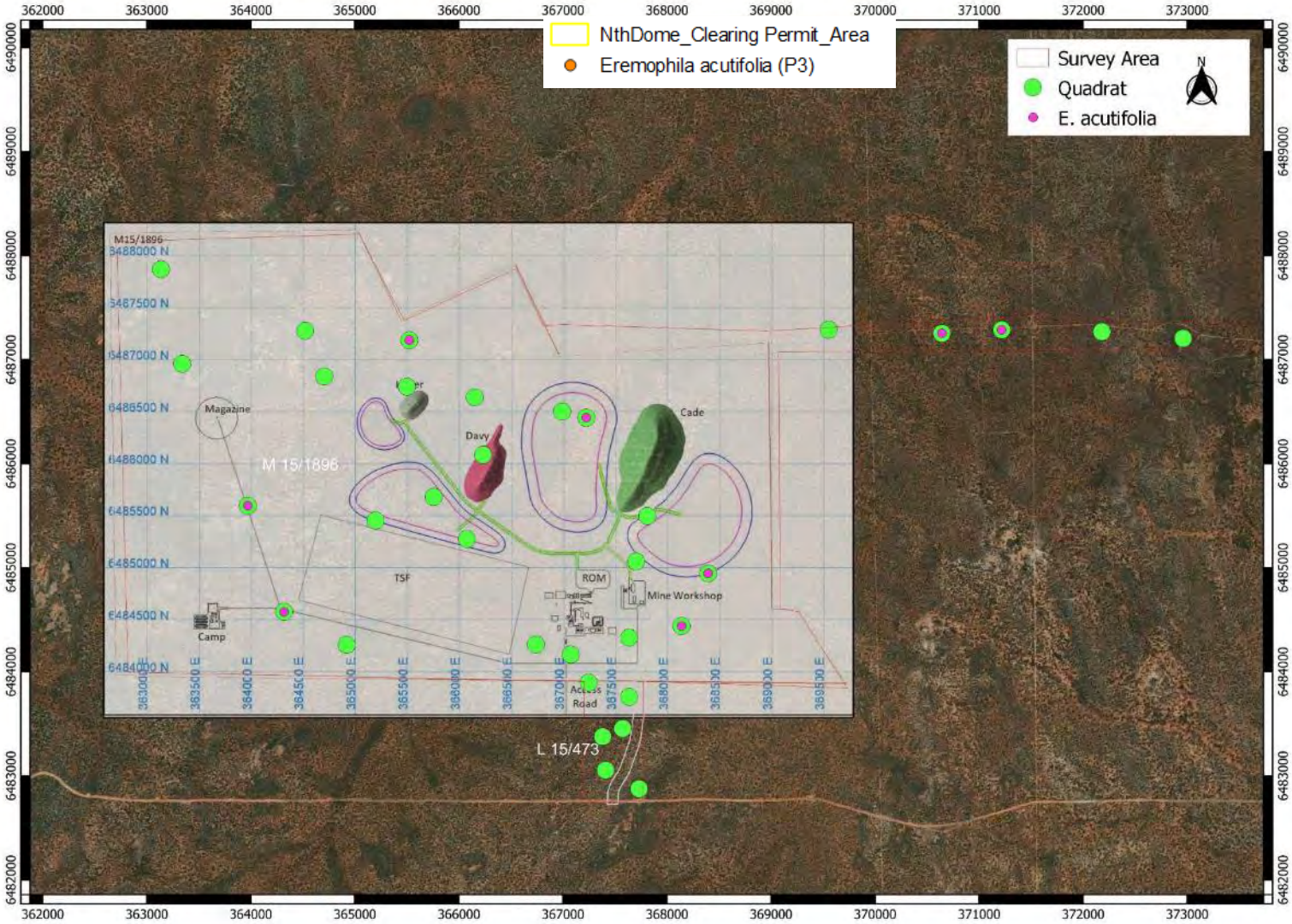
**Attachment 1: Regional Location**



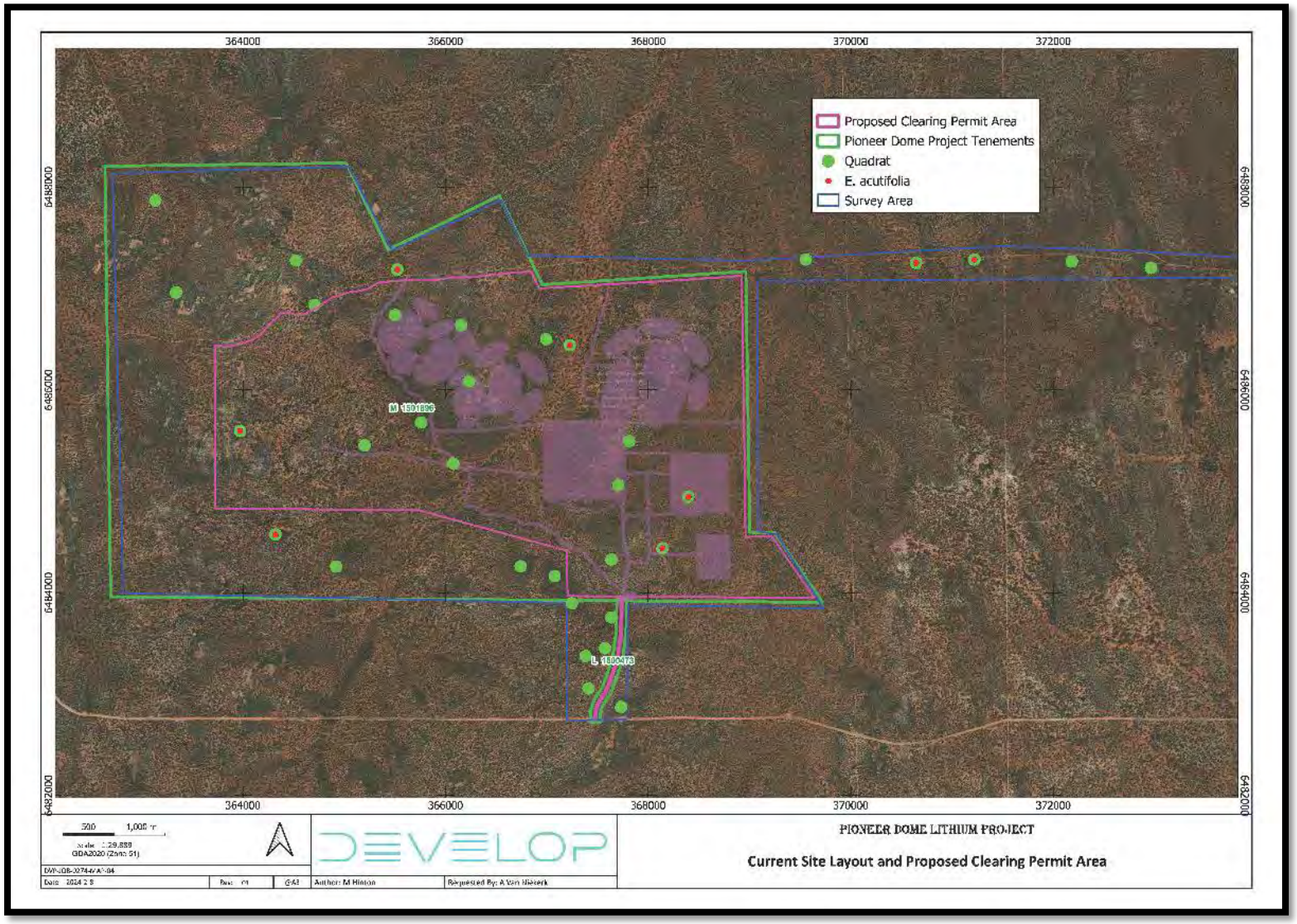
**Attachment 2: Clearing Permit Area**



**Attachment 3: Locations of *Eremophila acutifolia* (P3) within the Proposed Clearing Area – Preliminary Site Plan Layout**



**Attachment 4: Locations of *Eremophila acutifolia* (P3) within the Proposed Clearing Area – Current Site Plan Layout**



**Attachment 5: Priority Flora (*Eremophila acutifolia*) Impact Assessment**

| Quadrat [Botanica Consulting, 2024] | GPS Location [Botanica Consulting, 2024] | Location of plants pertaining to proposed clearing area (Inside/ Outside Clearing Permit Area) | Plants impacted by Current Site Plan Layout | Approx total no. of mature plants in population OR total area of community at that location | No. of plants and parts of plants likely to be taken OR area of community likely to be cleared (noting if this is buffer or actual community) | % of local population impacted |
|---|---|---|---|---|---|---|
| Q1 | 51J 367226 6486444 | **Inside** | Avoided | 12 | 0 | 0% |
| Q4 | 51J 365525 6487189 | Outside | Avoided | 12 | 0 | 0% |
| Q11 | 51J 368397 6484947 | **Inside** | **Impacted** | 12 | 12 | 100% |
| Q12 | 51J 368142 6484441 | **Inside** | **Possible Impact** | 12 | 12 | 100% |
| Q18 | 51J 363973 6485598 | **Inside** | Avoided | 12 | 0 | 0% |
| Q19 | 51J 364322 6484578 | Outside | Avoided | 12 | 0 | 0% |
| Q25 | 51J 370645 6487255 | Outside | Avoided | 12 | 0 | 0% |
| Q26 | 51J 371220 6487289 | Outside | Avoided | 12 | 0 | 0% |
| | | | **TOTAL** | **96** | **24** | **25%** |

**Attachment 6: Regional Priority Flora (*Eremophila acutifolia*) Impact Assessment**