Detailed Flora and Vegetation Survey
By-product Storage Site

Prepared for Lynas Kalgoorlie Pty Ltd
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EXECUTIVE SUMMARY

Lynas Kalgoorlie Pty Ltd (Lynas) commissioned Onshore Environmental Consultants (Onshore Environmental) to undertake a detailed flora and vegetation survey of the 553 hectare (ha) proposed long-term by-product storage site at Yarri Road, Parkeston (herein referred to as the study area), where by-products from the nearby rare earth processing plant will be stored. The study area is situated approximately 10 km northeast of Kalgoorlie in the Goldfields region of Western Australia.

A detailed flora and vegetation survey was completed by a Principal Botanist and Senior Ecologist from Onshore Environmental. The first phase survey was completed under fair seasonal conditions in June 2020, with a second phase survey completed under poor seasonal conditions in late October / early November 2020. An additional phase of survey work was undertaken in March 2021 following significant summer rainfall during February 2021. The additional phase of survey work included reassessment of the 48 permanent quadrats and targeted searches for annual and ephemeral plant taxa.

A total of 160 plant taxa from 37 families and 91 genera were recorded from the study area. Species representation was greatest among the Chenopodiaceae, Fabaceae, Poaceae, Scrophulariaceae and Asteraceae families. The most speciose genera were *Eremophila* (17 taxa), *Maireana* (ten taxa), *Acacia* (nine taxa)*, Eucalyptus* (six taxa) and *Senna* (five taxa).

None of the plant taxa currently identified from the study area were gazetted as Threatened Flora pursuant to the *Biodiversity Conservation Act 2016* (BC Act) or listed under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Based on the database searches completed as part of the desktop assessment, no Threatened flora species were likely to occur within the study area. One species recorded from the study area was listed as a Priority flora taxon by the Department of Biodiversity Conservation and Attractions (DBCA); *Eremophila praecox* (Priority 2)*. Eremophila praecox* was recorded as a total of seven plants from six point locations within the study area. It reached a maximum height of one metre and was recorded on hardpan plains. Seven additional locations for this species were recorded outside the study area boundary.

Thirteen introduced species were recorded from the study area. None of these species were Declared Plants listed under the *Biosecurity and Agriculture Management Act 2007* (BAM Act 2007).

A total of twelve vegetation types were described and mapped from the study area. None of the vegetation types were aligned with any commonwealth or state listed Threatened Ecological Communities (TECs) or state listed Priority Ecological Communities (PECs) known to occur within the Goldfields region. Vegetation within the study area was determined to be well represented at all levels (state-wide, bioregional [IBRA region and IBRA sub-region] and local), with approximately 99% of the pre-European extent remaining for the two Beard (1978) vegetation associations occurring within the study area. The proportion of these vegetation associations occurring within secure (Class I-IV) reserves was 3% and 14% at the state level.

Vegetation condition was rated as being *very good* with disturbances including roads and access tracks, timber cutting, rubbish dumping, and mine exploration.

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1.0 INTRODUCTION

1.1 Preamble

Onshore Environmental was commissioned by Lynas to undertake a detailed flora and vegetation survey of the proposed by-product storage site at Yarri Road, Parkeston, which is a potential long-term storage location for by-products originating from the nearby cracking and leaching plant that will treat rare earth concentrate from the Mt Weld mine near Laverton. The 553 hectare study area is located approximately 10 km northeast of Kalgoorlie in the Goldfields region of Western Australia (Figure 1). The detailed flora and vegetation survey was undertaken over three phases in June 2020, October/November 2020 and March 2021.

1.2 Land Use

The study area occurs predominantly on Common Reserve 8767 (85%) with the remainder on Unallocated Crown Land Common Reserve (UCL). Kalgoorlie is the main regional urban and industrial centre within the region, with surrounding land uses including grazing of rangelands (pastoral stations), crown reserves and mining. Mining occurs immediately adjacent to the larger regional centres of Kalgoorlie and Coolgardie, along with many other smaller towns in the Goldfields.

1.3 Biogeographic Regions

The latest version of the Interim Biogeographic Regionalisation for Australia (IBRA7) divides Australia into 89 bioregions based on climate, geology, landform, native vegetation and species information, and includes 419 sub-regions (Department of Environment 2013). The bioregions and sub-regions are the reporting unit for assessing the status of native ecosystems and their level of protection in the National Reserve System.

The study area is located on the border between the Murchison and Coolgardie bioregions. The Eastern Murchison subregion (MUR01) of the Murchison bioregion and the Eastern Goldfields subregion (COO003) of the Coolgardie bioregion both occur within the study area.

The East Murchison subregion is characterised by internal drainage, and extensive areas of elevated red desert sandplains with minimal dune development. Broad plains of red-brown soils and breakaway complexes occur as well as red sandplains. Vegetation is dominated by Mulga Woodlands often rich in ephemerals; hummock grasslands, saltbush shrublands and *Halosarcia* shrublands (Cowen 2001).

The Eastern Goldfields sub-region covers over 5.1 million hectares (CALM 2002). The sub-region comprises vegetation dominated by Mallees, *Acacia* thickets and shrub heaths on sandplains, diverse *Eucalyptus* woodlands around salt lakes, on ranges, and in valleys, while salt lakes support dwarf shrublands of samphire. Woodlands and *Dodonaea* shrubland occur on basic graninulites of the Fraser Range. The subregion is rich in endemic *Acacias* (CALM 2002).

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6618000 6615000 6612000 6609000 6606000 6603000 6600000 6597000 6594000

GIDJI ROASTER

GIDJI LAKE

GIDJI

GOLDFIELDS HIGHWAY

WHITE FLAG LAKE

KANOWNA

YARRI ROAD

MOUNT PERCY PLANT

PARKESTON

KALGOORLIE

CROESUS PLANT

BROWN HILL

BULONG ROAD

GOLDEN GATE

GREAT EASTERN HIGHWAY

WEST KALGOORLIE

SOMERVILLE

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community

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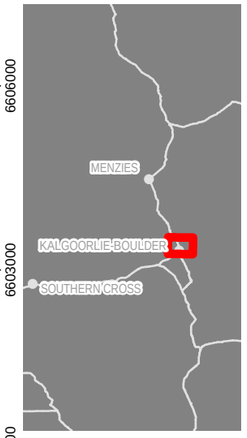
FIGURE 1

Location of the Study Area

Legend

Study Area



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1.4 Climate

The Kalgoorlie region has an arid to semi-arid climate. The closest weather station is at the Kalgoorlie-Boulder Airport, approximately 6 km southwest of the study area. Average annual rainfall is 266.1 mm with a bimodal rainfall pattern. Rainfall peaks in February with another smaller peak in June. Summer rainfall originates from deteriorating tropical cyclones that cross the coast of northern Western Australia and dissipate across the south east land division. Winter rainfall results from cold fronts crossing the southern coastline and moving inland. Mean maximum summer temperatures reach 33 degrees with mean minimum winter temperatures of 5 degrees.

The 2019 annual rainfall total of 143.0 mm was the lowest recorded since 1977, and was followed by a continued dry ten-month period from January to October 2020 with 133.2 mm received. This compares to the long term annual average of 266.1 mm. The total rainfall for the four month period prior to the first phase field survey in June 2020 was 70.2 mm, compared to the long-term average of 101.4 mm for the same period (Figure 2) (Bureau of Meteorology [BOM] 2020). However, it is noted that a large proportion of this rainfall was recorded during February 2020 (62.2 mm). Seasonal conditions at the time of the first season field survey in June 2020 were regarded as fair. A further 44.0 mm of rainfall was recorded between June and October 2020 (Figure 2), and seasonal conditions were regarded as poor at the time of the second phase survey which commenced in late October 2020. A total of 95.2 mm of rainfall was subsequently recorded in February 2021 (compared to the long term monthly average of 31.6 mm) (Figure 2). This is the first rainfall event of 70 mm or more recorded at Kalgoorlie since February 2017. As a result of this rainfall, an additional phase of survey work was undertaken in March 2021 to capture the annual and ephemeral flora component.

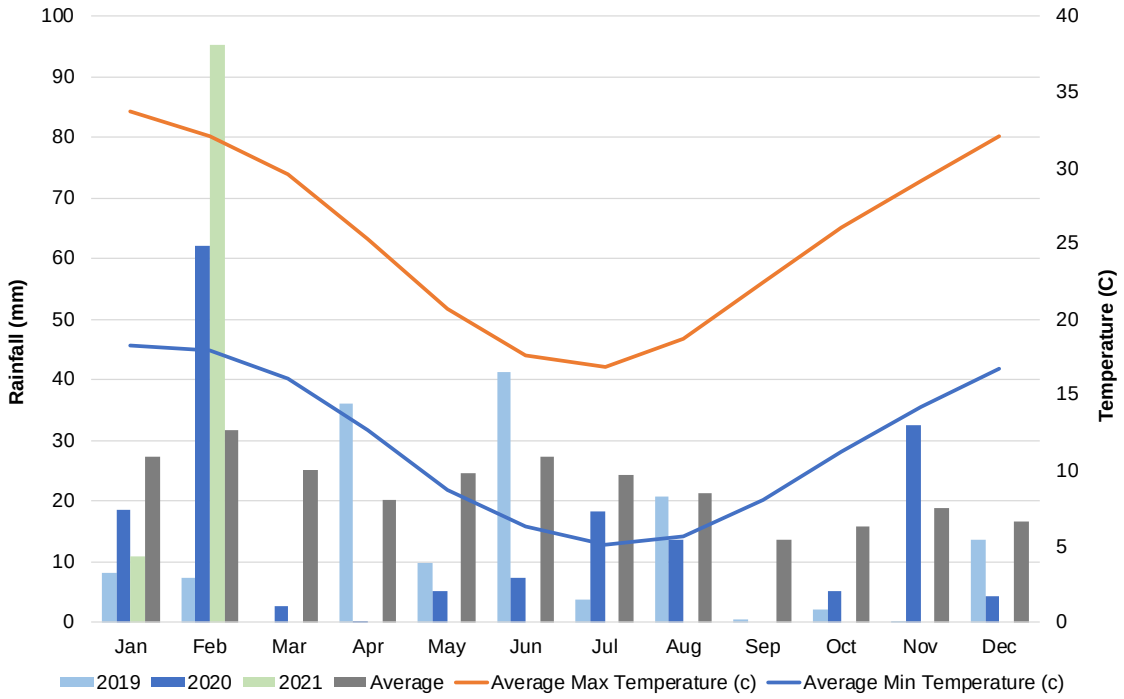

Figure 2 Rainfall and climatic data recorded at the Kalgoorlie-Boulder Airport station for 2019, 2020 and January to February 2021, with long term monthly average (BOM 2020).

1.5 Soils

Tille (2007) classified the most recent and detailed mapping of Western Australia's rangelands and arid interior into a hierarchy of soil-landscape mapping units. The study area is located within the Kalgoorlie Province, which has been divided into six soil-landscape zones. The study area lies within the Kambalda Zone.

The Kambalda Zone comprises flat to undulating plains with hills, ranges and some salt lakes and stony plains on greenstone and granitic rocks of the Yilgarn Craton. Soils are calcareous loamy earths and red loamy earths with salt lake soils, and some red-brown hardpan shallow loams and red sandy duplexes. Vegetation is described as red mallee, blackbutt, salmon gum and gimlet woodlands, with mulga and halophytic shrublands (and some spinifex grasslands).

1.6 Landforms

The Kalgoorlie Province consists of an extensive plateau of low relief; flat to undulating plains with small valleys (occasionally broken by low narrow rocky hills, ridges, tors and bosses) most commonly found on granitic terrain. These plains support silcrete duricrust, claypans, salt lakes with dunes and lunettes, gilgai areas, small remnants of sand plain, and small dune tracts. Low breakaways with short saline footslopes are occasionally present. Below these plains are some broad, flat to undulating, shallow valley plains formed on quaternary alluvium and colluvium. These plains have little defined drainage with seasonal lakes and claypans and isolated granitic and basic rock outcrops. Slightly lower down in the landscape are broad, flat valleys with chains of salt lakes. Also present on these valley floors are saline flats, claypans, kopi dunes, sand dunes, and sometimes tors and bosses of outcropping granites.

Higher up in the landscape are gently sloping to gently undulating plateau areas on granites and gneisses. These have long gentle slopes and, in places, abrupt erosional scarps. Some granitic bosses and tors are present. Rocky ranges, hills and ridges have formed on the greenstone, along with some undulating to low hilly country. Associated with this hilly terrain are gently undulating stony plains and low rises on limonite. Level to gently undulating sandplains and gravelly sandplains are mostly found over lateritic residuals and granitic basement. There are also some extensive loamy plains with sandy surfaces.

The study area is topographically flat to undulating, set on predominantly orange and yellow sands with the dominant landforms being hardpan plains. There are no significant surface water features within the study area.

1.7 Land Systems

The Department of Agriculture (now the Department of Primary Industries and Regional Development [DPIRD]) has conducted 14 rangeland surveys since 1972. These inventory and condition surveys used an integrated survey method involving the land system approach to rangeland description and evaluation. The primary objective of the surveys was to provide comprehensive descriptions and mapping of the biophysical resources of the region, as well as an evaluation of the condition of soils and vegetation. The mapping was based on patterns in topography, soils and vegetation.

The land systems of the Kambalda area were described by Payne *et al* (1998). This land system mapping covers the eastern part of the study area only, with no land system maps available for the western part of the study area. The eastern part of the study area is comprised of the Gumland land system which is described as 'extensive pedeplains supporting eucalypt woodlands with halophytic and non-halophytic shrub understoreys' (Payne *et al* 1998).

1.8 Flora and Vegetation

The study area is located on the border of the Coolgardie and Murchison IBRA regions of the Eremaean Botanical Province and South-west Interzone (Beard 1990). Beard (1978) described and mapped vegetation of the Kalgoorlie area at a scale of 1:250 000, differentiating eight vegetation systems. The original vegetation mapping undertaken by Beard (1978) was refined by Shepherd *et al*. (2002), who defined two vegetation associations covering the study area (Figure 3). The Pre-European extent currently remaining for the vegetation associations within the study area is close to 100%. The percentage of the current extent within reserves ranges from <1% to 13% (Table 1).

Table 1 Pre-European extent of vegetation associations occurring within the study area (Shepherd et al. 2002).

Vegetation Association	System	Description	Pre-European Extent (ha)	% Remaining	% Current Extent in Class I-IV Reserves
20	Barlee	Low woodland; mulga mixed with *Allocasuarina cristata* & *Eucalyptus* sp.	1,558,296	99.6	13.1
468	Coolgardie	Medium woodland; salmon gum & goldfields blackbutt	476,124	100	0.2

353000 354000 355000 356000 357000 358000 359000 360000

6608000 6607000 6606000 6605000 6604000 6603000 6602000

BARLEE, 20

COOLGARDIE, 468

COOLGARDIE, 1294

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FIGURE 3

Beard (1978) vegetation associations within the study area

Legend

- Study Area

Pre-European Vegetation (Beard 1975)

- BARLEE, 20
- COOLGARDIE, 1294
- COOLGARDIE, 468

N

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Meters

1:25,000

Datum: GDA94

Projection: MGA Zone 51

Date:	26/03/2021
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2.0 METHODOLOGY

2.1 Legislation and Guidance Statements

The detailed flora and vegetation survey was carried out in a manner that was compliant with Environmental Protection Authority (EPA) requirements for the environmental surveying and reporting of flora and vegetation in Western Australia:

- Technical Guidance Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a);
- Environmental Factor Guideline: Flora and Vegetation (EPA 2016b); and
- Statement of Environmental Principles, Factors and Objectives (EPA 2020).

2.2 Desktop Assessment

2.2.1 Literature Review

Regional scale reports relevant to the study area locality were reviewed, including:

- a summary of bioregional data (Cowen 2001);
- land systems mapping (Pringle *et al* 1994, Curry *et al* 1994, Payne *et al* 1998); and
- vegetation description and mapping by Beard (1976).

In addition, there was a review of all publicly available literature. While no previous flora and vegetation surveys have been completed within the study area, a number of previous surveys associated with mining projects have been completed within the Kalgoorlie area.

2.2.2 Database Searches

Desktop searches included information relating to significant flora, Threatened Ecological Communities (TECs) and Priority Ecological Communities (PECs) previously collected or described within, or in close proximity to, the study area. For this report the search was extended beyond the study area to place flora values into a local and regional context. The following databases were searched:

- NatureMap: This database represents the most comprehensive source of information on the distribution of Western Australia's flora, comprising records from the DBCA database and the Western Australian (WA) Herbarium Specimen Database (40 km radial search; accessed 27 May 2020) (DBCA 2020a);
- DBCA's Threatened and Priority flora database was searched to confirm the NatureMap results (50 km radial search; May 2020) (DBCA 2020b);
- DBCA's TEC, PEC and Environmentally Sensitive Areas (ESAs) database was searched to identify significant communities (100 km radial search; May 2020) (DBCA 2020c);
- EPBC Act Protected Matters Database (50 km radial search; accessed 27 May 2020) (DAWE 2020); and
- International Union for Conservation of Nature (IUCN) database (accessed 27 May 2020) (IUCN 2020).

2.2.3 Assessment of Likelihood of Occurrence in the Study Area

A list of conservation significant species occurring within a 50 km radius of the study area was compiled during the desktop searches. The likelihood of each taxon occurring within the study area was assessed using a set of rankings and criteria based on presence of suitable landform (inferred from aerial imagery with contours overlayed and knowledge of the adjacent areas) and distance to known records (Table 2).

Table 2 Ranking system used to assign the likelihood that a species would occur in the study area.

Rank	Criteria
Recorded	The species has been recorded in the study area.
Likely to occur	The species has previously been recorded from a landform which is present within the study area, and there are previous records within a 20 km radius of the study area.
Possible to occur	The species has previously been recorded from a landform which is present within the study area, and there are previous records within a 50 km radius of the study area.
Unlikely to occur	The landform from which the species has previously been recorded is absent within the study area, and/or there are no previous records within a 50 km radius of the study area.

2.2.4 Assessment of Conservation Significance

The conservation significance of flora and ecological communities are classified at a Commonwealth, State and Local level on the basis of various Acts and Agreements, including:

International Level:

- IUCN: The IUCN 'Red List' lists species at risk under nine categories (status codes) (Appendix 1).

Commonwealth Level:

- EPBC Act: The Department of Agriculture, Water and the Environment (DAWE) lists Threatened flora and ecological communities, which are determined by the Threatened Species Scientific Committee according to criteria set out in the Act. The Act lists flora that are considered to be of conservation significance under one of six categories (Appendix 1).

State Level:

- BC Act: At a State level, native flora species are protected under the BC Act - Wildlife Conservation Notice. A number of species are assigned an additional level of conservation significance based on a limited number of known populations and the perceived threats to these locations (Appendix 1); and
- DBCA Priority list: DBCA produces a list of Priority species and ecological communities that have not been assigned statutory protection under the BC Act. Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added under Priorities 1, 2 or 3. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been removed from the threatened species list for other taxonomic reasons, are placed in Priority 4. These species require regular monitoring (see Appendix 1). The list of PECs identifies those that need further investigation before nomination for TEC status at a State level.

Local Level:

- Species may be considered of local conservation significance because of their patterns of distribution and abundance. Although not formally protected by legislation, such species are acknowledged to be in decline as a result of threatening processes, primarily habitat loss through land clearing.

2.3 Survey Methodology

2.3.1 Timing and Personnel

The flora and vegetation survey was completed over three phases by Principal Botanist Dr Jerome Bull and Senior Ecologist Ms Jessica Waters:

- Phase 1: 12th to the 18th of June 2020;
- Phase 2: 27th October to the 2nd of November 2020; and
- Phase 3: 10th and 14th of March 2021.

2.3.2 Sampling of Study Sites

The field survey involved systematic sampling using quadrats (referred to as study sites). Relevé vegetation descriptions were made to increase the accuracy of vegetation mapping and targeted searches were completed in habitats where it was anticipated that significant flora might occur. The study sites were 20 metres by 20 metres in dimension which is standard for the Coolgardie and Murchison bioregions. A total of 48 quadrats were formally assessed. The species accumulation curve demonstrates that the study area was adequately sampled, with the species accumulation curve reaching an asymptote (Figure 4). The locations of all quadrats are provided in Figure 5.

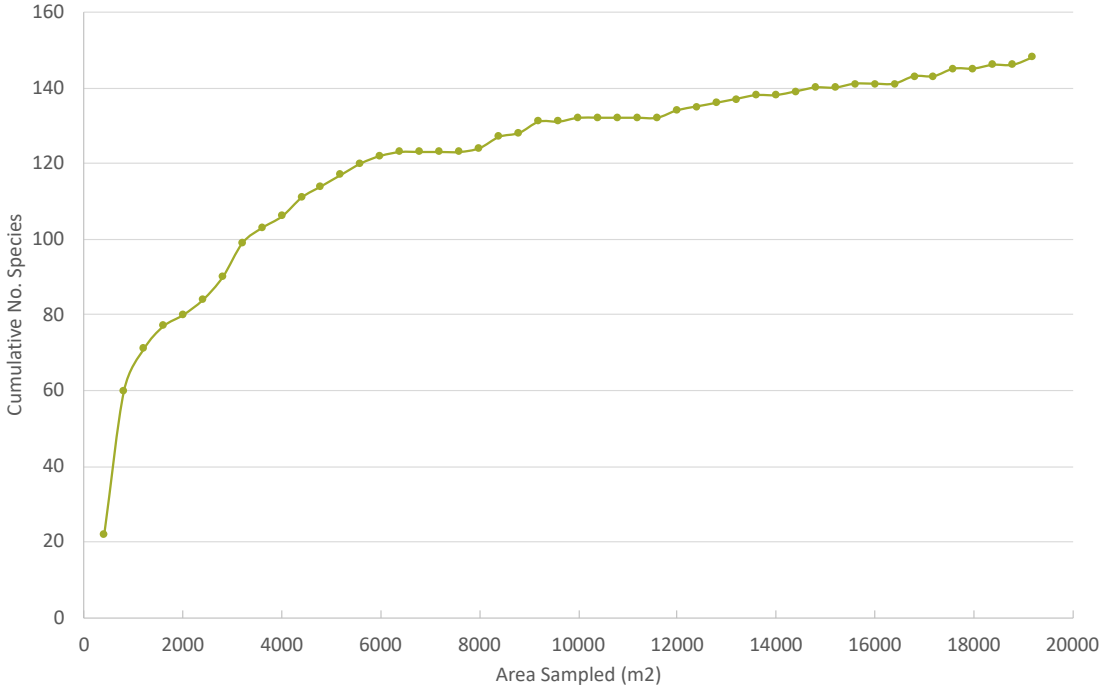

Figure 4 Species accumulation curve for the 48 quadrats formally assessed within the study area.

The sampling sites were assessed to provide a list of the total flora occurring within the study area and a description of the vegetation structure. Data collected covered a range of environmental parameters including:

- Landform and habitat;
- Aspect;
- Soil colour and soil type;
- Rock type;
- Slope (angle);
- Vegetation condition;
- Disturbance (caused by fire, clearing, grazing etc.);
- Age since fire;
- Broad floristic formation;
- Vegetation type description; and
- Height and percentage ground cover provided by individual plant taxa.

Other parameters recorded for each study site were:

- Study site number and date of assessment;
- Names of the botanists undertaking the assessment;
- Location description - a waypoint and GPS coordinate (GDA94) using a handheld GPS; and
- Photograph number.

Vegetation condition for each of the study sites was determined using a recognised rating scale (based on Keighery 1994, see Appendix 2).

2.3.3 Targeted Surveys for Conservation Significant Species

Targeted searches for species of conservation significance were completed within the study area. Ground truthing provided an opportunity to record opportunistic locations for Threatened and Priority listed flora, and undertake closer examination of specific landforms where conservation significant flora may be expected to occur.

2.3.4 Weed Survey

Introduced species were recorded from the study sites assessed within the study area. Opportunistic collections were also made while moving throughout the study area, with targeted weed searches completed in any high moisture habitats encountered.

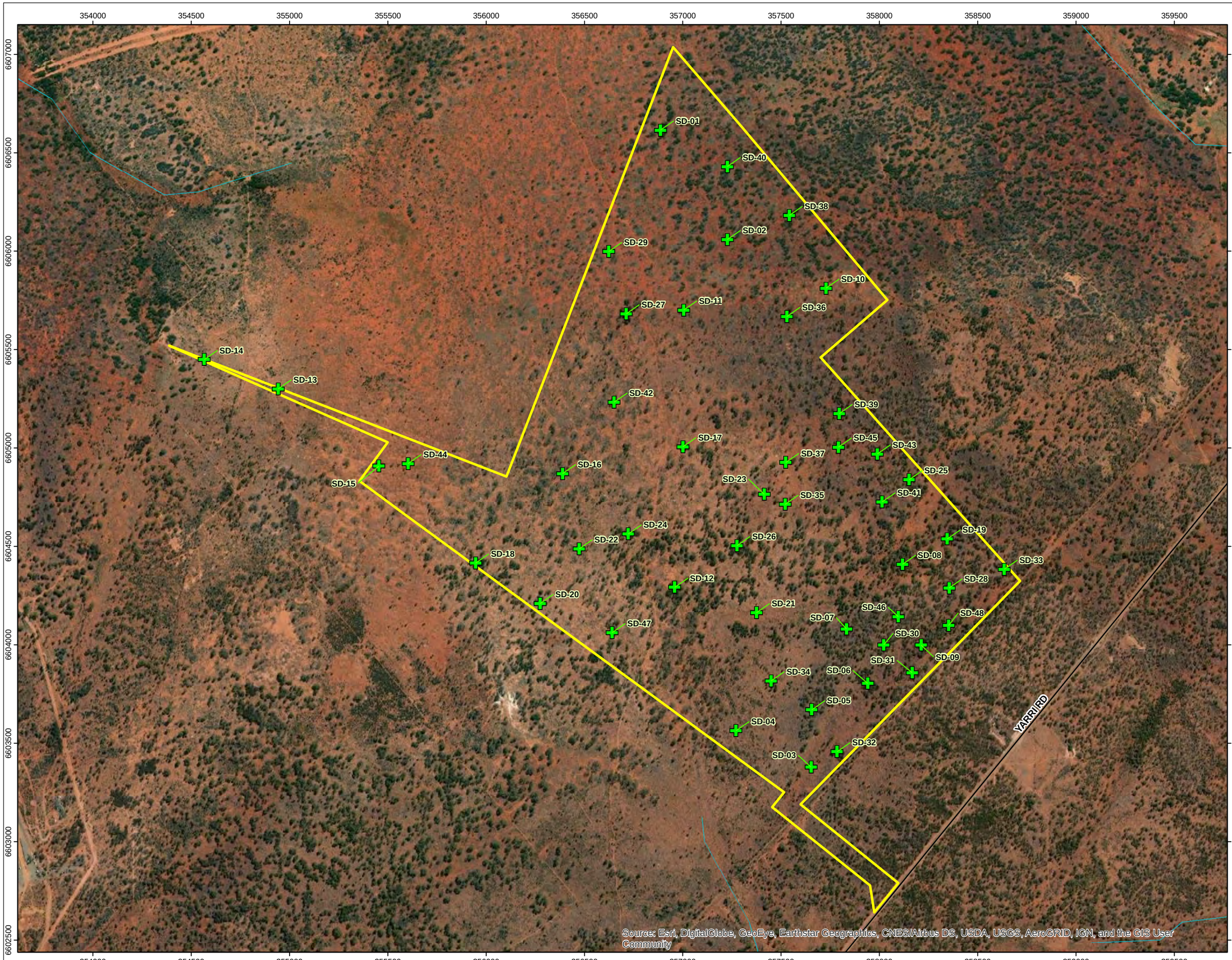

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FIGURE 5

Location of study sites (quadrats) within the study area

Legend

- Study Area
- Sample Locations

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0 100 200 300 400 500

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Projection: MGA Zone 51

Date:	26/03/2021
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2.3.5 Floristic Analysis

A multivariate statistical analysis of the floristic quadrat data (48 quadrats) was completed to assist in understanding the vegetation-habitat relationships within the study area. Statistical analysis of quadrat data can support delineation of vegetation types within the study area, and provide comparison against locally significant communities (TECs and PECs) where quadrat data is available.

A two-way classification (Agglomerative Hierarchical Fusion) of the presence/absence quadrat data was carried out on the 148 taxa x 48 quadrat dataset using the program PATN (Belbin 2003). The flexible unweighted pair group method with arithmetic mean (UPGMA) classification strategy was used ($\beta = -0.1$), together with the Bray-Curtis site similarity measure. The number of groups to be determined was set at 12. The primary output of the classification was in the form of a dendrogram (Appendix 3).

The results from the statistical analysis need to be appropriately analysed by an experienced botanist, and effects such as fire disturbance, ephemeral taxa, and spatial distribution of quadrats taken into consideration when interpreting the results. Plant taxa that occupy a range of vegetation types can obscure vegetation patterning and influence statistical outputs. It must be acknowledged that the results of multivariate statistical analysis may not always align with the delineated vegetation types; in these instances, an explanation for the differences will be provided.

2.3.6 Vegetation Type Mapping

The classification of vegetation types within the study area follow the height, life form and density classes of Muir (1997) (see Appendix 4). This is largely a structural classification suitable for broader scale mapping, but taking all ecologically significant strata into account.

The description of vegetation types lead with the most dominant strata (based on percent cover) and flora species listed start with the most dominant (Table 3). Table 4 further describes and categorises these strata and gives examples of potential growth forms for each, e.g. over-storey (U), mid-storey (M) and under-storey (G) vegetation strata.

Vegetation types recorded within the study area are grouped according to ‘broad floristic formation’ (refer to Table 3). A broad floristic formation describes the dominant growth form, cover and height as well as the dominant genus for the dominant stratum (Department of Environment and Heritage (DEH) 2003).

The vegetation mapping utilised high-resolution aerial photography of the entire study area at a scale of 1:12,500, with definition of vegetation polygons based on contrasting shading patterns. Ground-truthing of the study area was completed during the survey with vegetation descriptions made within selected vegetation polygons to confirm dominant structural layers and associated plant taxa. The 48 study sites and numerous relevé plots were overlaid on the aerial photography, and associated flora and vegetation data was used to provide vegetation type descriptions for individual polygons defined.

2.3.7 Vegetation Coding

A vegetation code was applied to each vegetation type mapped. This code is comprised of the dominant landform on which the vegetation type occurs and the dominant plant taxa in each vegetation stratum.

2.3.8 Vouchering

At least one voucher specimen was taken for each species collected to verify identification. Taxonomy was completed by Dr Jerome Bull at the Western Australian Herbarium (WAH) with use made of the WAH for confirmation of species identification.

Table 3 Vegetation type descriptions (based on the methods used under the National Vegetation Information System, DEH 2003).

Description	Species	Cover	Soils	Landscape Position	Example
Broad Floristic Formation	The one dominant genus name for the dominant stratum, e.g. *Acacia*	One cover class for the dominant stratum, e.g. Low Woodland. If two strata have the same cover range, the taller stratum is listed	Not relevant	Not relevant	*Acacia* Low Woodland
Vegetation Type (describe three strata – refer to Table 4)	Up to three dominant species listed for each stratum, e.g. *Acacia incurvaneura Acacia pruinocarpa* and *Acacia pteraneura*	One cover class code for each stratum, e.g. Low Open Woodland, Open Shrubland, Low Open Shrubland	State soil colour and type, e.g. red sandy loam	Include the landscape position, e.g. stony plain	Low Open Woodland of *Acacia incurvaneura, A.pruinocarpa* & *A.pteraneura* over Open Shrubland of *Eremophila spathulata* over Low Open Shrubland of *Ptilotus schwartzii, P.obovatus* & *Solanum lasiophyllum* on red sandy loam on stony plains

Table 4 Vegetation Stratum Levels (modified from DEH 2003).

Stratum Description	Example Growth Forms
Over-storey (U)	
Tallest tree sub-stratum; for forests and woodlands this will generally be the dominant stratum	Trees, tree mallee, and vines (mallee shrubs)
Sub-canopy layer; second tree layer	
Sub-canopy layer; third tree layer	
Mid-storey (M)	
Tallest shrub layer	Shrubs, low trees, mallee shrubs, grass-trees, tree-ferns, cycads, palms, and vines (low shrubs, tall grasses, tall forbs, tall sedges)
Second shrub layer	
Third shrub layer	
Under-storey (U)	
Tallest ground species	Grasses, forbs, sedges, rushes, lichens, epiphytes, low shrubs, ferns, bryophytes, cycads, grass-trees, and vines
Other ground species	

2.3.9 Field Survey Constraints

The EPA Technical Guidance for Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia (EPA 2016a) list seven potential limitations that field surveys may encounter. These limitations are addressed in Table 5.

Table 5 Relevance of limitations, as identified by EPA (2016a), to the flora and vegetation survey.

Constraint	Relevance
Availability of contextual information at a regional and local scale	No previous flora and vegetation surveys had been completed within the study area, however there are numerous surveys from the Kalgoorlie area that provide an excellent local database.
Proportion of flora recorded and/or collected, any identification issues	High intensity sampling was completed across the study area during the three field surveys. A large proportion of the annual and ephemeral flora was likely recorded given the intensity of the survey and variety of seasons sampled. All quadrats within the study area have now been assessed on three occasions and extensive targeted surveys were conducted. A large proportion of species within the study area were able to be fully identified to species level.
Survey timing, rainfall, season of survey	The field survey work was completed over three phases in mid June 2020, October/November 2020 and March 2020. Seasonal conditions for the surveys were rated as fair, poor and good respectively. Below average monthly rainfall was received during all months from January to October 2020, with the exception of February 2020. However significant rainfall was received in February 2021 which resulted in good seasonal conditions at the March 2021 assessment. The third targeted survey allowed for the assessment of the annual and ephemeral flora component.
Disturbance that may have affected the results of the survey such as fire, flood or clearing	There were no disturbances recorded within the study area that influenced survey outcomes. Disturbances within the study area included extensive access tracks, dumping of rubbish, and timber cutting. Disturbances did not impact on the ability to complete the field survey.

Constraint	Relevance
Was the appropriate area fully surveyed (effort and extent)	A Principal Botanist and Senior Ecologist spent 24 field days covering the entire study area over three field trips. A total of 48 quadrats supplemented by numerous relevé sites were assessed within the study area. This represents an extensive survey effort. The latest EPA technical guidelines (EPA 2016a) recommends that a minimum of three quadrats should be sampled in each vegetation unit. All vegetation types recorded within the study area were sampled with at least three quadrats. Adequate sampling was confirmed by the species accumulation curve, which reached an asymptote.
Access restrictions within the survey area	The study area was accessed on foot, noting that vegetation mapping was facilitated by high-resolution aerial photography. Access did not pose any restrictions to undertaking the field survey.
Competency/experience of the team carrying out the survey, including experience in the bioregion surveyed	The Principal Botanist working on the survey (Dr Jerome Bull) has more than 15 years' experience working in the region. Both the Principal Botanist and Senior Ecologist have completed a number of surveys in close proximity to the study area.

3.0 RESULTS

3.1 Desktop Review

3.1.1 Previous Baseline Flora Surveys

Broad scale vegetation mapping of the Kalgoorlie area was first carried out by Gardner (1942) and later refined by Beard (1975). Beard (1978) described and mapped vegetation at a scale of 1:250 000, differentiating eight vegetation systems. Vegetation complexes consisted predominantly of low woodlands dominated by eucalypts in the south, with Mulga becoming increasingly dominant in the north. Vegetation within the study area was mapped as Mulga, *Allocasuarina cristata* and *Eucalyptus* sp. low woodland, and Salmon Gum and Goldfields Blackbutt Medium Woodland.

In terms of its floristic richness, the Goldfields region includes species from both the south-west (Merchant 1973; Hopper 1979) and the arid interior, as well as species which are either endemic to the Goldfields or have restricted geographic distributions.

The first detailed flora and vegetation survey of the Kurnalpi-Kalgoorlie area was undertaken as part of the 'Biological Survey of the Eastern Goldfields of Western Australia' by Keighery, Milewski and Hnatiuk (in McKenzie and Hall 1992). They describe the main vegetation as woodland and low woodland transitional between the Southwestern Interzone (dominated by *Eucalyptus*) and the Austin Botanical District (dominated by *Acacia aneura*). Many of the 45 vegetation complexes described feature *Casuarina cristata* with the total flora list comprising three species of ferns, two conifers and 486 species of flowering plants.

Further north of the study area, flora and vegetation of the Murchison has been assessed at a broad scale by Gardner (1942) and Beard (1976). More recently, the Department of Agriculture (now DPIRD) completed inventory and condition surveys of the Murchison and Sandstone-Yalgoo-Paynes Find area based on land system mapping (Curry *et al* 1994, Payne *et al* 1998). In addition to the larger broad scale surveys, a number of smaller intensive flora and vegetation surveys have been completed in recent years associated with resource development projects. These surveys have resulted in the collection of a significant amount of site-specific biological survey data, most of which has been undertaken for formal environmental impact assessment.

While no previous surveys have been completed within the boundary of the study area, a number of surveys have been undertaken nearby including Lynas' cracking and leaching plant site (Onshore Environmental 2020), the Black Swan Nickel Mine (Onshore Environmental 1995), and associated expansions around the Black Swan Nickel Mine (Onshore Environmental 2004a, 2004b). Findings from these local surveys are summarised in Appendix 5.

3.1.2 Threatened Flora listed under the EPBC Act

A search of the EPBC Act Protected Matters database was undertaken for a 50 km radius around the study area (DAWE 2020). Three Threatened Flora taxa listed under the EPBC Act have been recorded as occurring or having suitable habitat within the 50 km radius of the study area; *Gastrolobium graniticum* (Endangered), *Tecticornia flabelliformis* (Vulnerable) and *Thelymitra stellata* (Endangered).

3.1.3 Threatened Flora listed under the IUCN Red List

A search of the IUCN database (IUCN 2020) determined that no Threatened Flora taxon was likely to occur within the study area.

3.1.4 Threatened Flora listed under the BC Act

No Threatened Flora taxa were identified from the DBCA's rare flora and NatureMap database searches (DBCA 2020a, 2020b) within a 50 km radius of the study area.

3.1.5 Priority Flora recognised by the DBCA

A total of 25 Priority flora taxa were identified from the DBCA's rare flora and Nature Map searches within a 50 km radius of the study area (Table 6). Five of these taxa were considered 'likely' to occur within the study area based on occurrence of habitat and proximity of previous records (Table 6). It was considered 'possible' that five taxa identified during the database searches may occur within the study area (Table 6). A further 15 taxa were determined as 'unlikely' to occur within the study area.

Table 6 Significant flora previously recorded from a 50 km search radius around the study area.

Taxon	Cons Code	Habitat	Likelihood
Acacia epedunculata	P1	Sand plains	Unlikely
Alyxia tetanifolia	P3	Sandy clay, loam, concretionary gravel; drainage lines, near lakes.	Unlikely
Angianthus prostratus	P3	Red clay or loamy soils. Saline depressions.	Unlikely
Austrostipa sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	P1	Very gently inclined crest of basalt, greenstone with some calcrete with brown shallow sandy clay loam soils.	Possible
Calandrinia lefroyensis	P1	Flat plain, orange clayey sand with fine quartz.	Possible
Cyathostemon verrucosus	P3	Pale brown/yellowish deep sand over granite.	Unlikely
Elachanthus pusillus	P2	Gentle upper slope, red clay soils with greenstone and granite gravel.	Unlikely
Eremophila caerulea subsp. *merrallii*	P4	Sand, clay or loam. Undulating plains.	Possible
Eremophila praecox	P2	Red/brown sandy loam. Undulating plains.	Likely
Eremophila xantholaema	P1	Stony, brown loam soils in *Eucalyptus-Casuarina* woodland on the upper slopes of low rocky hills.	Likely
Eucalyptus jutsonii subsp. *jutsonii*	P4	Red, yellow or orange deep sand; sandplains and dunes.	Unlikely
Eucalyptus x brachyphylla	P4	Sandy loam, granite rocks and outcrops.	Unlikely
Frankenia glomerata	P4	Low sandy rise within broad braided saline drainage line, saline sand.	Unlikely
Goodenia salina	P2	Well-drained, saline, grey or brown loamy clay. Low gypseous dunes near salt pans.	Unlikely
Isolepis australiensis	P3	Siltysand, sandyclay. Lake margins, pools.	Unlikely
Lepidium fasciculatum	P3	Red earth soils, flats.	Likely
Melaleuca coccinea	P3	Sandy loam over granite. Granite outcrops, sandplain, river valleys.	Unlikely

Taxon	Cons Code	Habitat	Likelihood
Notisia intonsa	P3	Gently inclined slopes of weathered basalt hills, red-brown shallow loam soils.	Unlikely
Ptilotus chortophytus	P1	Breakaway. Rocky brown loam with shale.	Possible
Ptilotus procumbens	P1	Wash away in deep red clay; broad flat, red cracking clay.	Likely
Ptilotus rigidus	P1	Small quartz and ironstone hill on the outer edge of salt lake.	Possible
Rhodanthe uniflora	P1	Brown earth. Open eucalyptus woodland.	Likely
Ricinocarpos sp. Eastern Goldfields (A. Williams 3)	P1	Rocky hillslope. Rocky surface. Red-brown sand-loam over felsic and mafic volcanics. Archean bedrock.	Unlikely
Tecticornia flabelliformis	P1	Clay. Saline flats.	Unlikely
Xanthoparmelia dayiana	P3	Granite Rock	Unlikely

3.1.6 TECs listed under State and Federal Legislation

A search of the EPBC Act Protected Matters database (DAWE 2020) confirmed there are no federal listed TECs previously recorded from within, or adjacent to, the study area. Similarly, a search of the DBCA ecological community database (DBCA 2020c) confirmed there are no state listed TEC records for the immediate study area.

3.1.7 PECs recognised by DBCA

A search of DBCA's ecological community database (DBCA 2020c) confirmed that no PECs are known to occur within a 50 km radius of the study area.

3.2 Flora Species

A total number of 160 plant taxa (including varieties and subspecies) from 37 families and 91 genera were recorded from the study area (Table 7, Appendix 6). Species representation was greatest among the Chenopodiaceae, Fabaceae, Poaceae, Scrophulariaceae and Asteraceae families (Table 7). The most speciose genera were *Eremophila* (17 taxa), *Maireana* (ten taxa), *Acacia* (nine taxa), *Eucalyptus* (six taxa) and *Senna* (five taxa). The most common species encountered in the study area were *Maireana sedifolia* and *Eremophila scoparia*, recorded from 48 and 47 quadrats respectively.

Table 7 Statistics for total flora recorded from the study area.

Overview	No. Taxa
Families	37
Genera	91
Taxa (species, subspecies, varieties)	160
Native Taxa	147
Introduced Taxa	13
Threatened Flora	0
Priority Flora	1
Range Extensions	0
Speciose Families	**No. Taxa**
Chenopodiaceae	25
Fabaceae	19
Poaceae	17
Scrophulariaceae	17
Asteraceae	16
Myrtaceae	7
Malvaceae	6
Amaranthaceae	4
Speciose Genera	**No. Taxa**
Eremophila	17
Maireana	10
Acacia	9
Eucalyptus	6
Senna	5
Ptilotus	4
Sclerolaena	4
Sida	4

3.3 Significant Flora

3.3.1 Threatened Flora listed under the BC Act and EPBC Act

None of the plant taxa recorded from the study area were gazetted as Threatened Flora (T) under the EPBC Act or the BC Act.

3.3.2 Significant Flora

One Priority flora species was recorded from the study area; *Eremophila praecox* (Figure 6, Appendix 7). *Eremophila praecox* (Priority 2) is a broom shaped shrub reaching up to 3 m high. Flowers are purple and appear in October or December. Flowering specimens were observed during the field survey. *Eremophila praecox* was recorded as a total of seven plants from six spot locations within the study area (Figure 6). It reached a maximum height of 1 m and was recorded on hardpan plains (Plate 1).

Plate 1 *Eremophila praecox* within the study area.

3.3.3 *Eremophila praecox* - Regional Distribution

Eremophila praecox has a bimodal geographic distribution, occurring in the Goldfields region of Western Australia (Coolgardie bioregion) and the western part of the Eyre Peninsula in South Australia (Nullarbor, Eyre, Yorke Block bioregions). In the Goldfields, it has been documented growing on red brown sandy loam soils on undulating plains around the Coolgardie-Widgiemooltha-Kalgoorlie area (WAH 2020, Brown and Buirchell 2011, Chinnock 2007).

The database searches identified 14 *Eremophila praecox* locations occurring within 20 km of the study area. Total plant numbers were generally low at each location. Habitat was described as red sand or clay with *Eucalyptus* woodlands.

Eremophila praecox was recorded at an additional seven locations outside the study area by Onshore Environmental during the March 2021 survey (Figure 6, Appendix 7). These locations lie approximately 500 m to 1 km east of the study area. The plants occurred on stony hillslopes dominated by *Eucalyptus lesouefii* and in a drainage zone with *Eucalyptus ravida* and *Eucalyptus salubris.* Plant numbers were low with between one and three plants recorded at each location and eleven aditional plants recorded in total.

3.4 Introduced Flora

A total of thirteen introduced species were recorded from the study area:

- **Carrichtera annua;*
- **Carthamus lanatus;*
- **Cenchrus ciliaris;*

- **Citrullus amarus;*
- **Cucumis myriocarpus;*
- **Cuscuta* cf.*epithymum;*
- **Erigeron bonariensis*
- **Lysmachia arvensis;*
- **Oligocarpus calendulaceus;*
- **Medicago laciniata;*
- **Salvia verbenaca;*
- **Sonchus oleraceus;* and
- **Stapelia* sp. indet.

No Declared Plants listed under the BAM Act 2007 were recorded from the study area.

3.5 Vegetation Condition

Vegetation condition within the study area was rated as *very good* using the Keighery (1994) scale (Figure 7), defined as “vegetation being altered by obvious signs of disturbance”. Disturbances recorded consistently across the entire study area included access tracks, low intensity grazing by cattle, mine exploration, timber cutting and dumping of domestic rubbish.

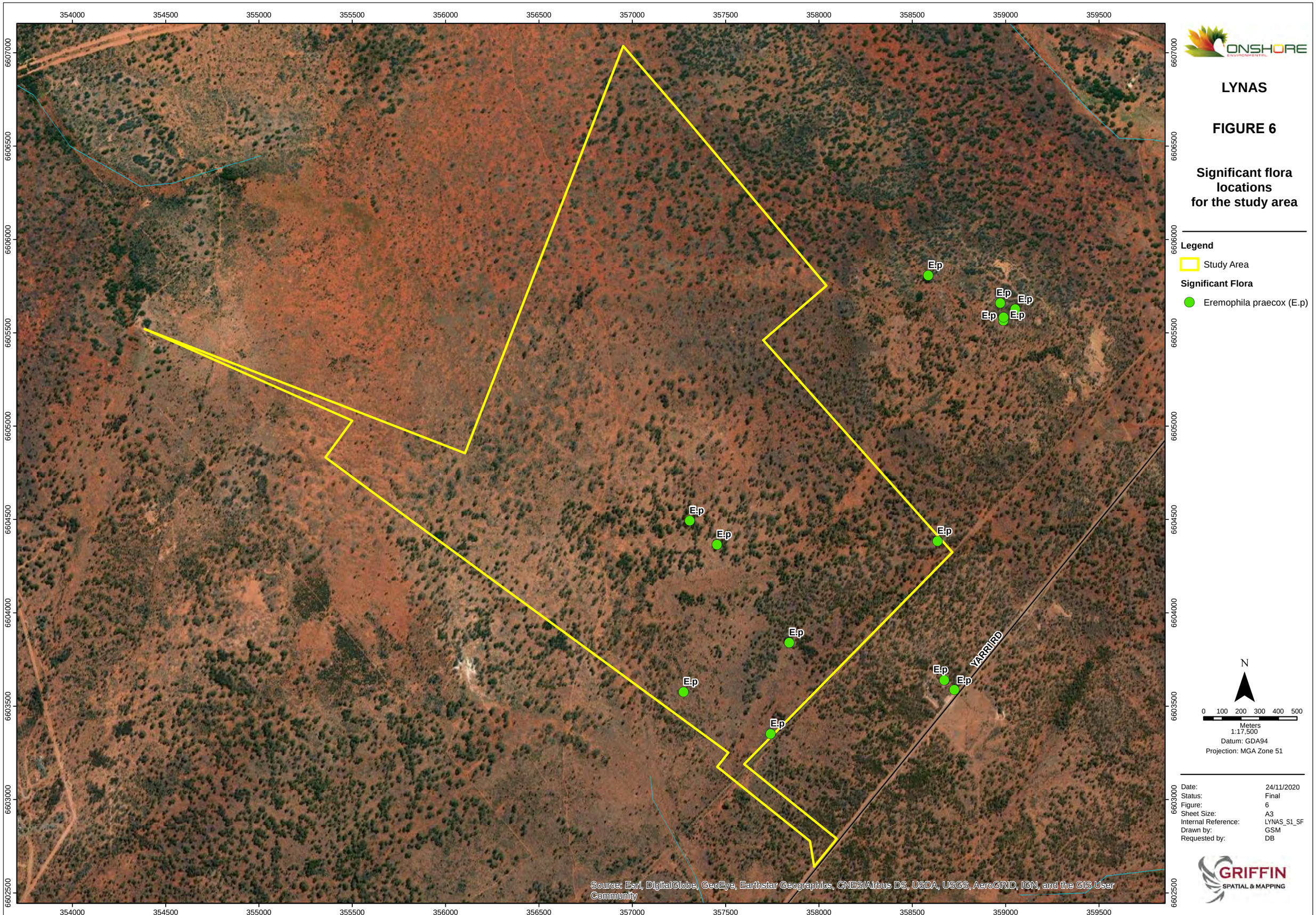

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FIGURE 6

Significant flora locations for the study area

Legend

- Study Area

Significant Flora

- Eremophila praecox (E.p)

N

0 100 200 300 400 500

Meters
1:17,500

Datum: GDA94

Projection: MGA Zone 51

Date:	24/11/2020
Status:	Final
Figure:	6
Sheet Size:	A3
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Requested by:	DB

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FIGURE 7

Vegetation condition map for the study area

Legend

- Study Area

Vegetation Condition

- Very Good

N

0 100 200 300 400 500

Meters

1:17,500

Datum: GDA94

Projection: MGA Zone 51

Date:	26/03/2021
Status:	Final
Figure:	7
Sheet Size:	A3
Internal Reference:	LYNAS_S1_VC
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Requested by:	DB

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3.6 Vegetation Types

A total of 12 vegetation types, classified as nine broad floristic formations and occurring on two landform features were described and mapped from the study area (Figure 8, Table 8). A species by site matrix and raw data for the 48 study sites is presented in Appendices 8 and 9 respectively.

The latest EPA technical guidelines (EPA 2016a) recommend that a minimum of three quadrats should be sampled within each vegetation unit. All vegetation types complied with this recommendation.

None of the vegetation types described and mapped from the study area were found to be aligned with any known TECs or PECs documented from the Coolgardie or Murchison bioregions.

The vegetation of the study area consisted predominantly of hardpan plains supporting *Eucalyptus salmonophloia* Woodland*, Eucalyptus salubris* Mallee, and *Maireana sedifolia* Shrubland*.* Vegetation types are described in more detail below.

Table 8 Vegetation types mapped within the study area.

Code	Broad Floristic Formation	Vegetation Type Description	Area (ha)	% of Study Area
HP EsEtEl EscEi MsLaSs	*Eucalyptus* Woodland	Woodland of *Eucalyptus salmonophloia*, *Eucalyptus transcontinentalis* and *Eucalyptus lesouefii* over Open Scrub of *Eremophila scoparia* and *Eremophila interstans* over Open Dwarf Scrub C of *Maireana sedifolia, Lysium australe* and *Scaevola spinescens* on red silty loam on hardpan plains	61.94	11.02
GP Es Ec MsAnLa	*Eucalyptus* Open Woodland	Open Woodland of *Eucalyptus salmonophloia* over Very Open Tree Mallee of *Eucalyptus celastroides* over Open Dwarf Scrub C of *Maireana sedifolia*, *Atriplex nummularia* and *Lysium australe* on red silty clay loam on gilgai plains	12.39	2.20
HP Es MsSs EscSafAh	*Eucalyptus* Low Woodland A	Low Woodland A of *Eucalyptus salmonophloia* over Dwarf Scrub C of *Maireana sedifolia* and *Scaevola spinescens* with Open Low Scrub of Ere*mophila scoparia, Senna artemisioides* subsp. *filifolia* and *Acacia hemiteles* on red clay loam on hardpan plains	51.00	9.07
HP El MsCc EpaMsOm	*Eucalyptus* Low Woodland A	Low Woodland A of *Eucalyptus lesouefii* over Open Dwarf Scrub C of *Maireana sedifoila* and *Cratystylis conocephala* over Open Dwarf Scrub D of *Eremophila parvifolia* subsp. *auricampa*, *Maireana sedifolia* and *Olearia muelleri* on brown silty loam on hardpan plains	18.89	3.36
HP Er EiEscEoa MsPoSs	*Eucalyptus* Dense Tree Mallee	Dense Tree Mallee of *Eucalyptus ravida* over Open Low Scrub A of *Eremophila ionantha*, *Eremophila scoparia* and *Eremophila* oldfieldii *subsp. angustifolia* over Open Dwarf Scrub C of *Maireana sedifolia, Ptilotus obovatus* and *Scaevola spinescens* on red clay loam on hardpan plains	2.85	0.51
HP Esa EscEapEoa MsSsOm	*Eucalyptus* Tree Mallee	Tree Mallee of *Eucalyptus salubris* over Open Low Scrub A of *Eremophila scoparia*, *Exocarpus aphyllus* and *Eremophila oppositifolia* subsp. *angustifolia* over Open Dwarf Scrub C of *Maireana sedifoila, Scaevola spinescens* and *Olearia muelleri* on brown loam on hardpan plains	3.07	0.55

Code	Broad Floristic Formation	Vegetation Type Description	Area (ha)	% of Study Area
HP Esa TdMsAv MsTd	*Eucalyptus* Open Tree Mallee	Open Tree Mallee of *Eucalyptus salubris* over Dwarf Scrub D of *Tecticornia disarticulata*, *Maireana sedifolia* and *Atriplex vesicaria* with Open Dwarf Scrub C of *Maireana sedifolia* and *Tecticornia disarticulata* on brown sandy clay loam on hardpan plains	48.29	8.59
HP AaAtEa EiEscSaf MsPoSs	*Acacia* Thicket	Thicket of *Acacia acuminata, Acacia tetragonophylla* and *Eremophila alternifolia* over Open Low Scrub A of *Eremophila ionantha*, *Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* over Open Dwarf Scrub C of *Maireana sedifoila*, *Ptilotus obovatus* and *Scaevola spinescens* on red clay loam on hardpan plains	5.52	0.98
HP MpMs AvMpMs EpEcSc	*Maireana* Dwarf Scrub C	Dwarf Scrub C of *Maireana pyramidata* and *Maireana sedifolia* over Dwarf Scrub D of *Atriplex vesicaria*, *Maireana pyramidata* and *Maireana sedifolia* over Very Open Low Grass of *Enneapogon polyphyllus*, *Enneapogon caerulescens* and *Sporobolus caroli* on red clay loam on gilgai plains and hardpan plains	47.14	8.39
HP MsSafCs EscSaf AvMsLa	*Maireana* Dwarf Scrub C	Dwarf Scrub C of *Maireana sedifoila, Senna artemisioides* subsp. *filifolia* and *Cratystylis subspinescens* with Open Low Scrub A of *Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* and Open Dwarf Scrub D of *Atriplex vesicaria, Maireana sedifolia* and *Lysium australe* on red clay loam on hardpan plains	72.32	12.87
HP MsMpAn Esc AvMsMp	*Maireana* Dwarf Scrub C	Dwarf Scrub C of *Maireana sedifolia, Maireana pyramidata* and *Atriplex nummularia* with Open Low Scrub A of *Eremophila scoparia* and Open Dwarf Scrub D of *Atriplex vesicaria, Maireana sedifolia* and *Maireana pyramidata* on red clay loam on hardpan plains	108.62	19.32
HP TdMs TdMsAv Es	*Tecticornia* Dwarf Scrub C	Dwarf Scrub C of *Tecticornia disarticulata* and *Maireana sedifolia* over Open Dwarf Scrub D of *Tecticornia disarticulata, Maireana sedifolia* and *Atriplex vesicaria* with Open Woodland of *Eucalyptus salmonophloia* on red clay loam on hardpan plains	130.10	23.14

Legend

Study Area

Sample Locations

Vegetation Types

Gilgai Plains

GP Es Ec MsAnLa	Open Woodland of Eucalyptus salmonophloia over Very Open Tree Mallee of Eucalyptus celastroides over Open Dwarf Scrub C of Maireana sedifolia, Atriplex nummularia and Lysium australe on red silty clay loam on gilgai plains

Hardpan Plains

HP AaAtEa EiEscSaf MsPoSs	Thicket of Acacia acuminata, Acacia tetragonophylla and Eremophila alternifolia over Open Low Scrub A of Eremophila ionantha, Eremophila scoparia and Senna artemisioides subsp. filifolia over Open Dwarf Scrub C of Maireana sedifolia, Ptilotus obovatus and Scaevola spinescens on red clay loam on hardpan plains
HP El MsCc EpaMsOm	Low Woodland A of Eucalyptus lesouefii over Open Dwarf Scrub C of Maireana sedifolia and Cratystylis conocephala over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa, Maireana sedifolia and Olearia muelleri on brown silty loam on hardpan plains
HP Er EiEscEoa MsPoSs	Dense Tree Mallee of Eucalyptus ravida over Open Low Scrub A of Eremophila ionantha, Eremophila scoparia and Eremophila oldfieldii subsp. angustifolia over Open Dwarf Scrub C of Maireana sedifolia, Ptilotus obovatus and Scaevola spinescens on red clay loam on hardpan plains
HP Es MsSs EscSafAh	Low Woodland A of Eucalyptus salmonophloia over Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens with Open Low Scrub of Eremophila scoparia, Senna artemisioides subsp. filifolia and Acacia hemiteles on red clay loam on hardpan plains
HP EsEtEl EscEi MsLaSs	Woodland of Eucalyptus salmonophloia, Eucalyptus transcontinentalis and Eucalyptus lesouefii over Open Scrub of Eremophila scoparia and Eremophila interstans over Open Dwarf Scrub C of Maireana sedifolia, Lysium australe and Scaevola spinescens on red silty loam on hardpan plains
HP Esa EscEapEoa MsSsOm	Tree Mallee of Eucalyptus salubris over Open Low Scrub A of Eremophila scoparia, Exocarpos aphyllus and Eremophila oppositifolia subsp. angustifolia over Open Dwarf Scrub C of Maireana sedifolia, Scaevola spinescens and Olearia muelleri on brown loam on hardpan plains
HP Esa TdMsAv MsTd	Open Tree Mallee of Eucalyptus salubris over Dwarf Scrub D of Tecticornia disarticulata, Maireana sedifolia and Atriplex vesicaria with Open Dwarf Scrub C of Maireana sedifolia and Tecticornia disarticulata on brown sandy clay loam on hardpan plains
HP MpMs AvMpMs EpEcSc	Dwarf Scrub C of Maireana pyramidata and Maireana sedifolia over Dwarf Scrub D of Atriplex vesicaria, Maireana pyramidata and Maireana sedifolia over Very Open Low Grass of Enneapogon polyphyllus, Enneapogon caerulescens and Sporobolus caroli on red clay loam on gilgai plains and hardpan plains
HP MsMpAn Esc AvMsMp	Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata and Atriplex nummularia with Open Low Scrub A of Eremophila scoparia and Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Maireana pyramidata on red clay loam on hardpan plains
HP MsSafCs EscSaf AvMsLa	Dwarf Scrub C of Maireana sedifolia, Senna artemisioides subsp. filifolia and Cratystylis subspinescens with Open Low Scrub A of Eremophila scoparia and Senna artemisioides subsp. filifolia and Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Lysium australe on red clay loam on hardpan plains
HP TdMs TdMsAv Es	Dwarf Scrub C of Tecticornia disarticulata and Maireana sedifolia over Open Dwarf Scrub D of Tecticornia disarticulata, Maireana sedifolia and Atriplex vesicaria with Open Woodland of Eucalyptus salmonophloia on red clay loam on hardpan plains

[redacted]

LYNAS

FIGURE 8

Legend Vegetation type map for the study area

Date:	24/11/2020
Status:	Final
Figure:	8
Sheet Size:	A3
Internal Reference:	LYNAS_S1_FH
Drawn by:	GSM
Requested by:	DB

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LYNAS

FIGURE 8

Vegetation type map for the study area

Legend

- Study Area
- Sample Locations

N

0 100 200 300 400 500

Meters

1:17,500

Datum: GDA94

Projection: MGA Zone 51

Date:	26/03/2021
Status:	Final
Figure:	8
Sheet Size:	A3
Internal Reference:	LYNAS_S1_FH
Drawn by:	GSM
Requested by:	DB

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Code	HP EsEtEl EscEi MsLaSs
Broad Floristic Formation	*Eucalyptus* Woodland
Vegetation Type	Woodland of *Eucalyptus salmonophloia*, *Eucalyptus transcontinentalis* and *Eucalyptus lesouefii* over Open Scrub of *Eremophila scoparia* and *Eremophila interstans* over Open Dwarf Scrub C of *Maireana sedifolia, Lysium australe* and *Scaevola spinescens* on red silty loam on hardpan plains

This unit is highly variable with different trees and mallees dominant across the unit. Characterised by a Woodland of *Eucalyptus* spp.

Quadrats Sampled	SD07, SD19, SD25, SD30, SD31, SD41
Area (ha)	61.94
Soils and Geology	Red silty loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	*Eremophila praecox* (P2)
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Rubbish, wood cutting, access tracks, mining exploration
Average Fire Age	Old (6+years)

Code	GP Es Ec MsAnLa
Broad Floristic Formation	*Eucalyptus* Open Woodland
Vegetation Type	Open Woodland of *Eucalyptus salmonophloia* over Very Open Tree Mallee of *Eucalyptus celastroides* over Open Dwarf Scrub C of *Maireana sedifolia*, *Atriplex nummularia* and *Lysium australe* on red silty clay loam on gilgai plains

Quadrats Sampled	SD39, SD43, SD45
Area (ha)	12.39
Soils and Geology	Silty clay loam
Land Form	Gilgai plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Cucumis myriocarpus, *Cuscuta* cf.*epithymum*
Vegetation Condition	Very Good
Disturbances	Mining Exploration, Road/ Access Track, Cattle grazing
Average Fire Age	Old (6+ years)

Code	HP Es MsSs EscSafAh
Broad Floristic Formation	*Eucalyptus* Low Woodland A
Vegetation Type	Low Woodland A of *Eucalyptus salmonophloia* over Dwarf Scrub C of *Maireana sedifolia* and *Scaevola spinescens* with Open Low Scrub of Ere*mophila scoparia, Senna artemisioides* subsp. *filifolia* and *Acacia hemiteles* on red clay loam on hardpan plains

Quadrats Sampled	SD01, SD40, SD38
Area (ha)	51.0
Soils and Geology	Red clay loam, scattered ironstone gravel at surface
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Rubbish, logging/ firewood cutting, tree death, cattle grazing
Average Fire Age	Old (6+years)

Code	HP El MsCc EpaMsOm
Broad Floristic Formation	*Eucalyptus* Low Woodland A
Vegetation Type	Low Woodland A of *Eucalyptus lesouefii* over Open Dwarf Scrub C of *Maireana sedifoila* and *Cratystylis conocephala* over Open Dwarf Scrub D of *Eremophila parvifolia* subsp. *auricampa, Maireana sedifolia* and *Olearia muelleri* on brown silty loam on hardpan plains

Quadrats Sampled	SD05, SD28, SD33, SD46
Area (ha)	18.89
Soils and Geology	Brown silty loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Mining exploration, road/ access track, logging, rabbits
Average Fire Age	Old (6+ years)

Code	HP Er EiEscEoa MsPoSs
Broad Floristic Formation	*Eucalyptus* Dense Tree Mallee
Vegetation Type	Dense Tree Mallee of *Eucalyptus ravida* over Open Low Scrub A of *Eremophila ionantha*, *Eremophila scoparia* and *Eremophila* oldfieldii subsp. *angustifolia* over Open Dwarf Scrub C of *Maireana sedifolia, Ptilotus obovatus* and *Scaevola spinescens* on red clay loam on hardpan plains

Quadrats Sampled	SD06, SD27, SD32
Area (ha)	2.85
Soils and Geology	Red clay loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Mining exploration, road/ access track, rubbish, wood cutting, rubbish, cattle grazing
Average Fire Age	Old (6+ years)

Code	HP Esa EscEapEoa MsSsOm
Broad Floristic Formation	*Eucalyptus* Tree Mallee
Vegetation Type	Tree Mallee of *Eucalyptus salubris* over Open Low Scrub A of *Eremophila scoparia*, *Exocarpus aphyllus* and *Eremophila oppositifolia* subsp. *angustifolia* over Open Dwarf Scrub C of *Maireana sedifoila, Scaevola spinescens* and *Olearia muelleri* on brown loam on hardpan plains

Quadrats Sampled	SD12, SD18, SD34
Area (ha)	3.07
Soils and Geology	Brown loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Mining exploration, road/ access track, rubbish, cattle grazing
Average Fire Age	Old (6+ years)

Code	HP Esa TdMsAv MsTd
Broad Floristic Formation	*Eucalyptus* Open Tree Mallee
Vegetation Type	Open Tree Mallee of *Eucalyptus salubris* over Dwarf Scrub D of *Tecticornia disarticulata*, *Maireana sedifolia* and *Atriplex vesicaria* with Open Dwarf Scrub C of *Maireana sedifolia* and *Tecticornia disarticulata* on brown sandy clay loam on hardpan plains

Quadrats Sampled	SD20, SD24, SD26
Area (ha)	48.92
Soils and Geology	Brown sandy clay loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	*Eremophila praecox* (P2)
Introduced (Weed) Species	**Oligocarpus calendulaceus*
Vegetation Condition	Very Good
Disturbances	Cattle grazing, mining exploration, road/access track, rabbits
Average Fire Age	Old (6+ years)

Code	HP AaAtEa EiEscSaf MsPoSs
Broad Floristic Formation	*Acacia* Thicket
Vegetation Type	Thicket of *Acacia acuminata, Acacia tetragonophylla* and *Eremophila alternifolia* over Open Low Scrub A of *Eremophila ionantha, Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* over Open Dwarf Scrub C of *Maireana sedifoila*, *Ptilotus obovatus* and *Scaevola spinescens* on red clay loam on hardpan plains

Quadrats Sampled	SD08, SD09, SD48
Area (ha)	5.52
Soils and Geology	Red clay loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	None
Vegetation Condition	Very Good
Disturbances	Cattle grazing, road/access track, rubbish, wood cutting
Average Fire Age	Old (6+ years)

Code	HP MpMs AvMpMs EpEcSc
Broad Floristic Formation	*Maireana* Dwarf Scrub C
Vegetation Type	Dwarf Scrub C of *Maireana pyramidata* and *Maireana sedifolia* over Dwarf Scrub D of *Atriplex vesicaria*, *Maireana pyramidata* and *Maireana sedifolia* over Very Open Low Grass of *Enneapogon polyphyllus*, *Enneapogon caerulescens* and *Sporobolus caroli* on red clay loam on gilgai plains and hardpan plains

Quadrats Sampled	SD03, SD10, SD15, SD21, SD44
Area (ha)	47.14
Soils and Geology	Red clay loam
Land Form	Gilgai plains and hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Carthamus lanatus, *Lysmachia arvensis*
Vegetation Condition	Very Good
Disturbances	Road/ access track, rabbits, historical logging, old rail line, weeds, rabbits,
Average Fire Age	Old (6+ years)

Code	HP MsSafCs EscSaf AvMsLa
Broad Floristic Formation	*Maireana* Dwarf Scrub C
Vegetation Type	Dwarf Scrub C of *Maireana sedifoila, Senna artemisioides* subsp. *filifolia* and *Cratystylis subspinescens* with Open Low Scrub A of *Eremophila scoparia* and *Senna artemisioides* subsp. *filifolia* and Open Dwarf Scrub D of *Atriplex vesicaria, Maireana sedifolia* and *Lysium australe* on red clay loam on hardpan plains

Quadrats Sampled	SD02, SD04, SD13, SD14, SD22, SD23, SD35
Area (ha)	72.32
Soils and Geology	Red clay loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	*Eremophila praecox* (P2)
Introduced (Weed) Species	**Carrichtera annua, *Oligocarpus calendulaceus*
Vegetation Condition	Very Good
Disturbances	Cattle grazing, road/ access track, weeds, firewood cutting, rubbish, rabbits
Average Fire Age	Old (6+ years)

Code	HP MsMpAn Esc AvMsMp
Broad Floristic Formation	*Maireana* Dwarf Scrub C
Vegetation Type	Dwarf Scrub C of *Maireana sedifolia, Maireana pyramidata* and *Atriplex nummularia* with Open Low Scrub A of *Eremophila scoparia* and Open Dwarf Scrub D of *Atriplex vesicaria, Maireana sedifolia* and *Maireana pyramidata* on red clay loam on hardpan plains

Quadrats Sampled	SD11, SD29, SD36, SD37
Area (ha)	108.62
Soils and Geology	Red clay loam
Land Form	Hardpan plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Oligocarpus calendulaceus, *Citrullus amarus, *Carrichtera annua*
Vegetation Condition	Very Good
Disturbances	Road/ access track, rubbish, logging, epicormic budding on trees, mining exploration, rabbits
Average Fire Age	Old (6+ years)

Code	HP TdMs TdMsAv Es
Broad Floristic Formation	*Tecticornia* Dwarf Scrub C
Vegetation Type	Dwarf Scrub C of *Tecticornia disarticulata* and *Maireana sedifolia* over Open Dwarf Scrub D of *Tecticornia disarticulata, Maireana sedifolia* and *Atriplex vesicaria* with Open Woodland of *Eucalyptus salmonophloia* on red clay loam on hardpan plains

Quadrats Sampled	SD16, SD17, SD42, SD47
Area (ha)	130.1
Soils and Geology	Red clay loam
Land Form	Hardpan Plains
Priority Ecological Community	No
Conservation Significant Flora	None
Introduced (Weed) Species	**Carrichtera annua*, **Oligocarpus calendulaceus, *Salvia verbenaca, *Sonchus oleraceus*
Vegetation Condition	Very Good
Disturbances	Mining exploration, logging/wood cutting, road/access track, rubbish
Average Fire Age	Old (6+ years)

3.7 Representation and Reservation of Vegetation

Regional vegetation mapping completed by Beard (1978) was utilised to assess representation of vegetation within the study area. Two Beard vegetation associations were represented within the study area (Table 9, Figure 3). In terms of representation, the Western Australian Government is committed to the National Objectives Targets for Biodiversity Conservation which includes a target that prevents clearance of ecological communities with an extent below 30% of that present at pre-European settlement (Department of Natural Resources and Environment 2002, EPA 2000).

When considering representation at the State level, the Beard vegetation associations represented within the study area currently have approximately 99% of the pre-European extent remaining (Table 9, Government of Western Australia 2018).

The study area is located on the boundary of the Coolgardie and Murchison bioregions, specifically within the Eastern Murchison subregion and the Eastern Goldfields subregion (as discussed in Section 1.3). When considering the representation of vegetation at the IBRA regional level and IBRA system level, over 93% of the pre-European extent remains for the vegetation associations represented (Table 9).

The study area falls entirely within the City of Kalgoorlie-Boulder. At this local level between 98% and 99% of the pre-European extent remains for the vegetation associations represented (Table 9).

Vegetation within the study area is therefore determined to be well represented at all levels (state-wide, bioregional [IBRA region and IBRA sub-region] and local).

In terms of reservation, there is a benchmark for a minimum of 15% of each Beard vegetation association to be protected in Class I-IV reserves (Commonwealth of Australia 1997). The proportion of the vegetation associations occurring within Class I-IV reserves at a state level ranges between 4% and 13%, noting that 20% of the current extent occurs within DBCA managed lands (Table 9). Hence the reservation status is determined to be of least concern for biodiversity conservation.

Table 9 Pre-European extent of vegetation represented on the basis of identified datasets (Government of Western Australia 2018).

Vegetation System / Association	Pre-European Extent (ha)	Current Extent (ha)	% Pre-European Extent Remaining	Current Extent in Class I-IV Reserves (ha)	% Current Extent in Class I-IV Reserves	Current Extent DBCA Managed Lands (ha)	% Current Extent DBCA Managed Lands
State-wide							
20 Low woodland; mulga mixed with *Allocasuarina cristata* & *Eucalyptus* sp.	1,295,103.39	1,292,474.58	99.80	172,489.47	13.35	250,985.57	19.42
468 Medium woodland; salmon gum & goldfields blackbutt	592,022.32	583,902.76	98.63	24,330.49	4.17	135,197.44	23.15
Beard Vegetation System							
20 (Barlee)	1,172,537.62	1,169,909.26	99.78	104,409.37	8.92	181,845.19	15.54
468 (Coolgardie)	65,948.55	61,726.56	93.60	0.94	0.00	1,314.84	2.13
IBRA Region							
20 - Murchison (MUR)	1,174,259.17	1,171,630.81	99.78	104,409.37	8.91	181,845.19	15.52
468 **-** Coolgardie (COO)	583,357.71	575,360.61	98.63	24,003.77	4.17	130,719.16	22.72
IBRA Sub-Region							
20 **-** Eastern Murchison (MUR01)	1,174,259.17	1,171,630.81	99.78	104,409.37	8.91	181,845.19	15.52
468 - Eastern Goldfields (COO3)	482,361.84	474,364.74	98.34	610.08	0.13	106,338.62	22.42
Local Government - City of Kalgoorlie-Boulder							
20	728,313.00	726,233.00	99.71	49,000.90	6.75	62,069.80	8.55
468	303,529.42	296,698.80	97.75	607.75	0.20	13,864.94	4.67

3.8 Conservation Significance of Vegetation

3.8.1 National Significance

None of the twelve vegetation types recorded from the study area support Threatened Flora listed under the EPBC Act, or are aligned with any commonwealth listed TECs. Therefore, vegetation within the study area is not considered to be of national significance.

3.8.2 State Significance

None of the twelve vegetation types recorded from the study area support Threatened Flora listed under the BC Act or are aligned with any state listed TECs or PECs. However, three vegetation types supported one species of Priority flora as currently listed by the DBCA; *Eremophila praecox* (Priority 2). Hence these three vegetation types are considered to be of state significance (refer to Figure 8):

- HP EsEtEl EscEi MsLaSs;
- HP MsSafCs EscSaf AvMsLa; and
- HP Esa TdMsAv MsTd.

3.8.3 Local Significance

None of the vegetation types support plant taxa considered to represent range extensions or occurring at the extent of their known distribution. Hence, none of the vegetation types were determined to be of local conservation significance.

4.0 SUMMARY

A detailed flora and vegetation survey of the By-product Storage Site was completed over three survey phases undertaken in June 2020, October/November 2020 and March 2021 by Onshore Environmental.

A total number of 160 plant taxa (including varieties and subspecies) from 31 families and 91 genera were recorded from the 553 ha study area. Species representation was greatest among the Chenopodiaceae, Fabaceae, Poaceae, Scrophulariaceae and Asteraceae families. The most speciose genera were *Eremophila*, *Maireana*, *Acacia, Eucalyptus* and *Senna*.

None of the plant taxa recorded from the study area were gazetted as Threatened Flora under the EPBC Act or the BC Act. One Priority flora taxon, as listed by the DBCA, was recorded from the study area; *Eremophila praecox* (Priority 2).

Thirteen introduced species were recorded from the study area, but none of these are listed as Declared Plants under the BAM Act.

Twelve vegetation types classified as nine broad floristic formations and occurring on two landforms were described and mapped from the study area. None of the vegetation types were aligned with known TECs or PECs documented from the Murchison or Coolgardie bioregions.

Vegetation condition within the study area was rated as *very good*, with vegetation altered by obvious signs of disturbance that included access tracks, low intensity grazing by cattle, mine exploration, timber cutting and dumping of domestic rubbish.

Vegetation within the study area was determined to be well represented at all levels (state-wide, bioregional [IBRA region and IBRA sub-region] and local), with approximately 99% of the pre-European extent remaining for the vegetation associations represented.

5.0 STUDY TEAM

The detailed flora and vegetation survey was planned, co-ordinated and executed by the following personnel:

Onshore Environmental Consultants P/L
ABN 41 095 837 120
PO Box 227
YALLINGUP WA 6282
M 0427 339 842
Email info@onshoreenvironmental.com.au

Project Staff

Dr Darren Brearley	PhD	Project Manager and Principal Botanist
Dr Jerome Bull	PhD	Principal Botanist
Ms Jessica Waters	BSc	Senior Ecologist
Mrs Kerry Keenan	Data Analyst	
Mr Todd Griffin	GIS Specialist	

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APPENDIX 1

Conservation Codes

Conservation codes for Western Australian Flora and Fauna

GOVERNMENT OF WESTERN AUSTRALIA

Department of **Biodiversity, Conservation and Attractions**

CONSERVATION CODES

For Western Australian Flora and Fauna

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

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

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

T **Threatened species**

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

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

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

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

CR **Critically endangered species**

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

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

EN **Endangered species**

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

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

VU **Vulnerable species**

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

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

Conservation codes for Western Australian flora and fauna

Extinct species

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

EX Extinct species

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

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

EW Extinct in the wild species

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

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

Specially protected species

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

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

MI Migratory species

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

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

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

CD Species of special conservation interest (conservation dependent fauna)

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

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

OS Other specially protected species

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

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

Conservation codes for Western Australian flora and fauna

P **Priority species**

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

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

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

1 **Priority 1: Poorly-known species**

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

2 **Priority 2: Poorly-known species**

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

3 **Priority 3: Poorly-known species**

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

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

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

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

Last updated 3 January 2019

Conservation categories for flora described under the EPBC Act

Category	Description
Extinct (Ex)	A species is extinct if there is no reasonable doubt that the last member of the species has died.
Extinct in the Wild (EW)	A species is categorised as extinct in the wild if it is only known to survive in cultivations, in captivity, or as a naturalised population well outside its past range; or if it has not been recorded in its known/expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically Endangered (CE)	The species is facing an extremely high risk of extinction in the wild and in the immediate future.
Endangered (EN)	The species is likely to become extinct unless the circumstances and factors threatening its abundance, survival, or evolutionary development cease to operate; or its numbers have been reduced to such a critical level, or its habitats have been so drastically reduced, that it is in immediate danger of extinction.
Vulnerable (VU)	Within the next 25 years, the species is likely to become endangered unless the circumstances and factors threatening its abundance, survival or evolutionary development cease to operate.
Conservation Dependent (CD)	The species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

Conservation categories for species described under the IUCN

Category	Description
Extinct (Ex)	A taxon is Extinct when there is no reasonable doubt that the last individual has died. A taxon is presumed Extinct when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
Extinct in the Wild (EW)	A taxon is Extinct in the Wild when it is known only to survive in cultivation, in captivity or as a naturalized population (or populations) well outside the past range. A taxon is presumed Extinct in the Wild when exhaustive surveys in known and/or expected habitat, at appropriate times (diurnal, seasonal, annual), throughout its historic range have failed to record an individual. Surveys should be over a time frame appropriate to the taxon's life cycle and life form.
Critically Endangered (CE)	A taxon is Critically Endangered when the best available evidence indicates that it meets any of the criteria A to E for Critically Endangered, and it is therefore considered to be facing an extremely high risk of extinction in the wild.
Endangered (EN)	A taxon is Endangered when the best available evidence indicates that it meets any of the criteria A to E for Endangered, and it is therefore considered to be facing a very high risk of extinction in the wild.
Vulnerable (VU)	A taxon is Vulnerable when the best available evidence indicates that it meets any of the criteria A to E for Vulnerable, and it is therefore considered to be facing a high risk of extinction in the wild.
Near Threatened (NT)	A taxon is Near Threatened when it has been evaluated against the criteria but does not qualify for Critically Endangered, Endangered or Vulnerable now, but is close to qualifying for or is likely to qualify for a threatened category in the near future.
Data Deficient (DD)	A taxon is Data Deficient when there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A taxon in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. Data Deficient is therefore not a category of threat. Listing of taxa in this category indicates that more information is required and acknowledges the possibility that future research will show that threatened classification is appropriate. It is important to make positive use of whatever data are available. In many cases great care should be exercised in choosing between DD and a threatened status. If the range of a taxon is suspected to be relatively circumscribed, and a considerable period of time has elapsed since the last record of the taxon, threatened status may well be justified.

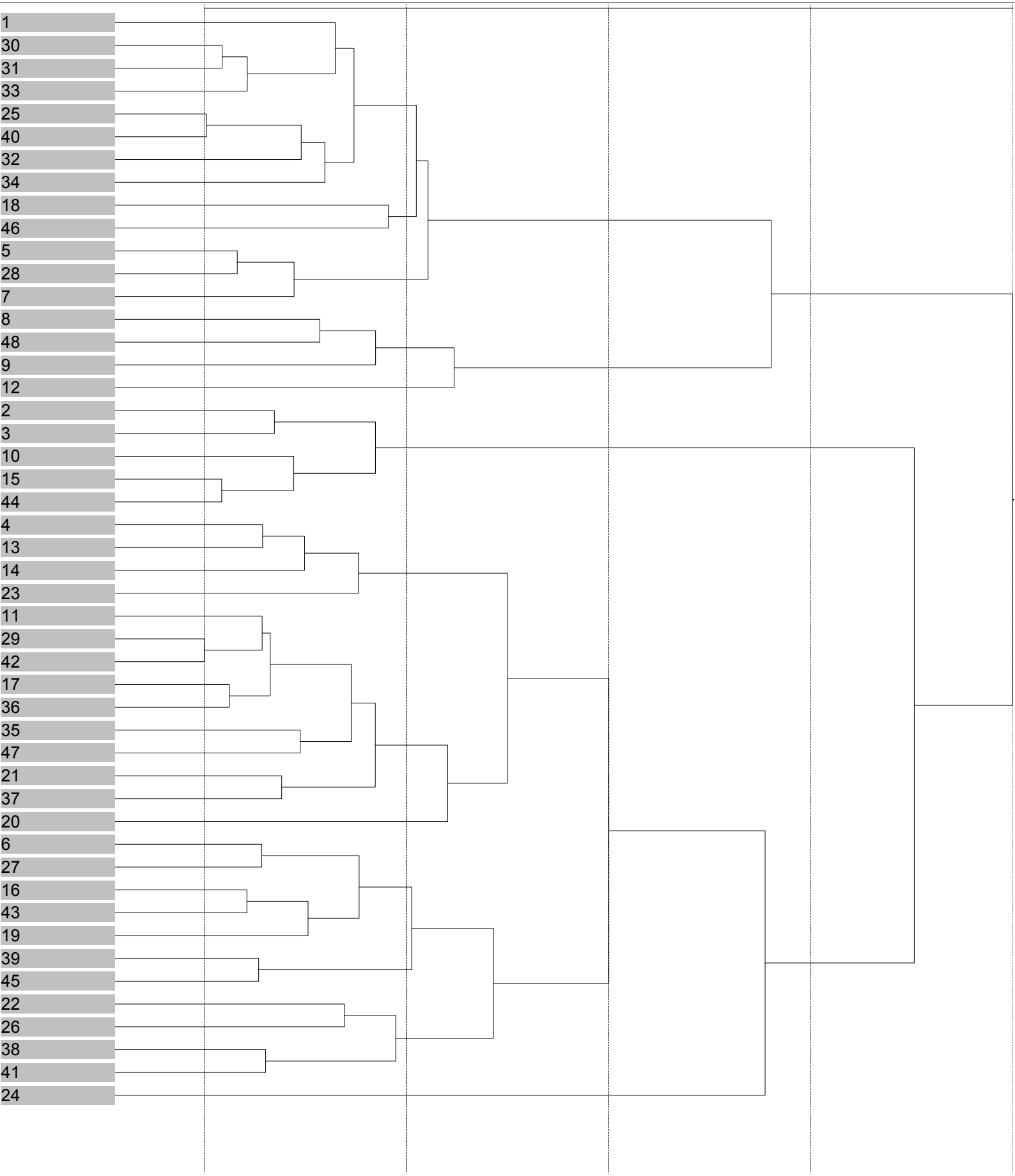
APPENDIX 2

Vegetation condition scale
(as developed by Keighery 1994)

Condition	Code	Description
Pristine	1	Pristine or nearly so, no obvious signs of disturbance.
Excellent	2	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
Very Good	3	Vegetation structure altered; obvious signs of disturbance.
Good	4	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it.
Degraded	5	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching Very Good condition without intensive management.
Completely Degraded	6	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species.

APPENDIX 3

Column Fusion Dendrogram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APPENDIX 4

Vegetation classifications for the study area base on Muir (1997).

LIFE FORM / HEIGHT	Canopy Cover			
CLASS	DENSE 70 % - 100%	MID DENSE 30% - 70%	SPARSE 10% - 30%	VERY SPARSE 2% - 10%
Trees > 30 m	Dense Tall Forest	Tall Forest	Tall Woodland	Open Tall Woodland
Trees 15 - 30 m	Dense Forest	Forest	Woodland	Open Woodland
Trees 5 - 15 m	Dense Low Forest A	Low Forest A	Low Woodland A	Open Low Woodland A
Trees < 5 m	Dense Low Forest B	Low Forest B	Low Woodland B	Open Low Woodland B
Mallee tree form	Dense Tree Mallee	Tree Mallee	Open Tree Mallee	Very Open Tree Mallee
Mallee shrub form	Dense Shrub Mallee	Shrub Mallee	Open Shrub Mallee	Very Open Shrub Mallee
Shrubs > 2 m	Dense Thicket	Thicket	Scrub	Open Scrub
Shrubs 1.5 - 2 m	Dense Heath A	Heath A	Low Scrub A	Open Low Scrub A
Shrubs 1 - 1.5 m	Dense Heath B	Heath B	Low Scrub B	Open Low Scrub B
Shrubs 0.5 - 1 m	Dense Low Heath C	Low Heath C	Dwarf Scrub C	Open Dwarf Scrub C
Shrubs 0 - 0.5 m	Dense Low Heath D	Low Heath D	Dwarf Scrub D	Open Dwarf Scrub D
Mat plants	Dense Mat Plants	Mat Plants	Open Mat Plants	Very Open Mat Plants
Hummock grass	Dense Hummock Grass	Mid-Dense Hummock Grass	Hummock Grass	Open Hummock Grass
Bunch grass > 0.5 m	Dense Tall Grass	Tall Grass	Open Tall Grass	Very Open Tall Grass
Bunch grass < 0.5 m	Dense Low Grass	Low Grass	Open Low Grass	Very Open Low Grass
Herbaceous spp.	Dense Herbs	Herbs	Open Herbs	Very Open Herbs
Sedges > 0.5 m	Dense Tall Sedges	Tall Sedges	Open Tall Sedges	Very Open Tall Sedges
Sedges < 0.5 m	Dense Low Sedges	Low Sedges	Open Low Sedges	Very Open Low Sedges
Ferns	Dense Ferns	Ferns	Open Ferns	Very Open Ferns
Mosses, liverworts	Dense Mosses	Mosses	Open Mosses	Very Open Mosses

APPENDIX 5

Summary of results from previous flora and vegetation surveys within or in close proximity to the study area

Report	Survey Timing & Intensity	Vegetation Associations & Landform	Taxon Summary	Significant Flora
Onshore Environmental (2020) Detailed Flora and Vegetation Survey Lot 500 Great Eastern Highway, Yilkari	20th - 24th of November 2019	10 vegetation associations	104 plant taxa from 25 families and 51 genera	*Eremophila praecox* (Priority 2)
Onshore Environmental (1995) Outline for Biological and Environmental Components of a Notice of Intent, M27/39 and M27/200 Leases, Black Swan Nickel Project	9-11 October 1995	10 vegetation associations	108 taxa, 28 families, 49 genera, 2 introduced species	No Threatened or Priority Flora recorded
Onshore Environmental (2004a) Proposed Miscellaneous License Low Salinity Exploration Targets	13 quadrats 29-30 October 2004	5 vegetation associations	97 taxa, 26 families, 50 genera, 1 introduced species	No Threatened or Priority Flora recorded
Onshore Environmental (2004b) Flora and Vegetation Survey – Federal Pit – Black Swan Pipeline Route	38 quadrats 25-26 October 2004	17 vegetation associations	119 taxa, 24 families, 48 genera, 8 introduced species	No Threatened or Priority Flora recorded
Onshore Environmental (2003a) Flora and Vegetation, Leinster – Wiluna Optic Fibre Cable Route	No quadrats 15 – 19 September 2003	20 vegetation associations	188 taxa, 33 families, 73 genera, 4 introduced species	No Threatened Flora Three Priority Flora[1]: *Eremophila pungens* (P4), *Grevillea inconspicua* (P4) and *Hemigenia exilis* (P4)

[1] *Baeckea* sp. Melita Station (H. Pringle 2738), *Calytrix erosipetala* and *Calytrix uncinata* were recorded as P3 species, and *Acacia balsamea* as a P4 species at the time of the survey, but are no longer listed as a Priority species

Report	Survey Timing & Intensity	Vegetation Associations & Landform	Taxon Summary	Significant Flora
Onshore Environmental (2003b) Flora and Vegetation, Meekatharra – Wiluna Optic Fibre Cable Route	No quadrats 8 – 10 February 2003	11 vegetation associations	Total recorded taxa not provided; 3 introduced species	No Threatened Flora One Priority Flora: *Micromyrtus mucronulata*[2] (P1)
Onshore Environmental (2007) Oakover Gold Ltd Mt Magnet Tenement Targeted Significant Flora Survey	No quadrats 21 – 24 February 2007	Four vegetation associations	Total recorded taxa not provide; no introduced species	No Threatened or Priority Flora recorded
GHD (2011) Main Roads Western Australia, Report for Goldfields Highway, SLK 737-748 Biological Survey	No quadrats 8 – 11 November 2010	Eight vegetation associations	98 taxa, 24 families, 50 genera, 2 introdices species	No Threatened or Priority Flora recorded
AECOM Australia (2014) Square Kilometre Array Ecological Assessment	65 quadrats September 2014	15 vegetation associations	199 taxa, 36 families, 82 genera, 4 introduced species	No Threatened Flora Six Priority Flora: *Gunniopsis divisa* (P3), *Hemigenia tysonii* (P3), *Ptilotus beardie* (P3), *Sauropus* sp. Woolgorong (M. Officer s.n. 10/8/94) (P3), *Verticordia jamiesonii* (P3) and *Frankenia confuse* (P4); additional *Eremophila simulans* subsp. *megacalyx* (P3) was previously recorded in the area
GHD (2016) Main Roads Western Australia, Goldfield Highway Material Sources SLK 748 to 781 Biological Survey	20 quadrats 9 – 12 November 2015	Nine vegetation associations	114 taxa, 24 families, 55 genera, 1 introduced species	No Threatened or Priority Flora recorded

[2] Recorded as *Micromyrtus racemosa* var. *mucronata* at the time of the survey

APPENDIX 6

Total flora list from the study area

FAMILY	GENUS	SPECIES	RANK	NAME
Aizoaceae	Sarcozona	praecox		
Amaranthaceae	Ptilotus	exaltatus		
Amaranthaceae	Ptilotus	holosericeus		
Amaranthaceae	Ptilotus	obovatus		
Amaranthaceae	Ptilotus		cf.	aervoides
Apiaceae	Daucus	glochidiatus		
Apocynaceae	*Stapelia		sp.	indet
Apocynaceae	Alyxia	buxifolia		
Apocynaceae	Marsdenia	australis		
Apocynaceae	Vincetoxicum	lineare		
Asparagaceae	Thysanotus		cf.	manglesianus
Asteraceae	*Carthamus	lanatus		
Asteraceae	*Erigeron	bonariensis		
Asteraceae	*Oligocarpus	calendulaceus		
Asteraceae	*Sonchus	oleraceus		
Asteraceae	Brachyscome	ciliaris		
Asteraceae	Centipeda		cf.	crateriformis
Asteraceae	Cratystylis	conocephala		
Asteraceae	Cratystylis	microphylla		
Asteraceae	Cratystylis	subspinescens		
Asteraceae	Dittrichia	graveolens		
Asteraceae	Leiocarpa	websteri		
Asteraceae	Minuria	cunninghamii		
Asteraceae	Olearia	muelleri		
Asteraceae	Siemssenia	capillaris		
Asteraceae	Streptoglossa	liatroides		
Asteraceae	Vittadinia	sulcata		
Boraginaceae	Halgania	andromedifolia		
Brassicaceae	*Carrichtera	annua		
Casuarinaceae	Casuarina	pauper		
Chenopodiaceae	Atriplex	nummularia		
Chenopodiaceae	Atriplex	vesicaria		
Chenopodiaceae	Chenopodium	gaudichaudianum		
Chenopodiaceae	Dysphania	melanocarpa		
Chenopodiaceae	Dysphania	pumilio		
Chenopodiaceae	Enchylaena	tomentosa	subsp.	tomentosa
Chenopodiaceae	Eriochiton	sclerolaenoides		
Chenopodiaceae	Maireana	amoena		
Chenopodiaceae	Maireana	georgei		
Chenopodiaceae	Maireana	glomerifolia		
Chenopodiaceae	Maireana	pentatropis		
Chenopodiaceae	Maireana	pyramidata		
Chenopodiaceae	Maireana	sedifolia		
Chenopodiaceae	Maireana	tomentosa		
Chenopodiaceae	Maireana	trichoptera		
Chenopodiaceae	Maireana	triptera		
Chenopodiaceae	Maireana	villosa		

FAMILY	GENUS	SPECIES	RANK	NAME
Chenopodiaceae	Malacocera	tricornis		
Chenopodiaceae	Rhagodia	drummondii		
Chenopodiaceae	Salsola	australis		
Chenopodiaceae	Sclerolaena	cuneata		
Chenopodiaceae	Sclerolaena	diacantha		
Chenopodiaceae	Sclerolaena	drummondii		
Chenopodiaceae	Sclerolaena	obliquicuspis		
Chenopodiaceae	Tecticornia	disarticulata		
Convolvulaceae	*Cuscuta		cf.	epithymum
Convolvulaceae	Convolvulus	remotus		
Cucurbitaceae	*Citrullus	amarus		
Cucurbitaceae	*Cucumis	myriocarpus		
Euphorbiaceae	Euphorbia	australis		
Euphorbiaceae	Euphorbia	drummondii		
Euphorbiaceae	Euphorbia		cf.	multifaria
Fabaceae	*Medicago	laciniata		
Fabaceae	Acacia	acuminata (narrow phyllode variant)		
Fabaceae	Acacia	aneura		
Fabaceae	Acacia	colletioides		
Fabaceae	Acacia	erinacea		
Fabaceae	Acacia	hemiteles		
Fabaceae	Acacia	kalgoorliensis		
Fabaceae	Acacia	nyssophylla		
Fabaceae	Acacia	oswaldii		
Fabaceae	Acacia	tetragonophylla		
Fabaceae	Glycyrrhiza	acanthocarpa		
Fabaceae	Senna	artemisioides	subsp.	×artemisioides
Fabaceae	Senna	artemisioides	subsp.	filifolia
Fabaceae	Senna	cardiosperma		
Fabaceae	Senna	charlesiana		
Fabaceae	Senna		cf.	stowardii
Fabaceae	Swainsona	oliveri		
Fabaceae	Swainsona		cf.	kingii
Fabaceae	Templetonia	ceracea		
Frankeniaceae	Frankenia	interioris		
Geraniaceae	Erodium		sp.	indet
Goodeniaceae	Goodenia	havilandii		
Goodeniaceae	Scaevola	spinescens		
Haloragaceae	Haloragis		cf.	gossei
Lamiaceae	*Salvia	verbenaca		
Loranthaceae	Amyema	gibberula		
Loranthaceae	Amyema	preissii		
Loranthaceae	Lysiana	casuarinae		
Malvaceae	Abutilon	cryptopetalum		
Malvaceae	Lawrencia	repens		
Malvaceae	Sida	fibulifera		
Malvaceae	Sida	intricata		

FAMILY	GENUS	SPECIES	RANK	NAME
Malvaceae	Sida	petrophila		
Malvaceae	Sida	spodochroma		
Marsileaceae	Marsilea	drummondii		
Myrtaceae	Eucalyptus	celastroides		
Myrtaceae	Eucalyptus	lesouefii		
Myrtaceae	Eucalyptus	ravida		
Myrtaceae	Eucalyptus	salmonophloia		
Myrtaceae	Eucalyptus	salubris		
Myrtaceae	Eucalyptus	transcontinentalis		
Myrtaceae	Melaleuca	sheathiana		
Nitrariaceae	Nitraria	billardierei		
Ophioglossaceae	Ophioglossum	lusitanicum		
Oxalidaceae	Oxalis	perennans		
Pittosporaceae	Pittosporum	angustifolium		
Poaceae	*Cenchrus	ciliaris		
Poaceae	Austrostipa	elegantissima		
Poaceae	Austrostipa	platychaeta		
Poaceae	Austrostipa	tuckeri		
Poaceae	Chloris	truncata		
Poaceae	Dactyloctenium	radulans		
Poaceae	Enneapogon	avenaceus		
Poaceae	Enneapogon	caerulescens		
Poaceae	Enteropogon	ramosus		
Poaceae	Eragrostis	dielsii		
Poaceae	Eragrostis	setifolia		
Poaceae	Iseilema	membranaceum		
Poaceae	Paspalidium	gracile		
Poaceae	Rytidosperma	caespitosum		
Poaceae	Sporobolus	caroli		
Poaceae	Sporobolus	ramigerus		
Poaceae	Tragus	australianus		
Primulaceae	*Lysimachia	arvensis		
Proteaceae	Grevillea	acuaria		
Proteaceae	Grevillea	nematophylla		
Proteaceae	Hakea	preissii		
Pteridaceae	Cheilanthes	sieberi	subsp.	sieberi
Santalaceae	Exocarpos	aphyllus		
Santalaceae	Santalum	acuminatum		
Santalaceae	Santalum	spicatum		
Sapindaceae	Alectryon	oleifolius	subsp.	canescens
Sapindaceae	Dodonaea	lobulata		
Sapindaceae	Dodonaea	viscosa	subsp.	angustissima
Scrophulariaceae	Eremophila	alternifolia		
Scrophulariaceae	Eremophila	caperata		
Scrophulariaceae	Eremophila	decipiens	subsp.	decipiens
Scrophulariaceae	Eremophila	deserti		
Scrophulariaceae	Eremophila	glabra	subsp.	glabra

FAMILY	GENUS	SPECIES	RANK	NAME
Scrophulariaceae	Eremophila	granitica		
Scrophulariaceae	Eremophila	interstans	subsp.	interstans
Scrophulariaceae	Eremophila	ionantha		
Scrophulariaceae	Eremophila	longifolia		
Scrophulariaceae	Eremophila	maculata	subsp.	brevifolia
Scrophulariaceae	Eremophila	oldfieldii	subsp.	angustifolia
Scrophulariaceae	Eremophila	oppositifolia	subsp.	angustifolia
Scrophulariaceae	Eremophila	pantonii		
Scrophulariaceae	Eremophila	parvifolia	subsp.	auricampi
Scrophulariaceae	Eremophila	praecox		
Scrophulariaceae	Eremophila	pustulata		
Scrophulariaceae	Eremophila	scoparia		
Solanaceae	Lycium	australe		
Solanaceae	Nicotiana	occidentalis	subsp.	obliqua
Solanaceae	Solanum	esuriale		
Solanaceae	Solanum	lasiophyllum		
Solanaceae	Solanum	nummularium		
Thymelaeaceae	Pimelea	microcephala	subsp.	microcephala
Zygophyllaceae	Roepera		sp.	indet

APPENDIX 7

Conservation significant flora recorded from the study area

Genus	Species	Conservation Code	No. Plants	Easting	Northing
Records from within the study area					
Eremophila	*praecox*	Priority 2	1	357275	6603576
Eremophila	*praecox*	Priority 2	2	357841	6603840
Eremophila	*praecox*	Priority 2	1	357307	6604494
Eremophila	*praecox*	Priority 2	1	357453	6604365
Eremophila	*praecox*	Priority 2	1	358635	6604384
Eremophila	*praecox*	Priority 2	1	357741	6603352
Records from outside the study area					
Eremophila	*praecox*	Priority 2	2	358988	6605565
Eremophila	*praecox*	Priority 2	1	358989	6605582
Eremophila	*praecox*	Priority 2	1	359052	6605627
Eremophila	*praecox*	Priority 2	2	358971	6605658
Eremophila	*praecox*	Priority 2	3	358586	6605807
Eremophila	*praecox*	Priority 2	1	358725	6603587
Eremophila	*praecox*	Priority 2	1	358671	6603640

APPENDIX 8

Species by site matrix for the study area

Genus	Species	Rank	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
*?Dittrichia	graveolens																																																	x
*Carrichtera	annua				x	x							x	x			x	x	x													x			x				x					x		x				
*Carthamus	lanatus					x																																												
*Citrullus	amarus													x																																				
*Cucumis	myriocarpus				x																																		x										
*Cuscuta		cf.	epithymum										x																																						
*Erodium		sp.	indet																							x																								
*Medicago	laciniata																																																	x
*Oligocarpus	calendulaceus				x	x							x			x	x	x	x	x			x	x	x							x					x		x			x			x	x
Abutilon	cryptopetalum				x							x																																					x
Acacia	acuminata (narrow phyllode variant)										x	x																																						x
Acacia	colletioides								x																																								
Acacia	erinacea																		x						x																								
Acacia	hemiteles			x								x																					x	x		x						x						
Acacia	kalgoorliensis													x																																				
Acacia	nyssophylla						x	x																										x	x		x												
Acacia	tetragonophylla								x		x	x			x																																		x
Alectryon	oleifolius	subsp.	canescens	x											x																																				
Alyxia	buxifolia														x																		x				x												
Amaranthaceae		sp.	indet										x																																					
Amyema	gibberula											x																																						
Apocynaceae		sp.	indet																							x																								
Atriplex	nummularia			x	x			x		x				x			x		x	x		x						x	x		x	x	x			x			x	x	x	x	x	x	x	x		x	x		
Atriplex	vesicaria				x	x	x	x	x	x			x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x		x	
Austrostipa	elegantissima			x																				x				x					x											x						
Austrostipa	platychaeta															x	x																											x						
Austrostipa	tuckeri											x																																						
Austrostipa		cf.	elegantissima			x																																												
Austrostipa		cf.	platychaeta																																	x													
Austrostipa		sp.	indet				x		x										x		x				x			x		x			x							x				x				
Brachyscome	ciliaris															x	x		x				x	x	x																								
Casuarina	pauper						x					x									x		x						x							x	x					x			x			
Cheilanthes	sieberi	subsp.	sieberi								x																																						
Chenopodium	gaudichaudianum																									x																							
Convolvulus	remotus															x	x						x																									
Convolvulus		cf.	remotus										x																																				
Cratystylis	conocephala																x														x		x	x		x									x		
Cratystylis	microphylla							x														x													x													
Cratystylis	subspinescens			x	x	x	x								x			x						x			x		x		x			x		x			x	x		x				
Dactyloctenium	radulans					x																																										
Dodonaea	lobulata										x						x																															
Dodonaea	viscosa	subsp.	angustissima				x										x						x														x										
Dysphania	pumilio				x																										x									x							
Enchylaena	tomentosa	subsp.	tomentosa	x	x				x		x	x			x					x		x					x		x		x			x			x			x	x	x	x	x			x
Enneapogon	avenaceus				x	x	x						x	x			x	x	x	x			x	x	x	x						x					x	x	x			x					
Enneapogon	caerulescens				x	x	x						x	x		x	x	x	x					x	x	x						x					x	x	x			x			x		
Enteropogon	ramosus				x	x	x						x	x		x		x		x			x	x	x	x			x			x					x	x	x	x	x			x	x		x		
Eragrostis	dielsii				x	x							x					x														x							x	x						x		
Eragrostis	setifolia				x													x												x																			
Eremophila	alternifolia										x	x		x		x	x									x											x											x
Eremophila	caperata																																														x		
Eremophila	decipiens	subsp.	decipiens			x	x					x			x	x	x								x			x		x		x			x											x
Eremophila	deserti										x						x				x																											
Eremophila	glabra	subsp.	glabra							x											x				x	x		x																		x		x
Eremophila	interstans	subsp.	interstans					x		x					x							x						x	x		x		x	x	x	x						x	x			x		x		
Eremophila	ionantha			x					x			x																x					x	x	x					x								x
Eremophila	maculata	subsp.	brevifolia																																														

Genus	Species	Rank	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Eremophila	oldfieldii	subsp.	angustifolia				x		x		x										x																													x
Eremophila	oppositifolia	subsp.	angustifolia												x						x	x				x																					x	x	
Eremophila	pantonii																																x																
Eremophila	parvifolia	subsp.	auricampi	x			x	x		x									x		x						x	x		x		x	x		x	x									x		
Eremophila	scoparia			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Eriochiton	sclerolaenoides																																		x														
Erodium		sp.	indet															x																															
Eucalyptus	celastroides									x																		x														x			x			
Eucalyptus	lesouefii							x		x																		x			x			x		x									x	x		
Eucalyptus	ravida								x													x								x			x			x									x			
Eucalyptus	salmonophloia			x								x		x			x		x	x	x	x						x				x	x	x		x			x		x	x		x	x	x		x		x	x
Eucalyptus	salubris									x	x	x			x						x		x				x	x	x		x			x			x						x				x		
Eucalyptus	transcontinentalis									x																							x												x					
Euphorbia	australis				x																																												
Euphorbia	drummondii				x	x					x		x	x			x	x				x		x	x	x											x	x	x								x
Euphorbia		cf.	multifaria		x	x						x	x																																				
Euphorbia		sp.	indet																																										x				
Exocarpos	aphyllus			x			x				x				x	x					x	x					x		x	x	x	x	x	x		x				x		x	x						x
Frankenia	interioris					x	x							x								x	x	x							x						x						x	x				
Frankenia		sp.	indet																																								x						
Goodenia	havilandii																								x	x																						
Grevillea	nematophylla											x																																					
Hakea	preissii																							x																								
Haloragis		cf.	gossei																																										x				
Lawrencia	repens																																												x				
Lawrencia		sp.	indet											x								x																x	x	x					x			
Leiocarpa	websteri																	x		x																												
Lycium	australe				x		x		x			x		x		x	x	x		x	x	x		x	x	x			x			x	x	x	x		x	x	x				x		x	x	x			x	x
Lysiana	casuarinae											x																																					x
Maireana	amoena																																x												x					
Maireana	georgei									x																		x			x			x	x	x								x				
Maireana	glomerifolia					x				x																																							
Maireana	pentatropis									x													x								x		x																
Maireana	pyramidata				x	x	x		x			x	x	x	x			x	x	x			x		x					x		x						x	x	x	x			x	x	x	x			x
Maireana	sedifolia			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Maireana	tomentosa				x	x			x			x	x	x				x		x		x	x	x			x											x			x			x			x		
Maireana	trichoptera			x	x		x							x		x	x		x	x			x	x	x			x	x	x		x	x	x	x	x	x	x	x			x			x		
Maireana	triptera				x				x		x		x	x					x	x		x				x		x		x		x	x	x			x		x	x	x	x	x	x			x		x	x
Maireana		sp.	indet			x							x	x				x		x			x	x														x										
Malacocera	tricornis					x																																											
Marsdenia	australis				x		x				x	x			x	x	x	x							x									x						x								x
Minuria	cunninghamii				x											x														x							x						x				
Nicotiana	occidentalis	subsp.	obliqua		x																																											
Nitraria	billardierei			x										x		x	x	x							x			x		x		x	x			x	x		x				x		x	x				
Olearia	muelleri			x		x	x	x		x					x						x	x			x			x	x		x		x	x	x	x	x						x	x				x		
Ophioglossum	lusitanicum																						x																										
Paspalidium	gracile			x	x	x			x			x	x			x	x	x				x		x	x	x				x					x		x			x	x		x						
Pimelea	microcephala	subsp.	microcephala			x	x	x	x			x		x	x	x	x		x	x	x	x	x		x			x	x	x	x	x	x	x	x		x				x	x	x	x			x	x	x
Pittosporum	angustifolium										x	x			x					x									x	x											x			x					x
Poaceae		sp.	indet								x					x					x		x										x																
Ptilotus	?exaltatus								x		x																																						
Ptilotus	exaltatus			x		x								x					x	x	x													x				x			x	x	x					
Ptilotus	holosericeus			x	x													x	x								x				x			x	x				x		x	x		x	x					
Ptilotus	obovatus				x	x			x		x	x	x		x				x					x		x		x	x	x				x	x	x		x		x			x						x
Ptilotus		cf.	aervoides																					x																									
Ptilotus		cf.	holosericeus											x					x	x				x																									
Ptilotus		sp.	indet		x									x					x																														

Genus	Species	Rank	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
Rhagodia	drummondii				x		x		x			x			x															x																				
Roepera		sp.	indet	x													x									x							x				x					x								
Rytidosperma	caespitosum																x							x																										
Salsola	australis																																						x												
Santalum	acuminatum				x																														x					x		x			x				
Santalum	spicatum										x																																							
Sarcozona	praecox					x																	x																												
Scaevola	spinescens			x	x		x	x	x	x	x			x	x	x	x		x		x	x			x			x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x			x		
Sclerolaena	cuneata				x	x	x						x	x				x	x	x		x	x	x								x					x	x	x		x			x	x	x	x		x	
Sclerolaena	diacantha				x	x	x		x	x			x	x		x		x	x	x		x	x	x	x	x	x	x	x			x	x	x	x			x	x	x	x	x	x	x	x	x	x	x	
Sclerolaena	drummondii													x																																				
Sclerolaena	obliquicuspis																x						x																	x										
Senna	artemisioides	subsp.	×artemisioides		x																																												
Senna	artemisioides	subsp.	filifolia	x			x			x	x	x			x	x	x	x	x	x	x				x			x	x	x	x	x	x	x	x	x	x			x		x	x	x	x			x		x
Senna	cardiosperma																																x															x		
Senna	charlesiana				x																																												
Senna		cf.	stowardii																																	x													
Sida	fibulifera				x	x						x	x			x		x																						x								
Sida	intricata				x								x	x				x					x	x							x								x								
Sida	petrophila				x								x													x																						
Sida	spodochroma														x				x		x							x						x		x				x	x							
Sida		sp.	indet																									x																				
Solanum	lasiophyllum				x		x		x		x	x	x	x	x	x	x	x	x	x				x	x	x		x				x						x	x			x		x	x	x		x	x	
Solanum	nummularium			x			x									x	x		x							x		x				x		x		x	x	x						x			x	x	
Sporobolus	caroli				x								x	x				x	x	x				x					x		x						x		x			x		x	x				
Streptoglossa	liatroides				x													x				x										x							x	x					x	x				
Swainsona	oliveri				x																																												
Swainsona		cf.	kingii		x								x																										x										x
Tecticornia	disarticulata						x						x		x		x		x	x	x		x		x		x		x											x		x	x				x		
Templetonia	ceracea																																					x		x	x			x		x				
Thysanotus		cf.	manglesianus			x										x		x																																
Tragus	australianus																							x																										
Vincetoxicum	lineare										x	x																																					x
Vittadinia	sulcata				x	x													x	x			x																								x	

APPENDIX 9

Representative photographs, raw data and total flora spreadsheets recorded for the 48 quadrats assessed within the study area

Study Sites

SITE_ID	LANDFORM	BROAD FLORISTIC FORMATION	VEGETATION ASSOCIATION	VEG_CONDITION	SLOPE	LAST_FIRE	EASTING	NORTHING
SD-01	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus salmonophloia over Dwarf Scrub C of Maireana sedifolia, Cratystylis subspinescens and Scaevola spinescens (Atriplex nummularia) over Dwarf Scrub D of Lycium australe, Maireana sedifolia and Eremophila parvifolia subsp. auricampa with Open Low Scrub A of Acacia hemiteles and Eremophila scoparia over Open Dwarf Scrub B of Acacia hemiteles, Eremophila scoparia and Senna artemisioides subsp. filifolia	Very Good	Flat	Old (6+ yr)	356887	6606615
SD-02	Drainage Area/ Floodplain	Cratystylis Dwarf Scrub C	Dwarf Scrub C of Cratystylis subspinescens and Maireana sedifolia with Open Scrub of Eremophila scoparia and Santalum acuminatum over Open Low Scrub A of Senna charlesiana and Eremophila scoparia over Open Dwarf Scrub D of Atriplex vesicaria and Solanum lasiophyllum over Very Open Herbs of Streptoglossa liatroides and *Oligocarpus calendulaceus over Very Open Low Grass of Paspalidium gracile, Enneapogon caerulescens and Sporobolus caroli	Very Good	Flat	Old (6+ yr)	357227	6606059
SD-03	Hardpan Plain	Atriplex Dwarf Scrub D	Dwarf Scrub D of Atriplex vesicaria, Frankenia interioris and Maireana glomerata with Open Dwarf Scrub C of Cratystylis subspinescens, Maireana sedifolia and Maireana pyramidata over Very Open Low Grass of Enneapogon polyphyllus, Enneapogon caerulescens and Enterogpogon ramosus	Very Good	Flat	Old (6+ yr)	357653	6603379
SD-04	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Scaevola spinescens and Cratystylis subspinescens with Open Scrub of Eremophila scoparia over Open Low Scrub A of Eremophila scoparia over Open Dwarf Scrub D of Atriplex vesicaria, Frankenia interioris and Maireana seidfolia	Very Good	Flat	Old (6+ yr)	357271	6603564
SD-05	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus lesouefii over Dwarf Scrub D of Eremophila parvifolia subsp. auricampa and Scaevola spinescens	Very Good	Low	Old (6+ yr)	357656	6603670
SD-06	Hardpan Plain	Eucalyptus Open Tree Mallee	Open Tree Mallee of Eucalyptus ravida over Open Low Scrub A Eremophila scoparia and Eremophila oldfieldii subsp. angustifolia over Open Dwarf Scrub C of Maireana sedifolia over Open Dwarf Scrub D of Ptilotus obovatus, Atriplex vesicaria and Enchylaena tomentosa	Very Good	Flat	Old (6+ yr)	357941	6603804
SD-07	Stony Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia with Open Low Woodland A of Eucalyptus transcontinentalis and Eucalyptus lesouefii over Very Open Tree Mallee of Eucalyptus salubris and Eucalyptus celastroides over Open Scrub of Eremophila interstans subsp. interstans and Eremophila scoparia over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa, Scaevola spinescens and Olearia muelleri	Excellent	Low	Old (6+ yr)	357833	6604081
SD-08	Stony Plain	Acacia Thicket	Thicket of Acacia acuminata (narrow phyllode variant), Acacia tetragonophylla and Eremophila alternifolia with Open Low Woodland A of Eucalyptus salmonophloia and Eucalyptus salubris over Open Low Scrub B of Scaevola spinescens, Senna artemisioides subsp. filifolia and Dodonaea lobulata over Open Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens over Open Dwarf Scrub D of Ptilotus obovatus	Very Good	Flat	Old (6+ yr)	358118	6604409
SD-09	Hardpan Plain	Acacia Scrub	Scrub of Acacia acuminata (narrow phyllode variant), Eremophila ionantha and Eremophila scoparia over Open Low Scrub B of Eremophila ionantha, Eremophila scoparia and Acacia tetragonophylla over Open Dwarf Scrub C of Pimelea microcephala, Senna artemisioides subsp. filifolia and Ptilotus obovatus over Open Dwarf Scrub D of Ptilotus obovatus and Enchylaena tomentosa	Very Good	Flat	Old (6+ yr)	358213	6603999
SD-10	Drainage Area/ Floodplain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana pyramidata over Dwarf Scrub D of Atriplex vesicaria, Solanum lasiophyllum, Sclerolaena diacantha and Maireana tomentosa over Very Open Herbs of *Oligocarpus calendulaceus over Very Open Low Grass of Enneapogon caerulescens and Paspalidium gracile	Very Good	Flat	Old (6+ yr)	357729	6605812
SD-11	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana pyramidata and Maireana sedifolia with Open Low Scrub B of Maireana sedifolia and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana tomentosa, Sclerolaena diacantha and Maireana triptera	Very Good	Flat	Old (6+ yr)	357005	6605701
SD-12	Hardpan Plain	Eucalyptus Tree Mallee	Tree Mallee of Eucalyptus salubris over Open Scrub of Eremophila scoparia, Exocarpos aphyllus and Alectryon oleifolius subsp. canescens over Open Dwarf Scrub C of Cratystylis subspinescens, Maireana sedifolia and Eremophila scoparia over Open Dwarf Scrub D of Olearia muelleri, Eremophila decipiens subsp. decipiens and Atriplex vesicaria	Very Good	Flat	Old (6+ yr)	356959	6604292
SD-13	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Eremophila scoparia and Senna artemisioides subsp. filifolia with Open Low Scrub A of Senna artemisioides subsp. filifolia and Eremophila scoparia over Open Dwarf Scrub D of Lycium australe, Maireana sedifolia and Atriplex vesicaria over Very Open Low Grass of Enneapogon caerulescens	Very Good	Flat	Old (6+ yr)	354943	6605300
SD-14	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Marieana sedifolia and Senna artemisioides subsp. filifolia with Open Low Woodland A of Eucalyptus salmonophloia (Casuarina pauper) over Open Scrub of Eremophila alternifolia and Eremophila scoparia over Open Scrub A of Eremophila scoparia, Senna artemisioides subsp. filifolia and Dodonaea viscosa subsp. angustissima over Open Dwarf Scrub D of Atriplex vesicaria, Eremophila decipiens subsp. decipiens and Maireana sedifolia	Very Good	Low	Old (6+ yr)	354567	6605449
SD-15	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata and Senna artemisioides subsp. filifolia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana pyramidata and Maireana sedifolia (Sida intricata) over Very Open Low rass of Enneapogon polyphyllus and Sporobolus caroli over Very Open Herbs of Streptoglossa liatroides	Very Good	Flat	Old (6+ yr)	355455	6604908

SITE_ID	LANDFORM	BROAD FLORISTIC FORMATION	VEGETATION ASSOCIATION	VEG_CONDITION	SLOPE	LAST_FIRE	EASTING	NORTHING
SD-16	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Lycium australe and Tecticornia disarticulata (Atriplex vesicaria) over Dwarf Scrub D of Tecticornia disarticulata, Atriplex vesicaria and Sclerolaena diacantha with Open Low Woodland A of Eucalyptus salmonophloia	Very Good	Flat	Old (6+ yr)	356389	6604870
SD-17	Hardpan Plain	Tecticornia Dwarf Scrub D	Dwarf Scrub D of Tecticornia disarticulata and Atriplex vesicaria over Open Dwarf Scrub C of Tecticornia disarticulata and Maireana sedifolia with Open Low Woodland A of Eucalyptus salmonophloia	Very Good	Flat	Old (6+ yr)	357001	6605006
SD-18	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus salubris (Eucalyptus salmonophloia) over Open Low Scrub A of Eremophila oppositifolia subsp. angustifolia, Eremophila scoparia and Exocarpos aphyllus over Open Dwarf Scrub C of Scaevola spinescens and Maireana sedifolia over Open Dwarf Scrub D of Olearia muelleri, Eremophila parvifolia subsp. auricampa and Tecticornia disarticulata	Very Good	Flat	Old (6+ yr)	355947	6604415
SD-19	Hardpan Plain	Eucalyptus Open Low Woodland A	Open Low Woodland A of Eucalyptus salmonophloia over Very Open Tree Mallee of Eucalyptus ravida over Open Low Scrub A of Eremophila scoparia over Open Dwarf Scrub C of Maireana sedifolia (Maireana pyramidata and Lycium australe) over Open Dwarf Scrub D of Atriplex vesicaria and Sclerolaena diacantha	Very Good	Flat	Old (6+ yr)	358345	6604538
SD-20	Hardpan Plain	Tecticornia Dwarf Scrub D	Dwarf Scrub D of Tecticornia disarticulata, Atriplex vesicaria and Sclerolaena diacantha with Open Low Woodland A of Eucalyptus salubris over Open Dwarf Scrub C of Maireana sedifolia and Tecticornia disarticulata	Very Good	Flat	Old (6+ yr)	356275	6604210
SD-21	Hardpan Plain	Atriplex Dwarf Scrub D	Dwarf Scrub D of Atriplex vesicaria and Maireana pyramidata with Open Scrub of Eremophila scoparia and Hakea preissii over Open Low Scrub B of Eremophila scoparia	Very Good	Low	Old (6+ yr)	357375	6604163
SD-22	Hardpan Plain	Senna Low Scrub A	Low Scrub A of Senna artemisioides subsp. filifolia and Eremophila scoparia over Dwarf Scrub C of Maireana sedifolia, Senna artemisioides subsp. filifolia and Scaevola spinescens over Open Dwarf Scrub D of Tecticornia disarticulata, Eremophila decipiens subsp. decipiens and Maireana sedifolia with Open Low Woodland A of Casuarina pauper	Very Good	Low	Old (6+ yr)	356474	6604488
SD-23	Stony Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia and Lycium australe with Open Scrub of Eremophila oppositifolia subsp. angustifolia and Eremophila alternifolia over Open Dwarf Scrub D of Ptilotus obovatus, Atriplex vesicaria and Solanum lasiophyllum	Very Good	Low	Old (6+ yr)	357415	6604765
SD-24	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus salubris over Dwarf Scrub D of Tecticornia disarticulata, Maireana sedifolia and Atriplex vesicaria with Open Dwarf Scrub C of Maireana sedifolia and Tecticornia disarticulata	Very Good	Low	Old (6+ yr)	356723	6604563
SD-25	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus lesouefii over Dwarf Scrub D of Maireana sedifolia, Olearia muelleri and Eremophila parvifolia subsp. auricampa with Very Open Tree Mallee of Eucalyptus celastroides and Eucalyptus salubris over Open Scrub of Eremophila scoparia and Eremophila interstans subsp. interstans over Open Dwarf Scrub C of Lycium australe, Maireana sedifolia and Senna artemisioides subsp. filifolia	Very Good	Flat	Old (6+ yr)	358151	6604839
SD-26	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus salubris over Dwarf Scrub C of Maireana sedifolia and Tecticornia disarticulata with Open Scrub of Eremophila interstans subsp. interstans over Open Dwarf Scrub D of Tecticornia disarticulata and Maireana sedifolia	Very Good	Flat	Old (6+ yr)	357276	6604504
SD-27	Hardpan Plain	Eucalyptus Tree Mallee	Tree Mallee of Eucalyptus ravida over Open Dwarf Scrub D of Ptilotus obovatus, Maireana sedifolia and Pimelea microcephala subsp. microcephala	Very Good	Flat	Old (6+ yr)	356713	6605682
SD-28	Stony Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus lesouefii over Open Dwarf Scrub C of Maireana sedifolia and Cratystylis conocephala over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa, Maireana sedifolia and Olearia muelleri	Very Good	Low	Old (6+ yr)	358355	6604289
SD-29	Hardpan Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata and Atriplex nummularia with Open Low Woodland A of Eucalyptus salmonophloia over Open Low Scrub A of Eremophila scoparia (Exocarpos aphyllus) over Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Cratystylis subspinescens	Very Good	Flat	Old (6+ yr)	356624	6605998
SD-30	Stony Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus transcontinentalis and Eucalyptus salmonophloia over Open Scrub of Eremophila interstans subsp. interstans over Open Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa and Atriplex vesicaria	Very Good	Low	Old (6+ yr)	358022	6604000
SD-31	Hardpan Plain	Eucalyptus Woodland	Woodland of Eucalyptus salmonophloia over Open Scrub of Eremophila scoparia, Acacia hemiteles and Eremophila interstans subsp. interstans over Open Low Scrub B of Eremophila scoparia, Eremophila ionantha and Senna artemisioides subsp. filifolia over Open Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa and Scaevola spinescens	Very Good	Flat	Old (6+ yr)	358167	6603859
SD-32	Hardpan Plain	Eucalyptus Dense Low Forest A	Dense Low Forest A of Eucalyptus ravida over Open Low Scrub A of Eremophila ionantha and Eremophila scoparia over Open Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens over Open Dwarf Scrub D of Scaevola spinescens, Maireana sedifolia and Olearia muelleri	Very Good	Flat	Old (6+ yr)	357785	6603457
SD-33	Stony Plain	Eucalyptus Woodland	Woodland of Eucalyptus lesouefii (Eucalyptus salmonophloia) over Open Low Scrub A of Acacia hemiteles, Senna artemisioides subsp. filifolia and Eremophila ionantha over Open Dwarf Scrub C of Cratystylis conocephala and Maireana sedifolia over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa, Olearia muelleri and Cratystylis conocephala	Very Good	Low	Old (6+ yr)	358635	6604384
SD-34	Hardpan Plain	Eucalytpus Tree Mallee	Tree Mallee of Eucalyptus salubris over Open Low Scrub A of Eremophila scoparia (Eremophila oldfieldii subsp. angustifolia) over Open Dwarf Scrub C of Maireana sedifolia and Scaevola spinescens (Lycium australe) over Open Dwarf Scrub D of Scaevola spinescens, Olearia muelleri and Eremophila parvifolia subsp. auricampa	Very Good	Flat	Old (6+ yr)	357450	6603817

SITE_ID	LANDFORM	BROAD FLORISTIC FORMATION	VEGETATION ASSOCIATION	VEG_CONDITION	SLOPE	LAST_FIRE	EASTING	NORTHING
SD-35	Stony Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Lycium australe and Senna artemisioides subsp. filifolia with Open Low Woodland A of Casuarina pauper over Open Low Scrub A of Eremophila scoparia and Senna artemisioides subsp. filifolia over Open Dwarf Scrub D of Lycium australe, Atriplex vesicaria and Maireana triptera	Very Good	Low	Old (6+ yr)	357521	6604714
SD-36	Hardpan Plain	Eucalyptus Open Low Woodland A	Open Low Woodland A of Eucalyptus salmonophloia over Open Scrub of Eremophila scoparia over Open Low Scrub B of Atriplex nummularia and Maireana sedifolia over Open Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana tomentosa and Maireana sedifolia	Very Good	Flat	Old (6+ yr)	357530	6605668
SD-37	Gilgai Plain	Lycium Dwarf Scrub C	Dwarf Scrub C of Lycium australe and Maireana sedifolia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Sclerolaena diacantha over Very Open Herbs of Streptoglossa liatroides over Very Open Low Grass of Enneapogon caerulescens	Very Good	Flat	Old (6+ yr)	357524	6604926
SD-38	Hardpan Plain	Eucalyptus Low Forest A	Low Forest A of Eucalyptus salmonophloia over Scrub of Eremophila scoparia over Open Low Scrub A of Eremophila scoparia and Eremophila ionantha over Open Dwarf Scrub C of Scaevola spinescens, Maireana sedifolia, Eremophila scoparia and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria and Maireana sedifolia	Very Good	Flat	Old (6+ yr)	357542	6606182
SD-39	Drainage Area/ Floodplain	Atriplex Dwarf Scrub D	Dwarf Scrub D of Atriplex vesicaria and Maireana tomentosa with Open Woodland of Eucalyptus salmonophloia over Open Tree Mallee of Eucalyptus celastroides over Open Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata and Atriplex nummularia	Very Good	Low	Old (6+ yr)	357796	6605175
SD-40	Hardpan Plain	Eucalyptus Low Woodland A	Low Woodland A of Eucalyptus salmonophloia over Dwarf Scrub C of Maireana sedifolia, Scaevola spinescens and Senna artemisioides subsp. filifolia with Open Scrub of Senna artemisioides subsp. filifolia and Eremophila scoparia over Open Low Scrub A of Senna artemisioides subsp. filifolia, Eremophila scoparia and Acacia hemiteles over Open Dwarf Scrub D of Maireana sedifolia, Scaevola spinescens and Ptilotus obovatus	Very Good	Flat	Old (6+ yr)	357227	6606430
SD-41	Stony Plain	Eucalyptus Woodland	Woodland of Eucalyptus salmonophloia and Eucalyptus transcontinentalis over Dwarf Scrub C of Maireana sedifolia, Lycium australe and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Lycium australe	Very Good	Low	Old (6+ yr)	358014	6604726
SD-42	Hardpan Plain	Tecticornia Dwarf Scrub C	Dwarf Scrub C of Tecticornia disarticulata and Maireana sedifolia over Open Dwarf Scrub D of Tecticornia disarticulata and Maireana sedifolia	Very Good	Flat	Old (6+ yr)	356651	6605233
SD-43	Stony Plain	Eucalyptus Open Woodland	Open Woodland of Eucalyptus salmonophloia over Very Open Tree Mallee of Eucalyptus celastroides over Open Dwarf Scrub C of Maireana sedifolia, Lycium australe and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria, Maireana sedifolia and Maireana triptera	Very Good	Low	Old (6+ yr)	357990	6604970
SD-44	Gilgai Plain	Maireana Dwarf Scrub C	Dwarf Scrub C of Maireana sedifolia, Maireana pyramidata, Lycium australe and Cratystylis subspinescens over Open Dwarf Scrub D of Eremophila maculata subsp. brevifolia, Maireana sedifolia, Maireana pyramidata and Atriplex vesicaria over Very Open Low Grass of Enneapogon polyphyllus and Sporobolus caroli	Very Good	Flat	Old (6+ yr)	355604	6604921
SD-45	Gilgai Plain	Eucalyptus Open Woodland	Open Woodland of Eucalyptus salmonophloia over Very Open Tree Mallee of Eucalyptus celastroides over Open Dwarf Scrub C of Maireana sedifolia, Lycium australe and Atriplex nummularia over Open Dwarf Scrub D of Atriplex vesicaria, Lycium australe and Sclerolaena diacantha	Very Good	Low	Old (6+ yr)	357792	6605005
SD-46	Hardpan Plain	Eucalyptus Low Forest A	Low Forest A of Eucalyptus lesouefii over Open Dwarf Scrub D of Eremophila parvifolia subsp. auricampa, Olearia muelleri and Scaevola spinescens	Very Good	Flat	Old (6+ yr)	358096	6604143
SD-47	Stony Plain	Tecticornia Dwarf Scrub C	Dwarf Scrub C of Tecticornia disarticulata and Maireana sedifolia with Open Woodland of Eucalyptus salmonophloia over Open Dwarf Scrub D of Tecticornia disarticulata, Atriplex vesicaria and Sclerolaena diacantha	Very Good	Low	Old (6+ yr)	356641	6604062
SD-48	Hardpan Plain	Acacia Thicket	Thicket of Acacia acuminata (narrow phyllode variant), Acacia tetragonophylla and Eremophila alternifolia with Open Woodland of Eucalyptus salmonophloia over Open Low Scrub A of Senna artemisioides subsp. filifolia and Eremophila ionantha over Open Dwarf Scrub C of Marieana sedifolia over Open Dwarf Scrub D of Ptilotus obovatus	Very Good	Flat	Old (6+ yr)	358352	6604098

Flora

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-01	Acacia	hemiteles			No	3	1-2
SD-01	Alectryon	oleifolius	subsp.	canescens	No	0.5	2.5-3
SD-01	Atriplex	nummularia			No	1	0.5-1
SD-01	Austrostipa	elegantissima			No	+	0.4
SD-01	Cratystylis	subspinescens			No	2	0.7
SD-01	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.4
SD-01	Eremophila	alternifolia			No	+	1.5
SD-01	Eremophila	interstans	subsp.	interstans	No	-	-
SD-01	Eremophila	ionantha			No	+	1-2
SD-01	Eremophila	oldfieldii	subsp.	angustifolia	No	+	1.7
SD-01	Eremophila	parvifolia	subsp.	auricampi	No	2	0.5
SD-01	Eremophila	scoparia			No	2	1.5-3
SD-01	Eucalyptus	salmonophloia			No	15	10-15
SD-01	Exocarpos	aphyllus			No	0.5	2.3
SD-01	Maireana	sedifolia			No	10	0.5-1
SD-01	Maireana	trichoptera			No	+	0.3
SD-01	Maireana	triptera			No	-	-
SD-01	Nitraria	billardierei			No	4	0.4-0.6
SD-01	Olearia	muelleri			No	+	0.3
SD-01	Paspalidium	gracile			No	+	0.3
SD-01	Pimelea	microcephala	subsp.	microcephala	No		0.5
SD-01	Ptilotus	exaltatus			No	+	0.1
SD-01	Ptilotus	holosericeus			No	+	0.02
SD-01	Roepera		sp.	indet	No	+	Cl
SD-01	Santalum	acuminatum			No	-	-
SD-01	Scaevola	spinescens			No	2	0.5-1
SD-01	Senna	artemisioides	subsp.	filifolia	No	1.5	1-1.5
SD-01	Solanum	nummularium			No	+	0.4
SD-02	*Carrichtera	annua			No	+	0.05
SD-02	*Cucumis	myriocarpus			No	+	Cr
SD-02	*Oligocarpus	calendulaceus			No	0.5	0.1
SD-02	Abutilon	cryptopetalum			No	+	0.5
SD-02	Atriplex	nummularia			No	+	0.5-1.5
SD-02	Atriplex	vesicaria			No	4	0.5
SD-02	Casuarina	pauper			No	-	-
SD-02	Cratystylis	subspinescens			No	5	0.5-1
SD-02	Dactyloctenium	radulans			No		
SD-02	Dysphania	pumilio			No	+	0.1-0.3
SD-02	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.4-1
SD-02	Enneapogon	avenaceus			No	0.5	0.2
SD-02	Enneapogon	caerulescens			No	0.5	0.2
SD-02	Enteropogon	ramosus			No	+	0.3
SD-02	Eragrostis	dielsii			No	+	0.05
SD-02	Eragrostis	setifolia			No	+	0.25
SD-02	Eremophila	scoparia			No	8	1-2.5

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-02	Euphorbia	australis			No	+	0.05
SD-02	Euphorbia	drummondii			No	+	0.05
SD-02	Euphorbia		cf.	multifaria	No	+	0.02
SD-02	Frankenia	interioris			No	0.5	0.4
SD-02	Lycium	australe			No	+	0.5-1
SD-02	Maireana	pyramidata			No	+	1
SD-02	Maireana	pyramidata			No	+	0.5
SD-02	Maireana	sedifolia			No	7	0.5-1
SD-02	Maireana	tomentosa			No	+	0.3
SD-02	Maireana	trichoptera			No	+	0.25
SD-02	Maireana	triptera			No	+	0.34
SD-02	Marsdenia	australis			No	+	Cl
SD-02	Minuria	cunninghamii			No	+	0.3
SD-02	Nicotiana	occidentalis	subsp.	obliqua	No	+	0.4
SD-02	Paspalidium	gracile			No	0.5	0.35
SD-02	Ptilotus	holosericeus			No	+	0.05
SD-02	Ptilotus	obovatus			No	0.5	0.4
SD-02	Ptilotus		sp.	indet	No	+	0.05
SD-02	Rhagodia	drummondii			No	+	0.3
SD-02	Santalum	acuminatum			No	1.5	1-3.5
SD-02	Scaevola	spinescens			No	+	0.5
SD-02	Sclerolaena	cuneata			No	+	0.2
SD-02	Sclerolaena	diacantha			No	0.5	0.1
SD-02	Senna	artemisioides	subsp.	×artemisioides	No	0.5	0.5-1
SD-02	Senna	charlesiana			No	3	1-2
SD-02	Sida	fibulifera			No	+	0.2
SD-02	Sida	intricata			No	1	0.2
SD-02	Sida	petrophila			No	+	0.6
SD-02	Solanum	lasiophyllum			No	2	0.5
SD-02	Sporobolus	caroli			No	0.5	0.3
SD-02	Streptoglossa	liatroides			No	2.5	0.1
SD-02	Swainsona	oliveri			No	+	0.05
SD-02	Swainsona		cf.	kingii	No	+	0.05
SD-02	Vittadinia	sulcata			No	+	0.1
SD-03	*Carrichtera	annua			No	+	0.1
SD-03	*Carthamus	lanatus			No	+	0.3
SD-03	*Oligocarpus	calendulaceus			No	0.5	0.1
SD-03	Atriplex	vesicaria			No	9	0.4
SD-03	Austrostipa		cf.	elegantissima	No	+	0.6
SD-03	Casuarina	pauper			No	-	-
SD-03	Cratystylis	subspinescens			No	2	0.5
SD-03	Dactyloctenium	radulans			No	+	0.2
SD-03	Enneapogon	avenaceus			No	1	0.2
SD-03	Enneapogon	caerulescens			No	0.5	0.2
SD-03	Enteropogon	ramosus			No	+	0.5
SD-03	Eragrostis	dielsii			No	+	0.1
SD-03	Eremophila	decipiens	subsp.	decipiens	No	-	-

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-03	Eremophila	scoparia			No	0.5	2
SD-03	Euphorbia	drummondii			No	+	0.1
SD-03	Euphorbia		cf.	multifaria	No	+	Pr
SD-03	Frankenia	interioris			No	2	0.3
SD-03	Maireana	amoena			No	-	-
SD-03	Maireana	glomerifolia			No	1.5	0.4
SD-03	Maireana	pyramidata			No	+	0.7
SD-03	Maireana	pyramidata			No	4	0.3-0.6
SD-03	Maireana	sedifolia			No	5	0.5-1
SD-03	Maireana	tomentosa			No	1.5	0.3
SD-03	Maireana		sp.	indet	No	+	0.2
SD-03	Malacocera	tricornis			No	+	0.3
SD-03	Olearia	muelleri			No	+	0.2
SD-03	Paspalidium	gracile			No	+	0.3
SD-03	Pimelea	microcephala	subsp.	microcephala	No	+	1.2
SD-03	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-03	Ptilotus	exaltatus			No	+	0.1
SD-03	Ptilotus	obovatus			No	0.5	0.4
SD-03	Sarcozona	praecox			No	+	0.3
SD-03	Sclerolaena	cuneata			No	+	0.2
SD-03	Sclerolaena	diacantha			No	+	0.2
SD-03	Sida	fibulifera			No	+	0.1
SD-03	Sida	fibulifera			No	+	0.3
SD-03	Thysanotus		cf.	manglesianus	No	+	Cl
SD-03	Vittadinia	sulcata			No	+	0.2
SD-04	Acacia	nyssophylla			No	+	0.5
SD-04	Atriplex	vesicaria			No	5	0.3-0.5
SD-04	Austrostipa		sp.	indet	No	0.5	1
SD-04	Casuarina	pauper			No	1	5
SD-04	Cratystylis	subspinescens			No	1.5	1
SD-04	Dodonaea	viscosa	subsp.	angustissima	No	+	0.5
SD-04	Enneapogon	avenaceus			No	+	0.1
SD-04	Enneapogon	caerulescens			No	0.5	0.1
SD-04	Enteropogon	ramosus			No	+	0.5
SD-04	Eremophila	decipiens	subsp.	decipiens	No	+	0.3
SD-04	Eremophila	oldfieldii	subsp.	angustifolia	No	+	1.5
SD-04	Eremophila	parvifolia	subsp.	auricampi	No	+	0.4
SD-04	Eremophila	scoparia			No	10	1.5-3
SD-04	Exocarpos	aphyllus			No	0.5	2
SD-04	Frankenia	interioris			No	1	0.3
SD-04	Lycium	australe			No	1	1
SD-04	Maireana	pyramidata			No	+	0.5
SD-04	Maireana	sedifolia			No	12	0.5-1
SD-04	Maireana	trichoptera			No	+	0.3
SD-04	Marsdenia	australis			No	+	CL
SD-04	Olearia	muelleri			No	+	0.5
SD-04	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.3

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-04	Rhagodia	drummondii			No	+	0.5
SD-04	Scaevola	spinescens			No	2	0.5-1
SD-04	Sclerolaena	cuneata			No	+	0.3
SD-04	Sclerolaena	diacantha			No	+	0.2
SD-04	Senna	artemisioides	subsp.	filifolia	No	1	2
SD-04	Solanum	lasiophyllum			No	+	0.2
SD-04	Solanum	nummularium			No	+	0.3
SD-04	Tecticornia	disarticulata			No	1	0.7
SD-05	Acacia	nyssophylla			No	0.5	0.3
SD-05	Alyxia	buxifolia			No	2	0.5
SD-05	Atriplex	nummularia			No	+	0.5-1
SD-05	Atriplex	vesicaria			No	+	0.3
SD-05	Cratystylis	microphylla			No	0.5	0.5-1
SD-05	Eremophila	interstans	subsp.	interstans	No	+	0.75
SD-05	Eremophila	oppositifolia	subsp.	angustifolia	No		
SD-05	Eremophila	parvifolia	subsp.	auricampi	No	12	0.3
SD-05	Eremophila	scoparia			No	2	0.5-2
SD-05	Eucalyptus	lesouefii			No	25	8-10
SD-05	Eucalyptus	salmonophloia			No	2	0.5
SD-05	Eucalyptus	salubris			No	-	-
SD-05	Maireana	pentatropis			No	2	0.5
SD-05	Maireana	sedifolia			No	8	0.4-0.8
SD-05	Olearia	muelleri			No	+	0.5
SD-05	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-05	Scaevola	spinescens			No	2	0.5
SD-05	Senna	artemisioides	subsp.	filifolia	No	2	0.5
SD-06	Acacia	colletioides			No	+	0.5-1.5
SD-06	Acacia	tetragonophylla			No	+	0.4
SD-06	Atriplex	vesicaria			No	2	0.4
SD-06	Austrostipa		sp.	indet	No	+	0.3
SD-06	Enchylaena	tomentosa	subsp.	tomentosa	No	+	1
SD-06	Enchylaena	tomentosa	subsp.	tomentosa	No	0.5	0.3
SD-06	Eremophila	glabra	subsp.	glabra	No	+	1-2
SD-06	Eremophila	ionantha			No	2	1-2
SD-06	Eremophila	oldfieldii	subsp.	angustifolia	No	+	1.5
SD-06	Eremophila	scoparia			No	1	1-2
SD-06	Eucalyptus	ravida			No	70	8-10
SD-06	Lycium	australe			No	+	0.2
SD-06	Maireana	pyramidata			No	+	0.4
SD-06	Maireana	sedifolia			No	4	0.5-1
SD-06	Maireana	tomentosa			No	+	0.2
SD-06	Maireana	triptera			No	+	0.4
SD-06	Paspalidium	gracile			No	+	0.4
SD-06	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.5-1
SD-06	Ptilotus	?exaltatus			No	+	0.1
SD-06	Ptilotus	obovatus			No	3	0.4
SD-06	Ptilotus		cf.	holosericeus	No		

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-06	Rhagodia	drummondii			No	+	0.5
SD-06	Scaevola	spinescens			No	+	0.5
SD-06	Sclerolaena	cuneata			No		
SD-06	Sclerolaena	diacantha			No	+	0.15
SD-06	Senna	artemisioides	subsp.	filifolia	No		
SD-06	Solanum	lasiophyllum			No	+	0.2
SD-06	Solanum	nummularium			No	+	0.3
SD-06	Templetonia	ceracea			No	-	0.5-1
SD-07	Atriplex	nummularia			No	+	1
SD-07	Atriplex	vesicaria			No	0.5	0.5
SD-07	Eremophila	glabra	subsp.	glabra	No	+	1
SD-07	Eremophila	interstans	subsp.	interstans	No	2.5	2.5-4
SD-07	Eremophila	parvifolia	subsp.	auricampi	No	4	0.3-0.5
SD-07	Eremophila	scoparia			No	1	1-2
SD-07	Eucalyptus	celastroides			No	1.5	4-6
SD-07	Eucalyptus	lesouefii			No	2	8-10
SD-07	Eucalyptus	salubris			No	7	8-12
SD-07	Eucalyptus	transcontinentalis			No	4	10-15
SD-07	Maireana	georgei			No	0.5	0.4
SD-07	Maireana	pentatropis			No	+	0.4-1
SD-07	Maireana	sedifolia			No	10	0.5-1
SD-07	Olearia	muelleri			No	0.5	0.4
SD-07	Scaevola	spinescens			No	2	0.5
SD-07	Sclerolaena	diacantha			No	+	0.2
SD-07	Senna	artemisioides	subsp.	filifolia	No	0.5	1
SD-08	Acacia	acuminata (narrow phyllode variant)			No	20	2-4
SD-08	Acacia	tetragonophylla			No	5	1.5-3
SD-08	Alectryon	oleifolius	subsp.	canescens	No	-	-
SD-08	Casuarina	pauper			No	-	-
SD-08	Cheilanthes	sieberi	subsp.	sieberi	No	0.5	0.1
SD-08	Dodonaea	lobulata			No	1	1-2.5
SD-08	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.7
SD-08	Eremophila	alternifolia			No	5	2-3
SD-08	Eremophila	deserti			No	+	0.5
SD-08	Eremophila	oldfieldii	subsp.	angustifolia	No	3.5	2-3.5
SD-08	Eremophila	scoparia			No	+	0.5-1
SD-08	Eucalyptus	salmonophloia			No	-	-
SD-08	Eucalyptus	salubris			No	1	5-8
SD-08	Euphorbia	drummondii			No	+	0.02
SD-08	Exocarpos	aphyllus			No	2.5	2-3
SD-08	Maireana	sedifolia			No	2	0.5-1
SD-08	Maireana	triptera			No	+	0.3
SD-08	Marsdenia	australis			No	+	Cl
SD-08	Pimelea	microcephala	subsp.	microcephala	No	-	-
SD-08	Pittosporum	angustifolium			No	1	2-3
SD-08	Poaceae		sp.	indet	No	+	0.35

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-08	Ptilotus	?exaltatus			No	+	0.1
SD-08	Ptilotus	obovatus			No	3	0.4
SD-08	Santalum	spicatum			No	1	2-4
SD-08	Scaevola	spinescens			No	5	0.5-1.7
SD-08	Scaevola	spinescens			No	-	-
SD-08	Senna	artemisioides	subsp.	filifolia	No	3	1-2
SD-08	Solanum	lasiophyllum			No	+	0.5
SD-08	Vincetoxicum	lineare			No	+	Cl
SD-09	Abutilon	cryptopetalum			No	+	0.4
SD-09	Acacia	acuminata (narrow phyllode variant)			No	25	3-5
SD-09	Acacia	hemiteles			No	1	1-2
SD-09	Acacia	tetragonophylla			No	1.5	2
SD-09	Amyema	gibberula			No	+	Ap
SD-09	Austrostipa	tuckeri			No	+	0.5
SD-09	Casuarina	pauper			No	0.5	4-8
SD-09	Enchylaena	tomentosa	subsp.	tomentosa	No	+	1
SD-09	Eremophila	alternifolia			No	2	2.5
SD-09	Eremophila	decipiens	subsp.	decipiens	No	+	0.6
SD-09	Eremophila	ionantha			No	3	1-3
SD-09	Eremophila	oldfieldii	subsp.	angustifolia	No	-	-
SD-09	Eremophila	oppositifolia	subsp.	angustifolia	No	-	-
SD-09	Eremophila	scoparia			No	1	1-2.5
SD-09	Eucalyptus	salmonophloia			No	1	10
SD-09	Eucalyptus	salubris			No	1	7
SD-09	Euphorbia		cf.	multifaria	No	+	0.05
SD-09	Grevillea	nematophylla			No	1	4-6
SD-09	Lycium	australe			No	1	0.5-1.5
SD-09	Lysiana	casuarinae			No	-	-
SD-09	Maireana	pyramidata			No	0.5	1
SD-09	Maireana	sedifolia			No	+	0.5-1
SD-09	Maireana	tomentosa			No	+	0.5
SD-09	Marsdenia	australis			No	+	Cl
SD-09	Paspalidium	gracile			No	+	0.3
SD-09	Pimelea	microcephala	subsp.	microcephala	No	2	1-2.5
SD-09	Pittosporum	angustifolium			No	2	1-4
SD-09	Ptilotus	obovatus			No	4	0.5
SD-09	Rhagodia	drummondii			No	0.5	0.5-1
SD-09	Santalum	spicatum			No	-	-
SD-09	Senna	artemisioides	subsp.	filifolia	No	3	0.5-1
SD-09	Sida	fibulifera			No	+	0.1
SD-09	Solanum	lasiophyllum			No	+	0.1
SD-09	Vincetoxicum	lineare			No	+	Cl
SD-10	*Carrichtera	annua			No	+	0.15
SD-10	*Cuscuta		cf.	epithymum	No	+	Cl
SD-10	*Oligocarpus	calendulaceus			No	5	0.2
SD-10	Amaranthaceae		sp.	indet	No		-

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-10	Atriplex	vesicaria			No	9	0.3-0.6
SD-10	Convolvulus		cf.	remotus	No	+	Cr
SD-10	Enneapogon	avenaceus			No	+	0.2
SD-10	Enneapogon	caerulescens			No	1.5	0.2
SD-10	Enteropogon	ramosus			No	+	0.3
SD-10	Eragrostis	dielsii			No	+	0.05
SD-10	Eremophila	scoparia			No	+	0.4
SD-10	Euphorbia	drummondii			No	+	0.02
SD-10	Euphorbia		cf.	multifaria	No	+	0.05
SD-10	Maireana	pyramidata			No	12	1
SD-10	Maireana	sedifolia			No	+	0.5-1
SD-10	Maireana	tomentosa			No	0.5	0.2
SD-10	Maireana	triptera			No	+	0.2
SD-10	Maireana		sp.	indet	No	+	0.5
SD-10	Olearia	muelleri			No	-	-
SD-10	Paspalidium	gracile			No	1.5	0.4
SD-10	Pittosporum	angustifolium			No	-	-
SD-10	Ptilotus	obovatus			No	0.5	0.4
SD-10	Ptilotus		cf.	aervoides	No	-	-
SD-10	Sclerolaena	cuneata			No	+	0.2
SD-10	Sclerolaena	diacantha			No	1	0.15
SD-10	Senna	charlesiana			No	-	-
SD-10	Sida	fibulifera			No	+	0.2
SD-10	Sida	intricata			No	1	0.15
SD-10	Sida	petrophila			No	+	0.7
SD-10	Solanum	lasiophyllum			No	2	0.4
SD-10	Sporobolus	caroli			No	+	0.3
SD-10	Sporobolus	caroli			No	+	0.3
SD-10	Streptoglossa	liatroides			No	-	-
SD-10	Swainsona		cf.	kingii	No	+	0.1
SD-10	Tecticornia	disarticulata			No	+	0.4
SD-10	Vittadinia	sulcata			No	-	-
SD-11	*Carrichtera	annua			No	+	0.2
SD-11	*Citrullus	amarus			No	-	-
SD-11	*Oligocarpus	calendulaceus			No	-	-
SD-11	Acacia	kalgoorliensis			No	+	2
SD-11	Atriplex	nummularia			No	0.5	1-1.5
SD-11	Atriplex	vesicaria			No	8	0.5
SD-11	Cratystylis	subspinescens			No	-	-
SD-11	Enneapogon	avenaceus			No	+	0.1
SD-11	Enneapogon	avenaceus			No	+	0.2
SD-11	Enneapogon	caerulescens			No	+	0.2
SD-11	Enteropogon	ramosus			No	+	0.3
SD-11	Eremophila	alternifolia			No	+	0.4
SD-11	Eremophila	decipiens	subsp.	decipiens	No	-	-
SD-11	Eremophila	scoparia			No	+	0.5
SD-11	Eucalyptus	salmonophloia			No	1.5	10-15

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-11	Euphorbia	drummondii			No	+	0.02
SD-11	Euphorbia		cf.	multifaria	No	-	-
SD-11	Frankenia	interioris			No	+	0.4
SD-11	Lawrencia		sp.	indet	No	+	0.1
SD-11	Lycium	australe			No	+	1
SD-11	Maireana	pyramidata			No	9	0.5-1
SD-11	Maireana	sedifolia			No	4	0.5-1
SD-11	Maireana	tomentosa			No	+	0.15
SD-11	Maireana	trichoptera			No	+	0.3
SD-11	Maireana	triptera			No	0.5	0.2
SD-11	Maireana		sp.	indet	No	+	0.5
SD-11	Marsdenia	australis			No	-	-
SD-11	Nitraria	billardierei			No	+	0.6
SD-11	Paspalidium	gracile			No	-	-
SD-11	Pimelea	microcephala	subsp.	microcephala	No	-	-
SD-11	Pittosporum	angustifolium			No	-	-
SD-11	Ptilotus	exaltatus			No	+	0.1
SD-11	Ptilotus		cf.	holosericeus	No	+	0.1
SD-11	Ptilotus		sp.	indet	No	+	0.03
SD-11	Scaevola	spinescens			No	+	0.5-1
SD-11	Sclerolaena	cuneata			No	+	0.25
SD-11	Sclerolaena	cuneata			No	+	0.2
SD-11	Sclerolaena	diacantha			No	1	0.1
SD-11	Sclerolaena	drummondii			No	+	0.2
SD-11	Sida	intricata			No	+	0.2
SD-11	Solanum	lasiophyllum			No	+	0.3
SD-11	Sporobolus	caroli			No	+	0.3
SD-11	Streptoglossa	liatroides			No	-	-
SD-11	Tecticornia	disarticulata			No	-	-
SD-12	Acacia	tetragonophylla			No	+	0.5
SD-12	Alectryon	oleifolius	subsp.	canescens	No	1	4
SD-12	Alyxia	buxifolia			No	1	1-2
SD-12	Atriplex	vesicaria			No	0.5	0.4
SD-12	Cratystylis	subspinescens			No	2	1
SD-12	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.3
SD-12	Eremophila	decipiens	subsp.	decipiens	No	0.5	0.5-1
SD-12	Eremophila	interstans	subsp.	interstans	No	+	2-3
SD-12	Eremophila	oppositifolia	subsp.	angustifolia	No	0.5	1.5-2
SD-12	Eremophila	scoparia			No	2	1-2
SD-12	Eucalyptus	salubris			No	60	8-12
SD-12	Exocarpos	aphyllus			No	1	1.5-2
SD-12	Lycium	australe			No	-	-
SD-12	Maireana	georgei			No	-	-
SD-12	Maireana	pyramidata			No	+	0.7
SD-12	Maireana	sedifolia			No	1.5	0.5-1
SD-12	Maireana	trichoptera			No	-	-
SD-12	Marsdenia	australis			No	+	Cl

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-12	Olearia	muelleri			No	0.5	0.4
SD-12	Pimelea	microcephala	subsp.	microcephala	No	1	1
SD-12	Pittosporum	angustifolium			No	1	0.5-2
SD-12	Ptilotus	obovatus			No	0.5	0.3
SD-12	Rhagodia	drummondii			No	0.5	0.5-1
SD-12	Santalum	acuminatum			No	-	-
SD-12	Scaevola	spinescens			No	1	0.5
SD-12	Senna	artemisioides	subsp.	filifolia	No	0.5	0.5-1
SD-12	Sida	spodochroma			No	+	0.1
SD-12	Solanum	lasiophyllum			No	+	0.3
SD-12	Solanum	nummularium			No	-	-
SD-12	Tecticornia	disarticulata			No	+	0.3
SD-13	*Oligocarpus	calendulaceus			No	+	0.1
SD-13	Atriplex	vesicaria			No	2	0.5
SD-13	Austrostipa	platychaeta			No	+	0.4
SD-13	Brachyscome	ciliaris			No	+	0.25
SD-13	Brachyscome	ciliaris			No	+	0.1
SD-13	Casuarina	pauper			No	-	-
SD-13	Convolvulus	remotus			No	+	Cl
SD-13	Enneapogon	caerulescens			No	4	0.2
SD-13	Enteropogon	ramosus			No	+	0.3
SD-13	Eremophila	alternifolia			No	1	0.4-2
SD-13	Eremophila	decipiens	subsp.	decipiens	No	+	0.5
SD-13	Eremophila	scoparia			No	3	1-2
SD-13	Exocarpos	aphyllus			No	+	1.8
SD-13	Lycium	australe			No	1	0.5
SD-13	Maireana	sedifolia			No	15	0.5-1
SD-13	Maireana	trichoptera			No	+	0.2
SD-13	Marsdenia	australis			No	+	Cl
SD-13	Minuria	cunninghamii			No	+	0.2
SD-13	Nitraria	billardierei			No	2	0.5-1
SD-13	Paspalidium	gracile			No	+	0.3
SD-13	Pimelea	microcephala	subsp.	microcephala	No	+	1
SD-13	Poaceae		sp.	indet	No	+	0.1
SD-13	Scaevola	spinescens			No	+	1.2
SD-13	Scaevola	spinescens			No	+	0.5-1
SD-13	Sclerolaena	diacantha			No	+	0.2
SD-13	Senna	artemisioides	subsp.	filifolia	No	3	1-2
SD-13	Sida	fibulifera			No	+	0.1
SD-13	Solanum	lasiophyllum			No	+	0.2
SD-13	Solanum	nummularium			No	+	0.25
SD-13	Thysanotus		cf.	manglesianus	No	+	Cl
SD-14	*Carrichtera	annua			No	+	0.1
SD-14	*Oligocarpus	calendulaceus			No	+	0.1
SD-14	Alectryon	oleifolius	subsp.	canescens	No	-	-
SD-14	Atriplex	nummularia			No	+	0.5-1
SD-14	Atriplex	vesicaria			No	2	0.6

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-14	Austrostipa	platychaeta			No	+	0.4
SD-14	Brachyscome	ciliaris			No	+	0.2
SD-14	Casuarina	pauper			No	-	-
SD-14	Convolvulus	remotus			No	+	Cl
SD-14	Convolvulus	remotus			No	+	Cl
SD-14	Cratystylis	conocephala			No	+	0.5-1
SD-14	Dodonaea	lobulata			No	+	0.5-1
SD-14	Dodonaea	viscosa	subsp.	angustissima	No	2	1-2
SD-14	Enneapogon	avenaceus			No	+	0.2
SD-14	Enneapogon	caerulescens			No	4	0.2
SD-14	Eremophila	alternifolia			No	3	0.5-2.5
SD-14	Eremophila	decipiens	subsp.	decipiens	No	2	0.5
SD-14	Eremophila	deserti			No	1	1.2
SD-14	Eremophila	scoparia			No	2	1-2
SD-14	Eucalyptus	salmonophloia			No	1	15
SD-14	Euphorbia	drummondii			No	+	0.02
SD-14	Lycium	australe			No	1	0.5-1
SD-14	Maireana	sedifolia			No	15	0.5-1
SD-14	Maireana	trichoptera			No	+	0.2
SD-14	Marsdenia	australis			No	+	Cl
SD-14	Nitraria	billardierei			No	+	0.5-1
SD-14	Paspalidium	gracile			No	0.5	0.4
SD-14	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1.5
SD-14	Rhagodia	drummondii			No	-	-
SD-14	Roepera		sp.	indet	No	+	0.3
SD-14	Rytidosperma	caespitosum			No	+	0.2
SD-14	Scaevola	spinescens			No	1.5	0.5-1
SD-14	Sclerolaena	obliquicuspis			No	+	0.2
SD-14	Senna	artemisioides	subsp.	filifolia	No	3	1-1.5
SD-14	Solanum	lasiophyllum			No	+	0.3
SD-14	Solanum	nummularium			No	+	0.2-0.4
SD-14	Tecticornia	disarticulata			No	+	0.7
SD-15	*Carrichtera	annua			No	+	0.05
SD-15	*Carrichtera	annua			No	0.5	0.1
SD-15	*Oligocarpus	calendulaceus			No	0.5	0.1
SD-15	Atriplex	vesicaria			No	6	0.2-0.5
SD-15	Casuarina	pauper			No	-	-
SD-15	Cratystylis	subspinescens			No	1	0.5-1
SD-15	Enneapogon	avenaceus			No	1	0.2
SD-15	Enneapogon	avenaceus			No	3	0.2
SD-15	Enneapogon	caerulescens			No	+	0.2
SD-15	Enteropogon	ramosus			No	+	0.3
SD-15	Eragrostis	dielsii			No	+	0.1
SD-15	Eragrostis	setifolia			No	+	0.3
SD-15	Eremophila	scoparia			No	2	1-2
SD-15	Erodium		sp.	indet	No	+	0.05
SD-15	Euphorbia	drummondii			No	+	0.05

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-15	Euphorbia	drummondii			No	+	0.1
SD-15	Frankenia	interioris			No	+	0.3
SD-15	Leiocarpa	websteri			No	+	0.3
SD-15	Leiocarpa	websteri			No	+	0.3
SD-15	Lycium	australe			No	0.5	0.5-0.7
SD-15	Maireana	pyramidata			No	6	0.5
SD-15	Maireana	sedifolia			No	8.5	0.5-1
SD-15	Maireana	tomentosa			No	+	0.2
SD-15	Maireana	trichoptera			No	+	0.15
SD-15	Maireana		sp.	indet	No	+	0.3
SD-15	Maireana		sp.	indet	No	+	0.15
SD-15	Marsdenia	australis			No	+	Cl
SD-15	Nitraria	billardierei			No	0.5	0.5-1
SD-15	Paspalidium	gracile			No	+	0.3
SD-15	Ptilotus	holosericeus			No	+	0.05
SD-15	Sclerolaena	cuneata			No	+	0.2
SD-15	Sclerolaena	diacantha			No	0.5	0.1
SD-15	Sclerolaena	drummondii			No	-	-
SD-15	Senna	artemisioides	subsp.	filifolia	No	+	0.5-1.5
SD-15	Sida	fibulifera			No	+	0.1
SD-15	Sida	intricata			No	0.5	0.2
SD-15	Solanum	lasiophyllum			No	+	0.2
SD-15	Sporobolus	caroli			No	2	0.35
SD-15	Streptoglossa	liatroides			No	1	0.1
SD-15	Thysanotus		cf.	manglesianus	No	+	CL
SD-16	*Carrichtera	annua			No	+	0.1
SD-16	*Carrichtera	annua			No	+	0.1
SD-16	*Oligocarpus	calendulaceus			No	+	0.1
SD-16	*Oligocarpus	calendulaceus			No	+	0.1
SD-16	Acacia	erinacea			No	0.5	0.5-1
SD-16	Atriplex	nummularia			No	1	1-2
SD-16	Atriplex	vesicaria			No	7.5	0.4
SD-16	Austrostipa		sp.	indet	No	+	0.5-1
SD-16	Brachyscome	ciliaris			No	+	0.25
SD-16	Enneapogon	avenaceus			No	+	0.1
SD-16	Enneapogon	avenaceus			No	+	0.3
SD-16	Enneapogon	caerulescens			No	+	0.2
SD-16	Eremophila	parvifolia	subsp.	auricampi	No	+	0.4
SD-16	Eremophila	scoparia			No	+	0.5-1.5
SD-16	Eucalyptus	salmonophloia			No	1	15-20
SD-16	Maireana	pyramidata			No	1	0.5-1
SD-16	Maireana	sedifolia			No	14	0.5-1
SD-16	Maireana	trichoptera			No	+	0.5
SD-16	Maireana	trichoptera			No	+	0.4
SD-16	Maireana	triptera			No	+	0.4
SD-16	Nitraria	billardierei			No	2	0.5-1
SD-16	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.5-1.5

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-16	Ptilotus	exaltatus			No	+	0.1
SD-16	Ptilotus	holosericeus			No	+	0.05
SD-16	Ptilotus	obovatus			No	+	0.4
SD-16	Ptilotus		sp.	indet	No	+	0.05
SD-16	Scaevola	spinescens			No	1	0.5-1
SD-16	Sclerolaena	cuneata			No	+	0.3
SD-16	Sclerolaena	diacantha			No	4	0.2
SD-16	Senna	artemisioides	subsp.	filifolia	No	+	0.5-1
SD-16	Sida	spodochroma			No	+	0.1
SD-16	Solanum	lasiophyllum			No	0.5	0.35
SD-16	Solanum	nummularium			No	+	0.5
SD-16	Sporobolus	caroli			No	+	0.4
SD-16	Tecticornia	disarticulata			No	7	0.5-1
SD-16	Vittadinia	sulcata			No	+	0.2
SD-17	*Oligocarpus	calendulaceus			No	+	0.2
SD-17	Atriplex	nummularia			No	+	1
SD-17	Atriplex	vesicaria			No	5	0.5
SD-17	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.5
SD-17	Enneapogon	avenaceus			No	+	0.15
SD-17	Enneapogon	avenaceus			No	+	0.1
SD-17	Enteropogon	ramosus			No	+	0.5
SD-17	Eremophila	scoparia			No	-	-
SD-17	Eucalyptus	salmonophloia			No	1.5	10-15
SD-17	Leiocarpa	websteri			No	+	0.25
SD-17	Lycium	australe			No	+	0.6
SD-17	Maireana	pyramidata			No	1	0.5-1
SD-17	Maireana	sedifolia			No	15	0.5-1
SD-17	Maireana	tomentosa			No	0.5	0.2
SD-17	Maireana	trichoptera			No	+	0.1
SD-17	Maireana	triptera			No	+	0.2
SD-17	Maireana		sp.	indet	No	-	-
SD-17	Pimelea	microcephala	subsp.	microcephala	No	0.5	1
SD-17	Poaceae		sp.	indet	No	+	0.1
SD-17	Ptilotus	exaltatus			No	+	0.1
SD-17	Ptilotus		cf.	holosericeus	No	+	0.2
SD-17	Sclerolaena	cuneata			No	0.5	0.2
SD-17	Sclerolaena	diacantha			No	+	0.3
SD-17	Senna	artemisioides	subsp.	filifolia	No	+	1
SD-17	Solanum	lasiophyllum			No	+	0.2
SD-17	Sporobolus	caroli			No	+	0.4
SD-17	Tecticornia	disarticulata			No	15	0.5-1
SD-17	Vittadinia	sulcata			No	+	0.15
SD-18	Austrostipa		sp.	indet	No	+	0.7
SD-18	Casuarina	pauper			No	+	1
SD-18	Eremophila	deserti			No	+	0.6
SD-18	Eremophila	glabra	subsp.	glabra	No	1	0.5-1.5
SD-18	Eremophila	oldfieldii	subsp.	angustifolia	No	+	1-2

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-18	Eremophila	oppositifolia	subsp.	angustifolia	No	5	1.5-3
SD-18	Eremophila	parvifolia	subsp.	auricampi	No	1.5	0.4-0.8
SD-18	Eremophila	scoparia			No	1	0.5-1.5
SD-18	Eucalyptus	salmonophloia			No	3	8-12
SD-18	Eucalyptus	salubris			No	28	8-10
SD-18	Exocarpos	aphyllus			No	1	2
SD-18	Lycium	australe			No	0.5	0.5-1
SD-18	Maireana	sedifolia			No	2.5	0.5-1
SD-18	Olearia	muelleri			No	1.5	0.4
SD-18	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-18	Ptilotus	exaltatus			No	+	0.05
SD-18	Scaevola	spinescens			No	5	0.5-1
SD-18	Senna	artemisioides	subsp.	filifolia	No	+	0.4
SD-18	Sida	spodochroma			No	+	0.1
SD-18	Tecticornia	disarticulata			No	1.5	0.4
SD-19	Atriplex	nummularia			No	+	0.5-1
SD-19	Atriplex	vesicaria			No	6	0.4
SD-19	Cratystylis	microphylla			No	+	0.3
SD-19	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.4
SD-19	Eremophila	interstans	subsp.	interstans	No	0.5	1.7
SD-19	Eremophila	oppositifolia	subsp.	angustifolia	No	+	1-1.5
SD-19	Eremophila	scoparia			No	1.5	1-2
SD-19	Eucalyptus	celastroides			No	-	-
SD-19	Eucalyptus	lesouefii			No	-	-
SD-19	Eucalyptus	ravida			No	5	6-8
SD-19	Eucalyptus	salmonophloia			No	2	10-15
SD-19	Euphorbia	drummondii			No	+	0.02
SD-19	Exocarpos	aphyllus			No	1	1.5
SD-19	Frankenia	interioris			No	0.5	0.4
SD-19	Lawrencia		sp.	indet	No	+	0.05
SD-19	Lycium	australe			No	+	0.5
SD-19	Maireana	pyramidata			No	1	0.4
SD-19	Maireana	sedifolia			No	5	0.5-1
SD-19	Maireana	tomentosa			No	+	0.3
SD-19	Maireana	triptera			No	+	0.2
SD-19	Olearia	muelleri			No	+	0.4
SD-19	Paspalidium	gracile			No	+	0.3
SD-19	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-19	Poaceae		sp.	indet	No	+	0.2
SD-19	Scaevola	spinescens			No	+	0.5
SD-19	Sclerolaena	cuneata			No	+	0.3
SD-19	Sclerolaena	diacantha			No	+	0.2
SD-19	Streptoglossa	liatroides			No	+	0.05
SD-20	*Oligocarpus	calendulaceus			No	-	-
SD-20	*Oligocarpus	calendulaceus			No	+	0.1
SD-20	Atriplex	vesicaria			No	6	0.3-0.5
SD-20	Brachyscome	ciliaris			No	+	0.2

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-20	Brachyscome	ciliaris			No	+	0.3
SD-20	Casuarina	pauper			No	+	1.5
SD-20	Convolvulus	remotus			No	+	Cr
SD-20	Dodonaea	viscosa	subsp.	angustissima	No	+	1.2
SD-20	Enneapogon	avenaceus			No	0.5	0.2
SD-20	Enneapogon	avenaceus			No	+	0.15
SD-20	Enteropogon	ramosus			No	+	0.3
SD-20	Eremophila	decipiens	subsp.	decipiens	No	-	-
SD-20	Eremophila	deserti			No	-	-
SD-20	Eremophila	scoparia			No	+	0.5-1
SD-20	Eucalyptus	salubris			No	6	6-12
SD-20	Exocarpos	aphyllus			No	-	-
SD-20	Frankenia	interioris			No	0.5	0.2
SD-20	Maireana	amoena			No	-	-
SD-20	Maireana	sedifolia			No	4	0.5-1
SD-20	Maireana	tomentosa			No	+	0.2
SD-20	Maireana	trichoptera			No	+	0.2
SD-20	Maireana	trichoptera			No	+	0.3
SD-20	Maireana		sp.	indet	No	+	0.15
SD-20	Ophioglossum	lusitanicum			No	+	0.1
SD-20	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-20	Sarcozona	praecox			No	+	0.2
SD-20	Sclerolaena	cuneata			No	+	0.2
SD-20	Sclerolaena	diacantha			No	1	0.2
SD-20	Sclerolaena	obliquicuspis			No	+	0.2
SD-20	Sclerolaena	obliquicuspis			No	+	0.15
SD-20	Sclerolaena	obliquicuspis			No	+	0.1
SD-20	Sida	intricata			No	+	0.2
SD-20	Solanum	esuriale			No	-	-
SD-20	Tecticornia	disarticulata			No	10	0.3-0.6
SD-20	Vittadinia	sulcata			No	+	0.2
SD-21	*Oligocarpus	calendulaceus			No	0.25	0.1
SD-21	*Oligocarpus	calendulaceus			No	0.5	0.2
SD-21	Atriplex	vesicaria			No	10	0.5
SD-21	Austrostipa	elegantissima			No	+	0.45
SD-21	Brachyscome	ciliaris			No	+	0.2
SD-21	Cratystylis	subspinescens			No	+	0.5
SD-21	Enneapogon	avenaceus			No	1	0.2
SD-21	Enneapogon	avenaceus			No	+	0.2
SD-21	Enneapogon	avenaceus			No	+	0.1
SD-21	Enneapogon	caerulescens			No	+	0.3
SD-21	Enteropogon	ramosus			No	+	0.4
SD-21	Eremophila	decipiens	subsp.	decipiens	No	-	-
SD-21	Eremophila	scoparia			No	4	1-2.5
SD-21	Euphorbia	drummondii			No	+	0.01
SD-21	Frankenia	interioris			No	+	0.5
SD-21	Hakea	preissii			No	1	1-4

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-21	Lycium	australe			No	+	0.5
SD-21	Maireana	pyramidata			No	8	0.5-1
SD-21	Maireana	sedifolia			No	+	0.3
SD-21	Maireana	tomentosa			No	2	0.3
SD-21	Maireana	trichoptera			No	0.5	0.2
SD-21	Maireana		sp.	indet	No	+	0.4
SD-21	Paspalidium	gracile			No	+	0.3
SD-21	Ptilotus	obovatus			No	+	0.6
SD-21	Ptilotus		cf.	aervoides	No	+	0.02
SD-21	Ptilotus		cf.	holosericeus	No	+	0.05
SD-21	Rytidosperma	caespitosum			No	+	0.2
SD-21	Sclerolaena	cuneata			No	+	0.3
SD-21	Sclerolaena	diacantha			No	0.5	0.2
SD-21	Sida	intricata			No	+	0.2
SD-21	Solanum	lasiophyllum			No	+	0.3
SD-21	Sporobolus	caroli			No	1	0.3
SD-21	Tecticornia	disarticulata			No	-	-
SD-21	Tragus	australianus			No	+	0.1
SD-22	*Oligocarpus	calendulaceus			No	+	0.1
SD-22	Acacia	erinacea			No	+	0.75
SD-22	Acacia	tetragonophylla			No	-	-
SD-22	Atriplex	vesicaria			No	+	0.3
SD-22	Brachyscome	ciliaris			No	+	0.5
SD-22	Casuarina	pauper			No	-	-
SD-22	Enneapogon	avenaceus			No	+	0.2
SD-22	Enneapogon	caerulescens			No	+	0.3
SD-22	Enteropogon	ramosus			No	+	0.3
SD-22	Eremophila	decipiens	subsp.	decipiens	No	2	0.5-1
SD-22	Eremophila	glabra	subsp.	glabra	No	1	1-2
SD-22	Eremophila	scoparia			No	2	1-2
SD-22	Euphorbia	drummondii			No	+	0.05
SD-22	Goodenia	havilandii			No	+	0.05
SD-22	Lycium	australe			No	+	0.5
SD-22	Maireana	sedifolia			No	15	0.5-1
SD-22	Marsdenia	australis			No	+	Cl
SD-22	Nitraria	billardierei			No	0.5	0.5-1
SD-22	Olearia	muelleri			No	+	0.4
SD-22	Paspalidium	gracile			No	+	0.3
SD-22	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-22	Scaevola	spinescens			No	2	0.5-1
SD-22	Sclerolaena	diacantha			No	+	0.15
SD-22	Senna	artemisioides	subsp.	filifolia	No	11	1-2.5
SD-22	Solanum	lasiophyllum			No	+	0.3
SD-22	Tecticornia	disarticulata			No	4	0.4-0.8
SD-23	*Erodium		sp.	indet	No	+	0.05
SD-23	Apocynaceae		sp.	indet	No	+	Cl
SD-23	Atriplex	vesicaria			No	0.5	0.4

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-23	Austrostipa		sp.	indet	No	+	1
SD-23	Casuarina	pauper			No	-	-
SD-23	Chenopodium	gaudichaudianum			No	+	0.5-1
SD-23	Enneapogon	avenaceus			No	+	0.2
SD-23	Enneapogon	avenaceus			No	+	0.3
SD-23	Enneapogon	caerulescens			No	1	0.3
SD-23	Enteropogon	ramosus			No	+	0.3
SD-23	Eremophila	alternifolia			No	2	1-3
SD-23	Eremophila	glabra	subsp.	glabra	No	+	0.6
SD-23	Eremophila	oppositifolia	subsp.	angustifolia	No	2	2-4
SD-23	Eremophila	scoparia			No	+	0.6
SD-23	Eucalyptus	transcontinentalis			No	-	-
SD-23	Euphorbia	drummondii			No	+	0.02
SD-23	Goodenia	havilandii			No	+	0.05
SD-23	Lycium	australe			No	2	0.5-1.5
SD-23	Maireana	sedifolia			No	11	0.5-1
SD-23	Maireana	triptera			No	+	0.3
SD-23	Paspalidium	gracile			No	+	0.3
SD-23	Ptilotus	obovatus			No	1	0.4
SD-23	Roepera		sp.	indet	No	+	0.5-1
SD-23	Sclerolaena	diacantha			No	+	0.1
SD-23	Sida	petrophila			No	+	0.5-1
SD-23	Siemssenia	capillaris			No	-	-
SD-23	Solanum	lasiophyllum			No	0.5	0.3
SD-23	Solanum	nummularium			No	+	0.4
SD-24	Atriplex	vesicaria			No	2	0.4
SD-24	Eremophila	scoparia			No	+	0.5
SD-24	Eucalyptus	salmonophloia			No	-	-
SD-24	Eucalyptus	salubris			No	10	7-12
SD-24	Exocarpos	aphyllus			No	-	-
SD-24	Maireana	sedifolia			No	5	0.5-1
SD-24	Maireana	tomentosa			No	+	0.2
SD-24	Maireana	trichoptera			No	+	0.15
SD-24	Sclerolaena	cuneata			No	-	-
SD-24	Sclerolaena	diacantha			No	0.5	0.1
SD-24	Tecticornia	disarticulata			No	20	0.4-1
SD-25	Atriplex	nummularia			No	+	0.5-1.5
SD-25	Atriplex	vesicaria			No	1	0.5
SD-25	Austrostipa	elegantissima			No	+	0.5
SD-25	Cratystylis	subspinescens			No	+	0.5
SD-25	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.2
SD-25	Eremophila	decipiens	subsp.	decipiens	No	+	1
SD-25	Eremophila	glabra	subsp.	glabra	No	+	1-7
SD-25	Eremophila	interstans	subsp.	interstans	No	1	1-4
SD-25	Eremophila	parvifolia	subsp.	auricampi	No	0.5	0.6
SD-25	Eremophila	scoparia			No	2	1-2
SD-25	Eucalyptus	celastroides			No	2	5-6

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-25	Eucalyptus	lesouefii			No	20	8-15
SD-25	Eucalyptus	salmonophloia			No	5	10-15
SD-25	Eucalyptus	salubris			No	1	8
SD-25	Exocarpos	aphyllus			No	+	0.5
SD-25	Maireana	georgei			No	+	0.4
SD-25	Maireana	sedifolia			No	8	0.5-1
SD-25	Maireana	trichoptera			No	+	0.3
SD-25	Maireana	triptera			No	+	0.3
SD-25	Nitraria	billardierei			No	4	0.5-1
SD-25	Olearia	muelleri			No	3	0.4
SD-25	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-25	Ptilotus	holosericeus			No	+	0.1
SD-25	Ptilotus	obovatus			No	+	0.5
SD-25	Scaevola	spinescens			No	0.5	0.5
SD-25	Sclerolaena	diacantha			No	+	0.2
SD-25	Senna	artemisioides	subsp.	filifolia	No	0.5	1-1.5
SD-25	Sida	spodochroma			No	+	0.1
SD-25	Sida		sp.	indet	No	+	0.1
SD-25	Solanum	lasiophyllum			No	+	0.3
SD-25	Solanum	nummularium			No	+	0.4
SD-26	Alyxia	buxifolia			No	-	-
SD-26	Atriplex	nummularia			No	+	0.7
SD-26	Atriplex	vesicaria			No	+	0.3
SD-26	Austrostipa		sp.	indet	No	+	0.5
SD-26	Casuarina	pauper			No	-	-
SD-26	Enteropogon	ramosus			No	+	0.3
SD-26	Eremophila	interstans	subsp.	interstans	No	3	2-5
SD-26	Eremophila	parvifolia	subsp.	auricampi	No	+	0.4
SD-26	Eremophila	scoparia			No	0.5	1-2
SD-26	Eucalyptus	salubris			No	16	8-13
SD-26	Exocarpos	aphyllus			No	-	-
SD-26	Lycium	australe			No	-	-
SD-26	Lycium	australe			No	-	-
SD-26	Maireana	sedifolia			No	13	0.5-1
SD-26	Maireana	trichoptera			No	+	0.2
SD-26	Olearia	muelleri			No	+	0.4
SD-26	Pimelea	microcephala	subsp.	microcephala	No	+	0.3-1
SD-26	Pittosporum	angustifolium			No	0.5	0.5-1
SD-26	Ptilotus	obovatus			No	+	0.3
SD-26	Scaevola	spinescens			No	1	0.5-1
SD-26	Sclerolaena	diacantha			No	+	0.15
SD-26	Senna	artemisioides	subsp.	filifolia	No	+	1-2
SD-26	Solanum	nummularium			No	-	-
SD-26	Tecticornia	disarticulata			No	10	0.5-1
SD-26	Vincetoxicum	lineare			No	-	-
SD-27	Alyxia	buxifolia			No	-	-
SD-27	Atriplex	vesicaria			No	+	0.4

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-27	Casuarina	pauper			No	-	-
SD-27	Cratystylis	subspinescens			No	+	0.2
SD-27	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.2
SD-27	Enteropogon	ramosus			No	-	-
SD-27	Eragrostis	setifolia			No	+	0.3
SD-27	Eremophila	decipiens	subsp.	decipiens	No	+	0.6
SD-27	Eremophila	oldfieldii	subsp.	angustifolia	No	-	-
SD-27	Eremophila	scoparia			No	1.5	0.3-2
SD-27	Eucalyptus	ravida			No	65	8-10
SD-27	Exocarpos	aphyllus			No	+	0.5
SD-27	Maireana	pyramidata			No	0.5	0.4
SD-27	Maireana	sedifolia			No	1	0.5
SD-27	Maireana	trichoptera			No	+	0.3
SD-27	Maireana	triptera			No	+	0.2
SD-27	Minuria	cunninghamii			No	+	0.2
SD-27	Nitraria	billardierei			No	+	0.5
SD-27	Paspalidium	gracile			No	+	0.2
SD-27	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.5-1
SD-27	Pittosporum	angustifolium			No	+	0.5
SD-27	Ptilotus	obovatus			No	1	0.4
SD-27	Rhagodia	drummondii			No	+	0.3
SD-27	Scaevola	spinescens			No	+	0.4
SD-27	Scaevola	spinescens			No	+	0.4
SD-27	Sclerolaena	diacantha			No	+	0.2
SD-27	Senna	artemisioides	subsp.	filifolia	No	+	0.4
SD-27	Sporobolus	caroli			No	+	0.2
SD-28	Acacia	hemiteles			No	-	1-2
SD-28	Atriplex	nummularia			No	+	0.5-1
SD-28	Atriplex	vesicaria			No	+	0.4
SD-28	Austrostipa		sp.	indet	No	+	0.5-1
SD-28	Cratystylis	conocephala			No	3	0.5-1
SD-28	Eremophila	interstans	subsp.	interstans	No	1	3-5
SD-28	Eremophila	pantonii			No	-	-
SD-28	Eremophila	parvifolia	subsp.	auricampi	No	3	0.3-0.5
SD-28	Eremophila	scoparia			No	1	0.5-2
SD-28	Eucalyptus	lesouefii			No	20	8-14
SD-28	Eucalyptus	salmonophloia			No	-	-
SD-28	Eucalyptus	salubris			No	3	8-10
SD-28	Exocarpos	aphyllus			No	+	0.5
SD-28	Maireana	georgei			No	-	0.15
SD-28	Maireana	pentatropis			No	+	0.5
SD-28	Maireana	sedifolia			No	4	0.5-1
SD-28	Nitraria	billardierei			No	-	-
SD-28	Olearia	muelleri			No	1	0.4
SD-28	Pimelea	microcephala	subsp.	microcephala	No	+	0.4
SD-28	Scaevola	spinescens			No	+	0.6
SD-28	Sclerolaena	diacantha			No	+	0.1

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-28	Senna	artemisioides	subsp.	filifolia	No	+	0.5-1
SD-29	*Carrichtera	annua			No	+	0.2
SD-29	*Oligocarpus	calendulaceus			No	+	0.1
SD-29	*Oligocarpus	calendulaceus			No	+	0.1
SD-29	Atriplex	nummularia			No	0.5	0.7
SD-29	Atriplex	vesicaria			No	6	0.4
SD-29	Cratystylis	subspinescens			No	2	0.4
SD-29	Dysphania	pumilio			No	+	0.2
SD-29	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.3
SD-29	Enneapogon	avenaceus			No	+	0.2
SD-29	Enneapogon	avenaceus			No	+	0.2
SD-29	Enneapogon	caerulescens			No	+	0.2
SD-29	Enteropogon	ramosus			No	+	0.1
SD-29	Eragrostis	dielsii			No	+	0.1
SD-29	Eremophila	decipiens	subsp.	decipiens	No	+	0.3
SD-29	Eremophila	scoparia			No	1.5	0.5-1.5
SD-29	Eucalyptus	salmonophloia			No	2	5-15
SD-29	Exocarpos	aphyllus			No	1	1-2
SD-29	Frankenia	interioris			No	+	0.4
SD-29	Lycium	australe			No	+	0.7
SD-29	Maireana	pyramidata			No	0.5	0.5-1
SD-29	Maireana	sedifolia			No	14	0.5-1
SD-29	Maireana	trichoptera			No	+	0.4
SD-29	Maireana	triptera			No	+	0.3
SD-29	Nitraria	billardierei			No	+	0.4
SD-29	Pimelea	microcephala	subsp.	microcephala	No	1	0.6
SD-29	Poaceae		sp.	indet	No	+	0.3
SD-29	Ptilotus	holosericeus			No	+	0.05
SD-29	Scaevola	spinescens			No	1	0.5
SD-29	Sclerolaena	cuneata			No	+	0.2
SD-29	Sclerolaena	diacantha			No	+	0.2
SD-29	Senna	artemisioides	subsp.	filifolia	No	+	0.4
SD-29	Sida	intricata			No	+	0.3
SD-29	Solanum	lasiophyllum			No	+	0.1
SD-29	Solanum	nummularium			No	+	0.3
SD-29	Sporobolus	caroli			No	+	0.3
SD-29	Streptoglossa	liatroides			No	0.5	0.1
SD-30	Acacia	hemiteles			No	1	2.5
SD-30	Alyxia	buxifolia			No	+	1.5
SD-30	Atriplex	nummularia			No	+	1-1.5
SD-30	Atriplex	vesicaria			No	2	0.3
SD-30	Austrostipa	elegantissima			No	+	0.5
SD-30	Cratystylis	conocephala			No	0.5	0.5-1
SD-30	Eremophila	interstans	subsp.	interstans	No	1.5	2-4
SD-30	Eremophila	parvifolia	subsp.	auricampi	No	2	0.4
SD-30	Eremophila	scoparia			No	1.5	1-2.5

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-30	Eucalyptus	ravida			No	1	6
SD-30	Eucalyptus	salmonophloia			No	4	10-15
SD-30	Eucalyptus	salubris			No	-	-
SD-30	Eucalyptus	transcontinentalis			No	10	10-15
SD-30	Exocarpos	aphyllus			No	+	2
SD-30	Lycium	australe			No	+	0.5
SD-30	Maireana	amoena			No	+	0.4
SD-30	Maireana	pentatropis			No	+	0.6
SD-30	Maireana	sedifolia			No	7	0.5-1
SD-30	Maireana	trichoptera			No	+	0.3
SD-30	Maireana	triptera			No	+	0.2
SD-30	Nitraria	billardierei			No	0.5	0.5-1
SD-30	Olearia	muelleri			No	0.5	0.4
SD-30	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-30	Roepera		sp.	indet	No	+	0.4
SD-30	Santalum	acuminatum			No	-	-
SD-30	Scaevola	spinescens			No	1	0.5-1
SD-30	Sclerolaena	diacantha			No	0.5	0.15
SD-30	Senna	artemisioides	subsp.	filifolia	No	+	0.5-1
SD-30	Senna	cardiosperma			No	+	0.5-1.5
SD-31	Acacia	hemiteles			No	2	2-3
SD-31	Acacia	nyssophylla			No	+	0.5-1
SD-31	Atriplex	vesicaria			No	-	-
SD-31	Austrostipa		sp.	indet	No	+	0.5-1
SD-31	Cratystylis	conocephala			No	0.5	0.4-1.2
SD-31	Cratystylis	microphylla			No	+	0.5-1
SD-31	Eremophila	interstans	subsp.	interstans	No	0.5	2.5-3.5
SD-31	Eremophila	ionantha			No	2	1-2
SD-31	Eremophila	pantonii			No	+	1
SD-31	Eremophila	parvifolia	subsp.	auricampi	No	1.5	0.2-0.6
SD-31	Eremophila	scoparia			No	2	1-3
SD-31	Eucalyptus	lesouefii			No	-	-
SD-31	Eucalyptus	salmonophloia			No	15	10-18
SD-31	Eucalyptus	salubris			No	1	10
SD-31	Eucalyptus	transcontinentalis			No	-	-
SD-31	Exocarpos	aphyllus			No	1	2-3
SD-31	Lycium	australe			No	+	0.5-1
SD-31	Maireana	georgei			No	+	0.3
SD-31	Maireana	sedifolia			No	4	0.5-1
SD-31	Maireana	trichoptera			No	+	0.2
SD-31	Maireana	triptera			No	1	0.3
SD-31	Olearia	muelleri			No	+	0.4
SD-31	Pimelea	microcephala	subsp.	microcephala	No	+	0.4-1
SD-31	Ptilotus	obovatus			No	+	0.5
SD-31	Scaevola	spinescens			No	1.5	0.5-1
SD-31	Sclerolaena	diacantha			No	+	0.2
SD-31	Senna	artemisioides	subsp.	filifolia	No	1.5	1-2

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-31	Sida	spodochroma			No	+	0.05
SD-31	Solanum	nummularium			No	+	0.4
SD-32	*Carrichtera	annua			No	+	0.3
SD-32	Acacia	nyssophylla			No	+	0.4
SD-32	Atriplex	vesicaria			No	1	0.4
SD-32	Cratystylis	subspinescens			No	+	0.5-1
SD-32	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.5
SD-32	Eremophila	decipiens	subsp.	decipiens	No	+	0.4
SD-32	Eremophila	interstans	subsp.	interstans	No	1	2-3
SD-32	Eremophila	ionantha			No	2	1-2
SD-32	Eremophila	scoparia			No	+	1-2
SD-32	Eriochiton	sclerolaenoides			No	0.5	0.2
SD-32	Eucalyptus	ravida			No	70	6-8
SD-32	Exocarpos	aphyllus			No	+	1.5
SD-32	Lycium	australe			No	+	0.5
SD-32	Maireana	georgei			No	+	0.4
SD-32	Maireana	sedifolia			No	5	0.5-1
SD-32	Maireana	trichoptera			No	+	0.15
SD-32	Marsdenia	australis			No	+	Cl
SD-32	Olearia	muelleri			No	1	0.4
SD-32	Paspalidium	gracile			No	+	0.2
SD-32	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-32	Ptilotus	exaltatus			No	+	0.2
SD-32	Ptilotus	holosericeus			No	+	0.05
SD-32	Ptilotus	obovatus			No	+	0.5
SD-32	Santalum	acuminatum			No	+	2
SD-32	Scaevola	spinescens			No	2	0.5-1
SD-32	Sclerolaena	diacantha			No	+	0.1
SD-32	Senna	artemisioides	subsp.	filifolia	No	1	1-2
SD-33	Acacia	hemiteles			No	2	1-2
SD-33	Alyxia	buxifolia			No	-	-
SD-33	Atriplex	nummularia			No	+	1
SD-33	Atriplex	vesicaria			No	+	0.4
SD-33	Austrostipa		cf.	platychaeta	No	+	0.5-1
SD-33	Casuarina	pauper			No	-	-
SD-33	Cratystylis	conocephala			No	4	0.5-1
SD-33	Eremophila	glabra	subsp.	glabra	No	-	-
SD-33	Eremophila	interstans	subsp.	interstans	No	0.5	2-3
SD-33	Eremophila	ionantha			No	0.5	1-2
SD-33	Eremophila	parvifolia	subsp.	auricampi	No	1	0.4-0.6
SD-33	Eremophila	scoparia			No	+	1-2
SD-33	Eucalyptus	lesouefii			No	17	10-13
SD-33	Eucalyptus	salmonophloia			No	4	15
SD-33	Maireana	georgei			No	+	0.3
SD-33	Maireana	sedifolia			No	2	0.5-1
SD-33	Maireana	trichoptera			No	+	0.4
SD-33	Maireana	triptera			No	+	0.4

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-33	Olearia	muelleri			No	0.5	0.2-0.35
SD-33	Pittosporum	angustifolium			No	-	-
SD-33	Ptilotus	holosericeus			No	+	0.1
SD-33	Ptilotus	obovatus			No	+	0.4
SD-33	Scaevola	spinescens			No	0.5	0.5-1
SD-33	Senna	artemisioides	subsp.	filifolia	No	1	1-2
SD-33	Sida	spodochroma			No	+	0.1
SD-33	Solanum	nummularium			No	+	0.4
SD-34	Acacia	nyssophylla			No	+	0.5
SD-34	Alyxia	buxifolia			No	+	0.8
SD-34	Atriplex	vesicaria			No	+	0.4
SD-34	Casuarina	pauper			No	+	1-1.5
SD-34	Cratystylis	subspinescens			No	+	0.4
SD-34	Enteropogon	ramosus			No	+	0.3
SD-34	Eremophila	ionantha			No	-	-
SD-34	Eremophila	oldfieldii	subsp.	angustifolia	No	-	-
SD-34	Eremophila	parvifolia	subsp.	auricampi	No	0.5	0.3
SD-34	Eremophila	scoparia			No	15	1-2
SD-34	Eucalyptus	salubris			No	55	10
SD-34	Exocarpos	aphyllus			No	+	1
SD-34	Lycium	australe			No	+	0.6
SD-34	Maireana	sedifolia			No	3	0.4
SD-34	Maireana	trichoptera			No	+	0.2
SD-34	Nitraria	billardierei			No	+	0.6
SD-34	Olearia	muelleri			No	1	0.4
SD-34	Paspalidium	gracile			No	+	0.2
SD-34	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.6
SD-34	Roepera		sp.	indet	No	-	-
SD-34	Santalum	acuminatum			No	-	-
SD-34	Scaevola	spinescens			No	2	0.5
SD-34	Sclerolaena	diacantha			No	-	-
SD-34	Senna	artemisioides	subsp.	filifolia	No	+	1
SD-34	Senna		cf.	stowardii	No	+	0.4
SD-34	Solanum	nummularium			No	+	0.4
SD-35	*Oligocarpus	calendulaceus			No	+	0.3
SD-35	Atriplex	vesicaria			No	2	0.4
SD-35	Casuarina	pauper			No	2	6-10
SD-35	Enneapogon	avenaceus			No	+	0.2
SD-35	Enneapogon	caerulescens			No	+	0.2
SD-35	Enteropogon	ramosus			No	+	0.4
SD-35	Eremophila	alternifolia			No	+	1.5-2.5
SD-35	Eremophila	scoparia			No	2	0.5-2.5
SD-35	Eucalyptus	salmonophloia			No	-	-
SD-35	Euphorbia	drummondii			No	+	0.02
SD-35	Frankenia	interioris			No	0.5	0.45
SD-35	Lawrencia		sp.	indet	No	+	0.1
SD-35	Lycium	australe			No	1	0.75

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-35	Maireana	sedifolia			No	12	0.5-1
SD-35	Maireana	trichoptera			No	+	0.15
SD-35	Maireana	triptera			No	0.5	0.2
SD-35	Maireana		sp.	indet	No	+	0.1
SD-35	Minuria	cunninghamii			No	+	0.3
SD-35	Nitraria	billardierei			No	4	0.5-1
SD-35	Ptilotus	obovatus			No	+	0.5-1
SD-35	Rhagodia	drummondii			No	+	0.5-1
SD-35	Scaevola	spinescens			No	+	0.4
SD-35	Sclerolaena	cuneata			No	+	0.2
SD-35	Sclerolaena	diacantha			No	0.5	0.1
SD-35	Senna	artemisioides	subsp.	filifolia	No	2	1-2
SD-35	Solanum	nummularium			No	+	0.4
SD-35	Sporobolus	caroli			No	+	0.4
SD-36	Atriplex	nummularia			No	2.5	0.3-1.5
SD-36	Atriplex	vesicaria			No	4	0.4
SD-36	Casuarina	pauper			No	-	-
SD-36	Cratystylis	subspinescens			No	-	-
SD-36	Dodonaea	viscosa	subsp.	angustissima	No	+	1
SD-36	Enchylaena	tomentosa	subsp.	tomentosa	No	-	0.2
SD-36	Enneapogon	avenaceus			No	+	0.3
SD-36	Enneapogon	caerulescens			No	+	0.2
SD-36	Enteropogon	ramosus			No	+	0.3
SD-36	Eragrostis	dielsii			No	+	0.05
SD-36	Eremophila	scoparia			No	2	1-2.5
SD-36	Eucalyptus	salmonophloia			No	3	10-15
SD-36	Euphorbia	drummondii			No	+	0.01
SD-36	Lawrencia		sp.	indet	No	+	0.1
SD-36	Lycium	australe			No	+	0.5
SD-36	Maireana	pyramidata			No	3	0.5-1
SD-36	Maireana	sedifolia			No	6	0.5-1
SD-36	Maireana	tomentosa			No	0.5	0.2
SD-36	Maireana	tomentosa			No	+	0.1
SD-36	Maireana	trichoptera			No	+	0.2
SD-36	Maireana	triptera			No	0.5	0.2
SD-36	Pittosporum	angustifolium			No	-	-
SD-36	Ptilotus	exaltatus			No	+	0.1
SD-36	Sclerolaena	cuneata			No	+	0.2
SD-36	Sclerolaena	diacantha			No	1.5	0.3
SD-36	Solanum	lasiophyllum			No	+	0.3
SD-36	Solanum	nummularium			No	-	-
SD-36	Streptoglossa	liatroides			No	+	0.1
SD-36	Swainsona		cf.	kingii	No	+	0.1
SD-36	Templetonia	ceracea			No	+	0.4
SD-37	*Carrichtera	annua			No	+	0.05
SD-37	*Carrichtera	annua			No	+	0.05
SD-37	*Carrichtera	annua			No	+	0.2

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-37	*Cucumis	myriocarpus			No	+	Cr
SD-37	*Oligocarpus	calendulaceus			No	0.5	0.2
SD-37	Atriplex	nummularia			No	+	0.5-1
SD-37	Atriplex	vesicaria			No	3	0.5
SD-37	Casuarina	pauper			No	-	-
SD-37	Enneapogon	avenaceus			No	0.5	0.1
SD-37	Enneapogon	caerulescens			No	3	0.25
SD-37	Enteropogon	ramosus			No	+	0.4
SD-37	Eragrostis	dielsii			No	+	0.1
SD-37	Eremophila	granitica			No	-	-
SD-37	Eremophila	scoparia			No	0.5	1-2.5
SD-37	Eucalyptus	ravida			No	-	-
SD-37	Eucalyptus	salmonophloia			No	-	-
SD-37	Eucalyptus	transcontinentalis			No	-	-
SD-37	Euphorbia	drummondii			No	0.25	0.05
SD-37	Lawrencia		sp.	indet	No	+	0.05
SD-37	Maireana	pyramidata			No	0.5	0.75
SD-37	Maireana	sedifolia			No	4	0.5-1
SD-37	Maireana	trichoptera			No	0.5	0.2
SD-37	Maireana	triptera			No	+	0.3
SD-37	Marsdenia	australis			No	+	Cl
SD-37	Nitraria	billardierei			No	10	0.5-1
SD-37	Paspalidium	gracile			No	+	0.4
SD-37	Ptilotus	obovatus			No	+	0.4
SD-37	Ptilotus		cf.	holosericeus	No	+	0.05
SD-37	Ptilotus		sp.	indet	No	+	0.05
SD-37	Salsola	australis			No	+	0.2
SD-37	Sclerolaena	cuneata			No	+	0.3
SD-37	Sclerolaena	diacantha			No	0.5	0.2
SD-37	Sclerolaena	obliquicuspis			No	+	0.2
SD-37	Sida	intricata			No	0.5	0.2
SD-37	Solanum	lasiophyllum			No	+	0.3
SD-37	Solanum	nummularium			No	-	-
SD-37	Sporobolus	caroli			No	+	0.3
SD-37	Streptoglossa	liatroides			No	2	0.05
SD-38	Atriplex	nummularia			No	2	0.3-1
SD-38	Atriplex	vesicaria			No	2.5	0.4
SD-38	Austrostipa		sp.	indet	No	+	0.5
SD-38	Casuarina	pauper			No	-	-
SD-38	Cratystylis	subspinescens			No	1	0.6
SD-38	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.4
SD-38	Enteropogon	ramosus			No	+	0.25
SD-38	Eremophila	ionantha			No	1	1-1.5
SD-38	Eremophila	scoparia			No	25	1-3
SD-38	Eucalyptus	salmonophloia			No	40	10-17
SD-38	Exocarpos	aphyllus			No	1	2.5
SD-38	Maireana	pyramidata			No	0.5	0.5

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-38	Maireana	sedifolia			No	1	0.5
SD-38	Maireana	triptera			No	+	0.3
SD-38	Nitraria	billardierei			No	-	-
SD-38	Paspalidium	gracile			No	+	0.3
SD-38	Pimelea	microcephala	subsp.	microcephala	No	+	0.2
SD-38	Pittosporum	angustifolium			No	0.5	0.3-2.5
SD-38	Ptilotus	holosericeus			No	+	0.05
SD-38	Santalum	acuminatum			No	1.5	1-2.5
SD-38	Scaevola	spinescens			No	5	0.5-1
SD-38	Scaevola	spinescens			No	+	0.7
SD-38	Sclerolaena	diacantha			No	+	0.2
SD-38	Senna	artemisioides	subsp.	filifolia	No	0.5	1.2
SD-38	Sida	petrophila			No	-	-
SD-38	Solanum	nummularium			No	-	-
SD-38	Templetonia	ceracea			No	+	0.5
SD-39	Atriplex	nummularia			No	1	0.5-1.8
SD-39	Atriplex	vesicaria			No	10	0.2-0.5
SD-39	Cratystylis	subspinescens			No	0.5	0.5
SD-39	Dodonaea	lobulata			No	-	-
SD-39	Eremophila	interstans	subsp.	interstans	No	0.5	4
SD-39	Eremophila	scoparia			No	0.5	1-2
SD-39	Eucalyptus	celastroides			No	8	4-7
SD-39	Eucalyptus	salmonophloia			No	2	10-15
SD-39	Frankenia		sp.	indet	No	0.5	0.3
SD-39	Lycium	australe			No	-	-
SD-39	Maireana	pyramidata			No	3	0.5-1
SD-39	Maireana	sedifolia			No	4	0.5-1
SD-39	Maireana	tomentosa			No	0.5	0.15
SD-39	Maireana	tomentosa			No	+	0.1
SD-39	Maireana	trichoptera			No	+	0.2
SD-39	Maireana	triptera			No	+	0.3
SD-39	Scaevola	spinescens			No	+	0.5
SD-39	Sclerolaena	cuneata			No	+	0.3
SD-39	Sclerolaena	diacantha			No	0.5	0.1
SD-39	Sclerolaena	drummondii			No	+	0.1
SD-39	Solanum	lasiophyllum			No	-	-
SD-39	Tecticornia	disarticulata			No	1.5	0.4
SD-39	Templetonia	ceracea			No	+	0.6
SD-40	Acacia	hemiteles			No	2	1.5
SD-40	Atriplex	nummularia			No	1	1.5
SD-40	Atriplex	vesicaria			No	-	-
SD-40	Austrostipa	platychaeta			No	+	1.5
SD-40	Casuarina	pauper			No	-	-
SD-40	Dysphania	pumilio			No	+	-
SD-40	Eremophila	interstans	subsp.	interstans	No	+	3
SD-40	Eremophila	oppositifolia	subsp.	angustifolia	No	-	-

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-40	Eremophila	scoparia			No	3	1-2.5
SD-40	Eucalyptus	salubris			No	10	10-20
SD-40	Exocarpos	aphyllus			No	1	2
SD-40	Lycium	australe			No	+	0.6
SD-40	Maireana	georgei			No	+	0.3
SD-40	Maireana	sedifolia			No	10	0.6
SD-40	Maireana	trichoptera			No	0.5	0.2
SD-40	Maireana	triptera			No	1	0.3
SD-40	Olearia	muelleri			No	0.5	0.4
SD-40	Pimelea	microcephala	subsp.	microcephala	No	+	1
SD-40	Ptilotus	exaltatus			No	+	0.1
SD-40	Ptilotus	holosericeus			No	+	0.1
SD-40	Ptilotus	obovatus			No	0.5	0.2
SD-40	Roepera		sp.	indet	No	+	0.3
SD-40	Santalum	acuminatum			No	+	2
SD-40	Scaevola	spinescens			No	4	0.5
SD-40	Sclerolaena	diacantha			No	0.5	0.3
SD-40	Senna	artemisioides	subsp.	filifolia	No	5	0.5-1.5
SD-40	Sida	spodochroma			No	+	0.1
SD-40	Solanum	lasiophyllum			No	+	0.3
SD-40	Sporobolus	caroli			No	+	0.6
SD-41	*Oligocarpus	calendulaceus			No	+	0.1
SD-41	Alectryon	oleifolius	subsp.	canescens	No	-	-
SD-41	Atriplex	nummularia			No	1	0.5-1
SD-41	Atriplex	vesicaria			No	1.5	0.4
SD-41	Austrostipa	elegantissima			No	+	0.5
SD-41	Casuarina	pauper			No	+	2.5
SD-41	Enchylaena	tomentosa	subsp.	tomentosa	No	0.1	0.3
SD-41	Enneapogon	caerulescens			No	+	0.2
SD-41	Eremophila	interstans	subsp.	interstans	No	-	-
SD-41	Eremophila	scoparia			No	1	0.5-2
SD-41	Eucalyptus	celastroides			No	-	-
SD-41	Eucalyptus	salmonophloia			No	8	10-15
SD-41	Eucalyptus	transcontinentalis			No	7	8-13
SD-41	Exocarpos	aphyllus			No	+	2-4
SD-41	Maireana	sedifolia			No	8	0.5-1
SD-41	Maireana	trichoptera			No	+	0.1
SD-41	Maireana	triptera			No	0.5	0.3
SD-41	Nitraria	billardierei			No	5	0.5-1
SD-41	Olearia	muelleri			No	+	0.4
SD-41	Pimelea	microcephala	subsp.	microcephala	No	+	0.5-1
SD-41	Pittosporum	angustifolium			No	+	0.5
SD-41	Ptilotus	holosericeus			No	+	0.05
SD-41	Scaevola	spinescens			No	+	0.5-1
SD-41	Sclerolaena	diacantha			No	+	0.1
SD-41	Senna	artemisioides	subsp.	filifolia	No	0.1	1-2
SD-41	Sida	spodochroma			No	+	0.05

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-41	Solanum	nummularium			No	-	-
SD-42	*Carrichtera	annua			No	+	0.1
SD-42	Atriplex	nummularia			No	+	1.5
SD-42	Atriplex	vesicaria			No	0.5	0.3
SD-42	Cratystylis	subspinescens			No	+	0.5
SD-42	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.6
SD-42	Enneapogon	avenaceus			No	+	0.1
SD-42	Enneapogon	avenaceus			No	+	0.2
SD-42	Enneapogon	caerulescens			No	+	0.3
SD-42	Enteropogon	ramosus			No	+	0.4
SD-42	Eremophila	maculata	subsp.	brevifolia	No	0.5	0.5
SD-42	Eremophila	scoparia			No	1	1-1.5
SD-42	Eucalyptus	salmonophloia			No	1	10-15
SD-42	Frankenia	interioris			No	+	0.4
SD-42	Lawrencia	repens			No	+	0.1
SD-42	Lycium	australe			No	+	0.5
SD-42	Maireana	amoena			No	+	0.2
SD-42	Maireana	pyramidata			No	0.5	1
SD-42	Maireana	sedifolia			No	6	0.4-1
SD-42	Maireana	tomentosa			No	0.5	0.3
SD-42	Maireana	tomentosa			No	+	0.2
SD-42	Maireana	tomentosa			No	0.5	0.2
SD-42	Maireana	trichoptera			No	+	0.3
SD-42	Maireana	triptera			No	+	0.3
SD-42	Paspalidium	gracile			No	+	0.3
SD-42	Pimelea	microcephala	subsp.	microcephala	No	0.5	0.5-1
SD-42	Ptilotus	exaltatus			No	+	0.1
SD-42	Scaevola	spinescens			No	+	0.5-1
SD-42	Sclerolaena	cuneata			No	+	0.2
SD-42	Sclerolaena	diacantha			No	+	0.2
SD-42	Senna	artemisioides	subsp.	filifolia	No	0.5	1
SD-42	Solanum	lasiophyllum			No	+	0.3
SD-42	Sporobolus	caroli			No	+	0.5
SD-42	Tecticornia	disarticulata			No	7	0.3-1
SD-43	Atriplex	nummularia			No	1.5	0.5-1.5
SD-43	Atriplex	vesicaria			No	3	0.4
SD-43	Austrostipa		sp.	indet	No	+	0.5
SD-43	Cratystylis	subspinescens			No	+	0.3
SD-43	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.6
SD-43	Enteropogon	ramosus			No	-	-
SD-43	Eremophila	interstans	subsp.	interstans	No	+	2.5
SD-43	Eremophila	scoparia			No	+	0.5
SD-43	Eucalyptus	celastroides			No	3.5	4-6
SD-43	Eucalyptus	ravida			No	-	-
SD-43	Eucalyptus	salmonophloia			No	4.5	10-15
SD-43	Eucalyptus	salubris			No	-	-
SD-43	Lycium	australe			No	1.5	0.7

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-43	Maireana	pyramidata			No	+	0.5-1
SD-43	Maireana	sedifolia			No	5	0.5-1
SD-43	Maireana	trichoptera			No	+	0.2
SD-43	Maireana	triptera			No	1	0.2
SD-43	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-43	Ptilotus	exaltatus			No	+	0.1
SD-43	Ptilotus	holosericeus			No	+	0.05
SD-43	Ptilotus	obovatus			No	+	0.3
SD-43	Santalum	acuminatum			No	+	1-2
SD-43	Scaevola	spinescens			No	+	0.5-1
SD-43	Sclerolaena	cuneata			No	-	-
SD-43	Sclerolaena	diacantha			No	+	0.1
SD-43	Senna	artemisioides	subsp.	filifolia	No	+	1
SD-43	Solanum	lasiophyllum			No	-	-
SD-43	Solanum	nummularium			No	+	0.4
SD-43	Streptoglossa	liatroides			No	+	0.1
SD-43	Tecticornia	disarticulata			No	-	-
SD-43	Templetonia	ceracea			No	+	0.5-1
SD-44	*Carrichtera	annua			No	+	0.05
SD-44	*Carrichtera	annua			No	+	0.1
SD-44	*Oligocarpus	calendulaceus			No	+	0.1
SD-44	Atriplex	vesicaria			No	1	0.3
SD-44	Casuarina	pauper			No	1	2-6
SD-44	Cratystylis	subspinescens			No	1	0.2
SD-44	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.2
SD-44	Enneapogon	avenaceus			No	0.5	0.2
SD-44	Enneapogon	avenaceus			No	2	0.2
SD-44	Enneapogon	caerulescens			No	+	0.1
SD-44	Enteropogon	ramosus			No	+	0.3
SD-44	Eragrostis	dielsii			No	+	0.1
SD-44	Eragrostis	setifolia			No	0.5	0.3
SD-44	Eremophila	decipiens	subsp.	decipiens	No	-	-
SD-44	Eremophila	maculata	subsp.	brevifolia	No	4	0.3
SD-44	Eremophila	scoparia			No	1	1-2
SD-44	Euphorbia		sp.	indet	No	+	0.02
SD-44	Frankenia	interioris			No	+	0.4
SD-44	Haloragis		cf.	gossei	No	+	0.05
SD-44	Lawrencia		sp.	indet	No	+	0.05
SD-44	Lycium	australe			No	0.5	0.5
SD-44	Maireana	pyramidata			No	3.5	0.4-1
SD-44	Maireana	sedifolia			No	5	0.5-1
SD-44	Minuria	cunninghamii			No	+	0.1
SD-44	Nitraria	billardierei			No	2	0.5
SD-44	Pittosporum	angustifolium			No	-	-
SD-44	Ptilotus	exaltatus			No	+	0.1
SD-44	Ptilotus	holosericeus			No	+	0.05
SD-44	Sclerolaena	cuneata			No	+	0.2

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-44	Sclerolaena	diacantha			No	+	0.2
SD-44	Sida	fibulifera			No	+	0.2
SD-44	Sida	intricata			No	+	0.2
SD-44	Solanum	lasiophyllum			No	+	0.4
SD-44	Sporobolus	caroli			No	0.5	0.4
SD-44	Sporobolus	caroli			No	0.5	0.3
SD-44	Streptoglossa	liatroides			No	0.5	0.1
SD-45	Atriplex	nummularia			No	3	0.5-1.5
SD-45	Atriplex	vesicaria			No	4	0.4
SD-45	Cratystylis	subspinescens			No	0.5	0.5-1
SD-45	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.6
SD-45	Eremophila	scoparia			No	0.5	1-2
SD-45	Eucalyptus	celastroides			No	4	4-6
SD-45	Eucalyptus	lesouefii			No	1	8
SD-45	Eucalyptus	salmonophloia			No	5	10-15
SD-45	Frankenia	interioris			No	+	0.4
SD-45	Maireana	pyramidata			No	0.5	0.5-1
SD-45	Maireana	sedifolia			No	5	0.5-1
SD-45	Maireana	tomentosa			No	+	0.1
SD-45	Maireana	trichoptera			No	+	0.15
SD-45	Maireana	triptera			No	+	0.2
SD-45	Nitraria	billardierei			No	2	0.5-1
SD-45	Sclerolaena	cuneata			No	+	0.3
SD-45	Sclerolaena	diacantha			No	0.5	0.1
SD-45	Sporobolus	caroli			No	+	0.2
SD-45	Tecticornia	disarticulata			No	1	0.5-1
SD-45	Templetonia	ceracea			No	1	0.5-1
SD-46	Acacia	hemiteles			No	+	0.5
SD-46	Atriplex	nummularia			No	+	1
SD-46	Cratystylis	conocephala			No	1	0.6
SD-46	Eremophila	caperata			No	+	0.75
SD-46	Eremophila	glabra	subsp.	glabra	No	+	0.6
SD-46	Eremophila	interstans	subsp.	interstans	No	+	1-2.5
SD-46	Eremophila	oppositifolia	subsp.	angustifolia	No	+	1
SD-46	Eremophila	parvifolia	subsp.	auricampi	No	3	0.4
SD-46	Eremophila	scoparia			No	+	1-2
SD-46	Eucalyptus	lesouefii			No	45	8-10
SD-46	Eucalyptus	salubris			No	2	5-8
SD-46	Maireana	sedifolia			No	0.5	0.3-0.8
SD-46	Olearia	muelleri			No	0.5	0.3
SD-46	Scaevola	spinescens			No	0.5	0.4
SD-46	Sclerolaena	diacantha			No	+	0.1
SD-46	Senna	artemisioides	subsp.	filifolia	No	+	0.4
SD-46	Senna	cardiosperma			No	+	0.3
SD-46	Solanum	lasiophyllum			No	+	0.4
SD-46	Solanum	nummularium			No	+	0.4
SD-47	*Oligocarpus	calendulaceus			No	0.5	0.1

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-47	Atriplex	vesicaria			No	2	0.2-0.6
SD-47	Austrostipa		sp.	indet	No	-	-
SD-47	Casuarina	pauper			No	+	0.3
SD-47	Enneapogon	caerulescens			No	+	0.2
SD-47	Enteropogon	ramosus			No	+	0.5
SD-47	Eremophila	decipiens	subsp.	decipiens	No	-	-
SD-47	Eremophila	oppositifolia	subsp.	angustifolia	No	+	2-3
SD-47	Eremophila	scoparia			No	+	1-2
SD-47	Eucalyptus	salmonophloia			No	6	10-20
SD-47	Eucalyptus	salubris			No	-	-
SD-47	Exocarpos	aphyllus			No	-	-
SD-47	Lycium	australe			No	+	0.75
SD-47	Maireana	sedifolia			No	6	0.5-1
SD-47	Maireana	tomentosa			No	+	0.2
SD-47	Maireana	trichoptera			No	+	0.2
SD-47	Maireana	triptera			No	+	0.4
SD-47	Minuria	cunninghamii			No	+	0.3
SD-47	Paspalidium	gracile			No	+	0.3
SD-47	Pimelea	microcephala	subsp.	microcephala	No	+	0.75
SD-47	Scaevola	spinescens			No	-	-
SD-47	Sclerolaena	cuneata			No	+	0.25
SD-47	Sclerolaena	diacantha			No	0.5	0.1
SD-47	Senna	artemisioides	subsp.	filifolia	No	-	-
SD-47	Solanum	lasiophyllum			No	+	0.2
SD-47	Solanum	nummularium			No	+	0.5
SD-47	Tecticornia	disarticulata			No	25	0.5-1
SD-47	Vittadinia	sulcata			No	+	0.3
SD-48	*?Dittrichia	graveolens			No	+	0.04
SD-48	*Medicago	laciniata			No	+	0.05
SD-48	*Oligocarpus	calendulaceus			No	0.5	0.1
SD-48	Abutilon	cryptopetalum			No	+	0.3-1
SD-48	Acacia	acuminata (narrow phyllode variant)			No	20	3-4
SD-48	Acacia	tetragonophylla			No	7	2-4
SD-48	Enchylaena	tomentosa	subsp.	tomentosa	No	+	0.5-1
SD-48	Eremophila	alternifolia			No	1	2-3
SD-48	Eremophila	decipiens	subsp.	decipiens	No	+	0.5-1
SD-48	Eremophila	glabra	subsp.	glabra	No	-	-
SD-48	Eremophila	glabra	subsp.	glabra	No	+	1
SD-48	Eremophila	ionantha			No	2.5	1-2
SD-48	Eremophila	oldfieldii	subsp.	angustifolia	No	0.5	2-4
SD-48	Eremophila	scoparia			No	0.5	1-2.5
SD-48	Eucalyptus	salmonophloia			No	3	5-15
SD-48	Euphorbia	drummondii			No	+	0.02
SD-48	Exocarpos	aphyllus			No	+	2
SD-48	Lycium	australe			No	+	1
SD-48	Lysiana	casuarinae			No	+	Aer Par

SITE	GENUS	SPECIES	RANK	NAME	CONS. SIG.	% COVER	PLANT HEIGHT
SD-48	Maireana	pyramidata			No	+	0.5-1
SD-48	Maireana	sedifolia			No	2	0.5-1
SD-48	Maireana	triptera			No	0.5	0.15
SD-48	Marsdenia	australis			No	+	Cl
SD-48	Pimelea	microcephala	subsp.	microcephala	No	+	0.5
SD-48	Pittosporum	angustifolium			No	+	2
SD-48	Ptilotus	obovatus			No	2	0.4
SD-48	Senna	artemisioides	subsp.	filifolia	No	4	1.5-2.5
SD-48	Swainsona		cf.	kingii	No	+	0.05
SD-48	Vincetoxicum	lineare			No	+	Cl

Representative Photos

SD-01

SD-02

SD-03

SD-04

SD-05

SD-06

SD-07

SD-08

SD-09

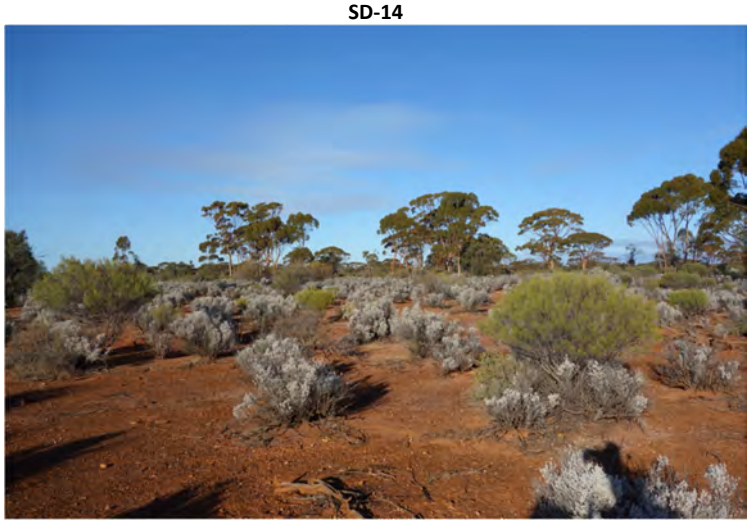
SD-10

SD-11

SD-12

SD-13

SD-14



SD-15

SD-16

SD-17

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SD-26

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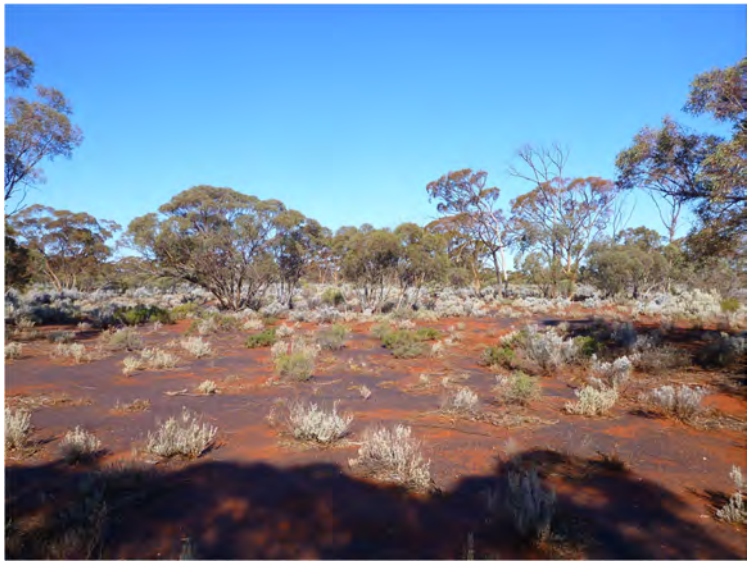
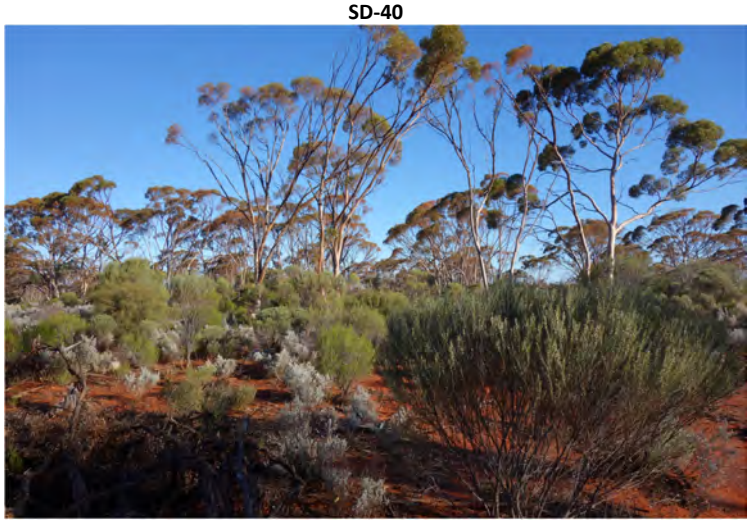


SD-40



SD-41

SD-42

SD-43

SD-44

SD-45

SD-46

SD-47

SD-48