Appendix 3
Supporting Technical Studies

FLORA AND VEGETATION ASSESSMENT

EARL GREY LITHIUM PROJECT

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LIST OF ABBREVIATIONS

BAM Act:	*Biosecurity and Agriculture Management Act 2007* (WA)
BC Act:	*Biodiversity Conservation Act 2016* (WA)
Blueprint	Blueprint Environmental Strategies
BOM:	Bureau of Meteorology
DAFWA:	Department of Agriculture and Food, Western Australia
DBCA	Department of Biodiversity, Conservations and Attractions
DotEE:	Department of the Environment and Energy
DPaW:	Department of Parks and Wildlife (check as about to change)
EGLP	Earl Grey Lithium Project
EP Act:	*Environmental Protection Act 1986* (WA)
EPA:	Environmental Protection Authority
EPBC Act:	*Environment Protection and Biodiversity Conservation Act 1999* (Commonwealth)
ESCAVI	Executive Steering Committee for Australian Vegetation Information
IBRA:	Interim Biogeographical Regionalisation for Australia
Kidman	Kidman Resources Ltd
NVIS	National Vegetation Information System
PEC:	Priority ecological community
PRIMER:	Plymouth Routines in Multivariate Ecological Research
TEC:	Threatened ecological community
TSSC:	Threatened Species Scientific Committee
WAH:	Western Australian Herbarium (PERTH)
WAOL:	Western Australian Organism List
WC Act:	*Wildlife Conservation Act 1950* (WA)

EXECUTIVE SUMMARY

The Earl Grey Lithium Project is owned by Kidman Resources Ltd. In 2016 Kidman Resources Ltd discovered a pegmatite-hosted lithium deposit at its Earl Grey Prospect, south of Southern Cross, near Mt Holland in Western Australia. The Mt Holland area has been the subject of previous flora and vegetation surveys. Mattiske Consulting Pty Ltd has undertaken three vegetation surveys on behalf of Kidman Resources Ltd associated with the Earl Grey Lithium Project, two in 2016 and one in 2017.

Mattiske Consulting Pty Ltd was commissioned in July 2017 by Kidman Resources Ltd to undertake a detailed flora and vegetation assessment of the Earl Grey Lithium Project. The Earl Grey Lithium Project is situated approximately 105 km south of Southern Cross on the abandoned Bounty Mine site. The flora and vegetation survey area comprised the Earl Grey Lithium Project development envelope together with a 1 km buffer zone about the main section of the development envelope and 200 m either side of the centre line of the access routes which form a component of the Earl Grey Lithium Project. The total area surveyed comprised 4,417.83 ha, of which 1,993.59 ha formed the Earl Grey Lithium Project development envelope. A reconnaissance survey of a portion of the Earl Grey Lithium Project was completed by Mattiske Consulting Pty Ltd in October and November 2016. The detailed survey of the Earl Grey Lithium Project was completed in September of 2017.

A total of 369 vascular plant taxa which are representative of 140 genera and 49 families were recorded within the Earl Grey Lithium Project across 214 survey quadrats. The majority of taxa recorded were representative of the Myrtaceae (73 taxa), Fabaceae (48 taxa), Proteaceae (42 taxa), Asteraceae (19 taxa), Rutaceae (17 taxa), and Ericaceae (11 taxa) families. The majority of the taxa recorded were widespread both locally and more broadly within the associated biogeographical subregion.

One threatened flora taxon pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the WAH (1998-) was recorded within the Earl Grey Lithium Project survey area. This taxon was *Banksia sphaerocarpa* subsp. *dolichostyla* (T). *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is listed as vulnerable, pursuant to the *Environment Protection and Biodiversity Conservation Act 1999*. A total of 279 individuals of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) were recorded within the Earl Grey Lithium Project survey area. Based on both historic records and recordings of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) made during the present survey, this taxon is very restricted in its distribution to the area around Mt Holland. This may in part be due to the absence of broader searches for this taxon.

Eleven priority flora taxa, as listed by WAH (1998-), were recorded within the Earl Grey Lithium Project. The ten priority flora recorded were: *Acacia undosa* (P3), *Brachyloma stenolobum* (P1), *Chorizema circinale* (P3), *Daviesia sarissa* subsp. *redacta* (P2), *Grevillea lissopleura* (P1), *Grevillea marriottii* (P1), *Hakea pendens* (P3), *Labichea rossii* (P1), *Microcorys* sp. Mt. Holland (D Angus DA 2397) (P1), *Olearia laciniifolia* (P2) and *Orianthera exilis* (P2). In terms of the priority flora recorded, with the exception of *Hakea pendens* (P3), the priority taxa were recorded infrequently and in low numbers. Two of the priority flora recorded were specifically associated with defined vegetation communities. These were *Grevillea lissopleura* (P1) and *Hakea pendens* (P3). *Grevillea lissopleura* (P1) was specifically associated with the H1 vegetation community. *Hakea pendens* (P3) was recorded occasionally, and in low numbers, at a number of locations across the Earl Grey Lithium Project. One large population of this *Hakea pendens* (P3) taxon forms the W17 vegetation community on the eastern edge of the Earl Grey Lithium Project development envelope on a lateritic hill. Ideally, this community should be left undisturbed. All priority taxa, with the exception of *Daviesia sarissa* subsp. *redacta* (P2) are known to occur in the broader area about the Earl Grey Lithium Project. The recording of *Daviesia sarissa* subsp. *redacta* (P2) at the Earl Grey Lithium Project represents an approximately 150 km southern extension to its presently known locations, which lies between Yellowdine and the Boorabbin Nature reserve.

Several undescribed species were recorded during the recent field investigations. The latter included two *Acacia* species in the survey area (*Acacia* sp. 1 and *Acacia* sp. 2) which have been confirmed by the State Herbarium as undescribed and novel species. *Acacia* sp. 1 was recorded at one site in vegetation community W9 to the south of the current camp site and *Acacia* sp. 2 was recorded at two sites within

vegetation community W4. As these two taxa are undescribed these locations should be avoided and further site investigations should be undertaken in 2018 to capture flowering and fruiting on these taxa to assist in taxonomic studies.

Overall, the vegetation communities mapped and species recorded in the Earl Grey Lithium Project were consistent with both the historical mapping of John Beard and the more recent localised surveys for mining in the immediate area. The majority of the Earl Grey Lithium Project is situated on sandy, sandy clay or clay loam flats and gentle slopes supporting *Eucalyptus* mallee woodlands over *Melaleuca* shrublands, interspersed with dense *Allocasuarina* scrub. No banded ironstone formations or vegetation associated with such formations was identified during the survey of the Earl Grey Lithium Project. Given the number of novel taxa recorded during the survey, which current advice suggests may represent undescribed taxa, it would be reasonable to postulate that the area about the Earl Grey Lithium Project is, from a floristic standpoint, under-surveyed. Further surveys would likely uncover more undescribed flora taxa; including the two undescribed *Acacia* species.

Whilst the Earl Grey Lithium Project development envelope falls within the buffer of the Ironcap Hills Vegetation Complexes (P3) priority ecological community, none of the landforms, nor the corresponding species communities associated with this priority ecological community were recorded within the Earl Grey Lithium Project development envelope. Vegetation communities defined by Mattiske Consulting were overall significantly different to the vegetation communities defined by Thompson and Allen (2013) in their survey of the Forrestania Greenstone Belt, which represented the nearest independent surveys to those undertaken by Mattiske Consulting. The reasons for this include the different landforms surveyed and the contribution of post-fire successional species in the Mattiske Consulting survey. Cleared land within the Earl Grey Lithium Project development envelope accounted for 25.27% of the area. Consequently, the high degree of existing disturbance, together with the indicated aim of the proponent to site infrastructure, wherever possible, on currently disturbed lands, should minimize impacts to the local vegetation.

The principal issues with respect to the flora and vegetation surveyed is in relation to the presence of *Banksia sphaerocarpa* var. *dolichostyla* (T) both within and external to the EGLP, the Priority flora species and the several undescribed species. It would be appropriate, in the event of mine development, to put in place a management plan to minimize impacts to the threatened, priority and undescribed flora species and the associated vegetation.

1. INTRODUCTION

The Earl Grey Lithium Project is owned by Kidman Resources Ltd (Kidman). In 2016 Kidman discovered a pegmatite-hosted lithium deposit at its Earl Grey Prospect, south of Southern Cross, near Mt Holland in Western Australia. The Mt Holland area has been the subject of previous flora and vegetation surveys. In 2006, Craig (2006) completed a rare and priority flora survey of the Bounty Mine area for Nickel Australia limited. In September 2016, Native Vegetation Solutions (2016a) completed a targeted threatened flora survey of the Earl Grey Prospect. Mattiske Consulting Pty Ltd (Mattiske) completed a reconnaissance flora and vegetation survey of Earl Grey Prospect in October and November 2016 (Mattiske Consulting 2017). In addition to the Earl Grey Prospect, the reconnaissance survey included the adjacent Irish Breakfast and Prince of Wales Prospects. In January 2017, Mattiske Consulting surveyed a range of vegetation in the broader area surrounding the Earl Grey Lithium Deposit as part of a vertebrate fauna survey (Western Wildlife 2017). In April 2017 Blueprint Environmental Strategies (Blueprint) completed a targeted survey for the threatened flora taxon *Banksia sphaerocarpa* subsp. *dolichostyla* (Blueprint 2017).

Mattiske Consulting Pty Ltd was commissioned in July 2017 to undertake a detailed flora and vegetation survey of the Earl Grey Lithium Project (EGLP).

1.1 Location and Scope of Project

The EGLP, which is located approximately 105 km southeast of the town of Southern Cross, is situated on the abandoned Mt Holland Mine Site (Figure 1). The EGLP occupies an area of 1,993.59 ha. The EGLP intersects exploration licences E77/1400, E77/1775, E77/2099, E77/2143, E77/2167, E77/2345, E77/2349; general purpose leases G77/45, G77/47, G77/48, G77/49, G77/50, G77/68, G77/70, G77/71, G77/72, G77/73, G77/109, G77/110, G77/129, G77/130; miscellaneous licences L77/59, L77/85, L77/96, L77/107, L77/176, L77/193, L77/194, L77/198, L77/199, L77/200, L77/205, L77/206, L77/207, L77/208, L77/271; and mining leases M77/216, M77/389, M77/549, M77/1065, M77/1066, M77/1080 (Figure 2).

The scope of the survey was to undertake a detailed flora and vegetation survey of the EGLP including a defined buffer area extending beyond the project development envelope.

1.2 Environmental Legislation and Guidelines

The following key Commonwealth (federal) legislation relevant to this survey is the:

- *Environment Protection and Biodiversity Conservation Act 1999.*

The following key Western Australian (state) legislation relevant to this survey include the:

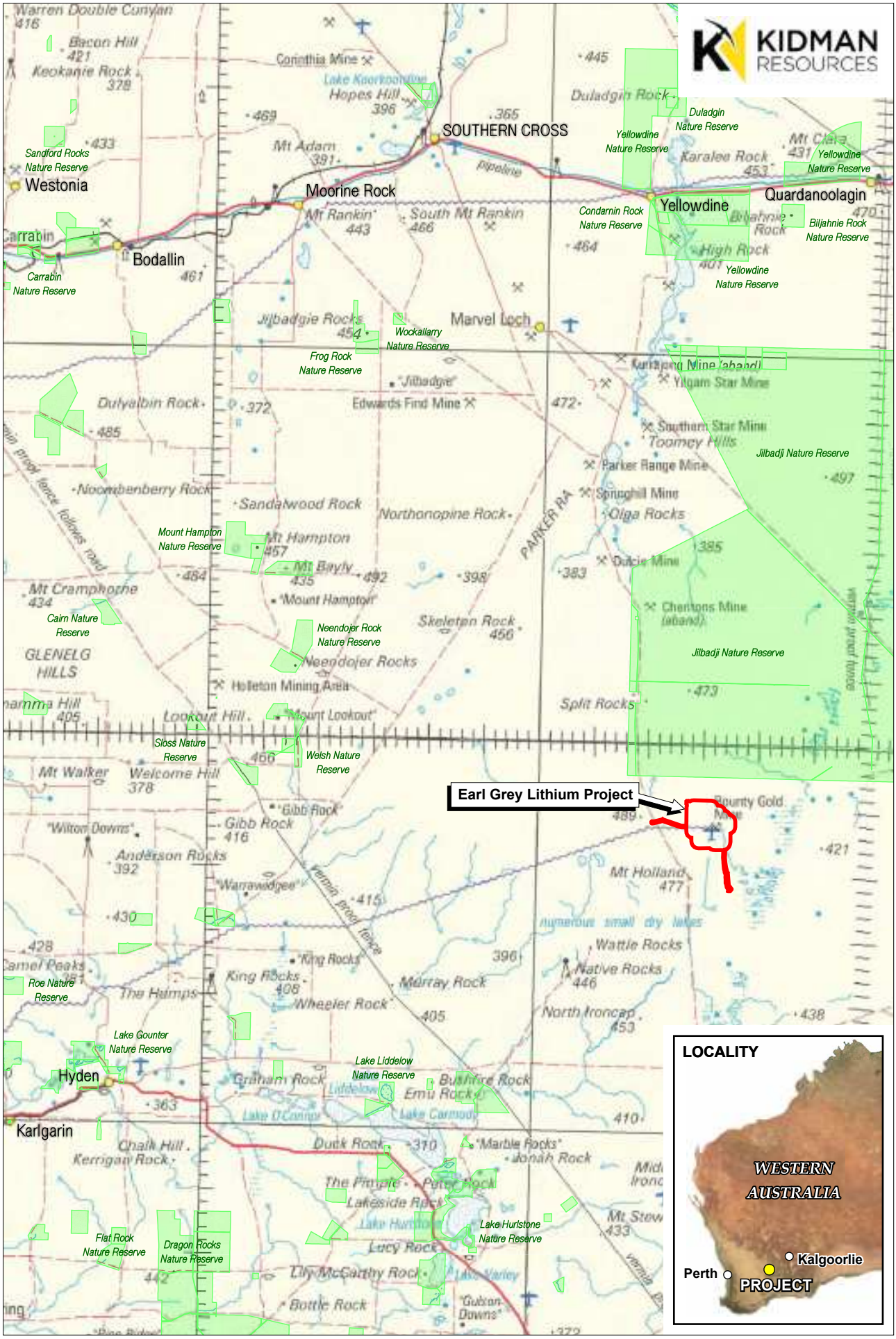
- *Biodiversity Conservation Act 2016* (BC Act);
- *Biosecurity and Agriculture Management Act 2007* (BAM Act);
- *Environmental Protection Act 1986* (EP Act); and
- *Wildlife Conservation Act 1999* (WC Act).

Furthermore, key Western Australian guidelines relevant to this survey are the:

- *Environmental Factor Guideline: Flora and Vegetation* (Environmental Protection Authority [EPA] 2016a); and
- *Technical Guidance – Flora and vegetation surveys for environmental impact assessment* (EPA 2016b).

Definitions of flora and vegetation terminology commonly used throughout this report are provided in Appendix A1-4.

DBCA Estates: Department of Biodiversity, Conservation and Attractions, WA



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MGA94 (Zone 50)
CAD Ref: g2445_R011_01
Date: Nov 2017 | Rev: A | A4

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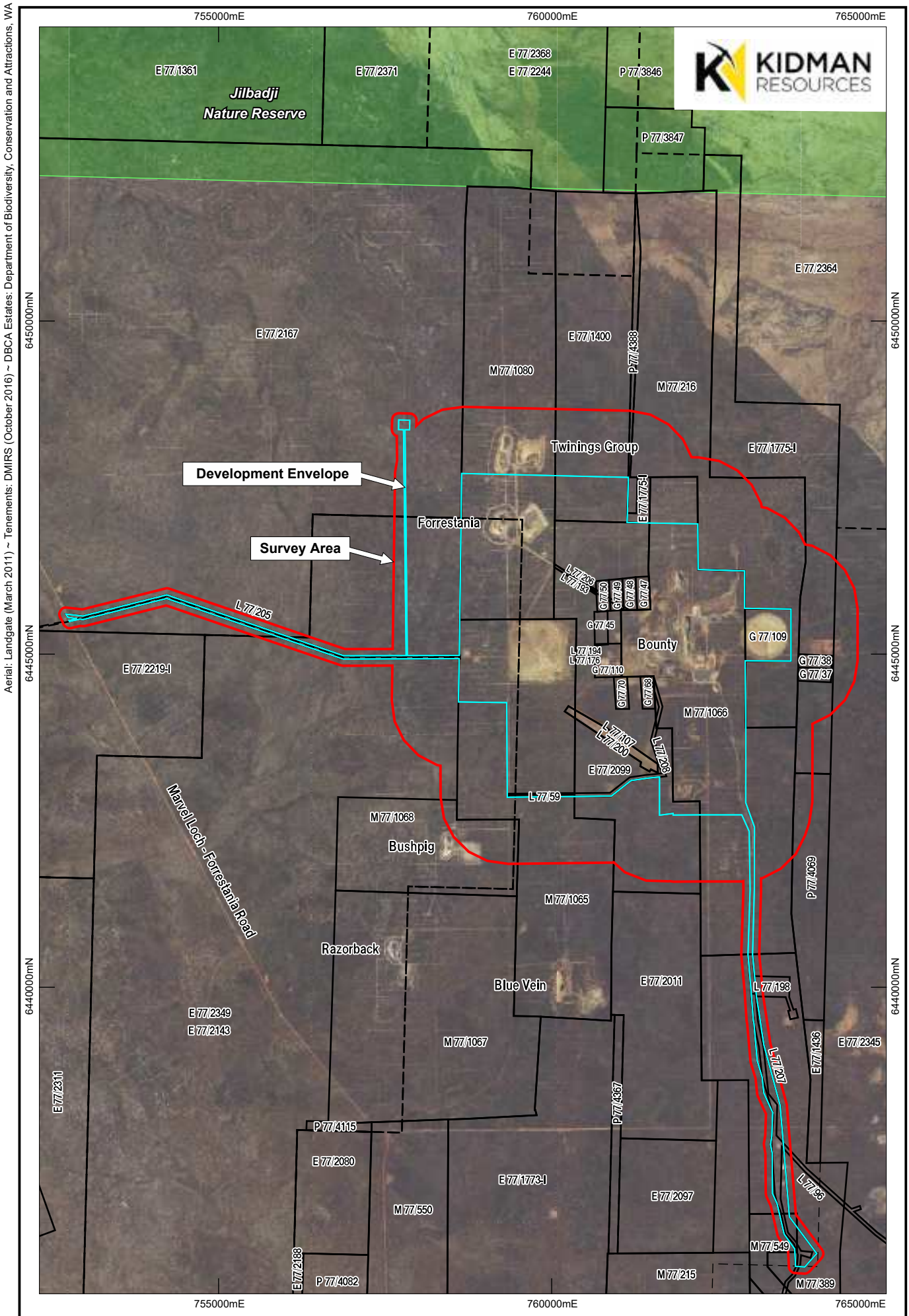
Earl Grey Lithium Project

Project Area Locality

Figure: **1**



Aerial: Landgate (March 2011) ~ Tenements: DMIRS (October 2016) ~ DBCA Estates: Department of Biodiversity, Conservation and Attractions, WA

0 1km

Scale 1:75,000
MGA94 (Zone 50)

CAD Ref: g2445_R011_02

Date: Nov 2017 | Rev: A | A4

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Earl Grey Lithium Project

Tenements

Figure: **2**

2. OBJECTIVES

The aim of this survey was to complete a detailed flora and vegetation survey of the EGLP. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the local and broader area associated with the EGLP to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the EGLP;
- On the basis of the reviews, provide summaries to assist in the assessment of the potential range of values and the potential for conservation significant species and communities;
- Undertake botanical data collection in quadrats that are representative of all potential vegetation communities within the EGLP of sufficient detail to permit appropriate statistical analyses;
- Collect and identify the vascular plant species present in vegetation survey quadrats, as well as opportunistically, within the EGLP;
- Record visual observations on the fire regimes, grazing pressures and overall health of the vegetation to allow for an assessment of the overall condition of the flora and vegetation within the EGLP;
- Identify and record the locations of any declared pest organisms within the EGLP;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the DPaW (WAH 1998-) and plant collections held at the Western Australian State Herbarium, and listed by the Department of the Environment (DotEE 2017a) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Define and prepare a vegetation map of the vegetation communities within the EGLP;
- Assess the condition of the vegetation communities within the EGLP;
- Evaluate the distributions of any conservation significant flora recorded within the EGLP and evaluate their regional significance - this did not specifically include a targeted and detailed survey of any threatened or priority taxa recorded;
- Provide descriptions of the vegetation communities present within the EGLP and evaluate their regional significance; and
- Prepare a report summarizing the findings.

3. METHODS

The EGLP occupies an area of 1,993.59 ha. The coordinates delineating the boundaries of the EGLP, which were supplied by Kidman, are set out in Appendix B. The flora and vegetation survey area included the EGLP, together with a buffer which extended 1 km beyond the boundary of the development envelope area and 200 m either side of the centre line of the access routes which form a component of the EGLP. That is, the access road from the Marvel Loch- Forrestania Road to the project area, the access road from the project area to the borefields and the access road to the proposed communications tower location (Figure 2). The total area surveyed was 4,417.84 ha

The survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016b) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016a).

3.1 Desktop Survey

The desktop assessment for the EGLP was undertaken using the resources of the DPaW (2017a, 2017c, 2017d), the DotEE (2017a, 2017b, 2017c) and the Western Australian Herbarium (WAH 1998-) databases, along with historic surveys in the immediate vicinity (Craig 2006, Thompson and Allen 2013, Native Vegetation Solutions 2014, Native Vegetation Solutions 2016a) or the broader region (Gibson 2004a) together with the recent flora and vegetation survey completed by Mattiske Consulting (2017). The parameters used for database searches were a 20 km radius 'by circle' at 760778 mE, 6445372 mN, (MGA94 zone 50).

These databases were utilised to identify the possible occurrence of threatened and priority flora, threatened and priority ecological communities and any other matters protected under the *Environment Protection and Biodiversity Conservation Act 1999* within the vicinity of the EGLP.

3.2 Field Survey

The Detailed flora and vegetation assessment of the EGLP vegetation survey area (Figure 2) was undertaken by four experienced botanists from MCL, from the 6th to 14th September 2017. All botanists held valid collection licences to collect flora for scientific purposes, issued under the *Wildlife Conservation Act 1950*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Wildlife Conservation Act 1950*. Table 1 sets out the flora and vegetation surveys undertaken by Mattiske Consulting which are associated with the EGLP.

Aerial photographic maps at a 1:10,000 scale of the EGLP, based on high resolution aerial data (0.05 m) captured in January 2017, were prepared by CAD Resources of Carine, Western Australia. The high resolution aerial data was supplied by Kidman. To sample all the apparent vegetation types across EGLP, the location of vegetation survey quadrats was made primarily on the basis of aerial photographic maps. Additional sites were selected *in situ*, based on observations of vegetation communities during the field survey. Wherever possible, replicate vegetation survey quadrats (a minimum of three) were established in the same but discontinuous vegetation community types. In addition to data recorded from vegetation survey quadrats, a more comprehensive species inventory of the EGLP was achieved using supplementary survey techniques - opportunistic collections, relevés and traverses - within the EGLP. The coordinated delineating the boundary of the EGLP development envelope and the vegetation survey boundary are set out in Appendix B.

A total of 214 vegetation survey quadrats were established and surveyed across the EGLP. Of these, 179 were established in September 2017. The remaining 35 quadrats were established in October and November 2016 (Mattiske Consulting 2017). All vegetation survey quadrats measured 20 m x 20 m in size. In situations where vegetation community shape (e.g. drainage channels) precluded establishing

quadrats of the standard dimension, an area of equivalent size (i.e. 400 m^2) was surveyed. The locations of all survey quadrats established within the EGLP are set out in Appendix C.

Table 1: Record of Mattiske Consulting surveys associated with the EGLP

SURVEY [REPORT REFERENCE]	SURVEY DATES	NUMBER OF PERSONNEL	SURVEY EFFORT (PERSON DAYS)
Reconnaissance survey of the Earl Grey, Irish Breakfast and Prince of Wales Prospects [Mattiske Consulting 2017]	24/10/16 to 26/10/16	2	6
Reconnaissance survey of the Earl Grey, Irish Breakfast and Prince of Wales Prospects [Mattiske Consulting 2017]	9/11/16 to 10/11/16	2	4
Reconnaissance survey of the Van Uden Prospect [Mattiske Consulting 2016]	8/11/16	2	2
Reconnaissance regional survey of vegetation surrounding the EGLP	16/01/17 – 20/01/17	1	5
Detailed survey of the EGLP [this report]	6/9/17 to 14/9/17	4	36
		Total effort (person days)	53

The flora and vegetation was sampled and described systematically at each vegetation survey quadrat, and additional opportunistic collecting was undertaken wherever previously unrecorded plants were observed. At each vegetation survey quadrat, the following floristic and environmental parameters were recorded:

- GPS location (GDA94 datum);
- soil type, colour and any additional observations;
- local site topography;
- presence of any outcropping rocks and their type;
- aspect of the hill-slopes;
- percentage of litter cover (logs, twigs and/or leaves);
- percentage of bare ground;
- time since fire;
- condition of the vegetation, based on Trudgen's (1988) condition ratings (Appendix A5); and
- alive and dead percentage of foliage cover and average height of each species recorded.

All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH. All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

3.3 Statistical Analysis of Data and Vegetation Mapping

A species accumulation curve, based on accumulated species versus number of quadrats surveyed was prepared, to evaluate the level of adequacy of the survey effort. The species accumulation curve was based on the species accumulation analysis of Colwell (2013).

Plymouth Routines in Multivariate Ecological Research version 6 (PRIMER v6) statistical analysis software was used to analyse species-by-site data and discriminate sites on the basis of their species composition (Clarke and Gorley 2006). To down weight the relative contributions of quantitatively dominant species

a presence-absence transformation was applied to the data set. Introduced species, singletons (species recorded at only one site) and specimens that were not identified down to the species level were excluded from the analysis. Annuals were removed from the data in analysis due to the likelihood of substantial differences between years based on seasonality of local rainfall events. Computation of similarity matrices was based on the Bray-Curtis similarity measure. Transformed data were analysed using a series of multivariate analysis routines including Hierarchical Clustering (CLUSTER), Similarity Profile (SIMPROF), Similarity Percentages (SIMPER) and Amalysis of Similarity (ANOSIM). Results were used to inform and support interpretation of aerial photography and delineation of individual vegetation communities.

Vegetation descriptions were based on Alpin's (1979) modification of the vegetation classification system of Specht (1970), to align with the National Vegetation Information Systems (NVIS). Vegetation communities were described at the association level of the NVIS classification framework, as defined by the Executive Steering Committee for Australian Vegetation Information (ESCAVI 2003).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region containing the EGLP as Mediterranean, with a pronounced winter maximum and long dry summer, and annual precipitation of just over 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate with 200-300 mm of precipitation (Beard 1990, Cowan *et al.*, 2001). Hyden, which is located approximately 85 km to the south west of the EGLP has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2017). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period January 2016 to September 2017 to span both the current and 2016 survey periods. Rainfall in the four months preceding the October/November 2016 surveys was 165.0 mm, which is approximately 90% of the long term average for the corresponding period. Rainfall in the four months preceding the September 2017 field survey was 150.6 mm, which is approximately 85% of the long-term average for the corresponding period.

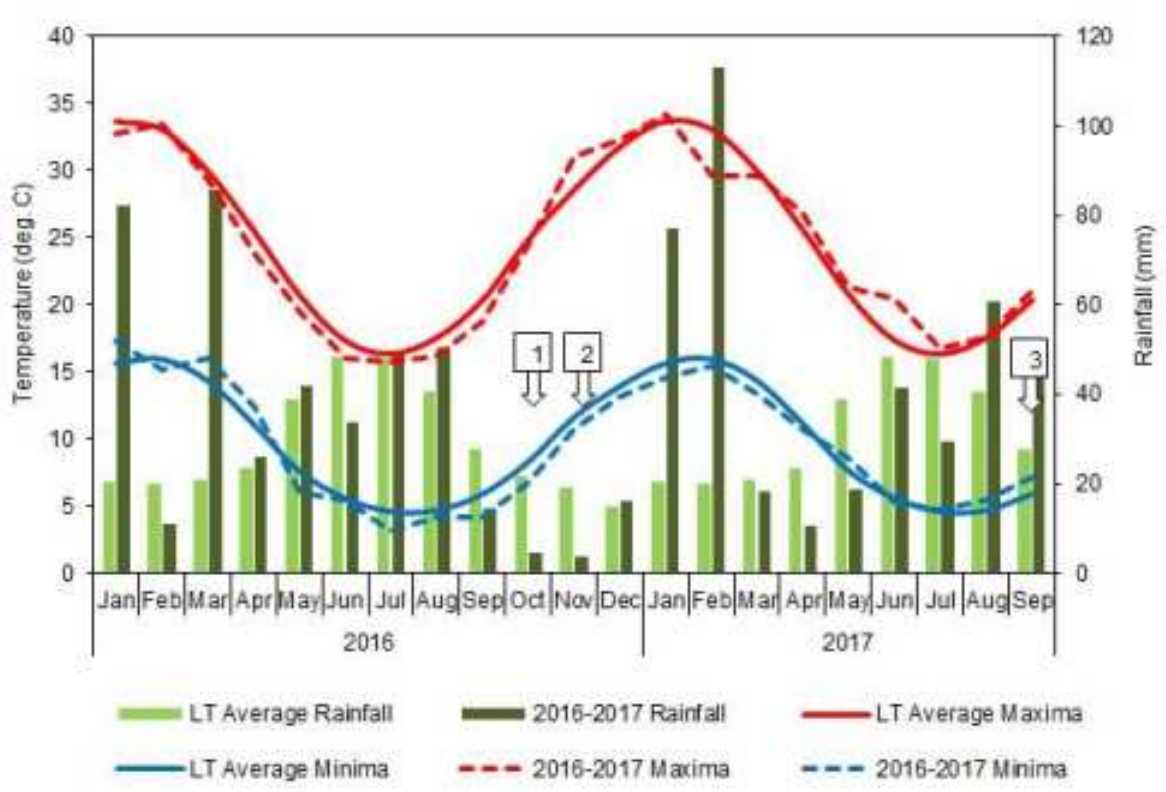


Figure 3: Rainfall and temperature data for Hyden
Long term average rainfall and temperature data, together with monthly rainfall data for the period January 2016 to September 2017 are shown (BOM 2017). The numbered markers indicate the timing of flora and vegetation surveys: 1 – Earl Grey and Irish Breakfast prospects; 2 - Earl Grey and Irish Breakfast prospects; 3 – EGLP.

4.2 Geology, Soils and Topography

The EGLP is situated within Beard's (1990) Coolgardie Botanical District, near its boundary with the Roe Botanical District (Mallee Region). A summary of the geology, soils and topography of each district is set out on the following page.

Coolgardie Botanical District

Geologically, the area consists of Proterozoic granite and gneiss of the Fraser Range block and Archaean granite with infolded volcanics and meta sediments of the Yilgarn block. Major greenstone belts provide the major hilly topography of the district (Beard 1990). Valley areas consist of quaternary duplex soils and chains of playa lakes. Upper levels in the landscape comprise the eroded remnants of a lateritic duricrust, yielding yellow sandplains, gravelly sandplains and laterite breakaways (Cowan *et al.* 2001).

Roe Botanical District

Geologically, the area consists of Archean and Proterozoic granites overlain in the east by Tertiary sediments (Beard 1990). The main surface soils consist of clays and silts underlain by Kankar, exposed granite, sandplains and laterite pavements (Beecham and Danks 2001).

In more recent times mapping of soils and landscapes has become available at a greater level of detail. The Department of Agriculture, in its "Soil-landscapes of Western Australia's Rangelands and Arid Interior" (Tille 2006), described a range of soil-landscape mapping units. The Earl Grey, Irish Breakfast and Prince of Wales prospects are situated within Tille's (2006) Southern Cross Zone (Zone 261). Tille (2006) describes the soils of the Southern Cross Zone as comprising undulating plains and uplands (with some salt lakes and low hills) on deeply weathered mantle, colluvium and alluvium over greenstone and granitic rocks of the Yilgarn Craton. The Southern Cross zone comprises calcareous loamy earths, red and yellow loamy earths and alkaline deep and shallow sandy duplexes with some yellow sandy earths, salt lake soils, yellow deep sands and red shallow loamy duplexes. The Southern Cross zone is located in the eastern Wheatbelt/south-western Goldfields between Bullfinch and Mt Holland.

4.3 Beard's Vegetation Mapping

4.3.1 Botanical Districts

The EGLP is situated within the Coolgardie Botanical District, near its boundary with the Roe Botanical District (Mallee Region) (Beard 1990). Consequently, there is the potential for elements of all three districts to be present within the EGLP. A summary of the general vegetation features of each of the botanical districts is set out below (adapted from Beard 1990).

Coolgardie Botanical District

The major greenstone belts in the district that forms the banded ironstone hills and are the main source of topographical relief, are dominated by *Allocasuarina acutivalvis*, *Casuarina campestris* and *Banksia arborea*. The slopes of these banded ironstone hills are home to mallee species, such as *Eucalyptus gardneri*, *Eucalyptus redunca*, *Eucalyptus loxophleba* and *Eucalyptus sheathiana*. The slopes and flats generally consist of woodlands in which *Eucalyptus longicornis*, *Eucalyptus salmonophloia*, *Eucalyptus corrugata* and *Eucalyptus sheathiana* are common. The understorey in these woodlands may be either sclerophyllous, with shrubs such as *Melaleuca pauperiflora*, or where the soils are more alkaline, soft-leaved shrubs such as *Atriplex vesicaria* and *Atriplex nummularia* are more dominant.

Roe Botanical District (Mallee Region)

Mallee, in the context of the Roe Botanical District, refers to a shrub-eucalypt formation. The most typical form of mallee is a closed community of mallee habit rising to 3-4.5 m in height, with an understorey of small ericoid shrubs of the genus *Melaleuca*. Elsewhere, the understorey may consist of mixed shrubs belonging to the scrub-heath, where there is a transition to the latter formation, or saltbush under alkaline soil conditions, or of hummock grass on red sand. Beard (1990) states that within the Roe Botanical District these vegetation formations occupy only small patches. In the mallee formation, *Eucalyptus eremophila* is the most consistent species, being nearly always present, but it has numerous associates, about three of which seem to be present at any one site. These associated species include *Eucalyptus celastroides, Eucalyptus cerasiformis, Eucalyptus conglobata, Eucalyptus cylindriflora, Eucalyptus deflexa, Eucalyptus dielsii, Eucalyptus foecunda, Eucalyptus georgei, Eucalyptus goniantha, Eucalyptus incrassata, Eucalyptus leptocalyx, Eucalyptus longicornis, Eucalyptus loxophleba,*

Eucalyptus merrickiae, Eucalyptus micranthera, Eucalyptus oleosa, Eucalyptus ovularis, Eucalyptus pileata, Eucalyptus redunca, *Eucalyptus sheathiana*, *Eucalyptus transcontinentalis* and *Eucalyptus uncinata*. The understorey is most commonly dominated by one or more species of *Melaleuca*, forming a more or less continuous layer with other casual species. Beard (1990) lists the recorded species composition as including *Melaleuca pungens*, *Melaleuca spicigera*, *Melaleuca viminea*, *Melaleuca urceolaris*, *Melaleuca hamulosa*, *Acacia beauverdiana*, *Acacia ericifolia*, *Acacia fragilis*, *Acacia hemiteles*, *Baeckea grandibracteata*, *Boronia ternata, Callitris roei*, *Cryptandra minutifolia*, *Eremophila lehmanniana*, *Gastrolobium parvifolium*, *Grevillea paradoxa*, *Grevillea petrophiloides*, *Hakea falcata*, *Hakea multilineata*, *Hybanthus floribundus*, *Isopogon scabriusculus*, *Isopogon teretifolius*, *Leptospermum erubescens*, *Micromyrtus imbricata*, *Mirbelia spinosa*, *Petrophile ericifolia*, *Phebalium filifolium*, *Pimelea suaveolens* and *Pityrodia lepidota*.

Woodland areas consist of mixtures of large mallees including *Eucalyptus salubris*, *Eucalyptus gracilis*, *Eucalyptus loxophleba*, *Eucalyptus oleosa*, *Eucalyptus sheathiana*, *Eucalyptus flocktoniae*, *Eucalyptus annulata* and *Eucalyptus spathulata*. A saltbush (*Atriplex* sp.) understorey is often present, otherwise scattered woody shrubs of *Acacia*, *Eremophila*, *Pittosporum* and some grasses predominate.

4.3.2 Vegetation Systems

Beard (1972), in his 1:250,000 mapping series described the vegetation of the Hyden Area, which encompasses the EGLP in its north eastern extent. Within the Hyden Area, Beard (1972) described a range of vegetation systems. A vegetation system consists of a particular series of plant communities recurring in a catenary sequence or mosaic pattern linked to topographic, pedological and/or geological features (Beard 1969). The EGLP is situated within Beard's (1972) Forrestania System. The Forrestania vegetation system is developed on the greenstone belt and comprises a variety of communities, which are controlled by the underlying geology largely in a mosaic form. The greenstones weather to form a flat tract of country with a heavy soil supporting sclerophyll woodland broken by numerous small salt lakes. There are included granites and quartzites which form siliceous soils, frequently lateritic, and account for areas of mallee, thicket and scrub heath within the mosaic. Additionally, there are banded ironstone formations forming prominent ridges with distinctive associations of heath and thicket.

The sclerophyll woodlands within the Forrestania System are dominated by two eucalypt species – *Eucalyptus salmonophloia* and *Eucalyptus longicornis* (Beard 1972). According to Beard (1972) the majority of this woodland is in poor condition as a result of past mining and farming activities. Other overstorey species in the sclerophyll woodland include *Eucalyptus salubris* and *Eucalyptus flocktoniae*, with smaller trees such as *Eucalyptus eremophila* and *Eucalyptus annulata* present as a middle layer. The shrub layer includes *Dodonaea stenozyga*, *Eremophila saligna* and *Daviesia nematophylla*. A second major vegetation component of the Forrestania System consists of the mallee scrub, the components of which have been described earlier in this section.

A particular feature of the Forrestania System are the ridges of banded ironstone which form hills with skeletal soil. These hills include Mount Holland, North Ironcap Hill, South Ironcap Hill and Hatter's Hill. The vegetation described by Beard (1972) on these hills is set out below.

Mt. Holland: Dense thicket, approximately 2 m tall, consisting predominantly of *Casuarina campestris, Calothamnus asper, Hakea* sp., *Banksia* sp., *Callitris preissii, Isopogon teretifolius, Santalum acuminatum, Melaleuca* sp., *and Leptospermum* sp.

North Ironcap Hill: Same species as per Mt Holland.

South Ironcap Hill: *Banksia sphaerocarpa, Allocasuarina* ?*dielsiana, Banksia* sp., *Melaleuca cardiophylla, Grevillea insignis, Adenanthos viridiflorus, Isopogon teretifolius, Callitris roei, Calothamnus quadrifidus, Mirbelia dilatata, Acacia hemiteles, Verticordia chrysantha, Hibbertia* aff. *mucronata, Calytrix breviseta, Dampiera*

juncea, Lysinema ciliatum, Lasiopetalum sp., and occasional *Eucalyptus falcata* to 4.5 m tall.

Hatter's Hill: Casuarina thickets resembling those on Mt. Holland, but comprising *Allocasuarina* ?*dielsiana, Eucalyptus loxophleba, Senna glutinosa* subsp*. chatelainiana, Dodonaea stenozyga, Melaleuca acuminata, Calothamnus quadrifidus, Santalum acuminatum, Boronia inornata, Westringia dampieri,* and *Halgania lavandulacea*.

The EGLP is situated within Beard's (1972) eSi vegetation unit. This vegetation is broadly described as mallee with patches of broombrush thicket.

4.4 Pre-European Vegetation

The pre-European vegetation dataset, prepared through the National Land and Water Resources Audit, describes vegetation in relation to natural resource boundaries commonly used for environmental reporting (Shepherd *et al.* 2001). The pre-European vegetation dataset builds on the vegetation map database developed by G R Beeston and A J M Hopkins, based on 1: 250,000 scale mapping. A total of 819 vegetation types were recognised in Western Australia, ranging from tall forests, through to a wide variety of forests and woodlands, shrublands and grasslands, mostly with an overstorey of trees. The identification of the original pre-European and current extent of each of the vegetation types assist in providing baselines for managing issues such as land clearing. Although the extent of native vegetation remains largely intact within the inland areas of Western Australia, the structure and floristic composition have been altered since European settlement through grazing by introduced animals such as sheep, cattle, goats and rabbits, mining activities and by altered fire regimes (Shepherd *et al*. 2001).

In more recent years Hopkins, Beeston and Shepherd (2001) delineated a series of vegetation maps based primarily on the work of John Beard carried out from 1964 to 1981. The pre-European vegetation associations occurring within the vicinity of the EGLP are illustrated in Figure 4. The EGLP intersects the Skeleton Rock System (Beard 1972). The area of pre-European vegetation associations intersecting the EGLP are set out in Table 2, and are based on the 2016 Statewide Vegetation Statistics (Government of Western Australia 2016.

Table 2: Extent of pre-European vegetation associations intersecting the EGLP

VEGETATION ASSOCIATION	STATE-WIDE			EGLP DEVELOPMENT ENVELOPE	
	PRE-EUROPEAN EXTENT (ha)	CURRENT EXTENT (ha)	PERCENT REMAINING (%)	AREA OF INTERSECTION (ha)	PROPORTION OF CURRENT EXTENT (%)
Forrestania_511.2 Wheatbelt; York gum, salmon gum etc. *Eucalyptus loxophleba, E. salmonophloia.* Goldfields; gimlet, redwood etc. *E. salubris, E. oleosa.*	163,919.47	163,255.52	99.59	96.1911	0.059
Skeleton Rock_519.4 Shrublands: mallee scrub, *Eucalyptus eremophila*	156,242.2	129,453.91	82.85	1,897.4030	0.015

4.5 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) delineated 85 bioregions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and

landform (Thackway and Cresswell 1995; DotEE 2017d). IBRA Version 7 refined the original 85 bioregions and 403 sub-regions described in IBRA 6.1, by expanding the number of regions to 89 and the number of sub-regions to 419. The sub-regions represent more localised and homogenous geomorphological units in each bioregion. IBRA7 includes four new oceanic bioregions, and seven new sub-regions in the oceanic bioregions and six new sub-regions in South Australia (DotEE 2017d).

The EGLP is situated within the Coolgardie 2 (COO2-Southern Cross) sub-region of the Coolgardie region, near its junction with the Mallee 2 (MAL2-Western Mallee) sub-region of the Mallee region and the Avon Wheatbelt 1 (AW1-Ancient Drainage) sub-region of the Avon Wheatbelt region (Figure 5). A summary of each of these sub-regions is set out below. Whilst the EGLP only intersect the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) an AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to its close proximity. Table 3 sets out the extent of intersection of the EGLP with the COO2 IBRA7 sub-region.

Table 3: Extent of IBRA sub-region intersecting the EGLP

IBRA SUB-REGION	STATE-WIDE	EGLP DEVELOPMENT ENVELOPE	
	CURRENT EXTENT (ha)	AREA OF INTERSECTION (ha)	PROPORTION OF CURRENT EXTENT (%)
COO2 (Southern Cross)	6012238	1,993.5938	0.03

COO2 – Southern Cross sub-region

Cowan *et al*. (2001) described the Southern Cross sub-region as having subdued relief, comprising gently undulating uplands dissected by broad valleys with bands of low greenstone hills. It lies on the 'Southern Cross Terrains' of the Yilgarn Craton. The granite strata of Yilgarn Craton are interrupted by parallel intrusions of Archaean Greenstone. Drainage is occluded. Chains of saline playa lakes occur within the sub-region. Floristically the sub-region has extensive eucalypt woodlands (*Eucalyptus salmonophloia*, *Eucalyptus salubris*, *Eucalyptus transcontinentalis*, *Eucalyptus longicornis*) rich in endemic eucalypts occur around these salt lakes, on the low greenstone hills, valley alluvials and broad plains of calcareous earths. The salt lake surfaces support dwarf shrublands of samphire. The granite basement outcrops at mid-levels in the landscape and supports swards of *Borya constricta*, with stands of *Acacia acuminata* and *Eucalyptus loxophleba*. Upper levels in the landscape are the eroded remnants of a lateritic duricrust yielding yellow sandplains, gravelly sandplains and laterite breakaways. Mallees (*Eucalyptus leptopoda*, *Eucalyptus platycorys* and *Eucalyptus scyphocalyx*) and scrub-heaths (*Allocasuarina corniculata*, *Callitris preissii*, *Melaleuca uncinata* and *Acacia beauverdiana*) occur on these uplands, as well as on sand lunettes associated with playas along the broad valley floors, and sand sheets around the granite outcrops. The scrubs are rich in endemic acacias and Myrtaceae. The dominant land uses are grazing and dry land agriculture.

MAL2 – Western Mallee sub-region

Beecham and Danks (2001) described the Western mallee sub-region as gently undulating, with partially occluded drainage. Mallee over myrtaceous-proteaceous heaths on duplex (sand over clay) soils are common. *Melaleuca* shrublands characterise alluvia, and *Halosarcia* low shrublands occur on saline alluvium. A mosaic of mixed eucalypt woodlands and mallee occur on calcareous earth plains and sandplains overlying Eocene limestone strata in the east. The landscape is fragmented with particular surface-types almost completely cleared as wheatfields. The dominant land use is dry land agriculture.

AW1 – Ancient Drainage sub-region

Beecham (2001) described the Ancient Drainage sub-region as an area of active drainage dissecting a Tertiary plateau on the Yilgarn Craton. It has a gently undulating landscape of low relief. Proteaceous scrub-heaths, rich in endemics, on residual lateritic uplands and derived sandplains; mixed eucalypt, *Allocasuarina huegeliana* and Jam-York Gum woodlands on Quaternary alluvials and colluvials. Within this bioregion, the AW1 is an ancient peneplain with low relief, gently undulating landscape. There is no

connected drainage; salt lake chains occur as remnants of ancient drainage systems that now only function in very wet years. Lateritic uplands are dominated by yellow sandplain. The dominant land uses are dry land agriculture, grazing, mining and rural residential.

4.6 Land Systems

The Department of Agriculture, in its "Soil-landscapes of Western Australia's Rangelands and Arid Interior" (Tille 2006), describes a range of soil-landscape mapping units. The EGLP lies within Tille's (2006) Kalgoorlie Province, on its western edge, in Zone 261. This zone is described as comprising undulating plains and uplands (with some salt lakes and low hills) on deeply weathered mantle, colluvium and alluvium over greenstone and granitic rocks of the Yilgarn Craton. The Southern Cross zone comprises calcareous loamy earths, red and yellow loamy earths and alkaline deep and shallow sandy duplexes with some yellow sandy earths, salt lake soils, yellow deep sands and red shallow loamy duplexes. The vegetation comprises salmon gum-gimlet-morrel-York gum woodlands with acacia-casuarina thickets (and some mallee, scrub-heath and halophytic shrublands). It is located in the eastern Wheatbelt/south-western Goldfields between Bullfinch and Mt Holland.

In the vicinity of the EGLP two mapping units from this zone intersect the EGLP survey area. These mapping units are illustrated in Figure 6. The landform and soil data illustrated in Figure 6 was extracted from the soil datasets managed by the Department of Agriculture and Food. The AC1 unit is described as gently sloping to gently undulating plateau areas, or uplands, on granites, gneisses, and allied rocks, with long gentle slopes and, in places, abrupt erosional scarps. The Ya29 unit is described as sandy plains with some clay pans and small salt lakes, dunes, and lunettes. The extent of intersection of these mapping units with the EGLP is set out in Table 4.

Table 4: Extent of Land Systems intersecting the EGLP

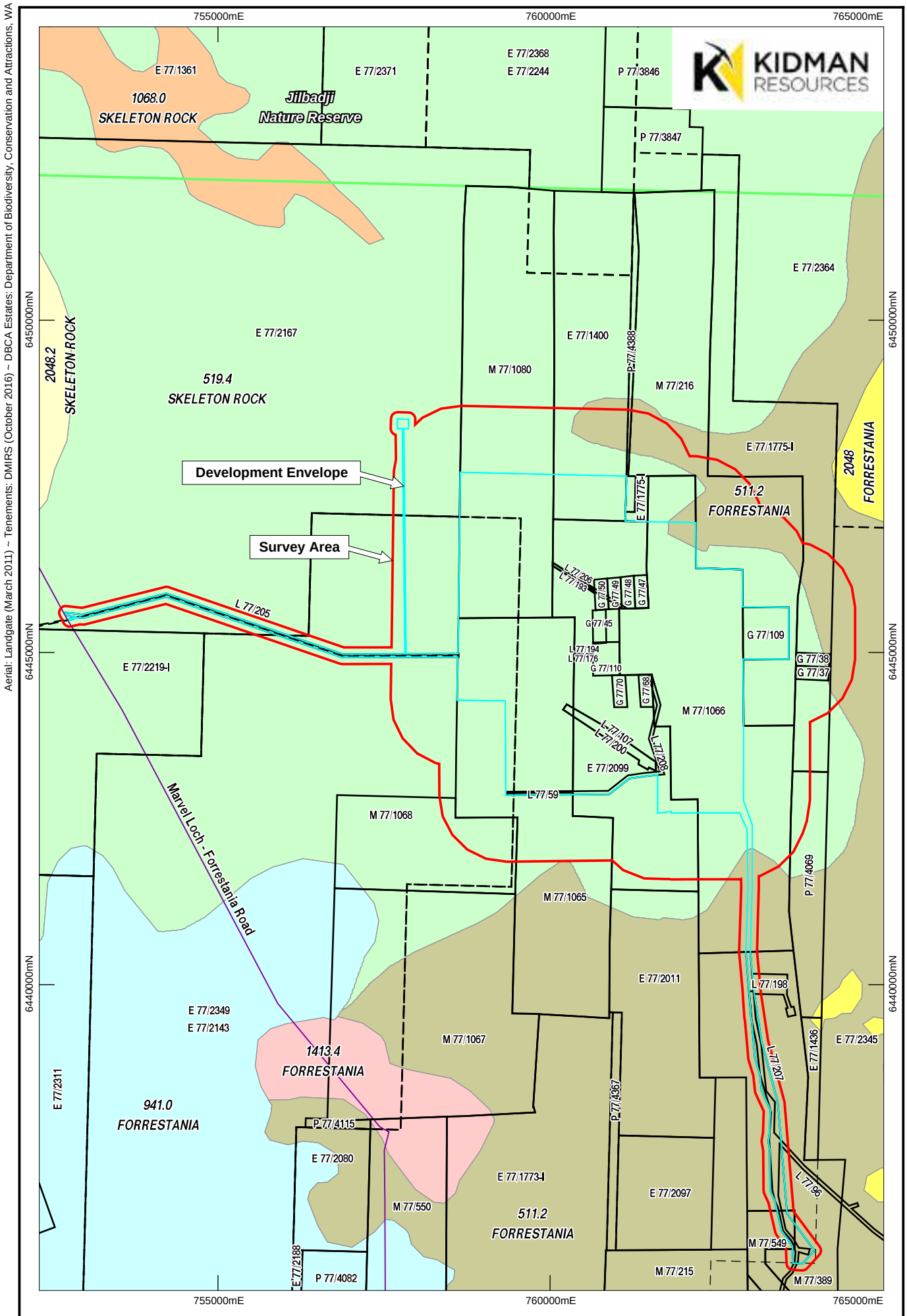
LAND SYSTEM	STATE-WIDE	EGLP DEVELOPMENT ENVELOPE	
	CURRENT EXTENT (ha)	AREA OF INTERSECTION (ha)	PROPORTION OF CURRENT EXTENT (%)
261_Ya28	119,208.3573	1902.5971	1.60
261_AC1	190,336.8038	90.9967	0.05

4.7 Previous Flora and Vegetation Surveys in the Vicinity of the EGLP

Several reports related to flora and vegetation surveys in the vicinity of the EGLP were reviewed to provide localised contextual flora information. These results of these reports are summarised below.

Craig, G.F. (2006). Bounty *JV - Tenements M77/1080, M77/1065, M77/1066, M77/1067, M77/1068 - Declared Rare and Priority Survey*. Unpublished report prepared for Nickel Australia Limited.

In 2006, Craig (2006) completed a threatened and priority flora survey for Nickel Australia Limited along a series of 30 drill lines at its Bounty mine site. Some of the drill lines surveyed were within Kidman's EGLP. No threatened flora pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the DPaW (2017b) were recorded along any of the drill lines searched. Three taxa which were priority flora (WAH 1998-) at the time of the survey were recorded. These were: *Baeckea* sp. Forrestania (KR Newbey 1105) (P1) – a minimum of 160 plants recorded at 11 separate locations; *Daviesia newbeyi* (P3) – a single plant recorded at one location; and *Stenanthemum* aff. *poicilum* (P3) – a minimum of 110 plants recorded at 13 separate locations.



Aerial: Landgate (March 2011) ~ Tenements: DMIRS (October 2016) ~ DBCA Estates: Department of Biodiversity, Conservation and Attractions, WA

0 1km
Scale 1:75,000
MGA94 (Zone 50)
CAD Ref: g2445_R011_03
Date: Nov 2016 | Rev: A | A4

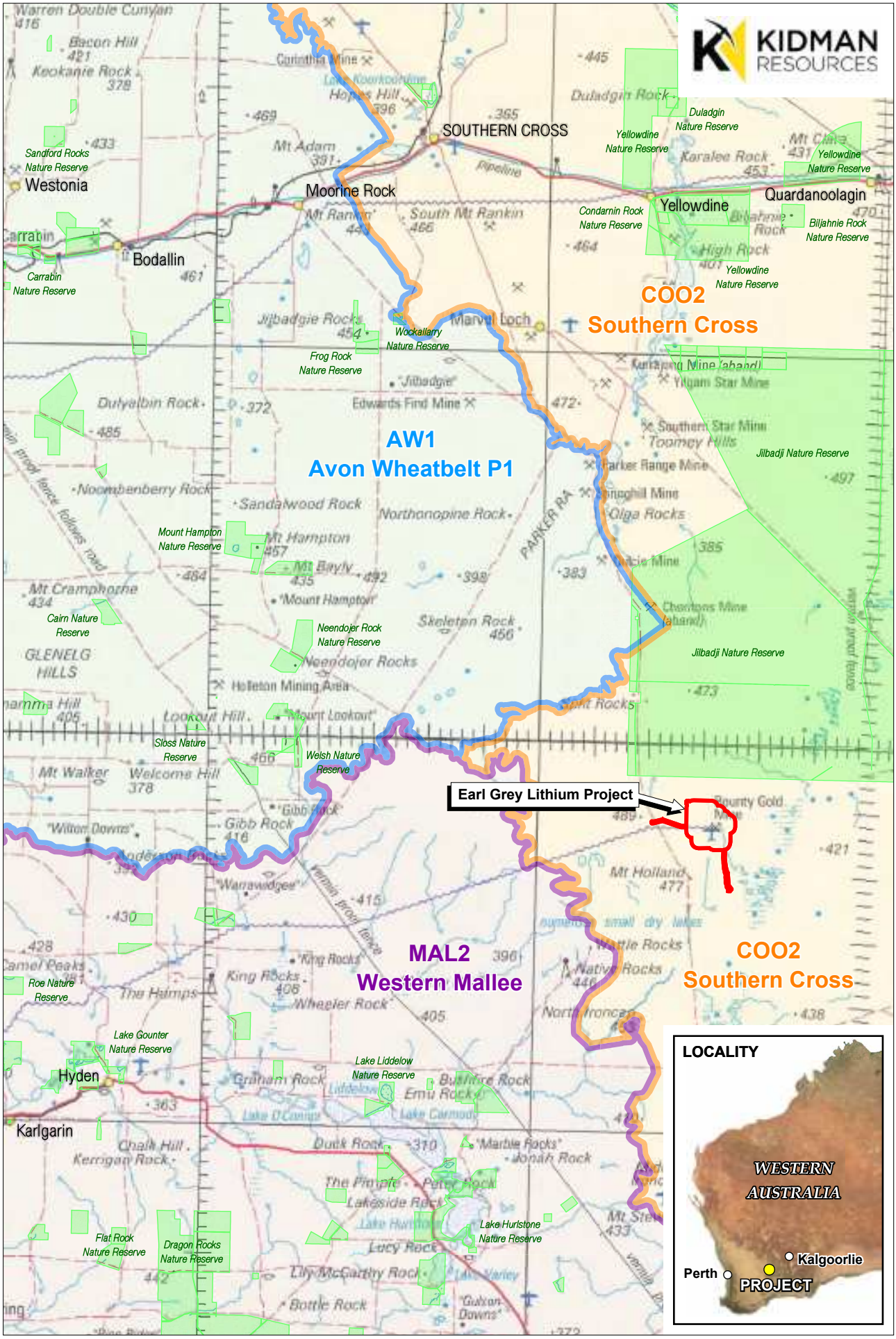
Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
Author: E M Mattiske | MCPL Ref: KID1702/025/17
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax: (08) 9246 3202

Earl Grey Lithium Project

Pre-European Vegetation

Figure: **4**

Interim Biogeographic Regionalisation for Australia (IBRA), Version 7: Australian Government Department of the Environment ~ DBCA Estates: Department of Biodiversity, Conservation and Attractions



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Scale 1:750,000
MGA94 (Zone 50)
CAD Ref: g2445_R011_04
Date: Nov 2016 | Rev: A | A4

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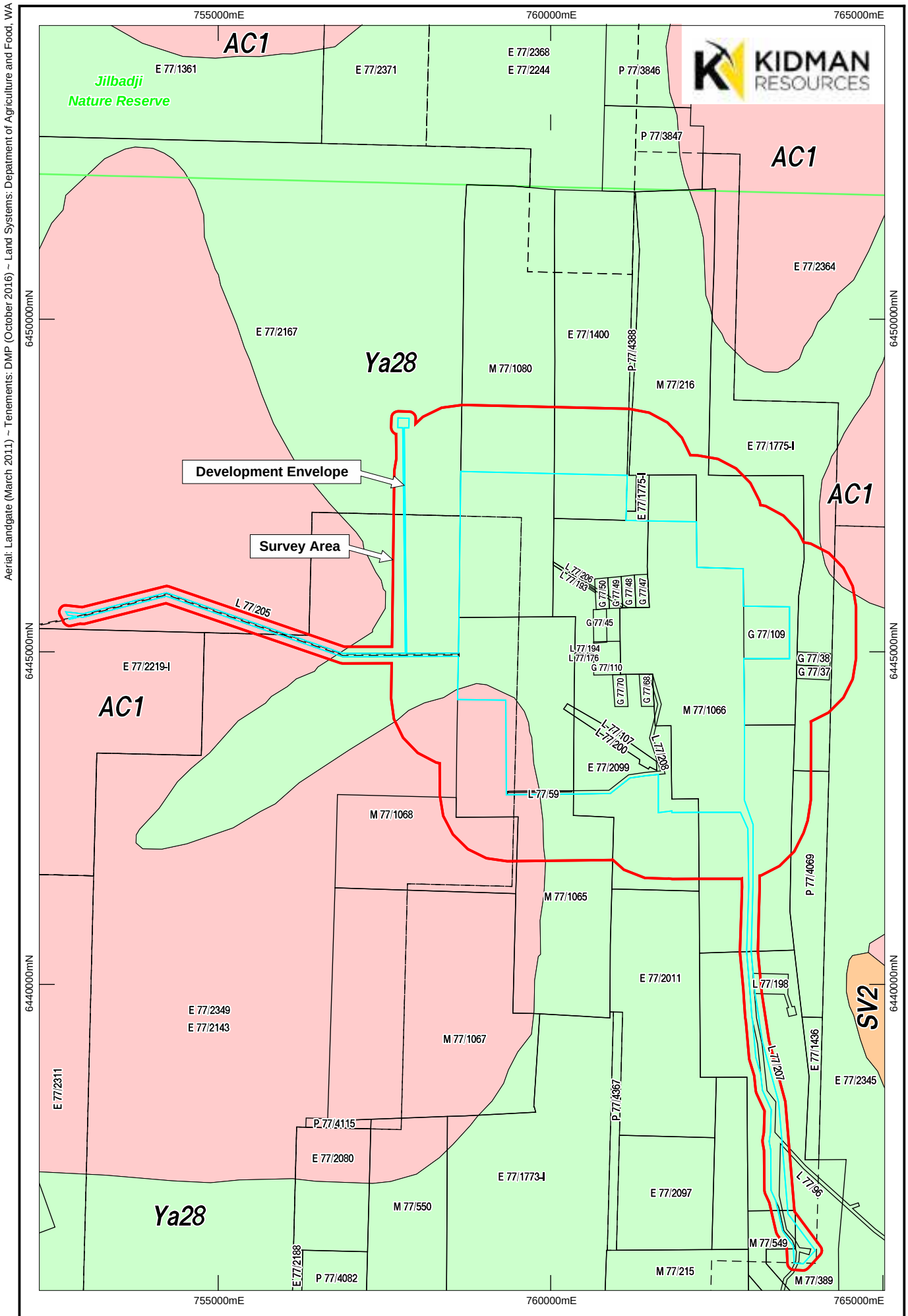
Earl Grey Lithium Project

IBRA Regions

Figure: **5**



0 1km
Scale 1:75,000
MGA94 (Zone 50)
CAD Ref: g2445_R011_05
Date: Nov 2017 | Rev: A | A4

Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
Author: E M Mattiske | MCPL Ref: KIS1702/025/17
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax: (08) 9246 3202

Kidman Resources Ltd.

Land Systems

Figure: **6**

At the time of the 2006 survey, *Daviesia newbeyi* was listed as a Priority 2 taxon and *Stenanthemum poicilum* was listed as a Priority 2 taxon. *Stenanthemum poicilum* (P3) does not occur in the Forrestania area. Its distribution is restricted to the northern portion of the Avon Wheatbelt region at its boundary with the Yalgoo bioregion (WAH 1998-). At the time of the 2006 survey (Craig 2006), a personal communication with Barbara Rye of the Western Australian Herbarium indicated that the specimens collected during the survey for Nickel Australia Limited differed from the typical *Stenanthemum poicilum* (P3), which grows in the Morawa – Mullewa district, some 600 km to the north-west. Due to its similarity to *Stenanthemum poicilum* (P3), it was attributed as *Stenanthemum* aff. *poicilum* (P3).

Thompson and Allen (2013). *Flora and vegetation of greenstone formations of the Yilgarn Craton: the northern Forrestania Greenstone Belt (Mt Holland area)*. Conservation Science W. Aust. 8(3): 277-294.

As part of the regional studies on Yilgarn Craton flora and vegetation studies were undertaken on the Mt Holland area. Fifty quadrats were established between North Ironcap and the Mt Holland area. Some of the quadrats established were within a few kilometers of the EGLP. The quadrat-based survey identified 305 taxa representing 47 families and 121 genera. Twelve taxa of conservation significance including the two threatened (*Banksia sphaerocarpa* subsp. *dolichostyla* and *Eucalyptus steedmanii*) and three new taxa were identified (*Hibbertia* sp., *Labichea rossii* and *Austrostipa* sp.). Eight floristic community types were defined. These are summarized below.

Community type 1 occurred predominantly on upland basalt/laterite sites with gentle gradients. The structure was generally defined as *Allocasuarina acutivalvis* and *Acacia yorkrakinensis* over *Melaleuca calyptroides*, *Thryptomene kochii*, *Hibbertia exasperata* and *Drummondita hassellii*.

Community type 2 occurred on upland sites characterized by granular or banded ironstone coarse fragments. The structure was generally defined as *Allocasuarina campestris* over *Calothamnus quadrifidus* subsp. *seminudus*, *Hakea subsulcata* and *Melaleuca cordata* over *Stenanthemum stipulosum* and *Stylidium sejunctum*.

Community type 3 corresponded to upland laterite and weathered ironstone sites. The structure was generally defined as *Eucalyptus eremophila*, *Acacia castanostegia*, *Baeckea crispiflora*, *Beyeria sulcata*, *Hakea multilineata*, *Melaleuca hamata* and *Stenanthemum stipulosum* over *Phebalium filifolium* and *Platysace maxwellii* over *Lepidosperma* sp. A2 Inland Flat.

Community type 4 consisted of lateritic and basalt sites with gentle slopes. The community structure was Eucalyptus flocktoniae and *Allocasuarina acutivalvis* over *Dodonaea bursariifolia*, *Melaleuca acuminata* subsp. *acuminata*, *Melaleuca hamata*, *Melaleuca lateriflora* subsp. *lateriflora* and *Grevillea acuaria*.

Community type 5 was recorded on red-brown clay loam and sandy clay soils on upland sites. The community structure was generally *Eucalyptus salubris* over *Dodonaea stenozyga*, *Trymalium myrtillus* subsp. *myrtillus* and *Grevillea acuaria* with *Thysanotus patersonii*.

Community type 6 occurred on footslopes and pediments with little slope and soils consisting typically of red-brown sandy clay loams, with coarse rock fragments primarily of undifferentiated greenstones. The vegetation structure was generally *Eucalyptus calycogona* subsp. *calycogona*, *Exocarpos aphyllus* and *Santalum acuminatum* over *Dodonaea stenozyga*, *Grevillea acuaria* over *Acacia erinacea* and *Wilsonia humilis*.

Community type 7 was characterized by the presence of calcrete in the substrate. The soils had varied textures including loam, clay loam and sandy clay loam. The community structure was dominated by *Eucalyptus extensa* over *Acacia merrallii*, *Daviesia articulata* and *Dodonaea stenozyga* with *Wilsonia humilis*.

Community type 8 occurred on plains with little or no gradient consisting of red-brown sandy clay loams. The vegetation structure was dominated by *Eucalyptus salmonophloia* over *Santalum acuminatum* over *Acacia merrallii*, *Daviesia scoparia*, *Eremophila ionantha* and *Olearia muelleri* with *Austrostipa elegantissima*.

Native Vegetation Solutions (2014). *Level 1 Flora and Vegetation Survey of the Proposed Blue Vein Mine Mt. Holland Operation (Tenement M77/1065)*. Unpublished report prepared for Convergent Minerals Limited, September 2014.

Convergent Minerals Limited, as part of their proposal to recommence mining activities at their Blue Vein Mine, 4.5 km south-south-west of the EGLP, commissioned a Level 1 flora and vegetation survey of approximately 90 ha at their Blue Vein Mine. The area surveyed included existing pit and waste dump areas, as well as nearby bushland, some of which had been the subject of an intense fire in April of 2014 (Native Vegetation Solutions 2014). The Blue Vein mine is situated 5 km south of the EGLP.

The survey resulted in a total of 71 vascular plant taxa being recorded (Appendix D). The names of the taxa recorded by Native Vegetation Solutions (2014) have been updated, where required, to make them consistent with current day nomenclature (WAH 1998-). No threatened flora pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the DPaW (2017a) were recorded. No priority flora, as listed by the DPaW (WAH 1998-), were recorded within the survey area. Two major vegetation communities were defined within the survey area. One of these vegetation communities was a *Eucalyptus* mallee woodland over *Melaleuca* shrubland. The dominant species in this community were *Eucalyptus urna*, *Eucalyptus loxophleba* subsp. *lissophloia*, *Eucalyptus platycorys*, *Melaleuca pauperiflora* subsp. *pauperiflora*, *Melaleuca eleuterostachya*, *Melaleuca lateriflora*, *Melaleuca cucullata*, *Phebalium filifolium*, and *Phebalium tuberculosum*. The second major vegetation community defined was a *Eucalyptus* woodland over *Allocasuarina* shrubland. The dominant species in this vegetation community were *Eucalyptus livida*, *Eucalyptus loxophleba* subsp. *lissophloia*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Allocasuarina campestris*, *Allocasuarina huegeliana*, *Hibbertia rostellata*, *Calothamnus quadrifidus* subsp. *semilunaris*, *Rinzia sessilis*, *Thryptomene kochii* and *Persoonia helix*. Native Vegetation Solutions (2014) delineated both burnt and unburnt area of both vegetation communities within the survey area.

Convergent Minerals Limited (2014). *Threatened Flora Management Plan for Banksia sphaerocarpa var. dolichostyla.* Mt. Holland Gold Project Blue Vein Operations DRAFT V2.0., October 2014.

Convergent Minerals Limited, as part of their proposal to recommence mining activities at their Blue Vein Mine, 4.5 km south-south-west of the Earl Grey Lithium Project, prepared a management plan to ensure existing populations of *Banksia sphaerocarpa* var. *dolichostyla* (T) were not impacted from proposed mining activities in the project area. Whilst no *Banksia sphaerocarpa* var. *dolichostyla* (T) were recorded within the proposed development areas (Native Vegetation Solutions 2014), *Banksia sphaerocarpa* var. *dolichostyla* (T) was recorded along existing roadside edges proposed to be utilised by light vehicles to access the camp and a separate existing haul road proposed to be utilised by haulage trucks. The objectives of the management plan (Convergent Minerals Limited 2014) were to prevent potential adverse impacts on *Banksia sphaerocarpa* var. *dolichostyla* populations in, or adjacent to the Blue Vein Mine Project and its associated operations, and to raise awareness about *Banksia sphaerocarpa* var. *dolichostyla.* These objectives were to be met by documenting the distribution of the species in the vicinity of the Blue Vein Mine Project; providing detailed species and preferred habitat description; identifying threatening processes to the species arising from the implementation of mining operations; developing strategies to reduce avoidable adverse impacts on the species; outline a monitoring program that aims to detect a decline in the health of local *Banksia sphaerocarpa* var. *dolichostyla* populations associated with the proposed mining activities; and allocate responsibilities for the implementation of the management plan.

Native Vegetation Solutions (2016a). *Level 1 Flora and Vegetation Survey of the Proposed Initial Cheritons and Texas Exploration Drill Lines- Jilbadji Nature Reserve Mt Holland Operation (Tenements E77/2111 & E77/2244).* Unpublished draft report prepared for Kidman Resources Limited, August 2016

Kidman commissioned Native Vegetation Solutions to undertake a Level 1 flora and vegetation survey of their Cheritons (exploration tenement E77/2111) and Texas (exploration tenement E77/2244) tenements, which form part of their Mt Holland project. Both tenements are situated within the Jilbadji Nature Reserve, and as such the flora and vegetation survey was an integral part of the process to develop a Conservation Management Plan. The Texas prospect is situated approximately 10 km north of the Mt Holland airstrip.

The survey resulted in a total of 151 species of vascular plants being recorded (Appendix D). The names of the taxa recorded by Native Vegetation Solutions (2016a) have been updated, where required, to make them consistent with current day nomenclature (WAH 1998-). No threatened flora pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the DPaW (2017a) were recorded. Three priority flora, as listed by the DPaW (WAH 1998-), were recorded within the survey areas. The priority flora recorded were *Acacia undosa* (P3), *Grevillea lullfitzii* (P1) and *Microcorys* sp. Forrestania (V. English 2004) (P4). No introduced species were recorded within the surveyed area. Native Vegetation Solutions defined eight vegetation communities in the combined Cheritons/Texas project areas. These are summarised below.

Eucalyptus mallee woodland over *Melaleuca* shrubland and emergent *Callitris preissii*
The dominant species in this community were *Eucalyptus eremophila* subsp. *eremophila*, *Eucalyptus livida*, *Melaleuca pauperiflora* subsp. *pauperiflora*, *Melaleuca lateriflora*, *Melaleuca hamata*, *Phebalium tuberculosum* and *Cryptandra nutans*. This community occupied an area of 1.29 ha (11.93%) of the total area surveyed (10.81 ha).

Eucalyptus mallee woodland (burnt)
The dominant species in this community were *Eucalyptus eremophila* subsp. *eremophila, Eucalyptus livida*, *Eucalyptus polita*, *Acacia fragilis*, *Gastrolobium spinosum*, *Melaleuca lateriflora*, *Thryptomene kochii*, *Grevillea acuaria*, *Dodonaea stenozyga* and *Hakea scoparia* subsp. *scoparia*. This community occupied an area of 2.76 ha (25.53%) of the total area surveyed (10.81 ha).

Eucalyptus woodland over *Allocasuarina* shrubland
The dominant species in this community were *Eucalyptus livida*, *Eucalyptus polita*, *Allocasuarina campestris*, *Hakea scoparia* subsp. *scoparia*, *Cryptandra nutans*, *Acacia sphacelata* subsp. *sphacelata*, *Calothamnus quadrifidus* subsp. *seminudus* and *Beyeria sulcata* var. *brevipes*. This community occupied an area of 0.07 ha (0.65%) of the total area surveyed (10.81 ha).

Sandplain mallee heath shrubland (burnt)
The dominant species in this community were *Persoonia helix*, *Persoonia coriacea*, *Melaleuca hamata*, *Hakea multilineata*, *Cyathostemon heterantherus*, *Hibbertia eatoniae*, *Melaleuca cordata, Gastrolobium spinosum*, *Bertya dimerostigma*, *Lepidosperma sanguinolentum* and *Gompholobium gompholobioides.* This community occupied an area of 4.48 ha (41.44%) of the total area surveyed (10.81 ha).

Eucalyptus salmonophloia woodland
The dominant species in this community were *Eucalyptus salmonophloia*, *Alyxia buxifolia*, *Scaevola spinescens*, *Acacia colletioides*, *Acacia hemiteles*, *Westringia cephalantha* var. *cephalantha* and *Acacia acuminata*. This community occupied an area of 0.17 ha (1.57%) of total area surveyed (10.81 ha).

Eucalyptus salmonophloia woodland (burnt)
The dominant species in this community were *Eucalyptus salmonophloia*, *Alyxia buxifolia*, *Scaevola spinescens*, *Acacia colletioides*, *Acacia hemiteles*, *Westringia cephalantha* var. *cephalantha* and *Acacia acuminata*. This community occupied an area of 0.47 ha (4.35%) of total area surveyed (10.81 ha).

Eucalyptus urna woodland over *Melaleuca* shrubland
The dominant species in this community were *Eucalyptus urna*, *Eucalyptus salubris*, *Eucalyptus eremophila* subsp. *eremophila*, *Olearia muelleri*, *Melaleuca lateriflora*, *Phebalium tuberculosum* and *Melaleuca pauperiflora* subsp. *pauperiflora.* This community occupied an area of 0.05 ha (0.46%) of total area surveyed (10.81 ha).

Eucalyptus mallee woodland over *Acacia steedmanii*
The dominant species in this community were *Eucalyptus livida*, *Eucalyptus loxophleba* subsp. *lissophloia*, *Phebalium filifolium*, *Acacia hemiteles*, *Allocasuarina helmsii*, *Grevillea stenobotrya*, *Grevillea pterosperma*, *Melaleuca cordata*, *Leucopogon* sp. outer wheatbelt (M. Hislop 30), *Acacia neurophylla* subsp. *erugata* and *Acacia steedmanii* subsp. *steedmanii.* This community occupied an area of 1.52 ha (14.06%) of total area surveyed (10.81 ha).

Native Vegetation Solutions (2016b). *Threatened flora targeted survey for Kidman Resources Ltd – Mt Holland Gold project, Earl Grey Prospect*. Unpublished memorandum prepared for Kidman Resources Limited, 16th September 2016.

In September 2016, Native Vegetation Solutions was commissioned to undertake a targeted search to assess potential threatened flora within the Earl Grey prospect at the Mt Holland Gold Project (Native Vegetation Solutions 2016b). The result of the search was that no threatened flora pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the DPaW (2017a) were recorded in the Earl Grey prospect. The majority of vegetation within the survey area comprised mallee woodland over *Melaleuca* shrubland, which was deemed not to be suitable habitat for *Banksia sphaerocarpa* var. *dolichostyla*, which is known to exist in the area about the Mt Holland Gold project area.

Blueprint Environmental Strategies (2017). *Targeted Surveys for Threatened Flora Species - Banksia sphaerocarpa var. dolichostyla. Summary Report. Earl Grey Lithium Project*. Unpublished report prepared for Kidman Resources Limited, May 2017.

A targeted flora survey for *Banksia sphaerocarpa* var. *dolichostyla* was undertaken by Goldfields Landcare Services in April 2017. The purpose of the survey was to identify *Banksia sphaerocarpa* var. *dolichostyla* in areas where clearing and/or disturbance are proposed within the development envelope for the EGLP. The outcome of this survey was summarized, together with the results from previous surveys for *Banksia sphaerocarpa* var. *dolichostyla* in the vicinity of the EGLP (Native vegetation Solutions 2014, 2016b, MAPL 2017; Blueprint 2017).

The results from the combined surveys recorded 521 specimens of *Banksia sphaerocarpa* var. *dolichostyla* from a number of locations, including adjacent to the existing landfill, various roads, the accommodation camp and a borrow pit. No specimens of the *Banksia sphaerocarpa* var. *dolichostyla* occur in the proposed EGLP disturbance footprint.

4.8 Survey of the Eastern Goldfields in the Vicinity of the EGLP

Newbey and Hnatiuk (1988), as part of a series of biological surveys of the Eastern Goldfields described, in broad terms, the landforms and vegetation of the area in which the EGLP is situated. Newbey (1988) classed the landform of the area in which the EGLP is situated as comprising sandplain, made up of the following component landform elements (Newbey and Hnatiuk 1988):

- Plains of shallow sandy clays supporting *Eucalyptus salmonophloia* woodlands, *Eucalyptus celastroides* subsp. *virella* mallee and *Eucalyptus salubris* low woodlands;
- Plains of shallow sand supporting *Eucalyptus redunca* mallee; *Eucalyptus transcontinentalis* mallee and *Melaleuca* spp. tall shrubland;

- Thick soil sheets on plain in deep sands supporting *Eucalyptus* aff. *decipiens* mallee, *Eucalyptus* aff. *occidentalis* mallee, *Eucalyptus tetragona* mallee, *Eucalyptus eremophila* mallee, *Acacia beauverdiana* tall shrubland, and *Grevillea eriostachya* subsp. *eriostachya* tall shrubland;
- Slight rises comprising gravelly sands supporting *Acacia signata* tall shrubland, *Allocasuarina acutivalvis* tall shrubland, *Allocasuarina campestris* tall shrubland, *Callitris preissii* subsp. *verrucosa* tall shrubland;
- Plains of gravelly sands supporting *Hakea* cf. *falcata* low shrubland; and
- Small depressions of alluvium supporting *Eucalyptus georgei* low woodlands.

4.9 Survey Associated with the Banded Ironstone Hill Formations

The flora and vegetation of the Middle and South Ironcap, Digger Rock and Hatter Hill was surveyed and the results reported by Gibson (2004a), as part of a series of detailed floristic studies of the ranges of the Eastern Goldfields. The EGLP is situated in the vicinity of the Forrestania greenstone belt, which extends from Mt Holland south to Hatter Hill, a distance of some 70 km. The study area was located 80 km east-south-east of Hyden, between Middle Ironcap and Hatter Hill. Gibson (2004a) established 38 quadrats along the range system and data from these quadrats was used to define four floristic community types.

Gibson (2004a) recorded a total of 343 vascular plant taxa across the 38 survey quadrats established. Thirty-five of the taxa recorded at the time of the survey were of conservation significance. These included:

- three taxa listed as threatened;
- a further 29 that are being considered for listing as threatened flora;
- 10 taxa considered endemic to the range; and
- a further eight that are regional endemics (found within 100 km).

The multivariate statistical analysis of the data resulted in the division of the 38 survey quadrats into four community types. Community types 1 and 2 occurred on skeletal soils derived from banded ironstone and the massive laterites. Community types 3 and 4 occurred on deeper soils derived from greenstone or decomposing laterites. A summary of each of the four community types is set out below.

Community Type 1

Community type 1 is comprised of the species-rich shrublands or mallee shrublands. Average species richness was 27.2 taxa/quadrat. This community type was restricted to the massive outcrops along the range (Middle Ironcap, South Ironcap, Digger Rock and Hatter Hill). Three subtypes were recognized. Type 1a occurred on all outcrops. Type 1b was restricted to area around South Ironcap. Type 1c generally lacked taxa in species was found at Middle Ironcap and the Hatter Hill area. Indicator species for this community type were *Lepidosperma* sp (NG & KB 2509), *Beaufortia schaueri, Gastrolobium spinosum, Dryandra pallida, Melaleuca pungens, Petrophile glauca, Hakea multilineata, Goodenia pinifolia, Persoonia helix, Isopogon gardneri, Leptospermum fastigiatum, Dryandra viscida, Allocasuarina campestris, Melaleuca cordata, Astroloma serratifolium, Hakea subsulcata, Comesperma volubile, Calytrix breviseta* subsp*. stipulosa, Verticordia chrysantha, Drummondita hassellii, Stylidium breviscapum, Micromyrtus racemosa, Phebalium ambiguum* and *Psammomoya choretroides*.

Community Type 2

Community type 2 were generally mallee shrublands or *Allocasuarina* thickets primarily found on massive laterites. Species richness tended to be lower than in community type 1 (20.3 taxa/quadrat). Distribution of this community was again closely correlated with the massive outcrops at Middle Ironcap, Digger Rock and Hatter Hill. It was not recorded from South Ironcap. Indicator species for this community type were *Acrotriche patula, Callitris canescens, Eriochilus dilatatus, Austrodanthonia caespitosa, Caladenia paradoxa, Platysace maxwellii, Melaleuca uncinata, Dodonaea bursariifolia, Santalum acuminatum* and *Olearia muelleri.*

Community Type 3

Community type 3 were eucalypt woodlands dominated or co-dominated by *Eucalyptus urna* and *Eucalyptus salubris as* occurring on the colluvial deposits on the flats below the outcrops or on the broad flat ridges along the range generally with an understorey dominated by *Melaleuca* spp. Species richness was considerably lower (14.4 taxa/quadrat). Only one local endemic (*Melaleuca agathosmoides*) is found in this community group - all the other local and regional endemics are restricted to community types 1 and 2. Indicator species for this community type were *Eucalyptus calycogona* subsp. *calycogona, Eucalyptus salmonophloia, Melaleuca teuthidoides, Microtis media* subsp*. media, Pultenaea arida, Dodonaea stenozyga, Eucalyptus annulata, Eucalyptus salubris, Melaleuca cucullata, Eucalyptus urna, Exocarpos aphyllus, Melaleuca pauperiflora* subsp. *pauperiflora* and *Microcybe albiflora.*

Community Type 4

Community type 4 was a species poor mallee community generally dominated by *Eucalyptus calycogona* with large emergent *Eucalyptus salmonophloia* on small colluvial flats in the ranges. Species richness was low with an average 12.5 taxa/quadrat. Indicator species for this community type were *Eucalyptus calycogona*, *Eucalyptus salmonophloia* and *Olearia muelleri*.

In biogeographical terms the range was most similar to the Bremer Range (Gibson and Lyons 1998a) and Parker Ranges (Gibson & Lyons 1998b), with a high diversity of eucalypts, acacias and melaleucas, and low richness of *Eremophila* spp. compared to the more northern ranges (Highclere Hills, Jaudi uplands, Helena and Aurora Range, Mt Manning Range) (Gibson and Lyons 2001a, Gibson and Lyons 2001b, Gibson *et. al*. 1997, Gibson 2004b). Despite considerable mining and exploration activity in the area, the flora and vegetation remain poorly known.

4.10 Reconnaissance Surveys of the EGLP

Mattiske Consulting has completed three reconnaissance surveys of areas within and surrounding the EGLP. In October and November 2016, reconnaissance surveys of prospects, two which intersect the present EGLP were completed (Mattiske Consulting 2016). In January 2017 a regional vegetation Reconnaissance survey of the broader area about the EGLP was undertaken as part of a broader fauna survey of the area surrounding the EGLP.

The 2016 flora and vegetation surveys recorded a total of 184 vascular plant taxa (Appendix D) which are representative of 86 genera and 35 families across three prospects surveyed – The Earl Grey and Irish Breakfast prospects intersect the EGLP; the Prince of Wales prospect is situated 2 km to the north of the EGLP (Figure 2). The majority of taxa recorded were representative of the Myrtaceae (46 taxa), Fabaceae (30 taxa), and Proteaceae (19 taxa) families. The most significant taxon recorded was *Banksia sphaerocarpa* var. *dolichostyla* (T). This taxon was not recorded within the Earl Grey, Irish Breakfast or Prince of Wales prospects. It was recorded at a location approximately 200 m from the eastern side of the Earl Grey prospect, in a vegetation community which is bisected by an old haul road. Four priority listed taxa were recorded within the Earl Grey, Irish Breakfast or Prince of Wales prospects. These were *Eutaxia lasiocalyx* (P2), *Acacia undosa* (P3), *Hakea pendens* (P3), and *Calamphoreus inflatus* (P4). All four taxa were recorded infrequently.

Based on the quadrat-based data recorded in 2016 by Mattiske Consulting, ten vegetation communities were defined across the prospects surveyed. The vegetation communities were:

Woodlands

W2 *Eucalyptus salubris*, *Eucalyptus flocktoniae* subsp. *flocktoniae* low woodland over *Melaleuca pauperiflora* subsp. *fastigiata*, *Melaleuca halmaturorum*, *Daviesia argillacea* mid open shrubland over *Microcybe ambigua* low sparse heathland on pale orange clayey sand flats.

Mallee Woodlands

MW3 *Eucalyptus eremophila*, *Eucalyptus flocktoniae* subsp. *flocktoniae*, *Eucalyptus prolixa* mid open mallee woodland over *Daviesia argillacea*, *Acacia hemiteles* low sparse shrubland over *Acacia deficiens*, *Coopernookia strophiolata* low sparse heathland on brown clay loam, occasionally with ironstone pebbles, on flats.

MW4 *Eucalyptus capillosa* subsp. *polyclada* mid open mallee woodland over *Baeckea elderiana*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Grevillea didymobotrya* subsp. *didymobotrya* mid-tall sparse shrubland on orange-brown clay, occasionally with ironstone pebbles, on flats and mid slopes.

MW5 *Eucalyptus burracoppinensis*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Callitris canescens* low open mallee woodland over *Banksia purdieana*, *Beaufortia orbifolia*, *Allocasuarina spinosissima* mid open shrubland over *Gompholobium hendersonii*, *Goodenia pinifolia* low isolated shrubs on yellow-brown clay loam on flats.

MW6 *Eucalyptus burracoppinensis*, *Eucalyptus eremophila* mid open mallee woodland over *Thryptomene kochii*, *Melaleuca laxiflora*, *Acacia acuminata* mid open shrubland over *Drummondita hassellii*, *Microcybe ambigua* low sparse heathland on grey-brown to orange-brown clay to clay sand, often with scattered ironstone pebbles on flats.

MW7 *Eucalyptus capillosa* subsp. *polyclada*, *Eucalyptus eremophila* mid open mallee woodland over *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Hakea subsulcata*, *Melaleuca hamata* mid-tall sparse shrubland over *Hibbertia exasperata*, *Phebalium megaphyllum* low sparse shrubland on orange-brown to brown clay to loamy clay, with occasional ironstone pebbles, on flats and slopes.

MW8 *Eucalyptus eremophila* mid open mallee woodland over *Melaleuca hamata*, *Leptospermum erubescens*, *Melaleuca lateriflora* mid sparse shrubland over *Thomasia* sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639), *Darwinia* sp. Karonie (K. Newbey 8503) low sparse shrubland on orange brown clay in minor drainage channel.

MW9 *Eucalyptus rigidula*, *Eucalyptus capillosa* subsp. *capillosa* mid mallee woodland over *Melaleuca acuminata* subsp. *acuminata*, *Melaleuca hamata*, *Melaleuca laxiflora* mid open shrubland over *Grevillea acuaria*, *Cryptandra minutifolia* subsp. *brevistyla*, *Dodonaea bursariifolia* low sparse heathland on brown to red-brown clay loam soils on flats and lower slopes.

MW10 *Eucalyptus rigidula*, *Eucalyptus eremophila*, *Eucalyptus flocktoniae* subsp. *flocktoniae* mid mallee woodland over *Melaleuca laxiflora*, *Melaleuca lateriflora*, *Melaleuca hamata* mid open shrubland over *Daviesia argillacea*, *Acacia hystrix* subsp. *hystrix*, *Grevillea acuaria* low sparse heathland on yellow to pale orange-brown clay sands with occasional scattered ironstone pebbles on flats.

MW11 *Eucalyptus eremophila*, *Eucalyptus incrassata*, *Eucalyptus prolixa* mid mallee woodland over *Melaleuca halmaturorum*, *Melaleuca lateriflora*, *Melaleuca hamata* mid sparse shrubland over *Daviesia scoparia*, *Acacia mackeyana* low sparse heathland on grey-brown to orange-brown clay and clay sands on flats and slopes.

Eucalypt mallee woodlands, with a myrtaceous, predominantly *Melaleuca* understorey, was the most dominant vegetation type mapped (communities MW6, MW10, and MW11), comprising 58.90% of the total area. Several vegetation communities (W2, MW4, MW7, MW8, and MW9) occupied less than 10% of the total areas mapped, but were variations on the eucalypt mallee woodlands over *Melaleuca* shrubland type vegetation. Cleared land occupied a major proportion of the areas surveyed, comprising 16.20% of the total area surveyed.

In January 2017, a reconnaissance survey of vegetation in the area about the EGLP was undertaken as part of a regional fauna survey (Western Wildlife 2017). This survey recorded species which had been

recorded in the reconnaissance survey of the Early Grey, Irish Breakfast and Prince of Wales prospects. The vegetation consisted of mixed *Eucalyptus* (mallee) woodlands over mixed myrtaceous shrublands, dominated by *Melaleuca* species (Western Wildlife 2017).

4.11 Threatened Ecological Communities

No TECs listed by the DPaW (2017c) occur within the vicinity of the EGLP. No TECs, pursuant to the EPBC Act and as listed by the DotEE (2017b) occur within the vicinity of the EGLP.

4.12 Priority Ecological Communities

One PEC, as listed by DPaW (2017d) currently intersects the EGLP. The majority of the EGLP is situated within the Ironcap Hills Vegetation Complexes (Mt. Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (banded ironstone), a Priority 3 ecological community (Figure 7). The principle threat to this PEC is mining (DPaW 2017d). A major portion of the EGLP development envelope intersects thus PEC. The area of intersection comprises 16.41% of the total area of the Ironcap Hills Vegetation Complexes, which occupies an area of 11,831.3577 ha (data sourced from the DBCA by CAD Resources).

4.13 Nature Reserves

The EGLP is situated 4.5 km south of the Jilbadji Nature Reserve (Figure 7). The Jilbadji Nature Reserve (Reserve C 24049) comprises an area of 208,860 ha, situated along the Forrestania Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Jilbadji Nature reserve is on the Register of the National Estate and was registered in 1978 (DotEE 2017e).

Given the extent of clearing in the Wheatbelt for dryland agriculture, the Jilbadji Nature Reserve is a significant area in maintaining existing ecological processes at a regional scale. With an area of 208,860 ha, it is a potentially important refugium for many species, including invertebrates and smaller vertebrates. The Jilbadji Nature Reserve is in the north-eastern part of the Wheatbelt region that is rich in endemic species at a national scale (DotEE 2017e).

4.14 Flora

A total of 450 plant taxa were identified in the desktop assessment as having the potential to occur within the EGLP (Appendix D). These 450 taxa are representative of 54 families and 160 genera. The most commonly represented families were the Myrtaceae (115 taxa), Fabaceae (72 taxa), Proteaceae (40 taxa), Asteraceae (20 taxa), and Scrophulariaceae (13 taxa). The most commonly represented genera were *Eucalyptus* (50 taxa), *Acacia* (40 taxa), and *Melaleuca* (29 taxa).

4.15 Threatened and Priority Flora

A total of seven known threatened flora taxa, 53 known priority flora taxa and one taxon which is currently presumed to be extinct have the potential to occur within the survey area. The 53 priority flora taxa were comprised of 16 Priority 1, seven Priority 2, 21 Priority 3 and nine Priority 4 taxa (WAH 1998-). These priority flora taxa are listed in Table 5. The distribution of known threatened and priority flora taxa, based on the DPaW's Threatened (Declared Rare) and Priority Flora database, the Western Australian Herbarium Specimen database, and recorded locations of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) (Blueprint Strategies 2017, Native Vegetation Solutions 2017) in the vicinity of the EGLP are illustrated in Figures 7 & 8.

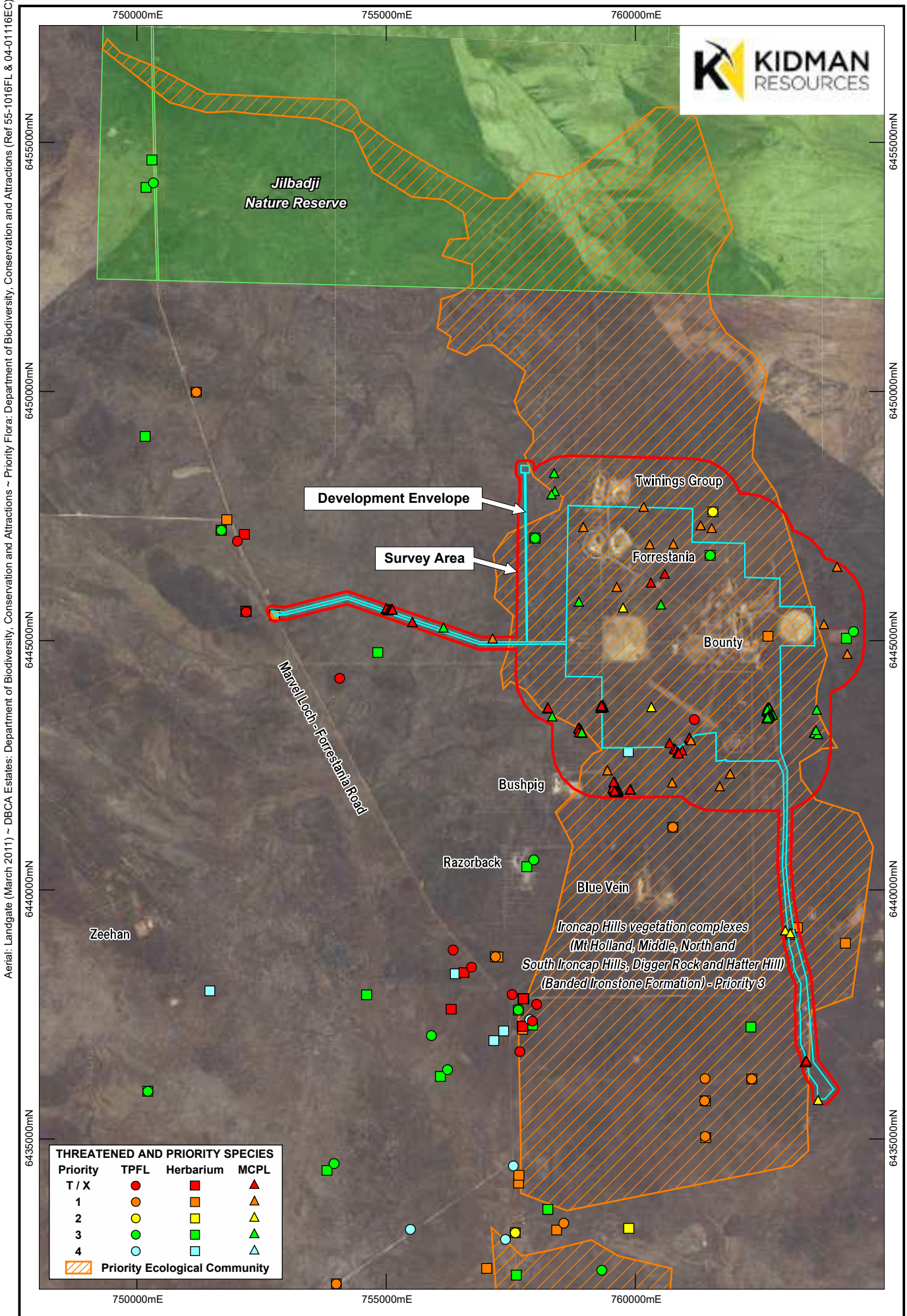
An assessment of the likelihood of recording any of the listed threatened and priority taxa within the EGLP, based on factors including known soil type, topography and distribution, is set out in Appendix E. Based on this assessment, four taxa – *Banksia sphaerocarpa* var. *dolichostyla* (T), *Eutaxia lasiocalyx* (P2), *Acacia undosa* (P3) and *Hakea pendens* (P3) – were ranked as being highly likely to be recorded as they have been recorded within the EGLP in 2016 by Mattiske Consulting. Twenty taxa were ranked with a medium likelihood of being recorded in the survey area, of which two are listed threatened taxa (Table 5). The remaining 36 taxa were ranked with a low likelihood of being recorded in the survey area, and a single taxon presumed to be extinct was ranked as unlikely (Table 5).

Table 5: Priority flora taxa in the vicinity of the EGLP

SPECIES	SCC[1]	FCC[2]	FAMILY	LIKELIHOOD TO RECORD
Thomasia gardneri	X	Ex	Malvaceae	unlikely
Acacia lobulata	T	E	Fabaceae	low
Acacia lanuginophylla	T	E	Fabaceae	medium
Banksia sphaerocarpa var. *dolichostyla*	T	V	Proteaceae	high
Boronia revoluta	T	E	Rutaceae	low
Eucalyptus steedmanii	T	V	Myrtaceae	medium
Paragoodia crenulata	T	CE	Fabaceae	low
Roycea pycnophylloides	T	E	Chenopodiaceae	low
Acacia tetraneura	P1	-	Fabaceae	low
Austrostipa sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	P1	-	Poaceae	low
Baeckea sp. Blue Haze Mine (P. Armstrong 06/910)	P1	-	Myrtaceae	medium
Brachyloma stenolobum	P1	-	Ericaceae	low
Dicrastylis capitellata	P1	-	Lamiaceae	medium
Eucalyptus myriadena subsp. *parviflora*	P1	-	Myrtaceae	low
Grevillea lissopleura	P1	-	Proteaceae	low
Grevillea lullfitzii	P1	-	Proteaceae	low
Grevillea marriottii	P1	-	Proteaceae	low
Hemigenia sp. Newdegate (E. Bishop 75)	P1	-	Lamiaceae	medium
Hibbertia axillibarba	P1	-	Dilleniaceae	low
Labichea rossii	P1	-	Fabaceae	low
Lepidosperma amantiferrum	P1	-	Cyperaceae	low
Melaleuca agathosmoides	P1	-	Myrtaceae	medium
Microcybe pauciflora subsp. *grandis*	P1	-	Rutaceae	low
Stenanthemum liberum	P1	-	Rhamnaceae	low
Acacia asepala	P2	-	Fabaceae	medium
Acacia heterochroa subsp. *robertii*	P2	-	Fabaceae	low
Bentleya diminuta	P2	-	Pittosporaceae	low
Conospermum sigmoideum	P2	-	Proteaceae	low
Dampiera orchardii	P2	-	Goodeniaceae	low
Eutaxia lasiocalyx	P2	-	Fabaceae	high
Orianthera exilis	P2	-	Loganiaceae	low
Acacia singula	P3	-	Fabaceae	medium
Acacia undosa	P3	-	Fabaceae	high
Angianthus micropodioides	P3	-	Asteraceae	low
Banksia viscida	P3	-	Myrtaceae	low

SPECIES	SCC[1]	FCC[2]	FAMILY	LIKELIHOOD TO RECORD
Chorizema circinale	P3	-	Fabaceae	low
Daviesia newbeyi	P3	-	Fabaceae	low
Eucalyptus exigua	P3	-	Myrtaceae	low
Eutaxia acanthoclada	P3	-	Fabaceae	medium
Grevillea insignis subsp. *elliotii*	P3	-	Proteaceae	low
Grevillea pilosa subsp. *redacta*	P3	-	Proteaceae	low
Hakea pendens	P3	-	Proteaceae	high
Leucopogon sp. Ironcaps (N. Gibson & K. Brown 3070)	P3	-	Ericaceae	medium
Mirbelia densiflora	P3	-	Fabaceae	low
Oxymyrrhine plicata	P3	-	Myrtaceae	low
Persoonia cymbifolia	P3	-	Proteaceae	medium
Phebalium brachycalyx	P3	-	Rutaceae	medium
Rinzia torquata Rye & Trudgeon formally Baeckea sp. Merredin	P3	-	Myrtaceae	medium
Seringia adenogyna	P3	-	Malvaceae	medium
Stylidium sejunctum	P3	-	Stylidiaceae	medium
Verticordia gracilis	P3	-	Myrtaceae	medium
Verticordia stenopetala	P3	-	Myrtaceae	medium
Calamphoreus inflatus	P4	-	Scrophulariaceae	medium
Eremophila biserrata	P4	-	Scrophulariaceae	low
Eremophila racemosa	P4	-	Scrophulariaceae	low
Eucalyptus georgei subsp. *fulgida*	P4	-	Myrtaceae	low
Eucalyptus rugulata	P4	-	Myrtaceae	low
Grevillea neodissecta	P4	-	Proteaceae	low
Microcorys sp. Forrestania (V. English 2004)	P4	-	Lamiaceae	medium
Myriophyllum petraeum	P4	-	Haloragaceae	low
Stenanthemum bremerense	P4	-	Rhamnaceae	medium

1 - State Conservation Code (refer Appendix A). 2 – Federal Conservation Code (refer Appendix A).



Aerial: Landgate (March 2011) ~ DBCA Estates: Department of Biodiversity, Conservation and Attractions ~ Priority Flora: Department of Biodiversity, Conservation and Attractions (Ref 55-1016FL & 04-01116EC)

0 1km

Scale 1:100,000
MGA94 (Zone 50)

CAD Ref: g2445_R011_06

Date: Nov 2017 | Rev: A | A4

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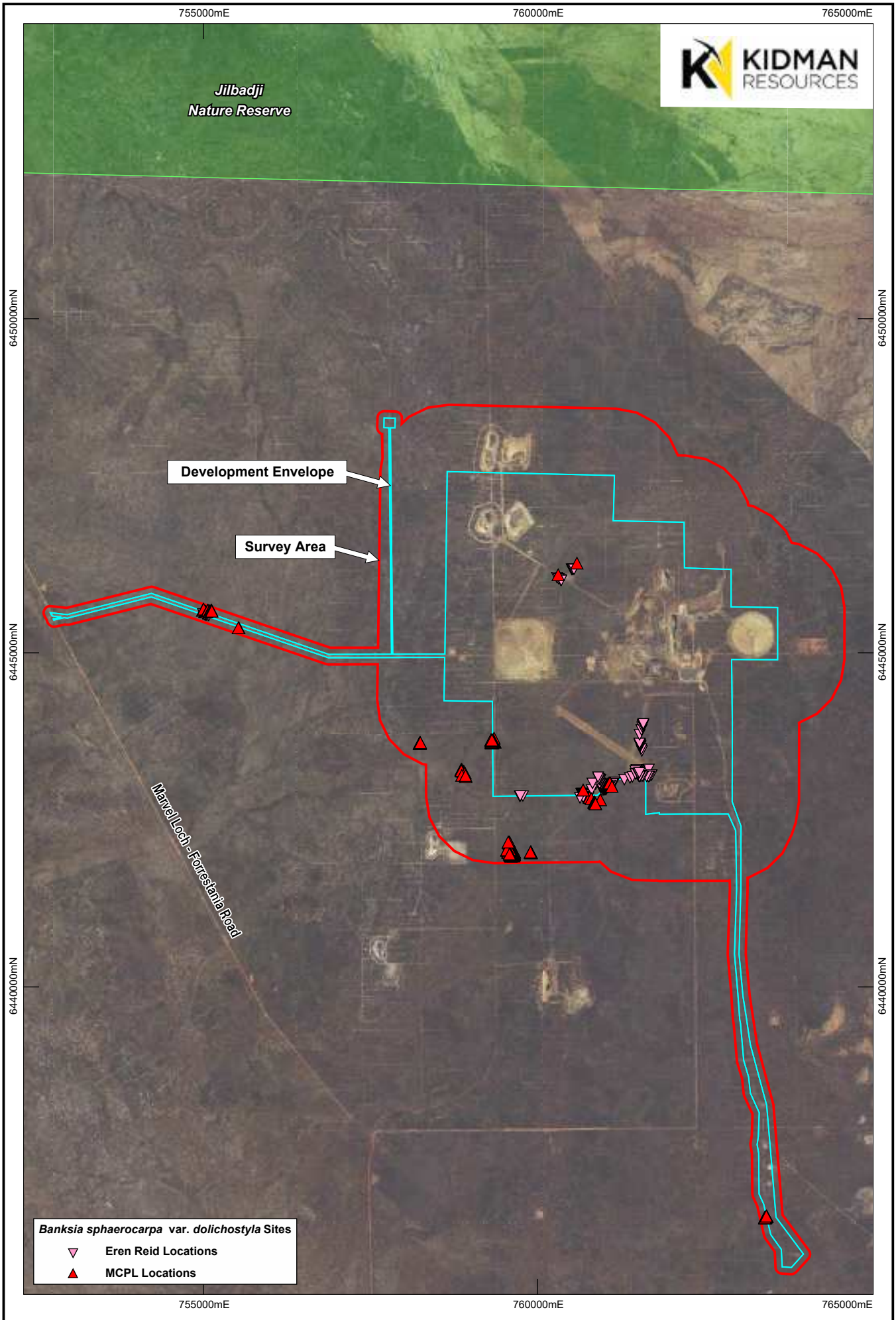
Earl Grey Lithium Project

PECs, Nature Reserve, Threatened and Priority Flora

Figure: 7



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Date: Nov 2017 | Rev: A | A4

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Earl Grey Lithium Project
***Banksia sphaerocarpa* var. *dolichostyla* Locations**

Figure: **8**

4.16 Introduced (Exotic) Plant Species

A total of ten introduced (exotic) plant species were recorded from the desktop assessment utilising a 20 km search buffer about the EGLP (Table 6). None of the species are listed as Declared Pest species pursuant to Section 22 of the *Biosecurity and Agriculture Management Act 2007*. None of the species are listed as a Prohibited Organism pursuant to Section 12 of the *Biosecurity and Agriculture Management Act 2007* or listed as a Weed of National Significance (DotEE 2017f).

Table 6: Introduced plant species in the vicinity of the EGLP

INTRODUCED SPECIES	COMMON NAME	FAMILY	POTENTIAL[4] /RECORDED
**Bromus rubens*[1, 3]	Red Broome	Poaceae	P
**Carrichtera annua*[2, 3]	Ward's Weed	Brassicaceae	P
**Centaurium tenuiflorum*[3, 5]	Slender Centaury	Gentianaceae	R
** Hypochaeris glabra*[1, 3]	Smooth Cat's-ear	Asteraceae	P
** Lysimachia arvensis*[1, 3]	Pimpernel	Primulaceae	P
** Mesembryanthemum nodiflorum*[1, 3]	Slender Iceplant	Aizoaceae	P
** Pentameris airoides* subsp. *airoides*[1, 3]	-	Poaceae	P
**Rostraria pumila*[1, 3]	Roughtail	Poaceae	P
** Ursinia anthemoides*[1, 3]	South African marigold	Asteraceae	P
** Vulpia myuros* forma *myuros*[1, 3]	Rats Tail Fescue	Poaceae	P

1 - recorded from NatureMap (DPaW 2007-); 2 - recorded from DotEE (2017c); 3 – Permitted (s11) under the BAM Act 2007; 4 - P = Potential to occur; 5 – Recorded by Mattiske Consulting (2016)

4.17 Other Matters

In addition to the items reviewed in the preceding paragraphs of this desktop assessment (paragraphs 4.1 through 4.14), the EPBC Act Protected Matters Report (DotEE 2017c) reveals that within 20 km of the EGLP, the following applies:

World Heritage Properties	none
National Heritage Places	none
Wetlands of International Importance	none
Listed Threatened Ecological Communities	none
Commonwealth Heritage Places	none
Critical Habitats	none
Commonwealth Terrestrial Reserves	none
Regional Forest Agreements	none
Nationally Important Wetlands	none

5. FIELD SURVEY RESULTS

A total of 214 survey quadrats were used to assess the flora and vegetation of the EGLP. Refer to Appendix B for a list of the geographic locations for each of the survey quadrats.

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the EGLP survey area, based on survey quadrat locations, tracks and foot traverses is illustrated in Figure 9. An assessment of the survey against a range of factors which may have had an impact on the outcomes of the present survey was prepared (Table 7). Based on this assessment, the survey of the EGLP has not been subject to constraints which would affect the thoroughness of the survey and the conclusions which have been formed.

Table 7: Potential flora and vegetation survey limitations for the EGLP

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Sources of information and availability of contextual information (i.e. pre-existing background versus new material).	**Not a constraint.** Reference resources such as Beard's mapping, historical survey data in both the vicinity of the survey area (Consultant's reports) and in the broader region (Gibson's series of Flora and Vegetation surveys of the Eastern Goldfield Ranges / Newbey & Hnatiuk's Biological Surveys of the Eastern Goldfields), together with online flora and vegetation information, has provided an appropriate level of information for the current survey.
Scope (i.e. what life forms, etc., were sampled).	**Not a constraint.** Vascular flora, which was the focus of the present survey of the EGLP, was thoroughly sampled.
Proportion of flora collected and identified (based on sampling, timing and intensity).	**Minor constraint.** The survey of the EGLP was undertaken over the course of three field visits, spread over two years. The majority of the field work was completed in September 2017. Based on the survey quadrat data, it was estimated that approximately 84.38% of the potential flora species that may be present were recorded (refer to Section 5.2.1 of this report). There were some issues in accurately identifying some species collected within fire burnt areas. This is likely to have had some impact on the discrimination between vegetation communities within these specific areas. However, given that the fire burnt areas consisted of Eucalypt woodlands or *Allocasuarina* scrub, both of which were well represented in the unburnt portion of the survey area, this is considered to be a minor issue. In addition, the majority of the fire burnt areas were situated in the eastern section of the survey area, external to the development envelope.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	**Potential constraint**. The survey of the EGLP was undertaken over two consecutive years, and a total of three field visits. The field visits took place in both the early and late spring seasons. There is unlikely to be potential constraints in relation to the aspect of multiple seasons of a "detailed" survey as defined in the EPA Technical Guide (2016b). However, given that the survey area contains a known threatened taxon, whose regional distribution still is relatively known, further survey work may be warranted.
Mapping reliability.	**Minor constraint**. The spatial coverage of the survey area is considered to be good. The quality of the aerial photographic maps available for the survey was considered to be excellent. Vegetation community boundaries were often discontinuous with interfaces resembling admixtures of one or more communities. This is a recognised and unavoidable limitation of vegetation mapping, particularly across mosaic *Eucalyptus* / *Melaleuca* and other shrubs associations and open woodland associations.

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Timing, weather, season, cycle.	**Not a constraint**. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period in the winter months. Rainfall in the four months preceding the October and November 2016 surveys and the September 2017 survey was slightly below average (Figure 3), with the area experiencing approximately 90% of the long-term average rainfall in both years. From a seasonal perspective, the majority of all flora present were either in flower or were towards the end of their flowering period. Consequently, it was possible to collect excellent specimens (fertile and many with fruit) of the majority of flora for identification purposes. This was especially important given the diversity of flora and the high potential for conservation significant species to be present.
Disturbances (fire, flood, accidental human intervention, etc.).	**Not a constraint**. The EGLP exhibits moderate to high levels of disturbance form past mining activities. Old mine pits and waste deposits are present, together with old roads and exploration tracks. In addition, the eastern part of the EGLP was subject to a fire in February 2015 (Carla Vincent, Kidman, pers. comm.). The aerial photographic maps used for the present survey were based on imagery captured after the fires.
Intensity (in retrospect, was the intensity adequate).	**Not a constraint**. The intensity of the survey effort of the EGLP was considered to be good.
Resources (i.e. were there adequate resources to complete the survey to the required standard).	**Not a constraint**. Resources, in terms of equipment, support and personnel were good.
Access problems (i.e. ability to access survey area).	**Not a constraint**. Vehicle access to the EGLP was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the survey area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	**Not a constraint**. All botanists had extensive experience working in a range of botanical districts across the state, and all had all botanists had experience working in the Coolgardie/Goldfields region.

5.2 Flora

A total of 369 vascular plant taxa which are representative of 140 genera and 49 families were recorded within the EGLP. The majority of taxa recorded were representative of the Myrtaceae (73 taxa), Fabaceae (48 taxa), Proteaceae (42 taxa), Asteraceae (19 taxa), Rutaceae (17 taxa), and Ericaceae (11 taxa) families. The majority of families (27 of 49) were represented by three or less taxa. The taxa recorded during the survey are set out in Appendix D. A list of plant taxa recorded at each survey quadrat within the EGLP is set out in Appendix F.

Annual species represented 9.49 % of all recorded plant species within the EGLP. The average species richness for the 214 survey quadrats was 16.71 ± 0.46 (mean ± s.e.m.), with a range of 6 to 42 species per quadrat.

A number of plant species could not be identified accurately to species level due to the absence of sufficient taxonomic characters to enable accurate identification. The three principle reasons for not being able to fully identify some of the collected specimens to species level were:

1. plant material was sterile or lacked sufficient taxonomic feature to permit accurate identification to species level. In these cases the species is identified as, for example, *Grevillea* sp.;
2. plant material was collected within the fire burnt portion of the survey area, and was juvenile in nature and lacked any fertile material to permit accurate identification. In these cases the species is identified as, for example, *Eucalyptus* sp.; or

3. the plant material collected could not be determined to be a known taxon. In this case, two *Acacia* species required detailed review by specialists at the WAH.

5.2.1 Proportion of Flora Surveyed

A species accumulation plot, based on accumulated species recorded versus sites surveyed within the EGLP was used to provide an indication as to the level of adequacy of the survey effort. As the number of survey sites increases, and correspondingly the size of the area surveyed increases, there should be a diminishing number of new species recorded. At some point, the number of new species recorded becomes essentially asymptotic. When the number of new species being recorded for survey effort expended approaches this asymptotic value, the survey effort can be considered to be adequate.

The species accumulation curve (Figure 10), based on the species accumulation analysis of Colwell (2013) was used to evaluate the adequacy of sampling. The asymptotic value was determined using Michaelis-Menten modelling. Using this analysis, the incidence based coverage estimator of species richness (ICE, Chao 2004) was calculated to be 437.29. Based on this value, and the total of 355 species recorded in the 214 survey quadrats, approximately 84.38 % of the flora species potentially present within the survey area were recorded. The number of species used for the species accumulation analysis is lower than the number of species reported in the EGLP (Section 5.2) because opportunistically collected taxa (i.e. those taxa which were recorded outside survey quadrats) were excluded from this analysis.

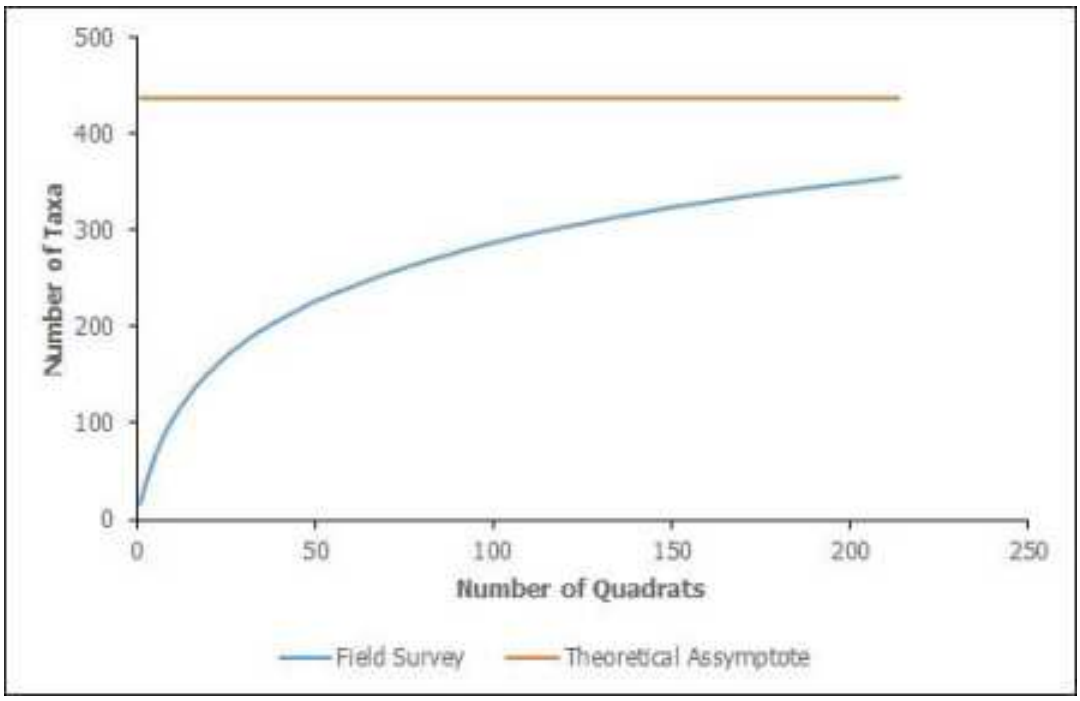
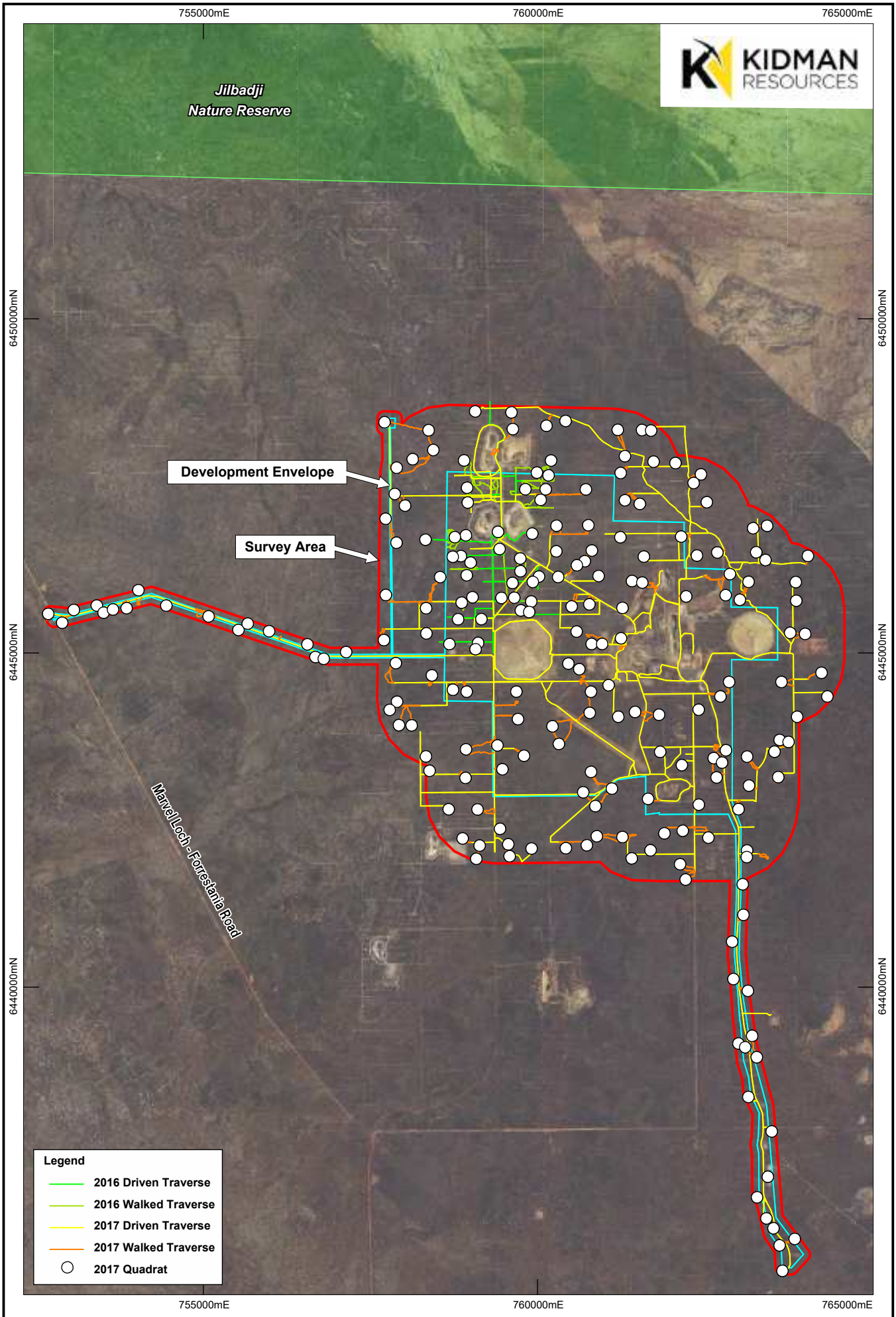


Figure 10: Average randomised species accumulation curve



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CAD Ref: g2445_R011_08

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Earl Grey Lithium Project

Tracks and Foot Traverses

Figure: **9**

5.2.2 Threatened and Priority Flora

One threatened flora taxon pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the WAH (1998-) was recorded within the EGLP survey area. This taxon was *Banksia sphaerocarpa* subsp. *dolichostyla* (T). *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is listed as vulnerable, pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* and as listed by the DotEE (2017a). A total of 279 individuals of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) were recorded within the EGLP survey area, 14 of which were recorded within survey quadrats. The remaining 265 plants were recorded opportunistically within the survey area. The geographical location where *Banksia sphaerocarpa* var*. dolichostyla* (T) were recorded is set out in Appendix G.

Eleven priority flora taxa, as listed by WAH (1998-), were recorded within the EGLP. The 11 priority flora recorded were

Acacia undosa (P3) (Fabaceae):	7 plants recorded
Brachyloma stenolobum (P1) (Ericaceae):	1 plant recorded
Chorizema circinale (P3) (Fabaceae):	2 plants recorded
Daviesia sarissa subsp. *redacta* (P2) (Fabaceae):	1 plant recorded
Grevillea lissopleura (P1) (Proteaceae):	2 plants recorded
Grevillea marriottii (P1) (Proteaceae):	1 plant recorded
Hakea pendens (P3) (Proteaceae):	225 plants recorded
Labichea rossii (P1) (Fabaceae):	4 plants recorded
Microcorys sp. Mt Holland (D. Angus DA 2397) (P1) (Lamiaceae)	36 locations (see comment below)
Olearia laciniifolia (P2) (Asteraceae):	2 plants recorded
Orianthera exilis (P2) (Loganiaceae):	1 plant recorded

With the exception of *Daviesia sarissa* subsp. *redacta* (P2), all the taxa are known to occur in the vicinity of the EGLP (WAH 1998-). The recording of *Daviesia sarissa* subsp. *redacta* (P2) at the EGLP represents an approximately 150 km southern extension to its presently known locations, which lie between Yellowdine and the Boorabbin Nature reserve (WAH 1998-).

Microcorys sp. Mt Holland (D. Angus DA 2397) (P1) was formally listed by the WAH in January 2018 as a new species. This taxon was originally collected during the 2016 survey (MCPL 2017). This taxon was recorded at 36 of the survey quadrats established by MCPL during the 2016 and 2017 field surveys. Thirteen of these quadrats were situated within the EGLP development envelope and 23 were situated within the vegetation survey buffer. Plant numbers were not recorded for this taxon at the time of survey as it was not recognised as being a new species.

The geographical locations where each of the priority taxa were recorded within the EGLP survey area are set out in Appendix G. Submitted DPaW threatened and priority report forms for the threatened and priority taxa recorded in the EGLP survey area are presented in Appendix H. The locations of all threatened and priority flora recorded during the survey of the EGLP are indicated on the vegetation maps (Appendix I).

5.2.3 Taxa with Range Extensions

Three taxa recorded during the survey of the EGLP represented an extension to their currently known distribution. These taxa were *Callitris verrucosa*, *Centrolepis strigosa* subsp. *rupestris* and *Daviesia sarissa* subsp. *redacta* (P2). The locations where these taxa were recorded within the EGLP are set out in Table 8. The recording of *Callitris verrucosa* in the EGLP represents an approximately 200 km south-eastern extension to its currently known range. The recording of *Centrolepis strigosa* subsp. *rupestris* in the EGLP represents an approximately 200 km southern extension to its currently known range. The recording of *Daviesia sarissa* subsp. *redacta* (P2) in the EGLP represents an approximately 150 km

southern extension to its currently know range. In this report, 150 km has been used as a basis to determine an extension to the currently known range for a taxon.

Table 8: Locations of taxa with extensions to their known range, recorded within the EGLP

TAXON	QUADRAT	LOCATION (GDA94, ZONE 50)	
		EASTING (ME)	NORTHING (MN)
Callitris verrucosa	EG004	753405	6445709
Callitris verrucosa	EG005	753507	6445602
Callitris verrucosa	EG014	756557	6445128
Callitris verrucosa	EG016	756802	6444912
Callitris verrucosa	EG018	759069	6448614
Callitris verrucosa	EG085	760310	6446136
Callitris verrucosa	EG104	760512	6445695
Callitris verrucosa	EG126	758420	6444664
Callitris verrucosa	EG133	760801	6444419
Callitris verrucosa	EG165	763604	6443142
Centrolepis strigosa subsp. *rupestris*	EG039	760166	6447657
Centrolepis strigosa subsp. *rupestris*	opportunistic	759668	6446061
Daviesia sarissa subsp. *redacta* (P2)	EG150	760321	6443638

5.2.4 Other Taxa of Significance

Four specimens collected within the EGLP survey area were deemed to be species of interest by the WAH. These taxa were identified as:

Acacia sp.1

B. Maslin (the *Acacia* specialist) at the WAH indicated that this taxon submitted for identification is an undescribed *Acacia* species. The specimen of this taxon was recorded at a single location in the vegetation survey buffer zone to the south of the development envelope during the survey of the EGLP in vegetation community W9 (Figure 11).

Acacia sp.2

B. Maslin (the *Acacia* specialist) at the WAH indicated that this taxon submitted for identification is an undescribed *Acacia* species. This taxon was recorded at two locations in the vegetation survey buffer zone on the western side of the development envelope during the survey of the EGLP in vegetation community W4 (Figure 11).

Eremophila sp. aff. *verticillata*

Advice from M. Hislop and Andrew brown of the WAH indicate that the specimen collected during the survey of the EGLP is currently an unrecognized taxon, potentially related to the threatened taxon *Eremophila verticillata*, and will be subject to further examination. This taxon was recorded at two locations in the vegetation survey buffer zone to the east and south of the development envelope during the survey of the EGLP.

Hibbertia aff. *oligantha*

Advice from M. Hislop of the WAH (31 October 2017) states that this may represent an undescribed taxon. Both Kevin Thiele and Judy Wheeler of the WAH have referred to this entity as 'aff oligantha', and it certainly appears to be distinct from *Hibbertia oligantha*.

5.2.5 Introduced (Exotic) Plant Species

One introduced (exotic) plant taxon was recorded during the survey of the EGLP. The introduced taxon recorded was **Centaurium tenuiflorum.* **Centaurium tenuiflorum* is listed as Permitted (s11) pursuant to the *Biosecurity and Agriculture Management Act 2007* according to the DAFWA (2017). **Centaurium tenuiflorum* was recorded at a single location within the EGLP at quadrat EG039 (760166 mE, 6447657 mN, GDA94, zone 50). **Centaurium tenuiflorum* (Gentianaceae) is an erect hairless herb that can grow to 50 cm high. It produces pink flowers from the months of August to December and is known to occur along drainage lines, in swamp, and disturbed areas (DPaW 2017g; Hussey *et al.* 2007).

5.3 Statistical Analysis of Data

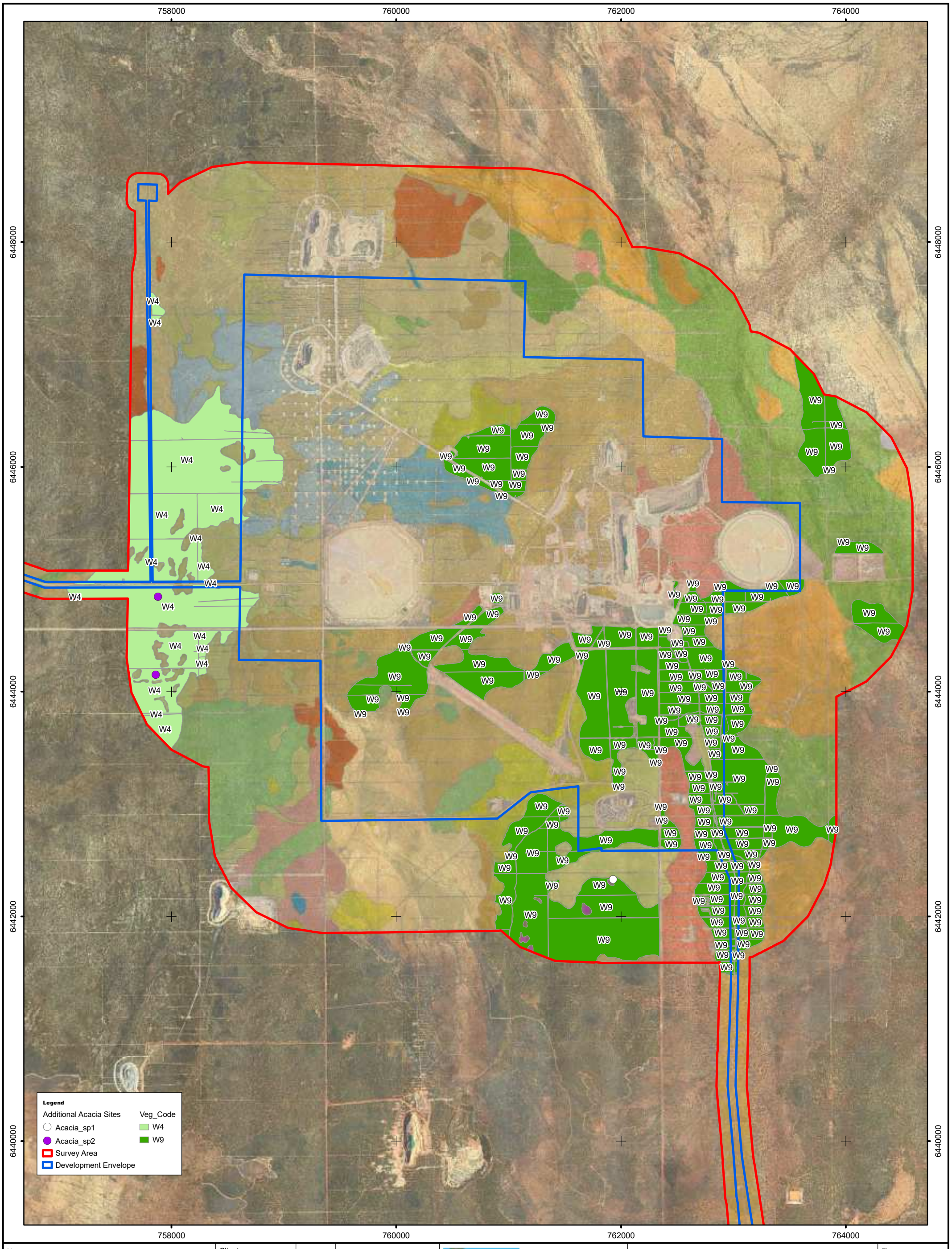
Cluster analyses derived from a species-by-site resemblance matrix (Bray-Curtis similarity) grouped survey sites into discrete clusters based on species composition (dissimilarity/distance increased) (Clarke and Gorley 2006). Only taxa which could be identified to species level were included in the analysis. Classification and ordination analyses were conducted on a data matrix of perennial taxa, with singularly occurring species and annual taxa omitted prior to analysis. This was justified on the basis that singleton taxa add little additional information, and annuals (desert ephemerals) exhibit high inter-annual variation in distribution and abundance (Mott 1972, 1973). In addition, the omission of annual species from the statistical analysis allows for comparison of data from surveys undertaken in different seasons or survey years. Hierarchical Clustering was used in conjunction with Similarity Profile (SIMPROF), Similarity Percentages (SIMPER), site descriptions, site photos and aerial photographs; combining these methods increased the understanding of site inter-relations and thus the ability to accurately delineate those sites based on species composition.

To down weight the relative contributions of quantitatively dominant species a presence-absence transformation of the data was used for statistical analysis. Introduced species, singletons (species recorded at only one quadrat), annuals and specimens that were not identified down to the species level were excluded from the analysis. Taxa which were identified to the subspecies and variety levels were revised to the specific level to reduce the tendency for this to create further statistical variation in analysis which was considered unwarranted. Computation of similarity matrices was based on the Bray Curtis similarity measure.

Where appropriate, outliers and small groupings were assigned to broader comparative vegetation units based on factors including species composition and site descriptions; this is particularly relevant where survey quadrats were established on ecotones. For the purposes of vegetation mapping, i.e. extrapolating quadrat data to generalised vegetation communities over broad areas, an inclusive rather than exclusive approach was adopted for outliers.

Similarity Profile Analysis (SIMPROF) of the 214 survey quadrats identified 47 significantly associated groups of vegetation survey and outlier quadrats ($Pi = 4.565$; $p < 0.001$). Following *a priori* analysis of significant groups, vegetation communities were delineated using a combination of the SIMPROF results together with landform, soil data, and associated records of the survey quadrats. Where appropriate outliers and small groupings were merged into broader vegetation units based on species composition and site descriptions.

Based on this approach, 26 significantly dissimilar vegetation communities were delineated within the EGLP (Global $R = 0.785$; $p<0.001$) The dendrogram representing the results of the cluster analysis, and the corresponding 26 vegetation communities is illustrated in Figure 12.



Notes:
No additional Acacia sites very identified on borefiled access or site access corridors

Client: KIDMAN RESOURCES

N

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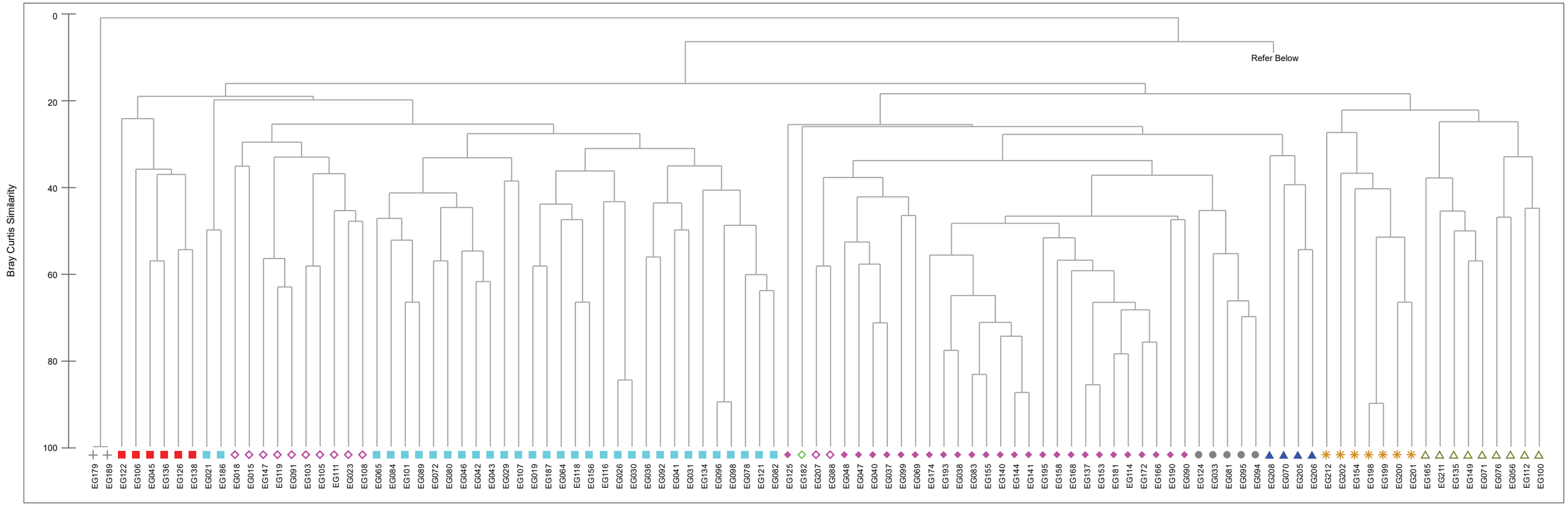
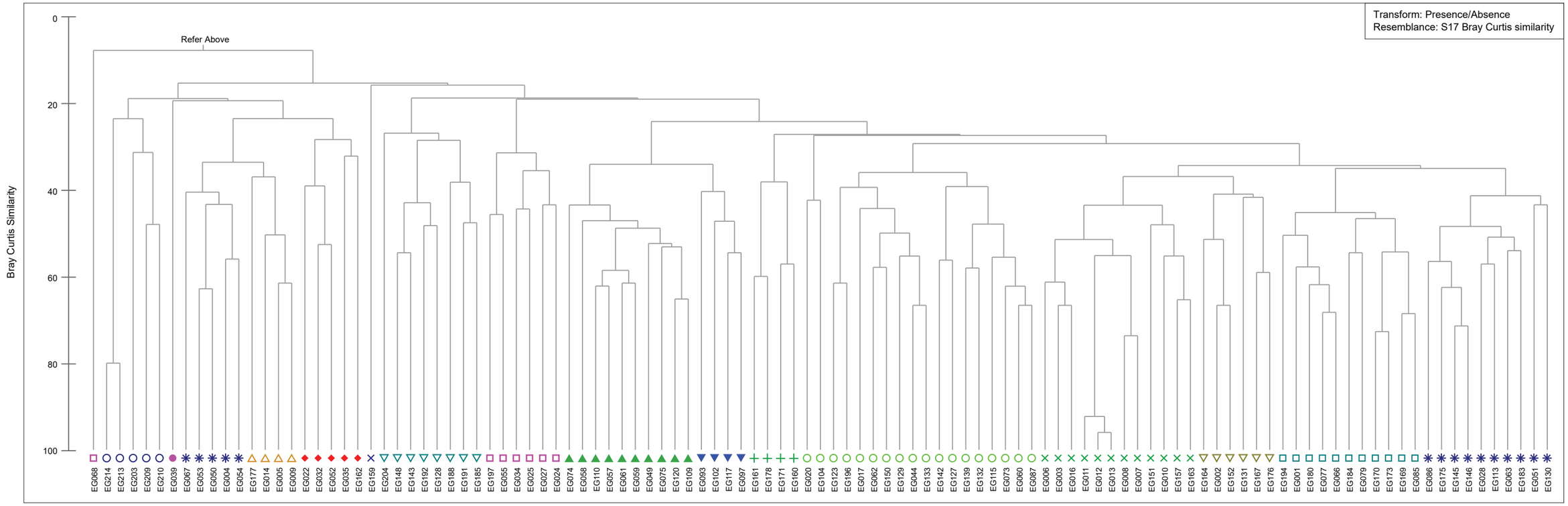
Earl Grey Lithium Project
Additional Acacia Species
Showing underlying vegetation community

Figure: 11





H1 S1 S2 S3 MW6 MW7 MW8 W4 W5 W6 W7 W8 W9
W10 W11 W12 W13 W14 W15 W16 W17 W18 W19 W20 W21 W22

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Earl Grey Lithium Project
Hierarchical Cluster of Floristic Community Types
Group Average

Figure **12**

5.4 Vegetation Communities and Mapping

Based on the statistical analysis (Section 5.3), 26 vegetation communities were defined and mapped across the EGLP survey area. In addition to the statistical analysis, survey quadrat physical data and aerial photographic maps were used to delineate the boundaries of the vegetation communities in the EGLP. The descriptions of the vegetation communities were based on Alpin's (1979) modification of the vegetation classification system of Specht (1970), to align with the NVIS. Vegetation communities were described at the association level of the NVIS classification framework, as defined by the ESCAVI (2003) (Appendix A6), and are summarised below. The vegetation mapped is presented in Appendix I. A listing of species recorded within each vegetation community is set out in Appendix J.

H1 *Melaleuca cliffortioides*, *Allocasuarina campestris*, *Dodonaea adenophora* mid open heathland over *Grevillea lissopleura* (P1), *Trymalium myrtillus* subsp. *myrtillus* low sparse shrubland on rocky red-brown sandy clay soils on slopes.

S1 *Allocasuarina acutivalvis*, *Allocasuarina spinosissima* tall closed shrubland over *Hakea subsulcata*, *Melaleuca cordata*, *Micromyrtus erichsenii* mid sparse heathland on lateritic orange-red clay soils on flats and lower slopes.

S2 *Allocasuarina acutivalvis*, *Allocasuarina spinosissima*, *Eucalyptus burracoppinensis* tall open shrubland over *Thryptomene kochii*, *Persoonia helix*, *Micromyrtus erichsenii* mid sparse heathland over *Cyathostemon heterantherus*, *Hibbertia exasperata*, *Drummondita hassellii* low sparse shrubland on orange brown clayey sand soils on flats.

S3 *Allocasuarina acutivalvis*, *Eucalyptus burracoppinensis* tall sparse shrubland over *Banksia purdieana*, *Hakea subsulcata*, *Melaleuca cordata* mid sparse shrubland over *Micromyrtus erichsenii*, *Persoonia helix* low isolated shrubs on gravelly yellow brown to orange brown clay to clayey sand soils on flats.

MW6 *Eucalyptus burracoppinensis*, *Eucalyptus eremophila* mid open mallee woodland over *Thryptomene kochii*, *Melaleuca laxiflora*, *Acacia acuminata* mid open shrubland over *Drummondita hassellii*, *Microcybe ambigua* low sparse heathland on grey brown to orange brown clay to clayey sand on flats.

MW7 *Eucalyptus capillosa* subsp. *polyclada* mid open mallee woodland over *Allocasuarina spinosissima*, *Callitris canescens*, *Hakea minyma* mid tall sparse shrubland over *Phebalium megaphyllum* low sparse shrubland on orange brown clay soils on flats and slopes.

MW8 *Eucalyptus eremophila* low open mallee woodland over *Melaleuca hamata*, *Leptospermum erubescens*, *Melaleuca lateriflora* mid sparse shrubland over *Thomasia* sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639), *Darwinia* sp. Karonie (K. Newbey 8503) low sparse shrubland on orange brown clay in minor drainage channel.

W4 *Eucalyptus flocktoniae* subsp. *flocktoniae*, *Eucalyptus eremophila* low open mallee woodland over *Melaleuca depauperata*, *Callitris canescens*, *Melaleuca phoidophylla* mid-tall sparse shrubland over *Acacia tetraptera*, *Grevillea acuaria* low isolated heath shrubs on orange brown sandy clay soils with ironstone or quartz pebbles on flats and slopes.

W5 *Eucalyptus rigidula*, *Eucalyptus burracoppinensis* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix, Hakea erecta* mid sparse heathland over *Hibbertia rostellata*, *Hibbertia stowardii* low isolated shrubs on gravelly orange brown clayey sand soils on flats and slopes.

W6 *Eucalyptus burracoppinensis, Allocasuarina acutivalvis*, *Allocasuarina spinosissima* tall open mallee woodland over *Hakea erecta*, *Petrophile stricta*, *Banksia laevigata* subsp. *fuscolutea* mid sparse heathland over *Drummondita hassellii*, *Hibbertia exasperata*, *Psammomoya choretroides* low sparse shrubland on yellow brown sandy soils on flats.

W7 Burnt *Eucalyptus* sp. (*E. cylindriflora, E. flocktoniae* subsp*. flocktoniae, E. prolixa, E. salmonophloia, E. eremophila, E. capillosa* subsp*. polyclada*) low open woodland over *Melaleuca hamata*, *Melaleuca eleuterostachya* mid sparse shrubland over *Daviesia argillacea*, *Acacia hemiteles*, *Acacia deficiens* low sparse heathland on orange brown sandy clay soils on flats.

W8 *Eucalyptus prolixa*, *Eucalyptus salmonophloia*, *Eucalyptus urna* mid mallee woodland over *Santalum acuminatum*, *Daviesia argillacea*, *Melaleuca eleuterostachya* mid sparse heathland over *Acacia merrallii*, *Daviesia argillacea*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland on red brown sandy clay flats.

W9 *Eucalyptus urna*, *Eucalyptus ravida*, *Eucalyptus prolixa* low mallee woodland over *Melaleuca pauperiflora*, *Dodonaea stenozyga*, *Daviesia argillacea* mid sparse shrubland over *Acacia merrallii*, *Grevillea acuaria*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland.

W10 *Eucalyptus* sp. (*E. urna, E. cylindrocarpa, E, rigidula, E gracilis*) low mallee woodland over *Melaleuca pauperiflora*, *Daviesia scoparia* mid sparse shrubland over *Acacia merrallii*, *Grevillea huegelii*, *Olearia muelleri* low sparse shrubland on red clay soils on flats.

W11 *Eucalyptus eremophila*, *Eucalyptus rigidula*, *Eucalyptus flocktoniae* subsp. *flocktoniae* low mallee woodland over *Melaleuca lateriflora*, *Melaleuca eleuterostachya*, *Melaleuca acuminata* subsp. *acuminata* mid sparse shrubland over *Grevillea acuaria*, *Acacia hystrix* subsp. *hystrix*, *Microcybe ambigua* low sparse shrubland on orange brown clay soils on flats.

W12 *Eucalyptus cylindriflora*, *Eucalyptus cylindrocarpa*, *Eucalyptus prolixa* low open mallee woodland over *Melaleuca eleuterostachya*, *Melaleuca lateriflora*, *Daviesia argillacea* mid sparse shrubland over *Grevillea acuaria*, *Acacia merrallii*, *Acacia camptoclada* low sparse shrubland on yellow brown to red brown sandy clay soils on flats.

W13 *Callitris canescens*, *Eucalyptus rigidula* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix*, *Allocasuarina spinosissima* mid tall sparse shrubland over *Beyeria sulcata*, *Drummondita hassellii* low sparse shrubland on yellow brown to orange brown clayey sands on flats and slopes.

W14 Burnt *Eucalyptus salmonophloia*, *Eucalyptus eremophila* mid open woodland over *Santalum acuminatum, Senna artemisioides* subsp. *filifolia* mid sparse shrubland over *Acacia hemiteles*, *Olearia muelleri* low sparse shrubland on orange brown clay spoils on flats.

W15 Burnt *Allocasuarina acutivalvis*, *Eucalyptus* sp. (*E. cylindriflora, E. eremophila, E, gracilis, E. rigidula, E. burracoppinensis*) low open mallee woodland over *Hakea minyma*, *Melaleuca cordata*, *Melaleuca hamata* mid sparse shrubland over *Dampiera sacculata, Pimelea sulfurea*, *Hybanthus floribundus* subsp. *floribundus* low sparse forbland.

W16 Burnt *Eucalyptus* sp. (*E. cylindriflora, E. tenuis, E. burracoppinensis, E. eremophila*) low open mallee woodland over *Persoonia helix, Gastrolobium spinosum*, *Acacia assimilis* mid sparse shrubland over *Dampiera tenuicaulis* subsp. *curvula*, *Glischrocaryon aureum*, *Dampiera eriocephala* low sparse forbland on orange red gravelly sandy loam soils on flats.

W17 *Eucalyptus capillosa* subsp. *polyclada* low open mallee woodland over *Hakea pendens* (P3), *Beyeria sulcata*, *Santalum acuminatum* mid sparse shrubland over *Rinzia sessilis*, *Westringia cephalantha* subsp. *cephalantha*, *Hibbertia ancistrophylla* low sparse shrubland on lateritic red brown clayey sand on slopes and ridges.

W18 *Eucalyptus rigidula*. *Eucalyptus platycorys*, *Callitris canescens* low open mallee woodland over *Melaleuca hamata*, *Allocasuarina spinosissima*, *Hakea erecta* mid sparse shrubland over *Hibbertia gracilipes*, *Phebalium obovatum*, *Cyathostemon heterantherus* low sparse shrubland on yellow brown sandy soils on flats.

W19 *Eucalyptus prolixa* low open mallee woodland over *Daviesia argillacea*, *Santalum acuminatum* mid sparse shrubland over *Acacia merrallii*, *Microcybe ambigua*, *Grevillea acuaria* low sparse shrubland on orange-red brown sandy clay soils on flats.

W20 Burnt *Eucalyptus urna*, *Eucalyptus salmonophloia*, *Eucalyptus tenuis* mid open mallee woodland over *Melaleuca pauperiflora* mid sparse shrubland over *Acacia deficiens*, *Daviesia argillacea*, *Daviesia grahamii* low sparse shrubland on red brown clay soils on flats.

W21 *Eucalyptus eremophila*, *Eucalyptus flocktoniae* subsp. *flocktoniae* low open mallee woodland over *Melaleuca hamata* over *Acacia acanthoclada* subsp. *acanthoclada*, *Dampiera sacculata*, *Westringia cephalantha* subsp. *cephalantha* low sparse shrubland on grey brown clayey sand soils on flats and slopes.

W22 *Eucalyptus eremophila* low open mallee woodland over *Melaleuca hamata*, *Melaleuca eleuterostachya*, *Melaleuca laxiflora* mid sparse shrubland over *Hibbertia exasperata*, *Cyathostemon heterantherus*, *Acacia sphacelata* subsp. *sphacelata* low sparse shrubland on slightly gravelly yellow-orange brown clay soils on flats and slopes.

CL Cleared Land

5.5 Area Coverage of Vegetation Communities

The areas mapped and percentage cover for each vegetation community delineated in the EGLP is set out in Table 9. Data is presented to indicate the total area of each vegetation community mapped within the within the EGLP survey area, together with the percentage of each vegetation community which falls within the EGLP development envelope and the percentage each vegetation community contributes to EGLP development envelope area.

In terms of the area surveyed, within the EGLP survey area (4,417.83 ha), 855.88 ha had been burnt by the fire which affected the area in February 2015. This area accounted for 19.37% of the total area surveyed. Within the EGLP development envelope (1,993.59 ha), 94.48 ha had been burnt, accounting for 4.74% of the development envelope. Cleared land occupied the greatest proportion of the EGLP survey area, comprising 14.65% of the total area. Within the EGLP development envelope cleared land comprised 25.27% of the area. Eucalypt mallee woodlands with a myrtaceous, predominantly *Melaleuca,* understorey was the most dominant vegetation type mapped (Table 9). Two of the mapped vegetation communities were only mapped within the EGLP development envelope (MW7 & W17). Three vegetation communities were only mapped as occurring within the EGLP vegetation survey buffer, external to the development envelope (H1, W7 & W16). Average species richness across all 214 quadrats was 16.71 ± 0.46 (mean ± s.e.m.). The MW6 vegetation community exhibited the highest species richness (28.20 ± 2.21). The H1 vegetation community, which consisted of small areas to the south of the development envelope, exhibited the lowest species richness (9.00).

Table 9: Area coverage of each vegetation community within the EGLP

VEGETATION COMMUNITY	TOTAL AREA MAPPED (ha)	AREA WITHIN DEVELOPMENT ENVELOPE (ha)	PERCENTAGE OF MAPPED COMMUNITY IN DEVELOPMENT ENVELOPE	PERCENTAGE OF DEVELOPMENT ENVELOPE AREA
H1	2.0006	0.0000	0.0000	0.00
S1	65.0408	26.9788	41.4797	1.35
S2	228.1599	103.8441	45.5137	5.21
S3	105.9603	69.0950	65.2084	3.47
MW6	111.9557	75.2116	67.1797	3.77
MW7	63.0570	63.0570	100.0000	3.16
MW8	2.4874	0.3645	14.6535	0.02
W4	235.8104	26.5148	11.2441	1.33
W5	138.7004	27.0284	19.4869	1.36
W6	82.3411	12.6685	15.3854	0.64
W7	85.1873	0.0000	0.0000	0
W8	259.0385	5.7516	2.2204	0.29
W9	559.0100	285.7927	51.1248	14.34
W10	49.0121	26.2135	53.4827	1.31
W11	600.1110	275.3876	45.8894	13.81
W12	186.7521	87.6212	46.9185	4.40
W13	370.4494	282.3610	76.2212	14.16
W14	61.0361	19.4234	31.8228	0.97
W15	162.9320	7.3956	4.2425	0.37
W16	113.7040	0.0000	0.0000	0
W17	2.7822	2.7872	100.0000	0.14
W18	69.2503	3.8042	5.4933	0.19
W19	68.6240	53.5348	78.0119	2.69
W20	48.2853	16.6620	34.5073	0.84
W21	21.3412	7.0030	32.8143	0.35
W22	66.0345	11.3457	17.1815	0.57
CL	647.3718	503.7477	77.8173	25.27
Totals	4417.8286	1993.5938		100.00

5.6 Regional and Local Comparison of Botanical Values

Some of the vegetation communities defined by Mattiske Consulting within the EGLP survey area showed a similarity with vegetation communities established by the Department of Environment and Conservation in the Northern Forrestania Greenstone Belt (Mt Holland area) (Thompson and Allen 2013) (Appendix L). Thompson and Allen (2013) established 50 quadrats between North Ironcap and the Mt Holland Area. Of these, three were situated 2 km to the north of the EGLP development envelope and eight were situated within 1 km of the EGLP development envelope about the southern borefields access route. Overall there was little similarity between the communities defined by Mattiske Consulting and those reported by Thompson and Allen (2013). The most similar vegetation communities were the

W12/Community 4 pairwise comparison (R = 0.34, p=0.01%), and the W11/Community 4 pairwise comparison (R=0.325, p=0.004%). All other pairwise comparisons had R values in excess of 0.5.

5.7 Condition of the Vegetation

The condition of the vegetation within the EGLP ranged from Excellent to Completely Degraded, according to the Trudgen (1988; Appendix A5) scale. Within the EGLP these areas can be delineated as follows:

Excellent: Areas of vegetation where no exploration or drill tracks encroach, typically at least 20 m distant from tracks.

Good to Very Good: Areas between tracks and drill lines, typically 5 m to 20 m from track/drill line edge, or burnt areas.

Poor: Areas bordering tracks and drill lines.

Very Poor: Old waste mounds and old tracks which have had some past attempts at rehabilitation.

Completely Degraded: Old mine pits and surrounds.

Considering the extent of past mining operations and the degree of impacts associated with tracks and drill lines, the absence of weed species was noteworthy.

6. DISCUSSION

Mattiske Consulting was commissioned in July 2017 by Kidman to undertake a detailed flora and vegetation assessment of the EGLP. The EGLP is situated approximately 105 km south of Southern Cross on the abandoned Bounty Mine site. The flora and vegetation survey area comprised the EGLP development envelope together with a 1 km buffer zone about the main section of the development envelope and 200 m either side of the centre line of the access routes which form a component of the EGLP. That is, the access road from the Marvel Loch- Forrestania Road to the project area, the access road from the project area to the borefields and the access road to the proposed communications tower location. The total area surveyed comprised 4,417.83 ha, of which 1,993.59 ha formed the EGLP development envelope. A reconnaissance survey of a portion of the EGLP was completed by Mattiske Consulting in October and November 2016 (Mattiske Consulting 2017). The detailed survey of the EGLP was completed in September of 2017.

Rainfall in the months preceding both the 2016 and 2017 surveys was close to average (Figure 3) for the area. The majority of flora were either flowering or were nearing the end of their flowering period during the surveys. This afforded a good opportunity to collect excellent specimens to enable accurate identifications. Annual species represented 9.48% of all taxa recorded, and included a number of orchid species. The surveys of the EGLP have taken place over three individual field visits between the early and late spring periods (Table 1). A section of the eastern portion of the EGLP, predominantly outside the development envelope was the subject of a fire in February 2105. The range of annual species recorded, and the ability to record a large proportion of species in flower indicate that the timing of the surveys has been good. In addition, an estimated 84.38% of the flora potentially present have been collected (Figure 10). A review of the potential constraints associated with these surveys (Table 7) determined that the surveys were not subject to constraints that would adversely affect the outcome of the surveys nor the conclusions formed from the results. Consequently, it is reasonable to conclude that the area has been adequately surveyed.

Flora

A total of 369 vascular plant taxa which are representative of 140 genera and 49 families were recorded within the EGLP. The majority of taxa recorded were representative of the Myrtaceae (73 taxa), Fabaceae (48 taxa), Proteaceae (42 taxa), Asteraceae (19 taxa), Rutaceae (17 taxa), and Ericaceae (11 taxa) families. The majority of the taxa recorded were widespread both locally and more broadly within the associated biogeographical subregion.

One threatened flora taxon pursuant to Schedule 1 of the *Wildlife Conservation Act 1950* and as listed by the WAH (1998-) was recorded within the EGLP survey area. This taxon was *Banksia sphaerocarpa* subsp. *dolichostyla* (T). *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is listed as vulnerable, pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* and as listed by the DotEE (2017a). A total of 279 individuals of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) were recorded within the EGLP survey area. Ten priority flora taxa, as listed by WAH (1998-), were recorded within the EGLP. The ten priority flora recorded were: *Acacia undosa* (P3), *Brachyloma stenolobum* (P1), *Chorizema circinale* (P3), *Daviesia sarissa* subsp. *redacta* (P2), *Grevillea lissopleura* (P1), *Grevillea marriottii* (P1), *Hakea pendens* (P3), *Labichea rossii* (P1), *Olearia laciniifolia* (P2), and *Orianthera exilis* (P2).

With the exception of *Daviesia sarissa* subsp. *redacta* (P2) and *Olearia laciniifolia* (P2), all the threatened and priority taxa were recorded in the desktop assessment as having a potential to occur in the survey area. The recording of *Daviesia sarissa* subsp. *redacta* (P2) at the EGLP represents an approximately 150 km southern extension to its presently known locations, which lie between Yellowdine and the Boorabbin Nature reserve (WAH 1998-).

A number of new populations of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) were identified during the September 2017 survey, predominantly in the western and southern areas of the vegetation survey

buffer. These are indicated on the vegetation maps (Appendix I). The distribution of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) populations which were known prior to the present survey (Figure 8) suggests that the distribution of this species has not been systematically investigated to date, as the distribution of plants tends to be associated with either existing roads, tracks or on the edges of the airstrip. Similarly, some of the data provided to Mattiske Consulting, sourced from Native Vegetation Solutions (2017), which was a survey for *Banksia sphaerocarpa* subsp. *dolichostyla* (T) tends to show plant populations primarily associated with existing tracks (Appendix I). In our view, the recording of the locations and distribution of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) has not been undertaken in a systematic manner, and it is likely that both the numbers of plants in identified populations and their spatial distribution is underrepresented in the local and regional context. Based on the information presented in the desktop assessment and data recorded during the present survey and that of Native Vegetation Solutions (2017), the distribution of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is localized in the region of Mt Holland. This in part is likely to be due there not having been a more wide-ranging search for this taxon in suitable habitats.

In terms of the priority flora recorded, with the exception of *Hakea pendens* (P3), the priority taxa were recorded infrequently and in low numbers (Appendix G). Two of the priority flora recorded were specifically associated with defined vegetation communities. These were *Grevillea lissopleura* (P1) and *Hakea pendens* (P3). *Grevillea lissopleura* (P1) was specifically associated with the H1 vegetation community. This heath community was only recorded in the vegetation survey buffer to the south of the development envelope (Appendix I). Whilst only 2 records of this taxon are reported (Appendix G), this taxon was identified from specimens collected in the field. Data recorded in the field demonstrate that this taxon is likely to be present in high numbers in the H1 community as it comprised 5% of the foliage cover of the survey quadrat in that community. Given that the H1 community is situated external to the EGLP development envelope, there are no current threats to this taxon. *Hakea pendens* (P3) was recorded occasionally, and in low numbers, at a number of locations across the EGLP. One large population of this taxon forms the W17 vegetation community (Appendix G) on the eastern edge of the EGLP development envelope on a lateritic hill. Forty-one individuals of this taxon were recorded within the survey quadrat, and represented 7.5% of the foliage cover of the quadrat. Opportunistic recordings of this taxon in the vicinity (Appendix G) of the survey quadrat recorded a further 163 individuals. Observations in the field indicate that this is only a small portion of the population present. Whilst this taxon has a relatively lower priority status, given the density of *Hakea pendens* (P3) present, we would recommend that this area be left undisturbed.

One priority taxon, *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1) was listed as a new species by the WAH in January 2018, based on material collected during the 2016 survey of the Earl Grey prospect (MCPL 2017). This taxon was recorded at 36 locations across a variety of vegetation communities in the EGLP (Appendix I), with 13 of the recording quadrats being situated within the EGLP development envelope and 23 situated within the vegetation survey buffer area. No studies on the population or distribution of this taxon have been undertaken, either locally or regionally. Given that it has been recorded within the EGLP development envelope there are likely to be some impacts by mine development. However, given that this taxon was recorded at survey quadrats both within the EGLP development envelope and within the vegetation survey buffer, it is likely to be locally common, and hence impacts may be low. Its regional distribution is unknown at this time.

Four taxa of significant interest were recorded during in the EGLP. These were *Acacia* sp. 1, *Acacia* sp.2, *Eremophila* sp. aff. *verticillata,* and *Hibbertia* aff. *oligantha.* Initially, advice from the WAH (M. Hislop pers. comm.) indicates that all four taxa would likely be undescribed species. B. Maslin (the *Acacia* specialist at the WAH) confirmed that the two *Acacia* species were undescribed and novel species. These *Acacia* species were recorded outside the development area. *Eremophila* sp. aff. *verticillata* is potentially related to the threatened taxon *Eremophila verticillata*, and will be subject to further examination by the WAH (M. Hislop pers. comm). *Hibbertia* aff. *oligantha* will similarly be the subject of further taxonomic

assessment. Both *Eremophila* sp. aff. *verticillata,* and *Hibbertia* aff. *Oligantha* were only recorded within the vegetation survey buffer area and not within the EGLP development envelope.

Only one introduced flora taxon was recorded in the EGLP during the 2016 reconnaissance survey (Mattiske Consulting 2017). This was **Centaurium tenuiflorum*, an introduced species which is listed as Permitted (s11) pursuant to the BAM Act according to the DAFWA (2017). Given the extent of disturbance, in terms of drill tracks, old mine pits and waste mounds, it is notable that more introduces species were not recorded.

Vegetation

Twenty-six vegetation communities were delineated and mapped across the EGLP survey area. The vegetation communities were, in general, either eucalypt woodlands with an understorey of *Melaleuca* shrubs or *Allocasuarina* dominated shrublands. There may be some justification in merging some of the eucalypt woodland communities. The difference between these was often determined by either the dominance of a particular species of eucalypt or the presence of specific understorey species. In addition, further differences in woodland structure were the result of the presence of recent (approximately 2.5 year old) fire burnt areas within the EGLP. The identification of some of the species in these areas was problematic due to the absence of fertile material to enable accurate identification. Additionally, there tended to be a suite of post fire recovery shrubs and herbs which are not typically present in unburnt woodlands. Notwithstanding these issues, the woodlands mapped were typical, both in terms of structure and species composition to those mapped in other surveys in the area (Craig 2006, Thompson & Allen 2013, Native vegetation Solutions 2014, 2016a) as well as those described historically by Beard (1972, 1990). The vegetation mapped in the EGLP was also more broadly represented (Western Wildlife 2017). Consequently, impacts resulting from mine development would have a minimal impact on the vegetation present given that the eucalypt woodlands and species present are well represented both at the local and regional scale. In addition, the historical clearing in the EGLP from past mining activities will reduce the degree of impacts to undisturbed vegetation. Within the EGLP development envelope, 25.27% of the area had been cleared. In general terms, proposed mine development will occur in these areas, so that overall impacts to the native vegetation should be minimal. Actual impact areas were not available to Mattiske Consulting to quantify these potential impacts in this report. As stated previously, we would recommend avoiding clearing of either the H1 of W17 vegetation communities as these communities host priority flora. The H1 community is situated externally to the EGLP development envelope and therefore would not be impacted by mining activities. The W17 community is situated on the eastern boundary of the EGLP development envelope. This community is host to a large population of *Hakea pendens* (P3). Whilst this taxon has a lower priority ranking, that there is potentially a large population of this taxon present, it therefore represents an important local population of this species which should preferably be left undisturbed.

The EGLP development envelope is partially situated within the buffer of the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (banded ironstone), a Priority 3 ecological community (Figure 7). Gibson (2004a) established a number of survey quadrats on the Middle, and South Ironcap, Digger Rock and Hatter Hill, as part of a series of detailed floristic studies of the ranges of the Eastern Goldfields. The survey quadrats established by Gibson (2004a) were principally sited on skeletal soils derived from banded ironstone and massive laterites, or on deeper soils derived from greenstone or decomposing laterites (Gibson 2004a). Gibson delineated four principal vegetation community types:

Community 1: Species rich shrubland or mallee shrubland on massive outcrops along the Middle Ironcap, South Ironcap, Digger Rock and Hatter Hill);

Community 2: Mallee shrublands or *Allocasuarina* thickets found on massive laterites;

Community 3: Eucalypt woodlands dominated or co-dominated by *Eucalyptus urna* and *Eucalyptus salubris* occurring on colluvial deposits on the flats below the outcrops or on the broad flat ridges along the ranges, with an understorey dominated by *Melaleuca* spp.; and

Community 4: Species poor mallee community generally dominated by *Eucalyptus calycogona* with large emergent *Eucalyptus salmonophloia* on small colluvial flats in the ranges.

Banded ironstone formations or any form of outcropping was not present within the EGLP development envelope. The terrain of the EGLP was gently undulating flats with occasional low rises, none of which exhibited any outcropping.

More recently, Thompson and Allen (2013) assessed the vegetation at 50 quadrats which were established between North Ironcap and the Mt Holland area. Eleven these quadrats are both within the buffer of the Ironcap Hills Vegetation Complexes, and within 2 km of the present EGLP vegetation survey area. Based on the vegetation community descriptions of Thompson and Allen (2013), Mattiske Consulting vegetation community W14 has a close descriptive resemblance to Thompson and Allen's (2013) Community 8. However this was not borne out by a statistical comparison (ANOSIM) undertaken between the communities defined by Thompson & Allen (2013). The ANOSIM analysis (Appendix L) demonstrated that Mattiske Consulting communities W11 and W12 were most statistically similar to Thompson and Allen's (2013) Community 4 (66% and 68% respectively). All other pairwise comparisons between the respective vegetation communities defined demonstrated a high level of statistical dissimilarity. Compared to the species recorded by Mattiske Consulting during the survey of the EGLP survey area, of the 305 taxa recorded by Thompson and Allen (2013), 91 species were not recorded by Mattiske Consulting. This is likely due to the fact that Mattiske Consulting quadrats were predominantly situated on flat terrain comprising sand or sandy clay loam soils with little evidence of any lateritic material on the surface. In contrast, Thompson and Allen's (2013) quadrats were substantially situated on upland locations, often lateritic, or basaltic or with banded ironstone fragments. As previously mentioned Mattiske Consulting vegetation community W14 had a close descriptive resemblance to Thompson and Allen's (2013) Community 8. The lack of statistical support for this is likely due to many of the quadrats established in the W14 community having been fire burnt approximately 2.5 years ago. Consequently whilst many of the dominant perennial species were descriptively similar to Thompson and Allen's (2013) Community 8, there was a post fire succession of species present which statistically contributed to the demonstrated dissimilarity between the communities.

Whilst the above listed community types, from both Gibson (2004a) and Thompson & Allen (2013) are not necessarily the only vegetation types which would be associated with the Ironcap Hills Vegetation Complexes (P3), the absence of most of the listed communities within the EGLP development envelope, and associated landforms, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). That many species are common between the present survey and that of Thompson & Allen (2013) demonstrates that, conservation significant taxa notwithstanding, the species recorded in the present survey are reasonably widely distributed in the region. Consequently it is likely that the development of the EGLP would not have major adverse effects in relation to the vegetation present. Given that much of the EGLP has been cleared as a result of past mining activities, and that Kidman is likely to make use of existing cleared areas for infrastructure, impacts to the local vegetation can be minimized.

7. CONCLUSION AND RECOMMENDATIONS

Overall, the vegetation communities mapped and species recorded in the EGLP were consistent with the historical mapping of Beard (1972, 1990) and the more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016a). The majority of the EGLP is situated on sandy, sandy clay or clay loam flats and gentle slopes supporting

Eucalyptus mallee woodlands over *Melaleuca* shrublands, interspersed with dense *Allocasuarina* scrub. No banded ironstone formations or vegetation associated with such formations was identified during the survey of the EGLP. Given the number of novel taxa recorded during the survey, which current advice suggests may represent undescribed taxa, it would be reasonable to postulate that the area about the EGLP is, from a floristic standpoint, under-surveyed. Further surveys would likely uncover more undescribed flora taxa.

Populations of *Banksia sphaerocarpa* var. *dolichostyla* (T) should be left undisturbed, with a minimum 50m buffer between populations of this taxon and any proposed infrastructure. Three populations of this taxon have the potential to be impacted by development within the EGLP. These are the small population on the access road from the Marvel Loch- Forrestania Road, the population at the southern end of the airstrip and the population located to the east of the main ore body. The more southern populations of this taxon are unlikely to be disturbed by planned developments at the EGLP.

With the exception of the population of *Hakea pendens* (P3) associated with the W17 vegetation community, the other priority taxa recorded were recorded infrequently and were not specifically associated with a particular vegetation community. Some of these taxa, especially *Microcorys* sp. Mt. Holland (D Angus DA 2397) (P1), have the potential to be impacted by development of the EGLP. However, given that this taxon was recorded widely both within and without the EGLP development envelope, impacts may be minimal. The Priority 1 taxon, *Grevillea lissopleura*, which was specifically associated with the H1 community would not be affected by development as it is situated externally to the south of the development envelope. With the exceptions of the H1 and W17 vegetation communities, none of the vegetation communities defined within the EGLP represents vegetation which could be classified as unique or restricted in the region.

Four taxa of significant interest were recorded during in the EGLP. These were *Acacia* sp. 1, *Acacia* sp.2, *Eremophila* sp. aff. *verticillata,* and *Hibbertia* aff. *oligantha.* Further investigations are required to clarify the local and regional extent of these species. Whilst some recent studies have defined locations in relation to the proposed impact areas further field studies may clarify the extent of these taxa further.

Whilst the EGLP development envelope falls within the buffer of the Ironcap Hills Vegetation Complexes (P3) PEC, none of the landforms, nor the corresponding species communities associated with this PEC were recorded within the EGLP development envelope. Cleared land within the EGLP development envelope, accounted for 25.27% of the area. Consequently, the high degree of existing disturbance, together with the indicated aim of the proponent to site infrastructure, wherever possible, on currently disturbed lands should minimize impacts to the local vegetation.

The principal issues with respect to the flora and vegetation surveyed is in relation to the presence of *Banksia sphaerocarpa* var. *dolichostyla* (T) both within and external to the EGLP, the Priority flora species and the several undescribed species. It would be appropriate, in the event of mine development, to put in place a management plan to minimize impacts to the threatened, priority and undescribed flora species and the associated vegetation. The latter would be facilitated by some targeted searching for some of the species outside the project area. As little is known on some of the flora species a program over several seasons may assist in clarifyng the status and spatial extent of some of the flora species of interest.

8. ACKNOWLEDGEMENTS

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9. PERSONNEL

The following Mattiske Consulting Pty Ltd personnel were involved in this project:

NAME	POSITION	SURVEY INVOLVEMENT	FLORA COLLECTION PERMIT
Dr E. M. Mattiske	Managing Director & Principal Ecologist	planning, management & reporting	N/A
Mr D. Angus	Senior Botanist	fieldwork, data analysis, plant identifications, mapping, report preparation	SL011706 3-1617
Dr S. Ruoss	Experienced Botanist	fieldwork	SL011718
Mr B. Ellery	Experienced Botanist / Taxonomist	fieldwork, plant identifications	N/A
Ms. M. van Weiss	Experienced Botanist	fieldwork	N/A
Mr A. Barrett	Experienced Botanist	fieldwork	SL011707
Ms. F. Martin	Experienced Botanist	plant identifications	N/A

10. REFERENCES

Alpin, T.E.H. (1979)
The Flora. In Environment and Science. Editor B.J. O'Brien, University of Western Australia Press, Perth, Western Australia.

Beard, J.S. (1969)
The vegetation of the Boorabbin and Lake Johnstone areas, Western Australia. Proc. Linn. Soc. NSW 93: 239-269.

Beard J.S. (1972)
Vegetation survey of Western Australia. The Vegetation of the Hyden Area, Western Australia. Map and explanatory memoir. 1:250,000 series. Vegmap Publications, Sydney.

Beard, J.S. (1990)
Plant Life of Western Australia. Kangaroo Press, Kenthurst NSW.

Beecham, B. (2001)
Avon Wheatbelt 1 (AW1 - Ancient Drainage subregion). In: *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002.* Western Australian Government Department of Environment and Conservation, Perth, Western Australia.

Beecham, B. and Danks, A. (2001)
Mallee 2 (MAL2 - Western Mallee subregion). In: *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002.* Western Australian Government Department of Environment and Conservation, Perth, Western Australia.

Biodiversity Conservation Act 2016 (WA)

Biosecurity and Agriculture Management Act 2007 (WA)

Biosecurity and Agriculture Management Regulations 2013 (WA)

Blueprint Environmental Strategies (2017)
Targeted Surveys for Threatened Flora Species - Banksia sphaerocarpa var. dolichostyla. Summary Report. Earl Grey Lithium Project. Unpublished report prepared for Kidman Resources Limited, May 2017.

Bureau of Meteorology (2017)
Climate averages for specific sites. Accessed 27th November 2017. <http://www.bom.gov.au/climate/data/>

Chao, A. (2004)
Species richness estimation. In Balakrisnan, N., Read, C.B. and Vidakovic, B, eds., *Encyclopaedia of Statistical Sciences*. Wiley, New York.

Clarke, K.R., and Gorley, R.N. (2006)
PRIMER v6: User Manual/Tutorial. PRIMER-E: Plymouth.

Colwell, R.K. (2013)
EstimateS: Statistical estimation of species richness and shared species from samples. Version 9. Persistent URL <purl.oclc.org/estimates>.

Convergent Minerals Limited (2014)
Threatened Flora Management Plan for Banksia sphaerocarpa *var.* dolichostyla*. Mt. Holland Gold Project Blue Vein Operations DRAFT V2.0.*, October 2014.

Cowan, M., Graham, G. and McKenzie, N (2001)
Coolgardie 2 (C002 – Southern Cross Subregion). In: *A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002.* Western Australian Government Department of Environment and Conservation, Perth, Western Australia.

Craig, G.F. (2006)
Bounty *JV - Tenements M77/1080, M77/1065, M77/1066, M77/1067, M77/1068 - Declared Rare and Priority Survey*. Unpublished report prepared for Nickel Australia Limited.

Department of Agriculture and Food Western Australia (2017)
Western Australian Organism List. Accessed 4th August 2017. <https://www.agric.wa.gov.au/bam/western-australian-organism-list-waol>

Department of Environment and Conservation (2013)
Definitions, categories and criteria for threatened and priority ecological communities. Accessed 4th August 2017. <https:// www.dpaw.wa.gov.au/images/plants-animals/threatened-species/definitions_categories_and_criteria_for_threatened_and_priority_ecological_communities.pdf>

Department of Parks and Wildlife (2007-)
NatureMap, Mapping Western Australia's Biodiversity. Accessed 24th November 2016. <http://naturemap.dec.wa.gov.au>

Department of Parks and Wildlife (2017a)
Wildlife Conservation (Rare Flora Notice 2016) 6th January 2017. Accessed 4th August 2017. <https://www.dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/Listings/flora_notice.pdf>

Department of Parks and Wildlife (2017b)
Conservation Codes for Western Australian Flora and Fauna. Accessed 4th August 2017. <https://www. dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/Listings/conservation_code_definitions.pdf>

Department of Parks and Wildlife (2017c)
List of Threatened Ecological Communities (TEC's) endorsed by the Minister for the Environment, 6th October 2016. Accessed 4th August 2017. <https://www.dpaw.wa.gov.au/images/plants-animals/threatened-species/threatened_ecological_communities_endorsed_by_the_minister_october_2016.pdf>

Department of Parks and Wildlife (2017d)
Priority Ecological Communities for Western Australia Version 26 (30th June 2017). Accessed 4th August 2017. <https://www.dpaw.wa.gov.au/images/documents/plants-animals/threatened-species/Listings/priority_ecological_communities_list.pdf >

Department of the Environment and Energy (2017a)
Environment Protection and Biodiversity Conservation Act 1999 List of Threatened Flora. Accessed 4th August 2017. <http://www.environment.gov.au/cgi-bin/sprat/public/publicthreatenedlist.pl?wanted=flora>

Department of the Environment and Energy (2017b)
Environment Protection Biodiversity Conservation Act 1999 List of Threatened Ecological Communities. Accessed 4th August 2017. <http://www.environment.gov.au/cgi-bin/sprat/public/publiclookupcommunities.pl>

Department of the Environment and Energy (2017c)
Protected Matters Search Tool. Accessed 4th August 2017. <https://www.environment.gov.au/epbc/protected-matters-search-tool>

Department of the Environment and Energy (2017d)
Australia's bioregions (IBRA). Accessed 7th August 2017. <http://www.environment.gov.au/topics/land/national-reserve-system/science-maps-and-data/australias-bioregions-ibra>

Department of the Environment and Energy (2017e)
Jilbadji Nature Reserve, Forrestania - Southern Cross Rd, Barker Lake via Marvel Loch, WA, Australia. Accessed 7th August 2017. <http://www.environment.gov.au/cgi-bin/ahdb/search.pl?mode=place_detail;place_id=9790>

Department of the Environment and Energy (2017f)
Weeds of national Significance. Accessed 7th August 2017. <http://www.environment.gov.au/biodiversity/invasive/weeds/weeds/lists/wons.html>

Environmental Protection Authority (2016a)
Environmental Factor Guideline: Flora and Vegetation. EPA, Western Australia.

Environmental Protection Authority (2016b)
Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment. EPA, Western Australia.

Environmental Protection Act 1986 (WA)

Environment Protection and Biodiversity Conservation Act 1999 (Cth)

Executive Steering Committee for Australian Vegetation Information (ESCAVI) (2003)
Australian Vegetation Attribute Manual: National Vegetation Information System, Version 6.0. Department of the Environment and Heritage, Canberra.

Gibson, N. (2004a)
Flora and vegetation of the Eastern Goldfield Ranges, Part 7: Middle and South Ironcap, Digger Rock and Hatter Hill. Journal of the Royal Society of Western Australia 87: 49-62.

Gibson, N. (2004b)
Flora and vegetation of the Eastern Goldfield Ranges, Part 6: Mt Manning Range. Journal of the Royal Society of Western Australia 87: 35-47.

Gibson, N. and Lyons M.N. (1998a)
Flora and vegetation of the Eastern Goldfield Ranges, Part 2: Bremer Range. Journal of the Royal Society of Western Australia 81: 107-117.

Gibson, N. and Lyons M.N. (1998b)
Flora and vegetation of the Eastern Goldfield Ranges, Part 3: Parker Range. Journal of the Royal Society of Western Australia 81: 119-129.

Gibson, N. and Lyons M.N. (2001a)
Flora and vegetation of the Eastern Goldfield Ranges, Part 4: Highclere Hills. Journal of the Royal Society of Western Australia 84: 71-81.

Gibson, N. and Lyons M.N. (2001b)
Flora and vegetation of the Eastern Goldfield Ranges, Part 5: Hunt Range, Yendilberin and Watt Hills. Journal of the Royal Society of Western Australia 84: 129-142.

Gibson, N., Lyons, M.N. and Lepschi, B.J. (1997)
Flora and vegetation of the Eastern Goldfield Ranges, Part 1: Helena and Aurora Range. CALMScience 2: 231-246.

Government of Western Australia (2016)
2016 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of October 2016. WA Department of Parks and Wildlife, Perth.
< https://www2.landgate.wa.gov.au/web/guest/downloader>

Hopkins, A.J.M., Beeston, G.R. & Shepherd, D.P. (2001)
A database on the vegetation of Western Australia, stage 1, Technical Report No 251 (in press). Department of Agriculture.

Hussey, B.M.J., Keighery, G.J., Dodd, J., Lloyd S.G. and Cousens, R.D. (2007)
Western Weeds: a guide to the weeds of Western Australia (Second Edition). The Weeds Society of Western Australia, Perth.

Mattiske Consulting Pty Ltd (2016)
Flora and Vegetation of the Van Uden Prospect. Unpublished report prepared for Kidman resources Limited, November 2016.

Mattiske Consulting Pty Ltd (2017)
Flora and Vegetation of the Earl Grey, Irish Breakfast and prince of Wales Prospects, Mt Holland Project. Unpublished report prepared for Kidman resources Limited, April 2017.

Mott, J.J. (1972)
Germination studies on some annual species from an arid region of Western Australia. Journal of Ecology 60, 293-304.

Mott, J.J. (1973)
Temporal and spatial distribution of an annual flora in an arid region of Western Australia. Tropical Grasslands 7, 89-97.

Myers, N., Mittermeier R. A., Mittermeier, C. G., da Fonseca, G. A. B., and Kent, J. (2000)
Biodiversity hotspots for conservation priorities. Nature 403, 853-858.

Native Vegetation Solutions (2014)
Level 1 Flora and Vegetation Survey of the Proposed Blue Vein Mine Mt. Holland Operation (Tenement M77/1065). Unpublished report prepared for Convergent Minerals Limited, September 2014.

Native Vegetation Solutions (2016a)
Level 1 Flora and Vegetation Survey of the Proposed Initial Cheritons and Texas Exploration Drill Lines- Jilbadji Nature Reserve Mt Holland Operation (Tenements E77/2111 & E77/2244). Unpublished draft report prepared for Kidman Resources Limited, August 2016

Native Vegetation Solutions (2016b)
Threatened flora targeted survey for Kidman Resources Ltd – Mt Holland Gold project, Earl Grey Prospect. Unpublished memorandum prepared for Kidman Resources Limited, 16th September 2016.

Native Vegetation Solutions (2017)
Targeted search of threatened flora for Kidman Resources Limited – Mt Holland Gold Project. Unpublished memorandum prepared for Kidman resources Limited, October 2017.

Newbey K.R. (1988)
Physical Environment In: *The Biological Survey of the Eastern Goldfields of Western Australia. Part 4. Lake Johnson-Hyden Study Area.* Records of the Western Australian Museum Supplement 30: 7–16.

Newbey K.R. and Hnatiuk R.J. (1988)
Vegetation and Flora In: *The Biological Survey of the Eastern Goldfields of Western Australia. Part 4. Lake Johnson-Hyden Study Area.* Records of the Western Australian Museum Supplement 30: 17–43.

Shepherd, D.P., Beeston, G.R., Hopkins, A.J.M. (2001)
Native Vegetation in Western Australia, Technical Report 249. Department of Agriculture, Western Australia, South Perth.

Specht, R.L. (1970)
Vegetation. In Leeper, G.W. ed., *The Australian Environment*. 4th ed. Melbourne.

Thackway, R. and Cresswell, I. D. (1995)
An interim biogeographic regionalisation for Australia: a framework for establishing the national system of reserves. Australian Nature Conservation Agency, Canberra, Australian Capital Territory.

Thompson, W.A and Allen, J. (2013)
Flora and vegetation of greenstone formations of the Yilgarn Craton, the northern Forrestania Greenstone Belt (Mount Holland area). Conservation Science (WA)

Tille, P. (2006)
Soil-landscapes of Western Australia's Rangelands and Arid Interior, Resource Management Technical Report 313. Department of Agriculture, W. Aust. 8(3): 277-294.

Trudgen, M.E. (1988)
A Report on the Flora and Vegetation of the Port Kennedy Area. Unpublished report prepared for Bowman Bishaw and Associates, West Perth.

Western Australian Herbarium (1998-)
FloraBase - the Western Australian Flora. Department of Parks and Wildlife. Accessed 4th August 2017.
<https://florabase.dpaw.wa.gov.au/>

Western Wildlife (2017)
Mt Holland Project: Earl Grey, Irish Breakfast, Prince of Wales, Van Uden. Level 2 Vertebrate Fauna Survey and Targeted Chuditch Survey 2016 - 2017. Unpublished Report to Kidman Resources Limited

Wildlife Conservation Act 1950 (WA)

APPENDIX B: COORDINATES DELINEATING THE BOUNDARY OF THE EARL GREY LITHIUM PROJECT AND VEGETATION SURVEY AREA

EARL GREY LITHIUM PROJECT DEVELOPMENT ENVELOPE

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
1	758649	6447712
2	761151	6447652
3	761138	6447117
4	761134	6446977
5	761468	6446968
6	762194	6446954
7	762199	6446270
8	762899	6446249
9	762898	6445687
10	763593	6445678
11	763594	6444897
12	762906	6444899
13	762916	6443895
14	762916	6442772
15	763047	6442401
16	763044	6441465
17	763019	6440491
18	763076	6439861
19	763127	6439524
20	763155	6439340
21	763187	6439133
22	763430	6438230
23	763485	6437574
24	763570	6436550
25	763980	6436000
26	763800	6435800
27	763719	6435804
28	763669	6435807
29	763663	6435807
30	763649	6436069
31	763490	6436293
32	763385	6436750
33	763316	6436901
34	763310	6437511
35	763286	6437639
36	763307	6437760
37	763318	6438117
38	763185	6438409
39	763160	6438648
40	763085	6438900

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
41	763038	6439453
42	763027	6439506
43	763000	6439900
44	762949	6440492
45	762980	6441461
46	762966	6442338
47	762855	6442587
48	762226	6442586
49	761825	6442583
50	761825	6442608
51	761621	6442580
52	761621	6443156
53	761439	6443137
54	761195	6443102
55	760898	6442870
56	760346	6442862
57	759353	6442850
58	759334	6442850
59	759325	6444273
60	758601	6444282
61	758613	6444929
62	756872	6444925
63	754220	6445835
64	752964	6445518
65	752918	6445525
66	752763	6445489
67	752755	6445505
68	752873	6445532
69	752735	6445552
70	752709	6445599
71	752963	6445570
72	754222	6445888
73	756880	6444975
74	758614	6444980
75	758649	6447712

APPENDIX B: COORDINATES DELINEATING THE BOUNDARY OF THE EARL GREY LITHIUM PROJECT AND VEGETATION SURVEY AREA

EARL GREY LITHIUM PROJECT DEVELOPMENT ENVELOPE - COMMUNICATIONS TOWER

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
1	757706	6448516
2	757872	6448511
3	757868	6448367
4	757798	6448368
5	757834	6444978
6	757816	6444978
7	757775	6448368
8	757702	6448370
9	757706	6448516

EARL GREY LITHIUM PROJECT VEGETATION SURVEY BOUNDARY

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
1	752656	6445492
2	752647	6445504
3	752621	6445551
4	752611	6445580
5	752610	6445611
6	752618	6445641
7	752636	6445667
8	752660	6445686
9	752689	6445697
10	752720	6445698
11	752956	6445671
12	754198	6445985
13	754226	6445988
14	754254	6445983
15	756897	6445075
16	757615	6445077
17	757649	6447725
18	757681	6447907
19	757676	6448275
20	757669	6448276
21	757641	6448291
22	757620	6448314
23	757606	6448342
24	757602	6448373
25	757606	6448518
26	757611	6448549
27	757626	6448576
28	757649	6448598
29	757677	6448611
30	757708	6448615
31	757875	6448611
32	757905	6448606
33	757933	6448591
34	757955	6448568
35	757968	6448540
36	757972	6448509
37	757970	6448429
38	758077	6448532
39	758360	6448669
40	758673	6448711
41	761175	6448652
42	761483	6448596
43	761758	6448447
44	761974	6448220
45	762101	6447956
46	762214	6447954
47	762517	6447900
48	762789	6447757
49	763005	6447539
50	763144	6447264
51	763154	6447206
52	763231	6447192
53	763502	6447047
54	763716	6446826
55	763806	6446644
56	763912	6446626
57	764187	6446483
58	764405	6446262
59	764545	6445985
60	764593	6445679

APPENDIX B: COORDINATES DELINEATING THE BOUNDARY OF THE EARL GREY LITHIUM PROJECT AND VEGETATION SURVEY AREA

EARL GREY LITHIUM PROJECT VEGETATION SURVEY BOUNDARY

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
61	764594	6444898
62	764545	6444588
63	764403	6444309
64	764181	6444087
65	763916	6443953
66	763916	6443905
67	763916	6443895
68	763916	6442772
69	763867	6442463
70	763807	6442278
71	763665	6442000
72	763445	6441779
73	763167	6441637
74	763144	6441633
75	763143	6441454
76	763143	6441452
77	763132	6441028
78	763119	6440494
79	763175	6439873
80	763285	6439154
81	763527	6438256
82	763530	6438238
83	763667	6436587
84	764060	6436060
85	764076	6436029
86	764080	6435995
87	764073	6435962
88	764054	6435933
89	763874	6435733
90	763852	6435714
91	763824	6435703
92	763795	6435700
93	763658	6435707
94	763629	6435713
95	763603	6435727
96	763583	6435747
97	763569	6435773
98	763563	6435802
99	763551	6436035

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
100	763408	6436235
101	763393	6436271
102	763289	6436717
103	763225	6436860
104	763216	6436900
105	763210	6437502
106	763188	6437621
107	763188	6437656
108	763207	6437770
109	763218	6438097
110	763094	6438367
111	763086	6438398
112	763062	6438628
113	762989	6438871
114	762985	6438892
115	762939	6439439
116	762929	6439486
117	762927	6439500
118	762909	6439762
119	762903	6439852
120	762897	6439929
121	762849	6440483
122	762849	6440495
123	762872	6441205
124	762877	6441395
125	762877	6441396
126	762880	6441462
127	762878	6441591
128	762859	6441587
129	762231	6441586
130	761832	6441583
131	761773	6441592
132	761759	6441590
133	761419	6441601
134	761102	6441725
135	760932	6441874
136	760911	6441870
137	759347	6441850
138	759036	6441895

APPENDIX B: COORDINATES DELINEATING THE BOUNDARY OF THE EARL GREY LITHIUM PROJECT AND VEGETATION SURVEY AREA

EARL GREY LITHIUM PROJECT VEGETATION SURVEY BOUNDARY

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
139	758755	6442035
140	758531	6442255
141	758386	6442533
142	758334	6442843
143	758331	6443326
144	758279	6443335
145	758001	6443481
146	757782	6443707
147	757644	6443989
148	757601	6444300
149	757610	6444827
150	756872	6444825
151	756840	6444830

WAYPOINT	LOCATION (MGA94, ZONE 50)	
	EASTING (mE)	NORTHING (mN)
152	754216	6445731
153	752988	6445421
154	752949	6445419
155	752922	6445423
156	752786	6445392
157	752753	6445390
158	752722	6445398
159	752695	6445416
160	752675	6445442
161	752667	6445458
162	752656	6445487
163	752656	6445492

APPENDIX C: LOCATIONS OF VEGETATION SURVEY QUADRATS ESTABLISHED IN THE EARL GREY LITHIUM PROJECT

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG001	752678	6445585
EG002	752887	6445452
EG003	753061	6445643
EG004	753405	6445709
EG005	753507	6445602
EG006	753648	6445650
EG007	753852	6445670
EG008	754028	6445939
EG009	754445	6445708
EG010	755078	6445546
EG011	755525	6445344
EG012	755664	6445438
EG013	755984	6445325
EG014	756557	6445128
EG015	756678	6444939
EG016	756802	6444912
EG017	757137	6445013
EG018	759069	6448614
EG019	759611	6448599
EG020	760421	6448471
EG021	757712	6448452
EG022	760135	6448399
EG023	759631	6448349
EG024	761202	6448338
EG025	761565	6448335
EG026	758371	6448332
EG027	761700	6448327
EG028	758441	6448036
EG029	761309	6447944
EG030	758133	6447899
EG031	758902	6447880
EG032	760203	6447879
EG033	761738	6447861
EG034	762066	6447841
EG035	757893	6447771
EG036	759992	6447698
EG037	761245	6447692
EG038	762447	6447672
EG039	760166	6447657
EG040	762337	6447543
EG041	758947	6447472
EG042	759820	6447449
EG043	760123	6447448

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG044	760725	6447447
EG045	757864	6447379
EG046	760048	6447290
EG047	761309	6447284
EG048	762534	6447255
EG049	758957	6447250
EG050	761532	6447230
EG051	758019	6447204
EG052	757728	6447008
EG053	760761	6446911
EG054	760285	6446903
EG055	763437	6446902
EG056	763228	6446866
EG057	759410	6446812
EG058	759922	6446785
EG059	758929	6446760
EG060	762151	6446741
EG061	758764	6446732
EG062	761241	6446731
EG063	758324	6446694
EG064	757890	6446649
EG065	759433	6446555
EG066	760814	6446532
EG067	760282	6446520
EG068	763274	6446506
EG069	762692	6446503
EG070	762387	6446457
EG071	764048	6446452
EG072	758855	6446449
EG073	761593	6446441
EG074	758733	6446439
EG075	759742	6446413
EG076	763413	6446390
EG077	760709	6446373
EG078	759000	6446352
EG079	760591	6446311
EG080	759746	6446223
EG081	762880	6446180
EG082	758942	6446162
EG083	760915	6446151
EG084	760023	6446143
EG085	760310	6446136
EG086	758544	6446135

APPENDIX C: LOCATIONS OF VEGETATION SURVEY QUADRATS ESTABLISHED IN THE EARL GREY LITHIUM PROJECT

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG087	761416	6446076
EG088	763159	6446064
EG089	759930	6446062
EG090	763866	6446060
EG091	761569	6446053
EG092	759627	6446047
EG093	757731	6445867
EG094	762817	6445864
EG095	762226	6445845
EG096	759028	6445833
EG097	759653	6445826
EG098	759461	6445823
EG099	763029	6445795
EG100	763873	6445781
EG101	759907	6445769
EG102	758866	6445752
EG103	760777	6445727
EG104	760512	6445695
EG105	761273	6445674
EG106	758334	6445669
EG107	759752	6445636
EG108	759876	6445612
EG109	759160	6445506
EG110	758813	6445504
EG111	760586	6445319
EG112	763782	6445300
EG113	758338	6445292
EG114	764006	6445284
EG115	761251	6445219
EG116	757702	6445192
EG117	759112	6445150
EG118	760811	6445134
EG119	760969	6445134
EG120	758683	6445133
EG121	759074	6445056
EG122	757880	6444847
EG123	760463	6444840
EG124	760626	6444757
EG125	764252	6444703
EG126	758420	6444664
EG127	762869	6444566
EG128	763652	6444566
EG129	761065	6444517

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG130	758736	6444449
EG131	759685	6444421
EG132	758941	6444420
EG133	760801	6444419
EG134	762739	6444349
EG135	764339	6444348
EG136	757898	6444270
EG137	762412	6444151
EG138	757789	6444148
EG139	761461	6444117
EG140	760782	6444103
EG141	761819	6444075
EG142	761210	6444045
EG143	763886	6444045
EG144	759709	6444010
EG145	757927	6443919
EG146	758117	6443916
EG147	760225	6443902
EG148	763625	6443698
EG149	763758	6443668
EG150	760321	6443638
EG151	759401	6443615
EG152	758931	6443558
EG153	762821	6443543
EG154	763548	6443522
EG155	761837	6443520
EG156	759799	6443462
EG157	758331	6443451
EG158	763138	6443448
EG159	762638	6443426
EG160	762763	6443359
EG161	762161	6443321
EG162	759476	6443259
EG163	758385	6443236
EG164	760802	6443220
EG165	763604	6443142
EG166	762681	6443137
EG167	758924	6443130
EG168	763166	6443014
EG169	761114	6442970
EG170	760685	6442915
EG171	761656	6442816
EG172	762414	6442730

APPENDIX C: LOCATIONS OF VEGETATION SURVEY QUADRATS ESTABLISHED IN THE EARL GREY LITHIUM PROJECT

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG173	760868	6442708
EG174	763009	6442662
EG175	758671	6442661
EG176	759104	6442658
EG177	759440	6442368
EG178	762174	6442339
EG179	761900	6442300
EG180	760888	6442257
EG181	761273	6442245
EG182	762558	6442236
EG183	758880	6442224
EG184	759563	6442136
EG185	760739	6442122
EG186	759134	6442117
EG187	760425	6442078
EG188	759912	6442073
EG189	761692	6442046
EG190	763137	6442044
EG191	759583	6441958
EG192	763133	6441946
EG193	761411	6441926

Quadrat	Location (GDA94, Zone 50)	
	Easting (mE)	Northing (mN)
EG194	759085	6441920
EG195	762135	6441838
EG196	762218	6441609
EG197	763072	6441538
EG198	763082	6441081
EG199	762914	6440679
EG200	762933	6440120
EG201	763149	6439944
EG202	763213	6439270
EG203	763008	6439156
EG204	763109	6439100
EG205	763282	6438950
EG206	763157	6438356
EG207	763506	6437840
EG208	763448	6437162
EG209	763287	6436854
EG210	763426	6436539
EG211	763532	6436391
EG212	763850	6436232
EG213	763624	6436135
EG214	763667	6435754

APPENDIX D: VASCULAR PLANT SPECIES RECORDED FROM THE DESKTOP ASSESSMENT AND FROM SURVEYS WITHIN THE EARL GREY LITHIUM PROJECT

Note: * denotes introduced species; P1 - P4 denotes priority taxon (DPaW 2017b, WAH 1998-); BV - Blue Vein Mine (Native Vege
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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Isoetaceae	*Isoetes australis*			x		
	Isoetes caroli			x		
Pteridaceae	*Cheilanthes sieberi* subsp. *sieberi*			x		
Cupressaceae	*Callitris canescens*				x	x
	Callitris preissii	x	x	x		x
	Callitris verrucosa				x	x
	Callitris sp.					x
Juncaginaceae	*Triglochin longicarpa*			x		
Poaceae	*Amphipogon caricinus* var. *caricinus*				x	
	Austrostipa acrociliata			x		
	Austrostipa elegantissima		x	x		
	Austrostipa hemipogon			x	x	x
	Austrostipa ?*juncifolia*					x
	Austrostipa nitida		x			
	Austrostipa scabra			x		
	Austrostipa trichophylla			x	x	x
	Austrostipa sp. Carlingup Road (S. Kern & R. Jasper LCH 18459) (P1)			x		
	Austrostipa sp.					x
	Neurachne alopecuroidea			x	x	
	* *Pentameris airoides* subsp. *airoides*			x		
	* *Rostraria pumila*			x		
	Rytidosperma caespitosum			x		
	Rytidosperma setaceum		x			
	* *Vulpia myuros* forma *myuros*			x		
Cyperaceae	*Gahnia* sp. South West (K.L. Wilson & K. Frank KLW 9266)					x
	Lepidosperma amantiferrum (P1)			x		
	Lepidosperma aff. *amantiferrum*					x
	Lepidosperma diurnum			x	x	x
	Lepidosperma drummondii		x			
	Lepidosperma sanguinolentum		x	x	x	x
	Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)		x	x		x
	Lepidosperma sp.			x	x	x
	Schoenus hexandrus					x
	Schoenus nanus				x	
	?*Schoenus* sp.					x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Centrolepidaceae	*Centrolepis cephaloformis* subsp *cephaloformis*					x
	Centrolepis polygyna				x	
	Centrolepis strigosa subsp. *rupestris*				x	
Asparagaceae	*Arthropodium curvipes*			x		
	Chamaexeros fimbriata				x	x
	Thysanotus manglesianus	x	x	x		
	Thysanotus patersonii			x		
	Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)				x	
	Thysanotus sp.					x
Xanthorrhoeaceae	*Xanthorrhoea nana*					x
Boryaceae	*Borya constricta*			x		
Hemerocallidaceae	*Dianella revoluta*				x	x
	Dianella revoluta var. divaricata		x	x		
Haemodoraceae	*Conostylis bealiana*			x		x
Orchidaceae	*Caladenia brevisura*			x		
	Caladenia microchila			x		
	Caladenia pachychila			x		
	Caladenia sp. Muddarning Hill (S.D. Hopper 4013)			x		
	Diuris picta					x
	Ericksonella saccharata			x		
	Pterostylis mutica					x
	Pterostylis aff. *nana*			x		
	Pterostylis roensis			x		
	Pterostylis sargentii			x		
	Pterostylis sp. inland (A.C. Beauglehole 11880)			x		
	Pterostylis sp.			x		x
	Thelymitra antennifera			x		
	Thelymitra petrophila			x		
Casuarinaceae	*Allocasuarina acutivalvis*			x	x	x
	Allocasuarina acutivalvis subsp. *acutivalvis*	x	x	x	x	
	Allocasuarina campestris	x	x	x	x	x
	Allocasuarina corniculata			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Casuarinaceae	*Allocasuarina helmsii*		x	x		x
(continued)	*Allocasuarina huegeliana*	x				
	Allocasuarina spinosissima			x	x	x
	Allocasuarina sp.					x
Proteaceae	*Adenanthos argyreus*			x		x
	Banksia densa var. Wheatbelt (M. Pieroni s.n. PERTH 04083407)			x		
	Banksia elderiana					x
	Banksia erythrocephala var. *erythrocephala*			x		
	Banksia laevigata					x
	Banksia laevigata subsp *fuscolutea*		x	x	x	x
	Banksia purdieana			x	x	x
	Banksia sphaerocarpa var. *dolichostyla* (T)			x	x	x
	Banksia sp.					x
	Conospermum croniniae			x		
	Conospermum sigmoideum (P2)			x		
	Grevillea acacioides	x				x
	Grevillea acuaria	x	x	x	x	x
	Grevillea biformis subsp. *biformis*			x		
	Grevillea cagiana					x
	Grevillea ?decipiens					x
	Grevillea didymobotrya					x
	Grevillea didymobotrya subsp. *didymobotrya*		x	x	x	
	Grevillea eryngioides			x		
	Grevillea excelsior			x		x
	Grevillea hookeriana subsp. *apiciloba*			x		x
	Grevillea huegelii		x	x	x	x
	Grevillea lissopleura (P1)			x	x	x
	Grevillea lullfitzii (P1)		x			
	Grevillea marriottii (P1)			x		x
	Grevillea nematophylla		x			
	Grevillea neodissecta (P4)			x		
	Grevillea oligantha			x		
	Grevillea oncogyne	x		x		x
	Grevillea pilosa subsp. *redacta* (P3)			x		
	Grevillea pteridifolia		x			
	Grevillea pterosperma		x	x		
	Grevillea shuttleworthiana subsp. *obovata*			x		x
	Grevillea teretifolia		x			
	Grevillea sp.				x	x
	Hakea erecta		x	x	x	x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Proteaceae	*Hakea francisiana*		x			x
(continued)	*Hakea invaginata*				x	x
	Hakea meisneriana			x	x	x
	Hakea minyma				x	x
	Hakea multilineata	x	x	x		
	Hakea newbeyana				x	x
	Hakea pendens (P3)			x	x	x
	Hakea scoparia subsp. *scoparia*	x	x			
	Hakea subsulcata	x		x	x	x
	Hakea sp.					x
	Isopogon gardneri	x		x	x	x
	Isopogon scabriusculus			x		
	Isopogon scabriusculus subsp. *pubifloris*			x		x
	Isopogon scabriusculus subsp. *stenophyllus*				x	
	Persoonia angustiflora			x		
	Persoonia coriacea	x	x	x		
	Persoonia cymbifolia (P3)			x		
	Persoonia helix	x	x	x		x
	Persoonia inconspicua			x		
	Persoonia quinquenervis				x	x
	Persoonia saundersiana			x	x	x
	Persoonia striata					x
	Petrophile divaricata		x			
	Petrophile merrallii					x
	Petrophile seminuda			x		
	Petrophile stricta			x	x	x
	Petrophile sp.					x
	Synaphea interioris			x		x
Santalaceae	*Exocarpos aphyllus*	x	x	x	x	x
	Exocarpos sparteus		x	x		
	Leptomeria preissiana				x	x
	Santalum acuminatum	x	x	x	x	x
	Santalum murrayanum			x		
Olacaceae	*Olax benthamiana*					x
Polygonaceae	*Muehlenbeckia diclina* subsp. *diclina*			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Chenopodiaceae	*Atriplex stipitata*			x		
	Enchylaena tomentosa				x	
	Atriplex sp.					x
	Maireana carnosa					x
	Maireana georgei			x		
	Maireana marginata			x		x
	Maireana radiata					x
	Maireana tomentosa		x			
	Maireana sp.					x
	Rhagodia ?drummondii					x
	Rhagodia preissii subsp. *preissii*			x		x
	Sclerolaena diacantha	x		x		x
	Sclerolaena patenticuspis	x				
	Tecticornia syncarpa			x		
	Tecticornia undulata			x		
Amaranthaceae	*Ptilotus drummondii*			x		
	Ptilotus drummondii var. *minor*				x	
	Ptilotus gaudichaudii				x	
	Ptilotus holosericeus			x		x
	Ptilotus humilis					x
Gyrostemonaceae	*Codonocarpus cotinifolius*		x	x		x
	Gyrostemon racemiger			x		x
Aizoaceae	*Gunniopsis intermedia*			x		
	* *Mesembryanthemum nodiflorum*			x		
	Sarcozona praecox					x
Portulacaceae	*Calandrinia calyptrata*			x		
	Calandrinia eremaea		x	x		x
	Calandrinia granulifera					x
Caryophyllaceae	*Stellaria filiformis*		x	x		
Lauraceae	*Cassytha aurea* var. *hirta*			x		
	Cassytha melantha	x	x	x		
	Cassytha nodiflora	x	x	x		
	Cassytha pomiformis					x
	Cassytha sp.				x	x
Brassicaceae	*Phlegmatospermum drummondii*		x			

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Droseraceae	*Drosera andersoniana*			x		
	Drosera browniana			x		
	Drosera glanduligera			x		x
	Drosera lowriei			x		
	Drosera macrantha subsp. *macrantha*	x	x	x		
	Drosera moorei					x
	Drosera rupicola			x		
	Drosera sp.					x
	*Drosera s*p. (climbing)				x	x
Crassulaceae	*Crassula colligata* subsp. *lamprosperma*			x		
	Crassula colorata					x
	Crassula colorata var. *colorata*				x	
	Crassula exserta			x		
	Crassula sp.					x
Fabaceae	*Acacia acanthaster*		x			
	Acacia acanthoclada subsp. *acanthoclada*	x				x
	Acacia acuminata		x	x	x	x
	Acacia acutata			x		
	Acacia asepala (P2)			x		
	Acacia assimilis					x
	Acacia assimilis subsp. *assimilis*			x	x	x
	Acacia beauverdiana		x	x		
	Acacia binata			x		
	Acacia camptoclada	x		x	x	x
	Acacia castanostegia			x		
	Acacia colletioides		x			x
	Acacia consanguinea					x
	Acacia coolgardiensis			x		
	Acacia deficiens		x	x	x	x
	Acacia densiflora			x		
	Acacia erinacea	x	x	x		x
	Acacia evenulosa		x		x	x
	Acacia fragilis		x			
	Acacia hadrophylla		x	x		
	Acacia hemiteles		x	x		x
	Acacia heteroneura			x		
	Acacia heteroneura var. *heteroneura*			x		
	Acacia heteroneura var. *jutsonii*	x		x	x	x
	Acacia hystrix subsp. *hystrix*	x		x	x	x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Fabaceae	*Acacia intricata*			x		
(continued)	*Acacia jennerae*			x		
	Acacia lanuginophylla (T)			x		
	Acacia leptopetala					x
	Acacia longispinea		x			
	Acacia mackeyana		x		x	x
	Acacia merrallii	x	x	x	x	x
	Acacia multispicata			x		
	Acacia mutabilis subsp. *mutabilis*			x		
	Acacia neurophylla subsp. *erugata*		x			
	Acacia nigripilosa subsp. *nigripilosa*			x		
	Acacia nivea			x		
	Acacia pachypoda			x		
	Acacia poliochroa			x		
	Acacia prainii			x		
	Acacia rostellata			x		
	Acacia sclerophylla var. *sclerophylla*			x		
	Acacia ?sphacelata					x
	Acacia sphacelata subsp. *sphacelata*	x	x		x	x
	Acacia spinosissima			x		x
	Acacia steedmanii					x
	Acacia steedmanii subsp. *steedmanii*		x	x	x	
	Acacia sulcata var. *platyphylla*		x	x		x
	Acacia tetraptera			x	x	x
	Acacia undosa (P3)		x	x	x	x
	Acacia unifissilis			x		
	Acacia verriculum			x		
	Acacia viscifolia			x		
	Acacia yorkrakinensis subsp. Acrita			x	x	x
	Acacia sp.					x
	Acacia sp. 1					x
	Acacia sp. 2					x
	Chorizema circinale (P3)			x		x
	Cullen discolor			x		
	Daviesia aphylla	x	x	x	x	x
	Daviesia argillacea			x	x	x
	Daviesia articulata			x		
	Daviesia grahamii			x		x
	Daviesia newbeyi (P3)			x		
	Daviesia pachyloma			x		
	Daviesia pachyphylla			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Fabaceae	*Daviesia sarissa* subsp. *redacta* (P2)					x
(continued)	*Daviesia scoparia*			x	x	x
	Daviesia sp.					x
	Dillwynia acerosa		x	x	x	x
	Dillwynia divaricata			x		
	Dillwynia uncinata			x		
	Erichsenia uncinata			x		
	Eutaxia lasiocalyx (P2)			x	x	
	Eutaxia neurocalyx			x		
	Eutaxia sp. North Ironcap (P. Armstrong PA 06/898)			x		
	Gastrolobium crassifolium		x			
	Gastrolobium discolor		x			
	Gastrolobium floribundum			x	x	x
	Gastrolobium melanocarpum				x	x
	Gastrolobium spinosum		x	x	x	x
	Gompholobium gompholobioides		x	x		
	Gompholobium hendersonii			x	x	x
	Gompholobium obcordatum			x		
	Jacksonia nematoclada		x		x	x
	Labichea rossii (P1)			x		x
	Leptosema daviesioides			x		x
	Mirbelia microphylla					x
	Phyllota luehmannii					x
	Pultenaea arida			x		
	Senna artemisioides			x		
	Senna artemisioides subsp. ×*artemisioides*	x		x		
	Senna artemisioides subsp. *filifolia*		x	x		x
	Senna stowardii			x		
	Swainsona colutoides			x		
	Templetonia aculeata			x	x	x
	Templetonia battii			x		
	Templetonia sulcata		x			
	Fabaceae sp.					x
Zygophyllaceae	*Zygophyllum glaucum*					x
Rutaceae	*Boronia inornata*	x		x		
	Boronia inornata subsp. *inornata*		x	x		x
	Boronia inornata subsp. *leptophylla*			x		x
	Boronia ternata			x		
	Boronia ternata var. *austrofoliosa*		x			

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Rutaceae	*Boronia ternata* var. *foliosa*			x		x
(continued)	*Boronia ternata* var. *ternata*		x	x		
	Boronia sp.					x
	Drummondita hassellii		x	x	x	x
	Microcybe ambigua				x	x
	Microcybe multiflora					x
	Microcybe multiflora subsp. *multiflora*			x	x	x
	Phebalium filifolium	x	x	x	x	x
	Phebalium lepidotum					x
	Phebalium megaphyllum			x	x	x
	Phebalium obovatum	x				x
	Phebalium tuberculosum	x	x	x	x	x
	Phebalium sp.					x
	Philotheca rhomboidea			x		x
Polygalaceae	*Comesperma drummondii*		x	x		x
	Comesperma volubile		x	x	x	x
Euphorbiaceae	*Bertya dimerostigma*		x	x		x
	Beyeria brevifolia		x			
	Beyeria minor			x		
	Beyeria ?sulcata				x	
	Beyeria sulcata var. *brevipes*		x	x	x	x
	Beyeria sulcata var. *gracilis*			x		x
	Beyeria sp.					x
	Monotaxis grandiflora var. *obtusifolia*					x
Celastraceae	*Psammomoya choretroides*			x		x
	Stackhousia monogyna					x
	Stackhousia muricata			x		x
Sapindaceae	*Dodonaea adenophora*				x	x
	Dodonaea amblyophylla				x	x
	Dodonaea bursariifolia	x	x	x	x	x
	Dodonaea microzyga var. *acrolobata*			x		
	Dodonaea sp.				x	x
	Dodonaea stenozyga	x	x	x	x	x
	Dodonaea ?viscosa					x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Rhamnaceae	*Cryptandra apetala* var. *anomala*			x		
	Cryptandra distigma				x	x
	Cryptandra intonsa					x
	Cryptandra minutifolia subsp. *brevistyla*			x	x	x
	Cryptandra minutifolia subsp. *minutifolia*			x	x	x
	Cryptandra myriantha			x		
	Cryptandra nutans	x	x			
	Cryptandra recurva			x		x
	Cryptandra wilsonii			x	x	x
	Granitites intangendus			x		
	Stenanthemum bremerense (P4)			x		
	Stenanthemum stipulosum		x	x	x	x
	Trymalium elachophyllum				x	x
	Trymalium ?*myrtillus*					x
	Trymalium myrtillus subsp. *myrtillus*			x	x	x
Elaeocarpaceae	*Tetratheca efoliata*		x	x		
Malvaceae	*Commersonia craurophylla*			x		x
	Lasiopetalum ferraricollinum			x		x
	Lawrencia berthae			x		
	Radyera farragei			x		
	Seringia adenogyna (P3)			x		
	Thomasia gardneri (X)			x		
	Thomasia sarotes			x		
	Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)				x	
Dilleniaceae	*Hibbertia ancistrophylla*					x
	Hibbertia eatoniae		x	x		
	Hibbertia exasperata	x		x	x	x
	Hibbertia gracilipes			x	x	x
	Hibbertia oligantha			x		
	Hibbertia aff. *oligantha*				x	x
	Hibbertia psilocarpa		x	x	x	x
	Hibbertia pungens	x				
	Hibbertia rostellata	x		x		x
	Hibbertia stowardii		x		x	x
	Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)				x	

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Violaceae	*Hybanthus epacroides*					x
	Hybanthus floribundus			x		
	Hybanthus floribundus subsp. *floribundus*		x	x		x
Thymelaeaceae	*Pimelea aeruginosa*			x		
	Pimelea angustifolia		x			x
	Pimelea sulphurea					x
Myrtaceae	*Astus subroseus*			x	x	x
	Baeckea elderiana		x	x	x	x
	Baeckea grandibracteata			x		
	Baeckea sp. Blue Haze Mine (P. Armstrong 06/910) (P1)			x		
	Baeckea sp.				x	x
	Beaufortia orbifolia	x		x	x	x
	Beaufortia puberula				x	
	Beaufortia schaueri				x	x
	Calothamnus gilesii			x		x
	Calothamnus quadrifidus					x
	Calothamnus quadrifidus subsp. *seminudus*	x	x	x		
	Calytrix leschenaultii					x
	Calytrix merrelliana			x		
	Calytrix sapphirina			x		
	Chamelaucium ciliatum	x		x		x
	Chamelaucium pauciflorum subsp. *pauciflorum* ms			x		x
	Chamelaucium virgatum			x		x
	Cyathostemon heterantherus		x	x		x
	Darwinia sp. Karonie (K. Newbey 8503)		x	x	x	x
	Darwinia sp. Lake Cobham (K. Newbey 3262)		x	x		
	Ericomyrtus serpyllifolia		x	x		
	Eucalyptus aequioperta			x		
	Eucalyptus alipes			x		
	Eucalyptus arachnaea			x		
	Eucalyptus brachycorys			x		
	Eucalyptus burracoppinensis			x	x	x
	Eucalyptus calycogona	x	x	x		
	Eucalyptus calycogona subsp *calycogona*			x		
	Eucalyptus capillosa			x		
	Eucalyptus capillosa subsp. *capillosa*			x		
	Eucalyptus capillosa subsp. *polyclada*				x	x
	Eucalyptus celastroides			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Myrtaceae	*Eucalyptus concinna*			x		
(continued)	*Eucalyptus cylindriflora*	x		x		x
	Eucalyptus cylindrocarpa			x		x
	Eucalyptus densa subsp densa			x		
	Eucalyptus densa subsp. improcera			x		
	Eucalyptus distuberosa subsp. *distuberosa*			x		
	Eucalyptus eremophila			x	x	x
	Eucalyptus eremophila subsp. *eremophila*	x	x			
	Eucalyptus exigua (P3)			x		
	Eucalyptus extensa			x		x
	Eucalyptus flocktoniae			x		
	Eucalyptus flocktoniae subsp. *flocktoniae*			x	x	x
	Eucalyptus flocktoniae subsp. *hebes*			x		
	Eucalyptus georgei subsp *fulgida* (P4)			x		
	Eucalyptus gracilis			x		x
	Eucalyptus horistes			x		x
	Eucalyptus incerata			x		
	Eucalyptus incrassata				x	x
	Eucalyptus leptopoda subsp. *subluta*		x			
	Eucalyptus livida	x	x	x	x	
	Eucalyptus longicornis			x		x
	Eucalyptus loxophleba subsp *lissophloia*	x		x		
	Eucalyptus loxophleba subsp. *lissophloia*		x			
	Eucalyptus luteola			x		
	Eucalyptus melanoxylon			x		
	Eucalyptus myriadena subsp *myriadena* (P1)			x		
	Eucalyptus neutra			x		
	Eucalyptus oleosa subsp. *oleosa*			x		
	Eucalyptus olivina			x		
	Eucalyptus phenax		x			
	Eucalyptus pileata		x	x		x
	Eucalyptus platycorys	x		x		x
	Eucalyptus polita		x	x		x
	Eucalyptus prolixa		x	x	x	x
	Eucalyptus ravida				x	x
	Eucalyptus rigidula		x	x	x	x
	Eucalyptus salmonophloia	x	x	x		x
	Eucalyptus salubris	x	x	x	x	x
	Eucalyptus sporadica		x			
	Eucalyptus steedmanii (T)			x		
	Eucalyptus subangusta subsp. *subangusta*			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Myrtaceae	*Eucalyptus tenera*			x		
(continued)	*Eucalyptus tenuis*			x		x
	Eucalyptus transcontinentalis			x		
	Eucalyptus urna	x	x	x		x
	Eucalyptus vittata			x		
	Eucalyptus yilgarnensis		x	x		
	Eucalyptus yilgarnensis					x
	Eucalyptus sp.		x		x	x
	Euryomyrtus maidenii		x	x	x	x
	Homalocalyx pulcherrimus			x		
	Leptospermum erubescens	x	x	x	x	x
	Leptospermum fastigiatum				x	x
	Leptospermum roei			x		
	Melaleuca ?acuminata					x
	Melaleuca acuminata subsp *acuminata*	x		x	x	x
	Melaleuca adnata	x	x	x		
	Melaleuca calyptroides			x	x	x
	Melaleuca carrii			x		
	Melaleuca cliffortioides			x	x	x
	Melaleuca condylosa			x		x
	Melaleuca cordata	x	x	x	x	x
	Melaleuca ctenoides				x	
	Melaleuca cucullata	x	x	x		x
	Melaleuca depauperata			x		x
	Melaleuca eleuterostachya	x	x	x	x	x
	Melaleuca elliptica	x	x	x		
	Melaleuca halmaturorum				x	x
	Melaleuca hamata		x	x	x	x
	Melaleuca johnsonii			x	x	x
	Melaleuca lanceolata			x		
	Melaleuca lateriflora	x	x	x	x	x
	Melaleuca laxiflora	x		x	x	x
	Melaleuca pauperiflora subsp. *fastigiata*		x	x	x	
	Melaleuca pauperiflora subsp. *pauperiflora*	x	x	x		x
	Melaleuca ?pentagona				x	
	Melaleuca phoidophylla			x		x
	Melaleuca pungens			x		x
	Melaleuca rigidifolia			x		
	Melaleuca sapientes		x	x		
	Melaleuca scalena			x		
	Melaleuca sheathiana			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Myrtaceae	*Melaleuca societatis*			x		
(continued)	*Melaleuca sparsiflora*			x		x
	Melaleuca spicigera				x	x
	Melaleuca teuthidoides		x	x		x
	Melaleuca tuberculata var. *tuberculata*			x		
	Melaleuca uncinata	x	x			
	Melaleuca villosisepala			x		
	Melaleuca sp.				x	x
	Micromyrtus erichsenii		x	x		x
	Micromyrtus obovata			x		
	Oxymyrrhine plicata (P3)			x		
	Regelia inops			x		
	Rinzia carnosa			x		
	Rinzia sessilis	x	x	x	x	x
	Thryptomene cuspidata			x		
	Thryptomene kochii	x	x	x	x	x
	Verticordia acerosa var. *preissii*			x		
	Verticordia chrysantha				x	x
	Verticordia densiflora var. *cespitosa*			x		
	Verticordia gracilis (P3)			x		
	Verticordia inclusa			x		
	Verticordia mitchelliana subsp. *implexior*			x		
	Verticordia plumosa var. *incrassata*			x		x
	Verticordia roei subsp. *roei*				x	
	Verticordia sieberi var. *sieberi*			x		
	Verticordia stenopetala (P3)			x		
	Verticordia sp.				x	
	Myrtaceae sp.				x	
Haloragaceae	*Glischrocaryon angustifolium*			x		
	Glischrocaryon aureum					x
	Glischrocaryon flavescens			x		
	Glischrocaryon roei		x			
	Glischrocaryon sp.					x
	Haloragis hamata			x		x
	Haloragodendron glandulosum			x		
	Myriophyllum petraeum (P4)			x		
Araliaceae	*Trachymene anisocarpa* var. *anisocarpa*			x		
	Trachymene cyanopetala			x		
	Trachymene pilosa					x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Apiaceae	*Actinotus humilis*			x		
	Chlaenosciadium gardneri			x		
	Daucus glochidiatus			x		
	Platysace maxwellii			x		x
	Platysace sp.					x
Ericaceae	*Acrotriche lancifolia*			x		
	Astroloma serratifolium	x		x	x	
	Brachyloma stenolobum (P1)			x		x
	Conostephium drummondii					x
	Conostephium ?preissii				x	
	Leucopogon cuneifolius			x		x
	Leucopogon hamulosus			x		
	Leucopogon sp. Boorabbin (K.R. Newbey 8374)			x		
	Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)			x	x	x
	Leucopogon sp. Forrestania (G.F. Craig 2386)			x	x	x
	Leucopogon sp. outer wheatbelt (M. Hislop 30)		x	x		x
	Leucopogon sp. Wheatbelt (S Murray 257)			x		
	Leucopogon sp.				x	
	Lysinema pentapetalum			x		x
	Styphelia exserta				x	x
Loganiaceae	*Orianthera exilis* (P2)			x		x
	Orianthera flaviflora			x		
	Orianthera judithiana			x		x
	Orianthera tortuosa					x
Gentianaceae	* *Centaurium tenuiflorum*				x	
Apocynaceae	*Alyxia buxifolia*		x	x		
Convolvulaceae	*Wilsonia humilis*		x	x		x
Boraginaceae	*Halgania andromedifolia*					x
	Halgania erecta			x		
	Halgania lavandulacea			x	x	
	Halgania sp.					x

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Lamiaceae	*Cyanostegia angustifolia*					x
	Dicrastylis capitellata (P1)			x		
	Hemigenia diplanthera			x		
	Hemigenia westringioides			x		x
	Hemiphora elderi			x		
	Microcorys ericifolia			x		x
	Microcorys obovata	x	x	x	x	x
	Microcorys sp. (aff. *macredieana)*				x	
	Microcorys sp. Forrestania (V. English 2004) (P4)		x	x		
	Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)					x
	Pityrodia lepidota		x	x		x
	Prostanthera semiteres subsp. *semiteres*			x		
	Westringia cephalantha	x		x		x
	Westringia cephalantha var. *cephalantha*		x	x	x	
	Westringia rigida			x		x
	Lamiaceae sp.					x
Solanaceae	*Lycium australe*					x
	Solanum nummularium		x			
	Solanum ?plicatile					x
	Solanum simile			x		
Scrophulariaceae	*Calamphoreus inflatus* (P4)			x		
	Eremophila biserrata (P4)			x		
	Eremophila decipiens subsp. *decipiens*		x	x		x
	Eremophila dempsteri			x		x
	Eremophila densifolia			x		x
	Eremophila densifolia subsp. *capitata*			x		
	Eremophila deserti			x		
	Eremophila drummondii		x	x		x
	Eremophila ionantha			x		x
	Eremophila labrosa			x		x
	Eremophila oppositifolia subsp. *angustifolia*		x			
	Eremophila psilocalyx			x		
	Eremophila racemosa (P4)			x		
	Eremophila rugosa			x		
	Eremophila scoparia	x				
	Eremophila sp. aff. *verticillata*					x
Phrymaceae	*Glossostigma drummondii*			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Plantaginaceae	*Plantago debilis*			x		
Campanulaceae	* *Wahlenbergia gracilenta*			x		x
Goodeniaceae	*Coopernookia polygalacea*			x		
	Coopernookia strophiolata	x	x	x		x
	Dampiera eriocephala		x			x
	Dampiera obliqua			x		
	Dampiera orchardii (P2)			x		
	Dampiera sacculata					x
	Dampiera tenuicaulis var. *curvula*					x
	Dampiera sp. Forrestania (F. Lullfitz L 4034)			x		
	Dampiera sp.				x	
	Goodenia dyeri			x		x
	Goodenia occidentalis				x	x
	Goodenia pinifolia		x	x	x	x
	Goodenia pusilliflora				x	
	Goodenia scapigera subsp. *scapigera*			x		
	Goodenia viscida		x	x		
	Goodenia sp.					x
	Lechenaultia brevifolia		x			
	Scaevola bursariifolia			x		
	Scaevola cuneiformis			x		
	Scaevola spinescens		x	x		x
Stylidiaceae	*Levenhookia stipitata*				x	
	Stylidium limbatum			x		x
	Stylidium neglectum					x
	Stylidium sejunctum (P3)			x		
	Stylidium yilgarnense		x			
	Stylidium sp. Mt Bayly (J.A. Wege & C. Wilkins JAW 1986)			x		
	Stylidium sp.					x
Asteraceae	*Actinobole uliginosum*			x		
	Angianthus micropodioides (P3)			x		
	Asteridea athrixioides			x		x
	Blennospora drummondii				x	x
	Brachyscome iberidifolia					x
	Brachyscome perpusilla			x		x
	Calotis hispidula			x		x
	Ceratogyne obionoides			x		

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FAMILTY	SPECIES	BV	CHER	Nmap	EGLP 2016	EGLP 2017
Asteraceae	*Erymophyllum ramosum* subsp. *ramosum*		x			
(continued)	*Gnephosis drummondii*				x	
	Helichrysum leucopsideum			x		
	Hyalosperma demissum			x		x
	* *Hypochaeris glabra*			x		
	Isoetopsis graminifolia			x		
	Millotia tenuifolia var. *tenuifolia*			x		x
	Olearia laciniifolia (P2)					x
	Olearia muelleri	x	x	x	x	x
	Olearia ramosissima			x	x	x
	Ozothamnus occidentalis			x		
	Podolepis capillaris				x	x
	Podolepis tepperi					x
	Podotheca angustifolia					x
	Rhodanthe laevis			x		x
	Rhodanthe pygmaea		x	x		x
	Senecio glossanthus			x		x
	Senecio quadridentatus			x		
	Ursinia anthemoides			x		
	Vittadinia humerata					x
	Waitzia acuminata var. *acuminata*		x	x	x	x

APPENDIX E: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE EARL GREY LITHIUM PROJECT

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GES – Geraldton Sandplains MAL – Mallee; MUR – Murchison

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Thomasia gardneri	Malvaceae	X	Ex	Habit: Erect, multi stemmed, woody perennial, to 0.5 m high Flowers: pink Flowering period: September Soils: Insufficient information IBRA Distribution: COO Florabase records: 7	Unlikely Species is presumed to be extinct. Most recent recording is from 1996 (DPaW 2016g). Records of this species are from Mt Holland.
Acacia lanuginophylla	Fabaceae	T	E	Habit: Dense to open, domed, erect or spreading shrub, 0.1 to 1.2 m high, with densely white-woolly braches Flowers: Yellow, 1 flower per leaf axil Flowering period: July - October Soils: Normally grows in slightly saline grey-white sands over clay and gravelly soils in broad drainage channels. IBRA Distribution: COO, MAL Florabase records: 29	Medium Species has been recorded less than 1 km from survey area. Whilst saline sands are not expected within survey area, the survey area does contain scrub of *Melaleuca* species
Acacia lobulata	Fabaceae	T	E	Habit: Erect, open, spindly shrub, 1-2 m high Flowers: yellow Flowering period: July Soils: gritty loam or sand on low granitic breakaways IBRA Distribution: AW, COO Florabase records: 25	Low Preferred habitat not expected within survey area. Majority of recorded specimens 200 km to north-west.
Banksia sphaerocarpa var. *dolichostyla*	Proteaceae	T	V	Habit: Lignotuberous shrub, 1 to 3 m high Flowers: yellow-orange Flowering period: March - May Soils: Lateritic gravel; low open woodland and low shrubland IBRA Distribution: AW, COO, MAL Florabase records: 39	High Species has been recorded within the survey area in 2016.

APPENDIX E: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE EARL GREY LITHIUM PROJECT

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GES – Geraldton Sandplains MAL – Mallee; MUR – Murchison

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Boronia revoluta	Rutaceae	T	E	Habit: Shrub to 0.8m high Flowers: Pink Flowering period: July- August Soils: Stony sandy loam or sand IBRA Distribution: MAL Florabase records: 21	Low Preferred soils and associated vegetation not expected to be present within survey area.
Eucalyptus steedmanii	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: white Flowering period: January to March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soils and landforms likely within survey area. A record of this taxon exists approximately 15 km to the south-west of the survey area.
Paragoodia crenulata	Fabaceae	T	CE	Habit: Annual prostrate herb to 10 cm high Flowers: Brown & yellow Flowering period: July - August Soils: Potentially lateritic/gravelly loam on low rise slopes IBRA Distribution: COO Florabase records: 6	Low Preferred soil & habitat combination may be within survey area. Nearest records of this taxon are 27 km to the south of the survey area.
Roycea pycnophylloides	Chenopodiaceae	T	E	Habit: Perennial herb to 5 cm high, forming dense silvery mats to 1 m wide Flowers: Green (inconspicuous) Flowering period: October - April Soils: Sandy soils, saline flats IBRA Distribution: AW, MAL Florabase records: 58	Low Preferred soil & habitat combination not expected within survey area. Records of the taxon are restricted to the adjacent wheatbelt area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Acacia tetraneura	Fabaceae	P1	-	Habit: Low, spreading shrub to 40 cm high Flowers: Yellow Flowering period: May - July Soils: Clay and lateritic gravels on ridges and low rises IBRA Distribution: AW, MAL Florabase records: 24	Low Preferred soil types not expected within survey area. Majority of known recordings of this species are within the Avon Wheatbelt
Austrostipa sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: data not available Flowering period: not known Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 12	Low Preferred vegetation and soils occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion.
Baeckea sp. Blue Haze Mine (P. Armstrong 06/910)	Myrtaceae	P1	-	Habit: Shrub to 1.2 m Flowers: pink Flowering period: unknown Soils: Yellow – orange lateritic sandy clay loam on undulating plains with open mallee, low to tall shrub heath IBRA Distribution: COO Florabase records: 9	Medium Preferred soils and associated vegetation potentially present within survey area. Species recorded approximately 4 km south of survey area.
Brachyloma stenolobum	Ericaceae	P1	-	Habit: Erect shrub to 1.5 m high Flowers: white Flowering period: unknown Soils: Bare yellow sandy loam flats IBRA Distribution: COO Florabase records: 3	Low Preferred soils not expected within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Dicrastylis capitellata	Lamiaceae	P1	-	Habit: Low spreading shrub, 0.2 – 0.25 m high Flowers: blue-purple Flowering period: May Soils: Loamy sand, sandy loam, with open mallee woodlands IBRA Distribution: COO, MAL Florabase records: 8	Medium Preferred soils and habitat occur within survey area. A record of this taxon is located approximately 13 km south-west of the survey area.
Eucalyptus myriadena subsp. *parviflora*	Myrtaceae	P1	-	Habit: Tree or (mallee), to 12 m high, with smooth bark, decorated in strips, grey-olive oversilvery grey to pale tan-cream Flowers: Yellow-cream Flowering period: November Soils: Orange laterite gravel. Summits and gentle upland slopes IBRA Distribution: MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area. The majority of records of this taxon are situated nearer Hyden, near the Forrestania cross-roads
Grevillea lissopleura	Proteaceae	P1	-	Habit: Erect shrub, 0.5 to 1.2 m high Flowers: (white) Flowering period: August Soils: Stony loam on banded ironstone; on ridges IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within survey area.
Grevillea lullfitzii	Proteaceae	P1	-	Habit: Shrub to 1.5m high Flowers: White Flowering period: December Soils: Lateritic soils and shallow soils on granite IBRA Distribution: MAL Florabase records: 24	Low Preferred soil & habitat combination not expected within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Grevillea marriottii	Proteaceae	P1	-	Habit: Open, multi-stemmed, lignotuberous shrub, 0.8-1.2 m high Flowers: green/cream/white Flowering period: August to October Soils: Yellow or white sand over laterite. On rises or on tops of lateritic cappings IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within survey area.
Hemigenia sp. Newdegate (E. Bishop 75)	Lamiaceae	P1	-	Habit: Spindly, erect to spreading shrub to 0.45m Flowers: Blue- purple Flowering period: September-October Soils: Clay loam and disturbed sites IBRA Distribution: AW, COO Florabase records: 25	Medium Preferred soil / habitat potentially present within survey area.
Hibbertia axillibarba	Dilleniaceae	P1	-	Habit: Shrub to 0.7m Flowers: Yellow Flowering period: September-October Soils: Lateritic soil and ranges IBRA Distribution: MAL, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area.
Labichea rossii	Fabaceae	P1	-	Habit: Subshrub to 50 cm (unconfirmed) Flowers: unknown Flowering period: unknown Soils: Hillslopes with BIF (unconfirmed) IBRA Distribution: COO Florabase records: 2	Low Insufficient data on species.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Lepidosperma amantiferrum	Cyperaceae	P1	-	Habit: Tufted rhizomatous, herb (sedge), leaves 0.15-0.42 m high, culms and leaves distichous Flowers: unknown Flowering period: unknown Soils: Yellow sandy loam with banded ironstone gravel and rocks. Gentle lower slopes IBRA Distribution: MAL Florabase records: 8	Low Preferred soil & habitat combination not expected within survey area.
Melaleuca agathosmoides	Myrtaceae	P1	-	Habit: Spreading shrub to 2 m high Flowers: White-cream Flowering period: September – October Soils: Gravelly red clay loam; hills IBRA Distribution: MAL Florabase records: 17	Medium Preferred soil / habitat potentially present within survey area.
Microcybe pauciflora subsp. *grandis*	Rutaceae	P1	-	Habit: Shrub to 60 cm high Flowers: yellow Flowering period: unconfirmed Soils: Clay loam, loam IBRA Distribution: ESP, MAL Florabase records: 6	Low Preferred soil & habitat combination not expected within survey area.
Stenanthemum liberum	Rhamnaceae	P1	-	Habit: Dwarf shrub to 0.5m Flowers: unknown Flowering period: unknown Soils: Yellow sandy loam over laterite IBRA Distribution: COO, MAL Florabase records: 6	Low Preferred soil & habitat combination may be within survey area, however current data available not confirmed.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Acacia asepala	Fabaceae	P2	-	Habit: Diffuse, much-branched shrub, 0.5 to 1.5 m high Flowers: yellow Flowering period: August Soils: Red-brown sandy loam. Undulating plains, along drainage lines IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soils and associated vegetation potentially present within survey area.
Acacia heterochroa subsp. *robertii*	Fabaceae	P2	-	Habit: Spindly open or dense spreading shrub to 1.5m Flowers: Yellow Flowering period: July -September Soils: Gravelly lateritic soils , hilltops and ridges IBRA Distribution: MAL Florabase records: 21	Low Preferred soil types not expected within survey area. Majority of known recordings of this species are within the Mallee bioregion
Bentleya diminuta	Pittosporaceae	P2	-	Habit: Rosetted rhizomatous, perennial, herb or shrub, 0.02-0.05 m high, growing in small colonies Flowers: white/yellow-green Flowering period: September to November Soils: Sandy clay or loam with calcareous nodules IBRA Distribution: COO, MAL Florabase records: 11	Low Preferred soils and associated vegetation not expected to be present within survey area.
Conospermum sigmoideum	Proteaceae	P2	-	Habit: Erect shrub, 0.2 – 0.5 m high Flowers: blue Flowering period: August - September Soils: Yellow sand IBRA Distribution: COO, MAL Florabase records: 12	Low preferred soil type not expected to occur within survey area

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Dampiera orchardii	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: information not available Flowering period: information not available Soils: sand IBRA Distribution: COO, MAL Florabase records: 9	Low Preferred soil type may occur within survey area.
Eutaxia lasiocalyx	Fabaceae	P2	-	Habit: Low, spreading, multi-stemmed shrub, to 0.15 m high Flowers: yellow Flowering period: November Soils: Red sandy loam, laterite and quartz gravel; gentle lower slopes IBRA Distribution: COO Florabase records: 5	High species recorded within Earl Grey prospect in 2016.
Orianthera exilis	Loganiaceae	P2	-	Habit: Leafless shrub Flowers: white Flowering period: unknown Soils: unconfirmed IBRA Distribution: COO, MAL Florabase records: 8	Low Insufficient data on species.
Acacia singula	Fabaceae	P3	-	Habit: Shrub to 2m Flowers: Yellow Flowering period: August- October Soils: Gravelly sand over laterite, white or yellow sand IBRA Distribution: MAL Florabase records: 32	Medium Preferred soils and associated vegetation potentially present within survey area, although the majority of records are situated within the Mallee bioregion.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT		POTENTIAL TO OCCUR IN SURVEY AREA
Acacia undosa	Fabaceae	P3	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Dense, domed or obconic shrub, 0.3-1.5 m high simple, globular, yellow, 2 flowers per leaf axil July - September Clayey sand or loam in open shrub mallee AW, COO, MAL 21	High species recorded within Earl Grey prospect in 2016.
Angianthus micropodioides	Asteraceae	P3	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	White-woolly, erect or decumbent annual herb to 15 cm high white, yellow-white November - February Saline sandy soils; river edges, saline depressions, clay pans AW, COO, SCP 35	Low Preferred soil types not expected within survey area. Majority of known recordings of this species are within the Avon Wheatbelt
Banksia viscida	Myrtaceae	P3	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Densely branched, non-lignotuberous shrub, 0.4 to 1 m high yellow-orange July to october Gravelly soils, lateritic rises COO, MAL 27	Low Preferred soils and associated vegetation not expected to be present within survey area.
Chorizema circinale	Fabaceae	P3	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Prostrate, scrambling, wiry shrub to 0.4 m high yellow, orange and red September to December Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation COO, ESP, MAL 14	Low Preferred soil type and vegetation not expected to occur within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Daviesia newbeyi	Fabaceae	P3	-	Habit: Bushy, multi-stemmed, broom-like shrub, to 1.5 m high Flowers: orange, yellow and red Flowering period: August to October Soils: Sand or sandy clay over granite; rocky slopes IBRA Distribution: COO, MAL, ESP Florabase records: 15	Low Preferred soil / rock type not expected to occur within survey area. A record of this taxon is located approximately 1.5 km to the east of the survey area.
Eucalyptus exigua	Myrtaceae	P3	-	Habit: Smooth-barked mallee, 2 – 5 m high, forming a lignotuber Flowers: white-cream Flowering period: March Soils: Sandy loam, white sand; sandplains IBRA Distribution: AW, COO, MAL Florabase records: 35	Low Survey area not expected to consists of sandplains. A record of this taxon is located approximately 11 km to the north-west of the survey area.
Eutaxia acanthoclada	Fabaceae	P3	-	Habit: Compact, mat-forming, prostrate shrub, to 0.3 m high Flowers: yellow/orange/red Flowering period: October to November Soils: Light brown sandy clay, shallow sandy loam, red clay over banded ironstone, gravel. Gently undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 18	Medium Preferred soils and associated vegetation potentially present within survey area.
Grevillea insignis subsp. *elliotii*	Proteaceae	P3	-	Habit: Erect, bushy, non-lignotuberous shrub to 2m Flowers: Red/pink, cream , white Flowering period: October Soils: Gravelly sand or loam over ironstone. Hilltops or rises IBRA Distribution: AW, COO, MAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Grevillea pilosa subsp. redacta	Proteaceae	P3	-	Habit: Spreading to prostrate, non-lignotuberous shrub, 0.4-1.2 m high Flowers: red Flowering period: February, October or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
Hakea pendens	Proteaceae	P3	-	Habit: Shrub, 2-3 m high, 2.5-3.1 m wide Flowers: pink-white Flowering period: September Soils: Stony loam. ironstone ridges IBRA Distribution: AW, COO Florabase records: 23	High species recorded within Earl Grey prospect in 2016.
Leucopogon sp. Ironcaps (N. Gibson & K. Brown 3070)	Ericaceae	P3	-	Habit: Slender open shrub to 1m high and 0.6m wide Flowers: White Flowering period: August Soils: Skeletal sand, yellow sandy loam, rocky loam , gravel, laterite and ironstone. Gentle lower slopes, flat uplands, hilltops. IBRA Distribution: AW, MAL Florabase records: 20	Medium Preferred soil / habitat potentially present within survey area.
Mirbelia densiflora	Fabacaea	P3	-	Habit: Shrub to 1 m high Flowers: Yellow-orange Flowering period: October, January Soils: Stony loam, loamy sand; Small ridges, breakaways, undulating plains IBRA Distribution: COO. MAL Florabase records: 22	Medium Preferred soil & habitat combination may be within survey area. Records of this taxon exist near the vicinity of the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Oxymyrrhine plicata	Myrtaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: white/green (unconfirmed) Flowering period: unknown Soils: unconfirmed IBRA Distribution: COO, ESP, MAL Florabase records: 12	Low Preferred soil & habitat combination may be within survey area, however current data available not confirmed.
Persoonia cymbifolia	Proteaceae	P3	-	Habit: Erect, spreading shrub, 0.2-0.6(-1) m high Flowers: yellow Flowering period: December or January Soils: Sandy soils. On flats or in rock crevices IBRA Distribution: COO, ESP, MAL Florabase records: 30	Medium Preferred soil & habitat combination may be within survey area. A record of this taxon is situated 12.5 km south-west of the survey area.
Phebalium brachycalyx	Rutaceae	P3	-	Habit: Shrub to 1.5m Flowers: Yellow/ cream/ white Flowering period: August- September Soils: Gravelly soils. Lateritic uplands and hills IBRA Distribution: COO, ESP, MAL Florabase records: 21	Medium Preferred soil & habitat combination may be within survey area.
Rinzia torquata Rye & Trudgeon	Myrtaceae	P3	-	Habit: Low, spreading shrub, 0.3 to 1.2 m high, to 0.7 wide Flowers: white/pink Flowering period: August to September Soils: Well-drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: AW, COO, MAL Florabase records: 18	Medium Preferred soils and associated vegetation potentially present within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Seringia adenogyna	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: mauve-purple Flowering period: unknown Soils: Unconfirmed but likely to be sand or loam over laterite-ironstone base IBRA Distribution: COO, ESP, MAL Florabase records: 26	Medium Preferred soil & habitat combination potentially present within survey area. Records (5) of this taxon are situated within 4.5 km south-west of the survey area.
Stylidium sejunctum	Stylidiaceae	P3	-	Habit: Caespitose perennial, herb, 0.25-0.45 m high. Membraneous scale leaves present at base of mature leaves. Scape glandular throughout Flowers: white/pink-purple Flowering period: September to November Soils: Clayey sand or loam, laterite. Outcrops, upper slopes, breakaways. Mallee and Allocasuarina shrubland. IBRA Distribution: COO, MAL Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. A record of this taxon is situated 8 km south of the survey area.
Verticordia gracilis	Myrtaceae	P3	-	Habit: Low, slender shrub, 0.15-0.6 m high Flowers: pink Flowering period: October to November Soils: Yellow sand, gravelly sand, sandy loam IBRA Distribution: AW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination potentially present within survey area. A record of this taxon is situated 7 km west survey area.
Verticordia stenopetala	Myrtaceae	P3	-	Habit: Shrub, 0.2-0.6(-1.3) m high Flowers: pink/pink-purple-red Flowering period: October to December or January Soils: Yellow sand, sometimes with gravel. Undulating plains IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination potentially present within survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Calamphoreus inflatus	Scrophulariaceae	P4	-	Habit: Erect, spreading shrub to 1.6 m high Flowers: blue-purple Flowering period: October – December or February – March Soils: Clay-loam soils with ironstone gravel; flats and disturbed sites IBRA Distribution: COO, MAL Florabase records: 25	Medium Habitat potentially within survey area. Specimen recorded in 2016 during survey of the nearby Prince of Wales prospect, in recently burnt area, approximately 3 km to the north of the Earl Grey Lithium Prospect.
Eremophila biserrata	Scrophulariaceae	P4	-	Habit: Prostrate shrub to 3 m wide Flowers: green, yellow-green Flowering period: September to November, or March Soils: Sandy or sandy clay soils; alluvial flats, salt flats and lakes IBRA Distribution: COO, MAL Florabase records: 20	Low Preferred soil and habitat type not expected to occur within survey area. A record of this taxon is located approximately 11 km to the south of the survey area.
Eremophila racemosa	Scrophulariaceae	P4	-	Habit: Erect shrub, 0.5 – 1.7 m high Flowers: purple-pink-red/white Flowering period: March or August - December Soils: Sandy or stony loam, clay loam; undulating plains IBRA Distribution: AW, COO, MAL Florabase records: 34	Low Survey area not expected to be composed of undulating plains
Eucalyptus georgei subsp. *fulgida*	Myrtaceae	P4	-	Habit: Smooth-barked tree, 4 – 20 m high Flowers: cream-white Flowering period: insufficient information Soils: Sandy loam, clayey sand; slight depressions IBRA Distribution: COO, MAL Florabase records: 20	Low Whilst preferred soil type is expected within survey area, current records of this taxon are situated to the west of the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
Eucalyptus rugulata	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: insufficient information Flowering period: insufficient information Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 12	Low Preferred soil & habitat combination not expected within survey area.
Grevillea neodissecta	Proteaceae	P4	-	Habit: Low, rounded, prickly shrub, 0.3-1 m high Flowers: red-pink Flowering period: February or October Soils: Sand over laterite, clay loam IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within survey area.
Microcorys sp. Forrestania (V. English 2004)	Lamiaceae	P4	-	Habit: Prostrate or erect shrub, 0.35-0.4 m high. Flowers: white/purple Flowering period: January or April Soils: Yellow sandy clay or red-brown clay. Open woodland or cleared areas IBRA Distribution: COO, MAL Florabase records: 37	Medium Preferred soil / habitat potentially present within survey area. A record of this taxon is located 7 km to the south of the survey area.
Myriophyllum petraeum	Haloragaceae	P4	-	Habit: Aquatic annual, herb, stems 0.15-0.3 m long Flowers: white Flowering period: August to December Soils: Strictly confined to ephemeral rock pools on granite outcrops IBRA Distribution: AW, COO, ESP, MAL Florabase records: 53	Low Preferred soil & habitat combination not expected within survey area.

APPENDIX E: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE EARL GREY LITHIUM PROJECT

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GES – Geraldton Sandplains MAL – Mallee; MUR – Murchison

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT		POTENTIAL TO OCCUR IN SURVEY AREA
Stenanthemum bremerense	Rhamnaceae	P4	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high white unknown Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways COO 27	Medium Preferred soil & habitat combination potentially present within survey area. A record of this taxon is situated 13 km south west of the survey area.

APPENDIX F: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN EACH SURVEY QUADRAT IN THE EARL GREY LITHIUM PROJECT

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SPECIES	SURVEY QUADRAT																																					
	EG001	EG002	EG003	EG004	EG005	EG006	EG007	EG008	EG009	EG010	EG011	EG012	EG013	EG014	EG015	EG016	EG017	EG018	EG019	EG020	EG021	EG022	EG023	EG024	EG025	EG026	EG027	EG028	EG029	EG030	EG031	EG032	EG033	EG034	EG035	EG036	EG037
Acacia acanthoclada subsp. *acanthoclada*																																					
Acacia acuminata			x													x																					
Acacia assimilis									x											x	x				x									x				
Acacia assimilis subsp. *assimilis*																																						
Acacia camptoclada															x																					x		
Acacia colletioides																																						
Acacia consanguinea																																						
Acacia deficiens																										x				x	x	x						
Acacia erinacea																																	x					x
Acacia evenulosa																																				x		
Acacia hemiteles																													x									
Acacia heteroneura var. *jutsonii*																																						
Acacia hystrix subsp. *hystrix*															x						x					x				x								
Acacia leptopetala																																						
Acacia mackeyana															x				x				x								x	x				x		
Acacia merrallii																													x				x					x
Acacia ?sphacelata																																						
Acacia sphacelata subsp. *sphacelata*							x													x		x			x		x					x	x					
Acacia spinosissima																																						
Acacia steedmanii																																						
Acacia steedmanii subsp. *steedmanii*																																						
Acacia sulcata var. *platyphylla*															x								x															
Acacia tetraptera																																						
Acacia undosa (P3)																																						
Acacia yorkrakinensis subsp. *acrita*	x																												x									
Acacia sp.																							x															
Acacia sp. 1																																						
Acacia sp. 2																																						
Adenanthos argyreus																																						
Allocasuarina acutivalvis	x	x				x	x	x		x	x	x	x							x									x						x			
Allocasuarina acutivalvis subsp. *acutivalvis*																															x	x						
Allocasuarina campestris																																						
Allocasuarina helmsii																																						
Allocasuarina spinosissima	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x								x													
Allocasuarina sp.																																						
Amphipogon caricinus var. *caricinus*																																						
Asteridea athrixioides																																						
Astroloma serratifolium																																						
Astus subroseus		x																																				
Atriplex sp.																																						

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Austrostipa hemipogon																																					
Austrostipa ?juncifolia																																					
Austrostipa trichophylla																																					
Austrostipa sp.																																					
Baeckea elderiana																																					
Baeckea sp.										x																											
Banksia elderiana							x																														
Banksia laevigata							x																														
Banksia laevigata subsp fuscolutea						x				x	x	x	x			x												x									
Banksia purdieana	x	x								x	x	x	x																								
Banksia sphaerocarpa var. dolichostyla (T)											x																										
Banksia sp.																								x													
Beaufortia orbifolia																				x																	
Beaufortia puberula																																					
Beaufortia schaueri			x			x					x	x	x				x																				
Bertya dimerostigma																																					
Beyeria ?sulcata																																					
Beyeria sulcata var. *brevipes*																																					
Beyeria sulcata var. *gracilis*																				x																	
Beyeria sp.																																					
Blennospora drummondii																		x					x														
Boronia inornata subsp. *inornata*																																					
Boronia inornata subsp. *leptophylla*																					x										x						
Boronia ternata var. *foliosa*																		x				x		x				x									
Boronia sp.																x																					
Brachyloma stenolobum (P1)																	x																				
Brachyscome iberidifolia																																					
Brachyscome perpusilla																																					
Calandrinia eremaea																																					
Calandrinia granulifera																																					
Callitris canescens						x																															
Callitris preissii																																					
Callitris verrucosa				x	x									x		x		x																			
Callitris sp.																																					
Calothamnus gilesii																																					
Calothamnus quadrifidus																																					
Calotis hispidula																																					
Calytrix leschenaultii					x				x		x	x	x																								
Cassytha pomiformis																																					
Cassytha sp.	x	x	x					x	x	x				x			x			x											x						

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**Centaurium tenuiflorum*																																					
Centrolepis cephaloformis subsp cephaloformis																																					
Centrolepis polygyna																																					
Centrolepis strigosa subsp. *rupestris*																																					
Chamaexeros fimbriata										x																											
Chamelaucium ciliatum															x			x																			
Chamelaucium pauciflorum subsp. *pauciflorum* ms						x	x	x													x														x		
Chamelaucium virgatum	x					x				x	x	x	x																								
Chorizema circinale (P3)																																					
Codonocarpus cotinifolius																																					
Comesperma drummondii																																					
Comesperma volubile																		x										x							x		
Commersonia craurophylla																																					
Conostephium drummondii														x																							
Conostephium ?preissii																																					
Conostylis bealiana						x																															
Coopernookia strophiolata																																					
Crassula colorata																																					
Crassula colorata var. *colorata*																																					
Crassula sp.																		x																			
Cryptandra distigma																																					
Cryptandra intonsa																																					
Cryptandra minutifolia subsp. *brevistyla*				x																																	
Cryptandra minutifolia subsp. *minutifolia*																																					
Cryptandra recurva						x			x																												
Cryptandra wilsonii															x																						
Cyanostegia angustifolia																																					
Cyathostemon heterantherus	x		x	x	x			x		x				x			x					x					x								x		
Dampiera eriocephala																									x												
Dampiera sacculata																																					
Dampiera tenuicaulis var. *curvula*										x														x	x		x						x				
Dampiera sp.																																					
Darwinia sp. Karonie (K. Newbey 8503)																													x						x		
Daviesia aphylla																			x																		
Daviesia argillacea																			x				x		x							x	x				x
Daviesia grahamii																								x	x		x										
Daviesia sarissa subsp. *redacta* (P2)																																					
Daviesia scoparia					x												x				x	x										x			x		
Daviesia sp.																																					
Dianella revoluta															x			x					x						x								

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Dillwynia acerosa					x									x			x															x			x		
Diuris picta																																					
Dodonaea adenophora																																					
Dodonaea amblyophylla					x																	x									x					
Dodonaea bursariifolia																		x												x	x					
Dodonaea stenozyga																			x												x					
Dodonaea ?*viscosa*																																					
Dodonaea sp.																																					
Drosera glanduligera																																					
Drosera moorei																																					
Drosera sp.																																					
Drosera sp. (climbing)									x	x						x																					
Drummondita hassellii	x	x	x		x	x	x	x	x	x	x	x	x			x	x																		x		
Enchylaena tomentosa																																					
Eremophila decipiens subsp. *decipiens*																																					
Eremophila dempsteri																																					
Eremophila densifolia																																					
Eremophila drummondii																																					
Eremophila ionantha																																					x
Eremophila labrosa																							x														
Eremophila sp. aff. *verticillata*																																					
Eucalyptus burracoppinensis	x	x					x	x		x	x	x								x					x			x									
Eucalyptus capillosa subsp. *polyclada*																																					
Eucalyptus cylindriflora														x	x			x					x				x										
Eucalyptus cylindrocarpa																																					
Eucalyptus eremophila														x				x	x			x	x			x			x	x	x	x			x	x	
Eucalyptus extensa																																					
Eucalyptus flocktoniae subsp. *flocktoniae*																										x				x					x		
Eucalyptus gracilis																																					
Eucalyptus horistes																	x																				
Eucalyptus incrassata																																			x		
Eucalyptus livida																																x					
Eucalyptus longicornis																																					
Eucalyptus pileata																																			x		
Eucalyptus platycorys					x				x																												
Eucalyptus polita																																					
Eucalyptus prolixa																													x		x		x			x	x
Eucalyptus ravida																																					
Eucalyptus rigidula					x				x											x																	
Eucalyptus salmonophloia																																					x

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Eucalyptus salubris																																					
Eucalyptus tenuis																																	x				
Eucalyptus urna																																					x
Eucalyptus yilgarnensis																																					
Eucalyptus sp.			x				x												x		x				x								x				
Euryomyrtus maidenii								x								x																					
Eutaxia lasiocalyx (P2)																																					
Exocarpos aphyllus																			x							x				x							
Fabaceae sp.																																					
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																																					
Gastrolobium floribundum	x																																				
Gastrolobium melanocarpum																	x											x									
Gastrolobium spinosum	x																			x				x	x		x							x			
Glischrocaryon aureum	x																																				
Glischrocaryon sp.																											x										
Gnephosis drummondii																																					
Gompholobium hendersonii																																					
Goodenia dyeri																																					
Goodenia occidentalis																																					
Goodenia pinifolia																									x												
Goodenia pusilliflora																																					
Goodenia sp.																																					
Grevillea acacioides			x													x																					
Grevillea acuaria																		x						x	x			x				x	x				
Grevillea cagiana									x	x																											
Grevillea ?decipiens															x																					
Grevillea didymobotrya																x																					
Grevillea didymobotrya subsp. *didymobotrya*																																					
Grevillea excelsior	x																																				
Grevillea hookeriana subsp. *apiciloba*																																					
Grevillea huegelii																	x				x																
Grevillea lissopleura (P1)																																					
Grevillea marriottii (P1)																																					
Grevillea oncogyne																						x															
Grevillea shuttleworthiana subsp. *obovata*								x			x	x	x																								
Grevillea sp.																					x			x	x		x							x		x	
Gyrostemon racemiger																																					
Hakea erecta	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x													x							
Hakea francisiana																				x					x			x									
Hakea invaginata										x																												

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Hakea meisneriana							x	x			x		x																								
Hakea minyma	x																x										x							x			
Hakea newbeyana																															x						
Hakea pendens (P3)																										x											
Hakea subsulcata	x																x			x							x				x						
Hakea sp.																								x	x									x			
Halgania andromedifolia																																					
Halgania lavandulacea																																					
Halgania sp.																																					
Haloragis hamata																																					
Hemigenia westringioides																																					
Hibbertia ancistrophylla											x	x	x																								
Hibbertia exasperata	x		x	x		x				x	x	x	x	x		x	x															x			x		
Hibbertia gracilipes					x				x		x	x	x	x			x																				
Hibbertia aff. *oligantha*																																					
Hibbertia psilocarpa																		x				x															
Hibbertia rostellata																		x				x															
Hibbertia stowardii		x					x	x																x													
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																																					
Hyalosperma demissum																																					
Hybanthus epacroides																																					
Hybanthus floribundus subsp. *floribundus*																																					
Isopogon gardneri																				x																	
Isopogon scabriusculus subsp. *pubifloris*	x	x				x	x	x			x	x	x																					x	x		
Isopogon scabriusculus subsp. *stenophyllus*																																					
Jacksonia nematoclada				x																																	
Labichea rossii (P1)																																					
Lamiaceae sp.																																		x			
Lasiopetalum ferraricollinum	x						x																														
Lepidosperma aff. *amantiferrum*						x																															
Lepidosperma diurnum																																					
Lepidosperma sanguinolentum	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x		x																			
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																																					
Lepidosperma sp.		x															x																				
Leptomeria preissiana																	x														x						
Leptosema daviesioides																																					
Leptospermum erubescens					x		x		x																												
Leptospermum fastigiatum											x	x	x	x																							
Leucopogon cuneifolius																																					
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)																																					

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Leucopogon sp. Forrestania (G.F. Craig 2386)	x	x	x			x	x	x			x	x	x				x																					
Leucopogon sp. outer wheatbelt (M. Hislop 30)																																						
Leucopogon sp.																																						
Levenhookia stipitata																																						
Lycium australe																																						
Lysinema pentapetalum						x			x			x	x																									
Maireana carnosa																																						
Maireana marginata																																						
Maireana radiata																																						
Maireana sp.																																						
Melaleuca ?acuminata																																						
Melaleuca acuminata subsp acuminata																													x		x							
Melaleuca calyptroides		x			x									x							x		x						x					x	x			
Melaleuca cliffortioides																																						
Melaleuca condylosa	x																x	x										x							x			
Melaleuca cordata	x	x	x			x	x	x		x	x	x	x			x	x								x									x				
Melaleuca ctenoides																																						
Melaleuca cucullata																																						
Melaleuca depauperata														x																								
Melaleuca eleuterostachya															x				x		x	x	x			x			x	x	x			x	x	x		
Melaleuca halmaturorum																			x			x									x		x		x			
Melaleuca hamata				x	x				x					x	x		x	x				x	x			x			x		x	x			x			
Melaleuca johnsonii					x				x					x	x							x	x			x	x		x		x	x			x			
Melaleuca lateriflora															x			x	x			x	x			x			x	x	x					x	x	
Melaleuca laxiflora				x																		x							x			x			x		
Melaleuca pauperiflora subsp. *fastigiata*																																						
Melaleuca pauperiflora subsp. *pauperiflora*					x					x															x												x	
Melaleuca ?pentagona																																						
Melaleuca phoidophylla	x		x	x		x	x									x	x		x							x				x							
Melaleuca pungens	x	x								x																												
Melaleuca sparsiflora																															x							
Melaleuca spicigera															x					x	x				x		x		x						x			
Melaleuca teuthidoides																			x		x	x																
Melaleuca sp.																									x										x			
Microcorys ericifolia																									x		x											
Microcorys obovata														x	x																				x		x	
Microcorys sp. (aff. *macredieana*)																																						
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)	x																x																					
Microcybe ambigua										x						x	x																	x				
Microcybe multiflora																																						

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Microcybe multiflora subsp. *multiflora*																																					x
Micromyrtus erichsenii	x	x	x	x	x	x	x	x		x	x	x	x			x	x			x				x			x	x									
Millotia tenuifolia var. *tenuifolia*																		x					x															
Mirbelia microphylla																																						
Monotaxis grandiflora var. *obtusifolia*																																						
Myrtaceae sp.																																						
Neurachne alopecuroidea																																						
Olax benthamiana																																						
Olearia laciniifolia (P2)																																						
Olearia muelleri																			x																	x		
Olearia ramosissima																																						
Orianthera exilis (P2)																																						
Orianthera judithiana																																						
Orianthera tortuosa																																						
Persoonia helix	x	x	x		x						x	x	x				x							x	x		x	x						x				
Persoonia quinquenervis			x																													x						
Persoonia saundersiana																												x										
Persoonia striata										x	x																												
Petrophile merrallii								x	x		x	x	x																										
Petrophile stricta			x			x		x	x	x	x	x	x			x	x																	x				
Petrophile sp.																								x														
Phebalium filifolium																																x						
Phebalium lepidotum																							x															
Phebalium megaphyllum																																						
Phebalium obovatum	x		x	x	x	x			x					x	x	x	x																						
Phebalium tuberculosum																		x																				
Phebalium sp.																																						
Philotheca rhomboidea																																						
Phyllota luehmannii																								x														
Pimelea angustifolia																																						
Pimelea sulphurea																																						
Pityrodia lepidota																								x														
Platysace maxwellii																																						
Platysace sp.																																						
Podolepis capillaris																																						
Podolepis tepperi																																						
Podotheca angustifolia																																						
Psammomoya choretroides			x			x	x	x		x														x														
Pterostylis mutica																																						
Pterostylis sp.																x																						

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SPECIES	SURVEY QUADRAT																																		
	EG001	EG002	EG003	EG004	EG005	EG006	EG007	EG008	EG009	EG010	EG011	EG012	EG013	EG014	EG015	EG016	EG017	EG018	EG019	EG020	EG021	EG022	EG023	EG024	EG025	EG026	EG027	EG028	EG029	EG030	EG031	EG032	EG033	EG034	EG035	EG036	EG037
Ptilotus drummondii var. *minor*																																					
Ptilotus gaudichaudii																																					
Ptilotus holosericeus																																					
Ptilotus humilis																																					
Rhagodia ?drummondii																																					
Rhagodia preissii subsp. *preissii*																																					
Rhodanthe laevis																																					
Rhodanthe pygmaea																																					
Rinzia sessilis																		x					x				x					x					
Santalum acuminatum															x		x						x		x		x				x	x	x	x			x
Sarcozona praecox																																					
Scaevola spinescens																																					x
Schoenus hexandrus																																					
Schoenus nanus																																					
?*Schoenus* sp.																																					
Sclerolaena diacantha																																					
Senecio glossanthus																																					
Senna artemisioides subsp. *filifolia*																																					
Solanum ?plicatile																																					
Stackhousia monogyna																																					
Stackhousia muricata																																					
Stenanthemum stipulosum																									x							x					
Stylidium limbatum																																					
Stylidium neglectum																																					
Stylidium sp.																																					
Styphelia exserta																																					
Synaphea interioris						x																															
Templetonia aculeata																											x										
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)																																x					
Thryptomene kochii		x						x								x												x	x								
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)																																				x	
Thysanotus sp.																																					
Trachymene pilosa																																					
Trymalium elachophyllum																																					
Trymalium ?myrtillus																																					
Trymalium myrtillus subsp myrtillus																																					
Verticordia chrysantha											x	x	x																								
Verticordia plumosa var. *incrassata*									x		x	x	x	x																							
Verticordia roei subsp. *roei*																																					
Verticordia sp.																																x					

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Vittadinia humerata																																					
Wahlenbergia gracilenta																																					
Waitzia acuminata var. *acuminata*																							x														
Westringia cephalantha																																					
Westringia cephalantha var. *cephalantha*																																x					
Westringia rigida																																					
Wilsonia humilis																																	x				
Xanthorrhoea nana								x																													
Zygophyllum glaucum																																					

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Acacia acanthoclada subsp. *acanthoclada*																																							
Acacia acuminata				x	x							x		x						x	x	x		x							x				x		x
Acacia assimilis									x									x							x														
Acacia assimilis subsp. *assimilis*																						x									x				x				
Acacia camptoclada																																							
Acacia colletioides																																							
Acacia consanguinea																														x									
Acacia deficiens				x																														x					
Acacia erinacea										x	x																					x		x					
Acacia evenulosa					x	x																																	
Acacia hemiteles										x	x							x	x														x						
Acacia heteroneura var. *jutsonii*						x															x	x		x		x													
Acacia hystrix subsp. *hystrix*					x			x																			x	x							x				
Acacia leptopetala																																							
Acacia mackeyana																																							
Acacia merrallii	x		x							x	x																					x	x						
Acacia ?sphacelata															x																								
Acacia sphacelata subsp. *sphacelata*																																							
Acacia spinosissima																																							
Acacia steedmanii																																							
Acacia steedmanii subsp. *steedmanii*																																							
Acacia sulcata var. *platyphylla*																																							
Acacia tetraptera								x																			x												
Acacia undosa (P3)		x								x		x	x			x	x																	x					
Acacia yorkrakinensis subsp. *acrita*									x																	x							x						
Acacia sp.																																							
Acacia sp. 1																																							
Acacia sp. 2																																							
Adenanthos argyreus																																							
Allocasuarina acutivalvis									x			x		x	x											x													
Allocasuarina acutivalvis subsp. *acutivalvis*				x	x	x						x																							x		x	
Allocasuarina campestris																																							
Allocasuarina helmsii																																							
Allocasuarina spinosissima					x		x					x					x			x	x	x		x	x	x			x					x				
Allocasuarina sp.													x					x																					
Amphipogon caricinus var. *caricinus*		x																																					
Asteridea athrixioides																																							
Astroloma serratifolium																																							x
Astus subroseus		x																										x										
Atriplex sp.																																							

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Austrostipa hemipogon		x									x																										
Austrostipa ?juncifolia																																					
Austrostipa trichophylla		x																																			
Austrostipa sp.																																		x			
Baeckea elderiana														x																								
Baeckea sp.																								x														
Banksia elderiana																																						
Banksia laevigata																																						
Banksia laevigata subsp fuscolutea																				x		x		x		x									x			
Banksia purdieana									x																				x									
Banksia sphaerocarpa var dolichostyla (T)																																						
Banksia sp.																																						
Beaufortia orbifolia									x																x											x		
Beaufortia puberula																						x													x			
Beaufortia schaueri																																						
Bertya dimerostigma													x																									
Beyeria ?sulcata																					x																	
Beyeria sulcata var. *brevipes*															x					x	x													x				
Beyeria sulcata var. *gracilis*																																						
Beyeria sp.																																						
Blennospora drummondii		x																																				
Boronia inornata subsp. *inornata*																																						
Boronia inornata subsp. *leptophylla*			x								x																											
Boronia ternata var. *foliosa*									x																													
Boronia sp.																																						
Brachyloma stenolobum (P1)																																						
Brachyscome iberidifolia																																						
Brachyscome perpusilla																																						
Calandrinia eremaea																																						
Calandrinia granulifera																																						
Callitris canescens		x					x							x		x				x	x		x		x				x	x					x			
Callitris preissii																	x																					
Callitris verrucosa																																						
Callitris sp.																																						
Calothamnus gilesii																																						
Calothamnus quadrifidus																																						
Calotis hispidula																																						
Calytrix leschenaultii																																						
Cassytha pomiformis																																						
Cassytha sp.									x			x														x										x			

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Centaurium tenuiflorum		x																																				
Centrolepis cephaloformis subsp cephaloformis																																						
Centrolepis polygyna		x																																				
Centrolepis strigosa subsp. *rupestris*		x																																				
Chamaexeros fimbriata																					x														x		x	
Chamelaucium ciliatum																																						
Chamelaucium pauciflorum subsp. *pauciflorum* ms																																				x		
Chamelaucium virgatum									x																													
Chorizema circinale (P3)																																						
Codonocarpus cotinifolius																																						
Comesperma drummondii																																						
Comesperma volubile																																						
Commersonia craurophylla																																						
Conostephium drummondii																																						
Conostephium ?preissii																																						
Conostylis bealiana																																						
Coopernookia strophiolata																																		x				
Crassula colorata																																						
Crassula colorata var. *colorata*																																						
Crassula sp.																																						
Cryptandra distigma																x																						
Cryptandra intonsa																																						
Cryptandra minutifolia subsp. *brevistyla*						x															x																	
Cryptandra minutifolia subsp. *minutifolia*													x			x	x				x																	
Cryptandra recurva																																						
Cryptandra wilsonii																					x																	
Cyanostegia angustifolia																																						
Cyathostemon heterantherus														x		x	x												x									
Dampiera eriocephala																		x																				
Dampiera sacculata																																						
Dampiera tenuicaulis var. *curvula*																		x																				
Dampiera sp.																						x																
Darwinia sp. Karonie (K. Newbey 8503)		x															x				x																	
Daviesia aphylla																																			x			
Daviesia argillacea	x		x		x	x			x	x									x							x						x		x				
Daviesia grahamii																																						
Daviesia sarissa subsp. *redacta* (P2)																																						
Daviesia scoparia				x											x	x																x	x					
Daviesia sp.																																						
Dianella revoluta		x		x	x	x				x		x				x																		x				

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Dillwynia acerosa												x			x						x														x		
Diuris picta																																					
Dodonaea adenophora																																					
Dodonaea amblyophylla															x																						
Dodonaea bursariifolia										x																	x			x							
Dodonaea stenozyga	x		x							x																											
Dodonaea ?*viscosa*																																					
Dodonaea sp.																																					
Drosera glanduligera																																					
Drosera moorei																	x																				
Drosera sp.																																					
Drosera sp. (climbing)																																					
Drummondita hassellii					x		x		x			x		x						x	x	x	x	x	x	x			x	x					x		x
Enchylaena tomentosa																																					
Eremophila decipiens subsp. *decipiens*																																					
Eremophila dempsteri																																					
Eremophila densifolia																																					
Eremophila drummondii																																					
Eremophila ionantha										x																											
Eremophila labrosa																			x																		
Eremophila sp. aff. verticillata																																					
Eucalyptus burracoppinensis									x					x						x		x			x	x			x								x
Eucalyptus capillosa subsp. *polyclada*																										x									x		
Eucalyptus cylindriflora							x										x		x																		
Eucalyptus cylindrocarpa																																		x			
Eucalyptus eremophila		x	x	x		x		x				x			x						x						x	x					x	x		
Eucalyptus extensa	x																																				
Eucalyptus flocktoniae subsp. *flocktoniae*								x																													
Eucalyptus gracilis										x																								x			
Eucalyptus horistes																																					
Eucalyptus incrassata				x																	x	x															
Eucalyptus livida																																					x
Eucalyptus longicornis																																					
Eucalyptus pileata																x														x			x				
Eucalyptus platycorys																																					
Eucalyptus polita																																					
Eucalyptus prolixa			x							x	x																							x			
Eucalyptus ravida								x																											x		
Eucalyptus rigidula					x	x															x		x					x							x		
Eucalyptus salmonophloia										x	x								x														x	x			

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Eucalyptus salubris				x																																	
Eucalyptus tenuis																											x										
Eucalyptus urna	x		x							x	x																										
Eucalyptus yilgarnensis																																					
Eucalyptus sp.					x	x			x		x	x	x		x			x																	x		
Euryomyrtus maidenii														x						x	x		x	x				x		x	x					x	x
Eutaxia lasiocalyx (P2)																																					
Exocarpos aphyllus				x				x																		x											
Fabaceae sp.																																					
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																																					
Gastrolobium floribundum																						x													x		
Gastrolobium melanocarpum					x							x										x															x
Gastrolobium spinosum							x														x	x	x		x											x	
Glischrocaryon aureum																		x																			
Glischrocaryon sp.																															x						
Gnephosis drummondii		x																																			
Gompholobium hendersonii																																					
Goodenia dyeri																																					
Goodenia occidentalis		x																																			
Goodenia pinifolia																		x																			
Goodenia pusilliflora																																					
Goodenia sp.																																					
Grevillea acacioides																																					
Grevillea acuaria	x				x	x			x																			x			x	x			x		
Grevillea cagiana																																					
Grevillea ?decipiens																																					
Grevillea didymobotrya														x																							
Grevillea didymobotrya subsp. *didymobotrya*																				x	x	x		x											x		
Grevillea excelsior																																					
Grevillea hookeriana subsp. *apiciloba*																																					
Grevillea huegelii				x						x	x					x														x		x	x		x		
Grevillea lissopleura (P1)																																					
Grevillea marriottii (P1)																																					
Grevillea oncogyne															x																				x		
Grevillea shuttleworthiana subsp. *obovata*																																					
Grevillea sp.				x																x											x						
Gyrostemon racemiger																																					
Hakea erecta							x					x	x			x					x	x	x	x	x	x					x				x	x	x
Hakea francisiana									x																x												
Hakea invaginata									x			x																							x		x

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Hakea meisneriana																						x		x													
Hakea minyma							x					x								x	x					x			x						x	x	
Hakea newbeyana																																					
Hakea pendens (P3)																																					
Hakea subsulcata					x		x																						x								
Hakea sp.																		x																			
Halgania andromedifolia																																					
Halgania lavandulacea																						x		x											x		
Halgania sp.																																					
Haloragis hamata																																					
Hemigenia westringioides																																					
Hibbertia ancistrophylla							x																														
Hibbertia exasperata					x	x						x	x		x	x	x									x			x	x							
Hibbertia gracilipes																					x																
Hibbertia aff. *oligantha*																																					
Hibbertia psilocarpa									x											x		x													x		
Hibbertia rostellata																																				x	
Hibbertia stowardii																						x		x	x										x		
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																					x																
Hyalosperma demissum																																					
Hybanthus epacroides																		x																			
Hybanthus floribundus subsp. *floribundus*																																					
Isopogon gardneri									x																											x	
Isopogon scabriusculus subsp. *pubifloris*							x																			x			x						x		
Isopogon scabriusculus subsp. *stenophyllus*																				x	x	x		x											x		x
Jacksonia nematoclada																				x	x	x		x													
Labichea rossii (P1)																																					
Lamiaceae sp.																			x																		
Lasiopetalum ferraricollinum																																					
Lepidosperma aff. *amantiferrum*																																					
Lepidosperma diurnum																																					
Lepidosperma sanguinolentum										x		x	x			x	x	x		x	x				x					x							
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																x																					
Lepidosperma sp.					x														x			x	x	x													
Leptomeria preissiana												x										x															x
Leptosema daviesioides																		x																			
Leptospermum erubescens		x																			x																
Leptospermum fastigiatum							x														x				x												
Leucopogon cuneifolius																																					
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)																				x	x		x														

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Leucopogon sp. Forrestania (G.F. Craig 2386)																								x													
Leucopogon sp. outer wheatbelt (M. Hislop 30)																																					
Leucopogon sp.																						x													x		
Levenhookia stipitata		x																																			
Lycium australe																																					
Lysinema pentapetalum																																					
Maireana carnosa																																					
Maireana marginata																																					
Maireana radiata																																					
Maireana sp.																																					
Melaleuca ?acuminata																																					
Melaleuca acuminata subsp acuminata					x	x													x																x		
Melaleuca calyptroides					x							x			x					x	x	x	x												x		
Melaleuca cliffortioides																																					
Melaleuca condylosa																										x											
Melaleuca cordata									x				x											x	x				x								x
Melaleuca ctenoides		x																																			
Melaleuca cucullata	x																																				
Melaleuca depauperata								x								x			x								x			x							
Melaleuca eleuterostachya	x		x	x		x		x		x	x	x	x		x	x					x		x				x	x					x	x	x		
Melaleuca halmaturorum				x	x																														x		
Melaleuca hamata		x		x	x	x				x		x	x		x	x	x	x		x	x	x	x	x				x		x				x	x		
Melaleuca johnsonii									x				x			x											x										
Melaleuca lateriflora		x	x	x	x	x				x			x			x					x						x	x						x		
Melaleuca laxiflora				x	x	x				x		x	x			x	x			x	x	x		x		x	x	x						x		x
Melaleuca pauperiflora subsp. *fastigiata*																																					
Melaleuca pauperiflora subsp. *pauperiflora*	x		x					x		x								x									x					x				
Melaleuca ?pentagona																																					
Melaleuca phoidophylla							x	x																	x				x								
Melaleuca pungens																																					
Melaleuca sparsiflora																																					
Melaleuca spicigera					x							x				x				x	x	x				x		x		x					x		
Melaleuca teuthidoides																																					
Melaleuca sp.																			x								x										
Microcorys ericifolia																																					
Microcorys obovata			x						x		x	x									x														x		
Microcorys sp. (aff. macredieana)																						x															x
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)							x		x	x																x			x								
Microcybe ambigua									x											x		x		x											x		x
Microcybe multiflora																																					

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Microcybe multiflora subsp. *multiflora*	x		x							x																		x									
Micromyrtus erichsenii							x		x					x				x					x		x	x			x	x						x	
Millotia tenuifolia var. *tenuifolia*																																						
Mirbelia microphylla																															x							
Monotaxis grandiflora var. *obtusifolia*																		x													x							
Myrtaceae sp.					x																																	
Neurachne alopecuroidea		x																																				
Olax benthamiana																																						
Olearia laciniifolia (P2)																																						
Olearia muelleri				x		x																										x	x					
Olearia ramosissima																												x										
Orianthera exilis (P2)																																						
Orianthera judithiana																																						
Orianthera tortuosa									x																													
Persoonia helix							x		x					x			x	x					x		x	x			x							x		
Persoonia quinquenervis												x		x						x	x	x													x		x	
Persoonia saundersiana																																			x		x	
Persoonia striata																																						
Petrophile merrallii																																						
Petrophile stricta									x			x													x				x							x	x	
Petrophile sp.																																						
Phebalium filifolium													x				x				x	x																x
Phebalium lepidotum																																						
Phebalium megaphyllum					x																						x	x							x		x
Phebalium obovatum													x		x										x					x							
Phebalium tuberculosum					x	x							x				x																		x			
Phebalium sp.																																						
Philotheca rhomboidea																																						
Phyllota luehmannii																																						
Pimelea angustifolia																																						
Pimelea sulphurea																		x																				
Pityrodia lepidota																		x													x						
Platysace maxwellii																										x					x						
Platysace sp.																	x																					
Podolepis capillaris																			x																			
Podolepis tepperi																																						
Podotheca angustifolia																																						
Psammomoya choretroides																																						
Pterostylis mutica																																						
Pterostylis sp.																																						

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Ptilotus drummondii var. *minor*		x																																				
Ptilotus gaudichaudii																																						
Ptilotus holosericeus																																						
Ptilotus humilis																																						
Rhagodia ?drummondii																																						
Rhagodia preissii subsp. *preissii*																																						
Rhodanthe laevis																																						
Rhodanthe pygmaea																																						
Rinzia sessilis										x			x		x																								
Santalum acuminatum			x	x	x	x				x		x				x		x	x	x	x		x		x	x		x				x		x		x		
Sarcozona praecox																																						
Scaevola spinescens											x																												
Schoenus hexandrus																							x															
Schoenus nanus																																						
?*Schoenus* sp.																																						
Sclerolaena diacantha																																						
Senecio glossanthus																																						
Senna artemisioides subsp. *filifolia*																																						
Solanum ?plicatile																																						
Stackhousia monogyna																																						
Stackhousia muricata																																						
Stenanthemum stipulosum																					x																	
Stylidium limbatum																							x															
Stylidium neglectum																																						
Stylidium sp.																																						
Styphelia exserta																																						
Synaphea interioris																																						
Templetonia aculeata																					x		x															
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)		x																																			
Thryptomene kochii					x		x				x	x		x						x	x	x	x	x	x		x		x		x	x			x	x	x
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)		x																										x									
Thysanotus sp.																																						
Trachymene pilosa																																						
Trymalium elachophyllum															x						x																	
Trymalium ?myrtillus																																						
Trymalium myrtillus subsp myrtillus																																						
Verticordia chrysantha									x											x																		
Verticordia plumosa var. *incrassata*																																						
Verticordia roei subsp. *roei*																																						
Verticordia sp.																						x																

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Vittadinia humerata																																					
Wahlenbergia gracilenta																																					
Waitzia acuminata var. *acuminata*																																					
Westringia cephalantha																																					
Westringia cephalantha var. *cephalantha*																																					
Westringia rigida			x								x																										
Wilsonia humilis											x																							x			
Xanthorrhoea nana																																					
Zygophyllum glaucum																																					

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Acacia acanthoclada subsp. *acanthoclada*																																					
Acacia acuminata	x					x																	x					x							x	x	
Acacia assimilis																														x							x
Acacia assimilis subsp. *assimilis*			x																																x		
Acacia camptoclada		x				x				x					x			x									x										
Acacia colletioides														x																							
Acacia consanguinea																														x							
Acacia deficiens		x					x							x		x										x											
Acacia erinacea							x							x						x																	
Acacia evenulosa																				x	x																
Acacia hemiteles		x												x			x									x											
Acacia heteroneura var. *jutsonii*																																					
Acacia hystrix subsp. *hystrix*						x				x					x																						
Acacia leptopetala																													x								
Acacia mackeyana																																					
Acacia merrallii							x							x		x	x			x	x				x								x	x			
Acacia ?sphacelata																																					
Acacia sphacelata subsp. *sphacelata*		x			x																																
Acacia spinosissima																									x	x											
Acacia steedmanii																										x											
Acacia steedmanii subsp. *steedmanii*																																					
Acacia sulcata var. *platyphylla*																																					
Acacia tetraptera				x				x															x		x								x				
Acacia undosa (P3)																		x																			
Acacia yorkrakinensis subsp. *acrita*			x									x							x															x			
Acacia sp.																																					
Acacia sp. 1																			x																		
Acacia sp. 2																			x																		
Adenanthos argyreus																																					
Allocasuarina acutivalvis			x		x							x																									
Allocasuarina acutivalvis subsp. *acutivalvis*						x					x												x					x								x		
Allocasuarina campestris																																					
Allocasuarina helmsii																																					
Allocasuarina spinosissima	x					x					x	x	x							x			x			x		x		x			x		x	x	x
Allocasuarina sp.																x																					
Amphipogon caricinus var. *caricinus*																																					
Asteridea athrixioides																				x																	
Astroloma serratifolium																																					
Astus subroseus																																					x
Atriplex sp.																																					

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Austrostipa hemipogon																		x																				
Austrostipa ?juncifolia																																						
Austrostipa trichophylla																															x							
Austrostipa sp.																																						
Baeckea elderiana																																			x			
Baeckea sp.																																						
Banksia elderiana																																						
Banksia laevigata																																						
Banksia laevigata subsp fuscolutea												x																										
Banksia purdieana			x		x						x																	x										
Banksia sphaerocarpa var dolichostyla (T)					x						x																											
Banksia sp.																																						
Beaufortia orbifolia					x						x										x																	
Beaufortia puberula						x																																
Beaufortia schaueri			x								x																											
Bertya dimerostigma																																						
Beyeria ?sulcata																																						
Beyeria sulcata var. *brevipes*				x																			x		x													
Beyeria sulcata var. *gracilis*													x																	x								
Beyeria sp.																																						
Blennospora drummondii																																						
Boronia inornata subsp. *inornata*																																						
Boronia inornata subsp. *leptophylla*																																						
Boronia ternata var. *foliosa*																																						
Boronia sp.																																						
Brachyloma stenolobum (P1)																																						
Brachyscome iberidifolia																															x							
Brachyscome perpusilla																																						
Calandrinia eremaea																																						
Calandrinia granulifera																																						
Callitris canescens			x																x				x					x	x									
Callitris preissii																																						
Callitris verrucosa											x																			x								
Callitris sp.																																x						
Calothamnus gilesii																																						
Calothamnus quadrifidus																																						
Calotis hispidula																																						
Calytrix leschenaultii																																						
Cassytha pomiformis																																						
Cassytha sp.											x																											

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Centaurium tenuiflorum																																					
Centrolepis cephaloformis subsp cephaloformis																																					
Centrolepis polygyna																																					
Centrolepis strigosa subsp. *rupestris*																																					
Chamaexeros fimbriata																																					
Chamelaucium ciliatum																																					
Chamelaucium pauciflorum subsp. *pauciflorum* ms																																					
Chamelaucium virgatum																																					
Chorizema circinale (P3)																																					
Codonocarpus cotinifolius																																					
Comesperma drummondii																																					
Comesperma volubile												x							x																		
Commersonia craurophylla																																					
Conostephium drummondii																																					
Conostephium ?preissii																		x																			
Conostylis bealiana																																					
Coopernookia strophiolata																																					
Crassula colorata																																					
Crassula colorata var. *colorata*																		x																			
Crassula sp.																																					
Cryptandra distigma						x																					x		x								
Cryptandra intonsa																																					
Cryptandra minutifolia subsp. *brevistyla*																																					
Cryptandra minutifolia subsp. *minutifolia*																																		x			
Cryptandra recurva																																					
Cryptandra wilsonii						x									x												x										
Cyanostegia angustifolia																																					
Cyathostemon heterantherus												x							x										x	x	x						
Dampiera eriocephala																																					
Dampiera sacculata					x																																
Dampiera tenuicaulis var. *curvula*																																					
Dampiera sp.																																					
Darwinia sp. Karonie (K. Newbey 8503)																																					
Daviesia aphylla				x		x		x		x					x																						
Daviesia argillacea		x		x			x		x	x				x	x					x	x	x		x		x	x		x					x			x
Daviesia grahamii																																					
Daviesia sarissa subsp. *redacta* (P2)																																					
Daviesia scoparia							x											x																			
Daviesia sp.																																					
Dianella revoluta																	x		x																x		

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Dillwynia acerosa															x								x														
Diuris picta																																					
Dodonaea adenophora																																					
Dodonaea amblyophylla																																					
Dodonaea bursariifolia																	x												x				x				
Dodonaea stenozyga									x											x	x	x		x		x							x	x	x			
Dodonaea ?*viscosa*																																					
Dodonaea sp.								x							x												x										
Drosera glanduligera																																					
Drosera moorei																																					
Drosera sp.																																					
Drosera sp. (climbing)																																					
Drummondita hassellii	x		x									x											x												x		
Enchylaena tomentosa																																				x	
Eremophila decipiens subsp. *decipiens*																																					
Eremophila dempsteri																																					
Eremophila densifolia																																					
Eremophila drummondii																																					
Eremophila ionantha															x																						
Eremophila labrosa		x														x																					
Eremophila sp. aff. verticillata																																					
Eucalyptus burracoppinensis	x		x		x						x																								x	x	
Eucalyptus capillosa subsp. *polyclada*																			x				x						x						x	x	
Eucalyptus cylindriflora		x	x														x						x										x				x
Eucalyptus cylindrocarpa																	x																				
Eucalyptus eremophila				x				x										x					x			x	x				x				x		
Eucalyptus extensa																																					
Eucalyptus flocktoniae subsp. *flocktoniae*		x		x											x							x		x	x		x									x
Eucalyptus gracilis																																					
Eucalyptus horistes																																					
Eucalyptus incrassata				x				x																													
Eucalyptus livida	x																																				
Eucalyptus longicornis																																					
Eucalyptus pileata																																					
Eucalyptus platycorys																																					
Eucalyptus polita																																					
Eucalyptus prolixa							x								x						x			x	x								x				
Eucalyptus ravida																						x		x													
Eucalyptus rigidula						x				x			x		x			x						x			x				x				x		
Eucalyptus salmonophloia														x		x									x	x											

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Eucalyptus salubris				x				x																														
Eucalyptus tenuis																																						
Eucalyptus urna									x							x									x													
Eucalyptus yilgarnensis																				x																		
Eucalyptus sp.						x	x												x		x											x						
Euryomyrtus maidenii																																				x		
Eutaxia lasiocalyx (P2)																																	x					
Exocarpos aphyllus				x				x														x		x	x							x						
Fabaceae sp.																																						
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																																						
Gastrolobium floribundum																																						
Gastrolobium melanocarpum						x																																
Gastrolobium spinosum													x																	x								
Glischrocaryon aureum																																						
Glischrocaryon sp.																										x												
Gnephosis drummondii																																						
Gompholobium hendersonii											x																											
Goodenia dyeri																																						
Goodenia occidentalis																																						
Goodenia pinifolia											x																											
Goodenia pusilliflora																																						
Goodenia sp.																															x							
Grevillea acacioides																																						
Grevillea acuaria				x		x	x									x	x	x			x	x	x		x	x	x	x	x	x		x		x	x			x
Grevillea cagiana																																						
Grevillea ?decipiens																																						
Grevillea didymobotrya																														x								
Grevillea didymobotrya subsp. *didymobotrya*	x																																			x		
Grevillea excelsior																																						
Grevillea hookeriana subsp. *apiciloba*																																						
Grevillea huegelii	x			x		x										x																						
Grevillea lissopleura (P1)																																						
Grevillea marriottii (P1)																																						
Grevillea oncogyne																																						
Grevillea shuttleworthiana subsp. *obovata*																																						
Grevillea sp.								x										x					x			x									x			
Gyrostemon racemiger																																						
Hakea erecta	x		x										x																							x		
Hakea francisiana																														x								
Hakea invaginata						x																														x		

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Hakea meisneriana																																				x	
Hakea minyma													x						x				x					x							x		
Hakea newbeyana																																					
Hakea pendens (P3)																												x		x							
Hakea subsulcata			x		x						x												x					x		x					x		
Hakea sp.																																					
Halgania andromedifolia																																					
Halgania lavandulacea																																					
Halgania sp.																																					
Haloragis hamata																																					
Hemigenia westringioides																																					
Hibbertia ancistrophylla																																					
Hibbertia exasperata						x																	x						x						x		x
Hibbertia gracilipes																																					
Hibbertia aff. *oligantha*																																					
Hibbertia psilocarpa																		x									x			x							
Hibbertia rostellata																																					
Hibbertia stowardii	x																																			x	
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																																					
Hyalosperma demissum																																					
Hybanthus epacroides																																					
Hybanthus floribundus subsp. *floribundus*																																					
Isopogon gardneri					x						x																										
Isopogon scabriusculus subsp. *pubifloris*			x																																		
Isopogon scabriusculus subsp. *stenophyllus*																																				x	
Jacksonia nematoclada	x																																				
Labichea rossii (P1)																																					
Lamiaceae sp.																	x																				
Lasiopetalum ferraricollinum																																					
Lepidosperma aff. *amantiferrum*																																					
Lepidosperma diurnum																																					
Lepidosperma sanguinolentum																	x																				
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																																					
Lepidosperma sp.						x																															
Leptomeria preissiana																																					
Leptosema daviesioides																																					
Leptospermum erubescens																							x														
Leptospermum fastigiatum	x																																				
Leucopogon cuneifolius			x																																		
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)																																					

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Leucopogon sp. Forrestania (G.F. Craig 2386)	x																																						
Leucopogon sp. outer wheatbelt (M. Hislop 30)												x																		x								
Leucopogon sp.																																							
Levenhookia stipitata																																							
Lycium australe																																							
Lysinema pentapetalum																																							
Maireana carnosa														x																									
Maireana marginata														x																									
Maireana radiata																																							
Maireana sp.																																							
Melaleuca ?acuminata																																							
Melaleuca acuminata subsp acuminata				x		x		x							x		x	x				x		x			x		x		x		x						
Melaleuca calyptroides	x									x			x		x												x		x		x				x				
Melaleuca cliffortioides																					x												x	x			x		
Melaleuca condylosa			x																x																				
Melaleuca cordata			x		x						x								x									x										x	
Melaleuca ctenoides	x								x							x																							
Melaleuca cucullata																									x														
Melaleuca depauperata																																							
Melaleuca eleuterostachya						x				x			x					x	x					x	x	x	x		x		x				x				x
Melaleuca halmaturorum				x				x											x					x									x						x
Melaleuca hamata			x			x					x		x		x				x	x			x						x					x	x	x	x	x	
Melaleuca johnsonii																																							
Melaleuca lateriflora	x					x		x		x					x				x			x		x			x		x		x				x				x
Melaleuca laxiflora	x			x		x				x		x			x				x	x				x			x	x					x		x	x	x	x	
Melaleuca pauperiflora subsp. *fastigiata*				x		x									x							x		x			x											
Melaleuca pauperiflora subsp. *pauperiflora*							x		x					x		x					x					x													x
Melaleuca ?pentagona																																		x					
Melaleuca phoidophylla			x																														x						
Melaleuca pungens																																							
Melaleuca sparsiflora																																							
Melaleuca spicigera	x			x		x						x															x								x	x		
Melaleuca teuthidoides							x												x		x									x								
Melaleuca sp.		x																						x			x												
Microcorys ericifolia																																							
Microcorys obovata	x			x		x																																	
Microcorys sp. (aff. macredieana)																		x																					
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)			x		x														x																			
Microcybe ambigua						x	x					x			x					x	x	x		x												x	x		
Microcybe multiflora																																							

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Microcybe multiflora subsp. *multiflora*								x						x	x	x									x													x
Micromyrtus erichsenii			x		x																									x								
Millotia tenuifolia var. *tenuifolia*																				x											x							
Mirbelia microphylla																																							
Monotaxis grandiflora var. *obtusifolia*																																							
Myrtaceae sp.	x																																						
Neurachne alopecuroidea																																							
Olax benthamiana																																							
Olearia laciniifolia (P2)																																							
Olearia muelleri						x								x				x				x	x	x	x														
Olearia ramosissima																		x													x								
Orianthera exilis (P2)																																							
Orianthera judithiana																																							
Orianthera tortuosa																																							
Persoonia helix			x									x	x																	x						x			
Persoonia quinquenervis	x																																			x			
Persoonia saundersiana																												x							x	x		
Persoonia striata												x																							x				
Petrophile merrallii																																							
Petrophile stricta	x		x		x							x																		x								
Petrophile sp.																																							
Phebalium filifolium				x		x												x																				
Phebalium lepidotum																																							
Phebalium megaphyllum						x				x									x				x			x		x							x				
Phebalium obovatum																			x												x								
Phebalium tuberculosum																													x		x								
Phebalium sp.		x																																					
Philotheca rhomboidea																																							
Phyllota luehmannii																																							
Pimelea angustifolia																																							
Pimelea sulphurea																																							
Pityrodia lepidota																																							
Platysace maxwellii																																							
Platysace sp.																																							
Podolepis capillaris																															x								
Podolepis tepperi																																							
Podotheca angustifolia																															x								
Psammomoya choretroides																																							
Pterostylis mutica																				x																			
Pterostylis sp.																																							

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Ptilotus drummondii var. *minor*																																					
Ptilotus gaudichaudii																																					
Ptilotus holosericeus																																					
Ptilotus humilis																															x						
Rhagodia ?drummondii																																					
Rhagodia preissii subsp. *preissii*																																					
Rhodanthe laevis																															x						
Rhodanthe pygmaea																																					
Rinzia sessilis													x					x					x			x												
Santalum acuminatum	x		x	x		x	x	x	x	x	x		x	x	x	x				x	x				x	x							x		x	x	x	
Sarcozona praecox																																					
Scaevola spinescens																									x												
Schoenus hexandrus																																					
Schoenus nanus																																					
?*Schoenus* sp.																																					
Sclerolaena diacantha														x		x																					
Senecio glossanthus																				x																	
Senna artemisioides subsp. *filifolia*																																					
Solanum ?plicatile																																					
Stackhousia monogyna																																					
Stackhousia muricata																																					
Stenanthemum stipulosum																																					
Stylidium limbatum																										x											
Stylidium neglectum																																					
Stylidium sp.																																					
Styphelia exserta																																					
Synaphea interioris																																					
Templetonia aculeata																																					
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)																																					
Thryptomene kochii	x		x			x					x	x	x						x							x				x			x		x	x	
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)						x												x															x				
Thysanotus sp.																																					
Trachymene pilosa																															x						
Trymalium elachophyllum																																					
Trymalium ?myrtillus																																		x			
Trymalium myrtillus subsp myrtillus																																					
Verticordia chrysantha						x																															
Verticordia plumosa var. *incrassata*																																					
Verticordia roei subsp. *roei*																																					
Verticordia sp.	x					x									x												x								x	x	

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Vittadinia humerata																																							
Wahlenbergia gracilenta																																							
Waitzia acuminata var. *acuminata*																		x													x								
Westringia cephalantha																																							
Westringia cephalantha var. *cephalantha*																												x					x						
Westringia rigida														x											x														
Wilsonia humilis		x												x		x										x													
Xanthorrhoea nana																																							
Zygophyllum glaucum																																							

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Acacia acanthoclada subsp. *acanthoclada*																																					
Acacia acuminata						x																				x							x	x		
Acacia assimilis																	x																				
Acacia assimilis subsp. *assimilis*									x											x																	
Acacia camptoclada	x							x			x		x																							x	
Acacia colletioides																																					
Acacia consanguinea																																					
Acacia deficiens	x		x																				x	x		x										
Acacia erinacea																								x													
Acacia evenulosa	x												x																								
Acacia hemiteles	x																							x													
Acacia heteroneura var. *jutsonii*																																					
Acacia hystrix subsp. *hystrix*					x																																
Acacia leptopetala																																					
Acacia mackeyana																																					
Acacia merrallii			x				x	x					x													x				x			x			x	
Acacia ?sphacelata																																					
Acacia sphacelata subsp. *sphacelata*			x															x						x						x						
Acacia spinosissima	x																																				
Acacia steedmanii	x																																				x
Acacia steedmanii subsp. *steedmanii*																																					
Acacia sulcata var. *platyphylla*																																					
Acacia tetraptera										x					x										x		x										
Acacia undosa (P3)	x													x																							
Acacia yorkrakinensis subsp. *acrita*		x																x			x								x				x	x		x
Acacia sp.																x																					x
Acacia sp. 1																																					
Acacia sp. 2											x																x										
Adenanthos argyreus																																					
Allocasuarina acutivalvis		x		x								x			x		x		x							x						x		x	x		x
Allocasuarina acutivalvis subsp. *acutivalvis*						x			x																												
Allocasuarina campestris																																					
Allocasuarina helmsii																																					
Allocasuarina spinosissima				x		x			x									x			x	x					x						x	x		
Allocasuarina sp.																																					
Amphipogon caricinus var. *caricinus*																																					
Asteridea athrixioides																																					
Astroloma serratifolium																																					
Astus subroseus																																					
Atriplex sp.																																					

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Austrostipa hemipogon																																									
Austrostipa ?juncifolia																																									
Austrostipa trichophylla																																									
Austrostipa sp.	x															x								x																	
Baeckea elderiana									x			x																														
Baeckea sp.									x																																	
Banksia elderiana																																									
Banksia laevigata																			x															x	x						
Banksia laevigata subsp fuscolutea		x																																							
Banksia purdieana																			x															x							
Banksia sphaerocarpa var dolichostyla (T)																																									
Banksia sp.																																									
Beaufortia orbifolia																	x																								
Beaufortia puberula																																									
Beaufortia schaueri																									x																
Bertya dimerostigma																																									
Beyeria ?sulcata																																									
Beyeria sulcata var. *brevipes*			x																	x																				
Beyeria sulcata var. *gracilis*				x												x		x		x		x							x			x								
Beyeria sp.																																									
Blennospora drummondii	x																																								
Boronia inornata subsp. *inornata*																																									
Boronia inornata subsp. *leptophylla*																																									
Boronia ternata var. *foliosa*																												x				x								
Boronia sp.															x			x																							
Brachyloma stenolobum (P1)																																									
Brachyscome iberidifolia																																									
Brachyscome perpusilla													x																												
Calandrinia eremaea							x																																		
Calandrinia granulifera																																									
Callitris canescens				x		x					x	x						x			x		x				x							x							
Callitris preissii																																									
Callitris verrucosa															x							x																			
Callitris sp.																																									
Calothamnus gilesii																																									
Calothamnus quadrifidus																																									
Calotis hispidula													x																												
Calytrix leschenaultii																																									
Cassytha pomiformis																																									
Cassytha sp.									x								x		x																x						

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Centaurium tenuiflorum																																							
Centrolepis cephaloformis subsp cephaloformis																																							
Centrolepis polygyna																																							
Centrolepis strigosa subsp. *rupestris*																																							
Chamaexeros fimbriata																																							
Chamelaucium ciliatum																																							
Chamelaucium pauciflorum subsp. *pauciflorum* ms				x																																			
Chamelaucium virgatum																																							
Chorizema circinale (P3)																																							
Codonocarpus cotinifolius																																							x
Comesperma drummondii																																x							
Comesperma volubile																																							
Commersonia craurophylla																																							
Conostephium drummondii																																							
Conostephium ?preissii																																							
Conostylis bealiana																																							
Coopernookia strophiolata							x																	x															
Crassula colorata								x																															
Crassula colorata var. *colorata*	x																																						
Crassula sp.								x																															
Cryptandra distigma																																							
Cryptandra intonsa																																							
Cryptandra minutifolia subsp. *brevistyla*	x																																						
Cryptandra minutifolia subsp. *minutifolia*																																							
Cryptandra recurva																																							
Cryptandra wilsonii																																							
Cyanostegia angustifolia																																							
Cyathostemon heterantherus															x			x	x		x												x	x				
Dampiera eriocephala																																							
Dampiera sacculata																x	x															x						x
Dampiera tenuicaulis var. *curvula*																																							
Dampiera sp.																																							
Darwinia sp. Karonie (K. Newbey 8503)																																							
Daviesia aphylla					x				x	x																													
Daviesia argillacea	x		x				x	x		x			x										x	x		x			x	x									
Daviesia grahamii															x																								
Daviesia sarissa subsp. *redacta* (P2)																																							
Daviesia scoparia															x																								
Daviesia sp.																																							
Dianella revoluta								x					x																										

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Dillwynia acerosa																																					
Diuris picta																																					
Dodonaea adenophora																																					
Dodonaea amblyophylla																																					
Dodonaea bursariifolia	x														x																						
Dodonaea stenozyga	x		x							x					x								x		x	x			x	x			x					
Dodonaea ?*viscosa*															x																						
Dodonaea sp.																x																						
Drosera glanduligera																																					
Drosera moorei																																					
Drosera sp.																																x					
Drosera sp. (climbing)																																					
Drummondita hassellii						x			x										x	x	x	x												x				
Enchylaena tomentosa																																					
Eremophila decipiens subsp. *decipiens*																																					
Eremophila dempsteri														x																							
Eremophila densifolia														x																							
Eremophila drummondii																									x												
Eremophila ionantha																									x												
Eremophila labrosa	x																																				
Eremophila sp. aff. verticillata														x																							
Eucalyptus burracoppinensis		x													x																				x	x		
Eucalyptus capillosa subsp. *polyclada*																											x										
Eucalyptus cylindriflora	x								x										x			x													x		
Eucalyptus cylindrocarpa									x				x																						x		
Eucalyptus eremophila					x				x	x	x					x							x				x					x					
Eucalyptus extensa																											x										
Eucalyptus flocktoniae subsp. *flocktoniae*			x							x					x												x										
Eucalyptus gracilis																																					
Eucalyptus horistes																																					
Eucalyptus incrassata											x																										
Eucalyptus livida																																					
Eucalyptus longicornis																																					
Eucalyptus pileata					x																																
Eucalyptus platycorys																																					
Eucalyptus polita																																					
Eucalyptus prolixa			x										x												x	x										x		
Eucalyptus ravida			x											x											x				x	x							
Eucalyptus rigidula																				x								x			x						
Eucalyptus salmonophloia																									x												

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	EG112	EG113	EG114	EG115	EG116	EG117	EG118	EG119	EG120	EG121	EG122	EG123	EG124	EG125	EG126	EG127	EG128	EG129	EG130	EG131	EG132	EG133	EG134	EG135	EG136	EG137	EG138	EG139	EG140	EG141	EG142	EG143	EG144	EG145	EG146	EG147	EG148
Eucalyptus salubris																																									
Eucalyptus tenuis							x						x													x															
Eucalyptus urna			x									x																	x	x			x							
Eucalyptus yilgarnensis																																									
Eucalyptus sp.		x					x								x	x				x	x								x										x	
Euryomyrtus maidenii						x																						x			x									
Eutaxia lasiocalyx (P2)																																									
Exocarpos aphyllus			x				x			x	x				x									x	x	x	x		x	x			x							
Fabaceae sp.																		x								x														
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																																									
Gastrolobium floribundum																	x																								
Gastrolobium melanocarpum																																									
Gastrolobium spinosum												x				x		x													x									
Glischrocaryon aureum																																									
Glischrocaryon sp.	x																																								
Gnephosis drummondii																																									
Gompholobium hendersonii																																									
Goodenia dyeri																																									
Goodenia occidentalis																																									
Goodenia pinifolia																	x																x							
Goodenia pusilliflora																																									
Goodenia sp.																																									
Grevillea acacioides																																									
Grevillea acuaria			x		x			x					x	x	x								x	x	x	x	x										x			
Grevillea cagiana																																									
Grevillea ?decipiens																																									
Grevillea didymobotrya																						x																			
Grevillea didymobotrya subsp. *didymobotrya*									x																																
Grevillea excelsior																																									
Grevillea hookeriana subsp. *apiciloba*																												x													
Grevillea huegelii									x		x															x															
Grevillea lissopleura (P1)																																									
Grevillea marriottii (P1)																																									
Grevillea oncogyne					x																																				
Grevillea shuttleworthiana subsp. *obovata*																																									
Grevillea sp.																	x										x						x							x
Gyrostemon racemiger																	x																								
Hakea erecta				x					x			x								x	x							x						x	x					
Hakea francisiana																																									
Hakea invaginata																																									

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Hakea meisneriana																																			x		
Hakea minyma		x				x			x			x				x		x			x							x			x	x					x
Hakea newbeyana							x																														
Hakea pendens (P3)																																					
Hakea subsulcata									x			x							x			x													x		
Hakea sp.																																					
Halgania andromedifolia																																					
Halgania lavandulacea																																					
Halgania sp.																																					
Haloragis hamata																																					
Hemigenia westringioides																	x																				x
Hibbertia ancistrophylla												x				x				x								x			x						
Hibbertia exasperata									x												x	x						x										
Hibbertia gracilipes																		x				x																
Hibbertia aff. *oligantha*																																					
Hibbertia psilocarpa																																					
Hibbertia rostellata																				x																	
Hibbertia stowardii				x																														x	x		
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																																					
Hyalosperma demissum																																					
Hybanthus epacroides																																					
Hybanthus floribundus subsp. *floribundus*																																	x				x
Isopogon gardneri																	x																				
Isopogon scabriusculus subsp. *pubifloris*																																			x		
Isopogon scabriusculus subsp. *stenophyllus*									x																												
Jacksonia nematoclada									x																			x									
Labichea rossii (P1)																																					
Lamiaceae sp.								x																													
Lasiopetalum ferraricollinum																												x									
Lepidosperma aff. *amantiferrum*																																					
Lepidosperma diurnum																																					
Lepidosperma sanguinolentum																																					
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																																					
Lepidosperma sp.																																					
Leptomeria preissiana																																			x		
Leptosema daviesioides	x															x																					
Leptospermum erubescens																															x						
Leptospermum fastigiatum												x										x															
Leucopogon cuneifolius																																					
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)																																					

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Leucopogon sp. Forrestania (G.F. Craig 2386)																																					
Leucopogon sp. outer wheatbelt (M. Hislop 30)																																			x		
Leucopogon sp.																																					
Levenhookia stipitata																																					
Lycium australe																																					
Lysinema pentapetalum																																					
Maireana carnosa																																					
Maireana marginata																																					
Maireana radiata																																					
Maireana sp.																																					
Melaleuca ?acuminata																							x						x								
Melaleuca acuminata subsp acuminata								x		x																										x	
Melaleuca calyptroides				x					x																												
Melaleuca cliffortioides														x																							
Melaleuca condylosa		x									x										x																
Melaleuca cordata		x		x													x	x		x		x															x
Melaleuca ctenoides																																					
Melaleuca cucullata																													x	x			x				
Melaleuca depauperata											x								x						x		x										
Melaleuca eleuterostachya	x						x			x					x										x		x										
Melaleuca halmaturorum										x																											
Melaleuca hamata				x		x			x	x					x	x					x				x			x			x	x					
Melaleuca johnsonii					x		x																														
Melaleuca lateriflora	x		x		x		x			x			x		x								x													x	
Melaleuca laxiflora						x			x	x																											
Melaleuca pauperiflora subsp. *fastigiata*												x		x																							
Melaleuca pauperiflora subsp. *pauperiflora*			x				x								x								x	x		x		x	x	x	x		x	x			
Melaleuca ?pentagona																																					
Melaleuca phoidophylla																		x				x	x		x											x	
Melaleuca pungens																																					
Melaleuca sparsiflora					x																																
Melaleuca spicigera									x		x								x																x	x		
Melaleuca teuthidoides					x								x														x										
Melaleuca sp.										x																											
Microcorys ericifolia																																					
Microcorys obovata	x																																				
Microcorys sp. (aff. macredieana)																																					
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)	x														x							x					x							x		
Microcybe ambigua							x																												x		
Microcybe multiflora			x																																		

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Microcybe multiflora subsp. *multiflora*			x																				x			x										x	
Micromyrtus erichsenii		x										x						x		x	x	x						x			x	x		x	x		x
Millotia tenuifolia var. *tenuifolia*													x																									
Mirbelia microphylla																																						
Monotaxis grandiflora var. *obtusifolia*																																						
Myrtaceae sp.																																						
Neurachne alopecuroidea																																						
Olax benthamiana																																						
Olearia laciniifolia (P2)																																						
Olearia muelleri													x																									
Olearia ramosissima																																						
Orianthera exilis (P2)																																						
Orianthera judithiana																																						
Orianthera tortuosa																																						
Persoonia helix		x		x		x						x						x		x		x						x						x	x		
Persoonia quinquenervis						x													x																x			
Persoonia saundersiana																																						
Persoonia striata		x																		x														x	x		
Petrophile merrallii																																						
Petrophile stricta												x							x																x			
Petrophile sp.																																						
Phebalium filifolium						x			x																													
Phebalium lepidotum																																		x				
Phebalium megaphyllum															x																			x				
Phebalium obovatum																		x																				
Phebalium tuberculosum																																						
Phebalium sp.																																						
Philotheca rhomboidea																																						
Phyllota luehmannii																																						
Pimelea angustifolia																x																						
Pimelea sulphurea																	x																	x				x
Pityrodia lepidota																																						
Platysace maxwellii																x															x							
Platysace sp.																																						
Podolepis capillaris																																						
Podolepis tepperi																																						
Podotheca angustifolia																																						
Psammomoya choretroides																																						
Pterostylis mutica																																						
Pterostylis sp.																																						

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Ptilotus drummondii var. *minor*																																										
Ptilotus gaudichaudii																																										
Ptilotus holosericeus																																										
Ptilotus humilis													x																													
Rhagodia ?drummondii																																										
Rhagodia preissii subsp. *preissii*																																										
Rhodanthe laevis	x												x																													
Rhodanthe pygmaea	x																						x																			
Rinzia sessilis	x	x				x			x																																	
Santalum acuminatum	x		x	x		x			x	x		x	x	x			x	x			x	x						x		x	x		x	x	x						
Sarcozona praecox																																										
Scaevola spinescens																																										
Schoenus hexandrus																																										
Schoenus nanus																																										
?*Schoenus* sp.																																										
Sclerolaena diacantha																																										
Senecio glossanthus	x																																									
Senna artemisioides subsp. *filifolia*																																										
Solanum ?plicatile																																										
Stackhousia monogyna																																										
Stackhousia muricata																																										
Stenanthemum stipulosum																x																										
Stylidium limbatum																x																										
Stylidium neglectum																																										
Stylidium sp.																																										
Styphelia exserta																																										
Synaphea interioris																																										
Templetonia aculeata																																										
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)																																										
Thryptomene kochii		x		x		x			x							x		x	x	x	x						x		x	x		x	x						
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)																																										
Thysanotus sp.																																										
Trachymene pilosa																																										
Trymalium elachophyllum																																										
Trymalium ?myrtillus																																										
Trymalium myrtillus subsp myrtillus																																										
Verticordia chrysantha									x																																
Verticordia plumosa var. *incrassata*																																										
Verticordia roei subsp. *roei*																																										
Verticordia sp.						x			x																																	

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Vittadinia humerata																																								
Wahlenbergia gracilenta																																								
Waitzia acuminata var. *acuminata*	x																						x																	
Westringia cephalantha																																								
Westringia cephalantha var. *cephalantha*																																								
Westringia rigida	x																																							
Wilsonia humilis																								x																
Xanthorrhoea nana																																								
Zygophyllum glaucum																																								

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Acacia acanthoclada subsp. *acanthoclada*																																					
Acacia acuminata																																					
Acacia assimilis									x						x							x			x												
Acacia assimilis subsp. *assimilis*																																x					
Acacia camptoclada														x															x								
Acacia colletioides																																					
Acacia consanguinea																																					
Acacia deficiens					x					x								x						x										x			
Acacia erinacea	x					x											x			x															x		
Acacia evenulosa			x																																		
Acacia hemiteles																	x																				
Acacia heteroneura var. *jutsonii*																																					
Acacia hystrix subsp. *hystrix*			x																															x			
Acacia leptopetala																																					
Acacia mackeyana			x																																		
Acacia merrallii					x					x								x		x				x		x							x				
Acacia ?sphacelata																																					
Acacia sphacelata subsp. *sphacelata*										x										x									x	x							
Acacia spinosissima																																					
Acacia steedmanii																																					
Acacia steedmanii subsp. *steedmanii*																																					
Acacia sulcata var. *platyphylla*																																					
Acacia tetraptera																																					
Acacia undosa (P3)																																					
Acacia yorkrakinensis subsp. *acrita*			x	x					x						x	x			x		x	x			x		x					x		x			
Acacia sp.																																					
Acacia sp. 1																																					
Acacia sp. 2																																					
Adenanthos argyreus									x							x			x		x	x						x						x	x	x	
Allocasuarina acutivalvis									x		x	x			x		x		x		x	x	x		x		x	x				x		x	x	x	
Allocasuarina acutivalvis subsp. *acutivalvis*			x																																		
Allocasuarina campestris																															x						
Allocasuarina helmsii																																					
Allocasuarina spinosissima	x			x					x				x	x							x						x			x							
Allocasuarina sp.																																					
Amphipogon caricinus var. *caricinus*																																					
Asteridea athrixioides																																					
Astroloma serratifolium																																					
Astus subroseus																																					
Atriplex sp.						x																															

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Austrostipa hemipogon																																					
Austrostipa ?juncifolia																																					
Austrostipa trichophylla																																					
Austrostipa sp.	x					x											x																				
Baeckea elderiana																																					
Baeckea sp.									x																												
Banksia elderiana																																					
Banksia laevigata																																					
Banksia laevigata subsp fuscolutea									x						x																						
Banksia purdieana				x					x						x	x			x		x	x	x		x							x			x	x	x
Banksia sphaerocarpa var dolichostyla (T)																			x		x	x			x											x	
Banksia sp.																																					
Beaufortia orbifolia		x																			x											x				x	x
Beaufortia puberula																																					
Beaufortia schaueri									x										x			x															
Bertya dimerostigma																																					
Beyeria ?sulcata																																					
Beyeria sulcata var. *brevipes*											x			x																				x			
Beyeria sulcata var. *gracilis*																														x							
Beyeria sp.																						x															
Blennospora drummondii																																					
Boronia inornata subsp. *inornata*																																					
Boronia inornata subsp. *leptophylla*																																					
Boronia ternata var. *foliosa*														x							x				x												x
Boronia sp.																																x					
Brachyloma stenolobum (P1)																																					
Brachyscome iberidifolia																																					
Brachyscome perpusilla																																					
Calandrinia eremaea																																					
Calandrinia granulifera																																					
Callitris canescens																					x									x		x			x		
Callitris preissii																																					
Callitris verrucosa																	x																				
Callitris sp.		x																																			
Calothamnus gilesii																																					
Calothamnus quadrifidus																																					
Calotis hispidula																																					
Calytrix leschenaultii																																					
Cassytha pomiformis																			x		x																
Cassytha sp.		x							x						x	x						x	x				x								x		

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Centaurium tenuiflorum																																					
Centrolepis cephaloformis subsp cephaloformis																																					
Centrolepis polygyna																																					
Centrolepis strigosa subsp. *rupestris*																																					
Chamaexeros fimbriata																																					
Chamelaucium ciliatum																																					
Chamelaucium pauciflorum subsp. *pauciflorum* ms																																					
Chamelaucium virgatum									x						x				x																		
Chorizema circinale (P3)																			x																		
Codonocarpus cotinifolius																																					
Comesperma drummondii																																					
Comesperma volubile	x											x		x			x						x								x						
Commersonia craurophylla																																					
Conostephium drummondii																																					
Conostephium ?preissii																																					
Conostylis bealiana																																					
Coopernookia strophiolata	x									x																											
Crassula colorata																																					
Crassula colorata var. *colorata*																																					
Crassula sp.																																					
Cryptandra distigma																																					
Cryptandra intonsa																																					
Cryptandra minutifolia subsp. *brevistyla*																																					
Cryptandra minutifolia subsp. *minutifolia*			x																																		
Cryptandra recurva																																					
Cryptandra wilsonii																																					
Cyanostegia angustifolia																																					x
Cyathostemon heterantherus									x					x	x												x		x								x
Dampiera eriocephala																																					
Dampiera sacculata																																			x		x
Dampiera tenuicaulis var. *curvula*	x																x																				
Dampiera sp.																																					
Darwinia sp. Karonie (K. Newbey 8503)																																					
Daviesia aphylla																																					
Daviesia argillacea	x		x		x		x	x		x							x	x						x								x	x				
Daviesia grahamii																																		x			
Daviesia sarissa subsp. *redacta* (P2)		x																																			
Daviesia scoparia																		x																			
Daviesia sp.																																					x
Dianella revoluta	x																x																				

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	EG149	EG150	EG151	EG152	EG153	EG154	EG155	EG156	EG157	EG158	EG159	EG160	EG161	EG162	EG163	EG164	EG165	EG166	EG167	EG168	EG169	EG170	EG171	EG172	EG173	EG174	EG175	EG176	EG177	EG178	EG179	EG180	EG181	EG182	EG183	EG184	EG185
Dillwynia acerosa																																					
Diuris picta																																					
Dodonaea adenophora																															x						
Dodonaea amblyophylla																																					
Dodonaea bursariifolia																	x																				
Dodonaea stenozyga	x				x	x	x			x								x		x				x		x							x				
Dodonaea ?*viscosa*																																					
Dodonaea sp.																												x									
Drosera glanduligera														x																							
Drosera moorei																																					
Drosera sp.																																					
Drosera sp. (climbing)			x										x																								
Drummondita hassellii		x		x					x						x	x			x			x					x	x	x								
Enchylaena tomentosa																																					
Eremophila decipiens subsp. *decipiens*						x																															
Eremophila dempsteri							x																	x													
Eremophila densifolia										x																											
Eremophila drummondii																																					
Eremophila ionantha																											x										
Eremophila labrosa																																					
Eremophila sp. aff. verticillata																																	x				
Eucalyptus burracoppinensis									x						x	x			x			x			x		x							x		x		x
Eucalyptus capillosa subsp. *polyclada*			x								x						x																		x		
Eucalyptus cylindriflora		x						x																x												x	x
Eucalyptus cylindrocarpa																																					
Eucalyptus eremophila														x																						x	
Eucalyptus extensa																																					
Eucalyptus flocktoniae subsp. *flocktoniae*										x																											
Eucalyptus gracilis																																					
Eucalyptus horistes																																					
Eucalyptus incrassata																																					
Eucalyptus livida																																					
Eucalyptus longicornis																																					
Eucalyptus pileata																																					
Eucalyptus platycorys																												x									
Eucalyptus polita																																					
Eucalyptus prolixa					x					x								x		x				x													
Eucalyptus ravida																		x						x									x				
Eucalyptus rigidula			x						x										x					x				x	x			x					
Eucalyptus salmonophloia						x																		x										x				

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Eucalyptus salubris																										x											
Eucalyptus tenuis																																	x				
Eucalyptus urna							x													x												x	x				
Eucalyptus yilgarnensis																																					
Eucalyptus sp.	x	x		x	x			x						x								x												x			
Euryomyrtus maidenii				x																																	
Eutaxia lasiocalyx (P2)																																					
Exocarpos aphyllus					x			x	x											x				x		x							x				
Fabaceae sp.																																					
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																																					
Gastrolobium floribundum																									x							x					x
Gastrolobium melanocarpum											x																										
Gastrolobium spinosum		x							x						x	x			x			x						x							x		
Glischrocaryon aureum																																					
Glischrocaryon sp.	x																																				
Gnephosis drummondii																																					
Gompholobium hendersonii									x										x																x		x
Goodenia dyeri																																					
Goodenia occidentalis																																					
Goodenia pinifolia																																					
Goodenia pusilliflora																																					
Goodenia sp.																																					
Grevillea acacioides																																					
Grevillea acuaria			x		x			x		x								x		x				x		x							x				
Grevillea cagiana																																					
Grevillea ?decipiens																																					
Grevillea didymobotrya												x			x																						
Grevillea didymobotrya subsp. *didymobotrya*																																					
Grevillea excelsior																																					
Grevillea hookeriana subsp. *apiciloba*												x				x												x									
Grevillea huegelii			x																																		
Grevillea lissopleura (P1)																																x					
Grevillea marriottii (P1)																															x						
Grevillea oncogyne																																					
Grevillea shuttleworthiana subsp. *obovata*																																					
Grevillea sp.																																					
Gyrostemon racemiger																																					x
Hakea erecta		x		x					x						x	x											x	x									
Hakea francisiana									x							x											x										
Hakea invaginata			x											x																	x						

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Hakea meisneriana																																					
Hakea minyma																														x		x					x
Hakea newbeyana																																					
Hakea pendens (P3)									x		x						x																				
Hakea subsulcata											x	x	x						x		x	x	x		x		x			x		x			x	x	x
Hakea sp.																																				x	
Halgania andromedifolia																																					
Halgania lavandulacea																																					
Halgania sp.																																					
Haloragis hamata																																					
Hemigenia westringioides																																					
Hibbertia ancistrophylla											x																								x		x
Hibbertia exasperata														x	x														x			x			x		
Hibbertia gracilipes																													x								
Hibbertia aff. *oligantha*																															x						
Hibbertia psilocarpa									x																												
Hibbertia rostellata		x										x							x		x						x								x		
Hibbertia stowardii				x									x				x				x	x	x		x			x		x						x		
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																																					
Hyalosperma demissum																																					
Hybanthus epacroides																																					
Hybanthus floribundus subsp. *floribundus*																																				x	
Isopogon gardneri		x															x				x	x			x							x				x	x
Isopogon scabriusculus subsp. *pubifloris*																																					
Isopogon scabriusculus subsp. *stenophyllus*																																					
Jacksonia nematoclada															x	x											x					x					
Labichea rossii (P1)		x																			x																x
Lamiaceae sp.																																					
Lasiopetalum ferraricollinum									x						x				x																		x
Lepidosperma aff. *amantiferrum*																																					
Lepidosperma diurnum																															x						
Lepidosperma sanguinolentum													x																								
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																																					
Lepidosperma sp.												x																									
Leptomeria preissiana															x		x										x										
Leptosema daviesioides																																					
Leptospermum erubescens											x			x																							
Leptospermum fastigiatum		x										x																									
Leucopogon cuneifolius																																					
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)				x																																	

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Leucopogon sp. Forrestania (G.F. Craig 2386)															x						x																
Leucopogon sp. outer wheatbelt (M. Hislop 30)		x																												x		x					
Leucopogon sp.																																					
Levenhookia stipitata																																					
Lycium australe																																					
Lysinema pentapetalum																																					
Maireana carnosa																																					
Maireana marginata																																					
Maireana radiata																																					
Maireana sp.																				x																	
Melaleuca ?acuminata																																					
Melaleuca acuminata subsp acuminata			x																																		
Melaleuca calyptroides				x															x									x									
Melaleuca cliffortioides								x																x							x		x					
Melaleuca condylosa																																			x		
Melaleuca cordata		x		x					x			x	x	x	x	x			x		x	x	x		x		x	x		x		x				x	
Melaleuca ctenoides																																					
Melaleuca cucullata							x																			x												
Melaleuca depauperata																																					
Melaleuca eleuterostachya	x							x																x													
Melaleuca halmaturorum																			x																		
Melaleuca hamata	x	x	x											x					x		x							x	x								x
Melaleuca johnsonii			x					x								x			x								x										
Melaleuca lateriflora								x																														
Melaleuca laxiflora			x											x																							
Melaleuca pauperiflora subsp. *fastigiata*																																					
Melaleuca pauperiflora subsp. *pauperiflora*	x			x	x		x			x					x			x						x	x	x	x					x	x				
Melaleuca ?pentagona																																					
Melaleuca phoidophylla		x							x																					x	x		x			x	
Melaleuca pungens																x																					
Melaleuca sparsiflora																																					
Melaleuca spicigera																																			x		x
Melaleuca teuthidoides										x																											
Melaleuca sp.	x					x											x																		x		
Microcorys ericifolia																																					
Microcorys obovata		x																	x						x			x								x
Microcorys sp. (aff. macredieana)																																					
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)																			x		x	x	x		x		x			x		x			x	x	x
Microcybe ambigua								x						x					x									x									
Microcybe multiflora																																					

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Microcybe multiflora subsp. *multiflora*		x			x													x		x				x									x				
Micromyrtus erichsenii		x		x					x				x	x	x	x			x				x		x		x	x		x		x			x		
Millotia tenuifolia var. *tenuifolia*																																						
Mirbelia microphylla																																						
Monotaxis grandiflora var. *obtusifolia*																																						
Myrtaceae sp.																																						
Neurachne alopecuroidea																																						
Olax benthamiana																																				x		
Olearia laciniifolia (P2)																																						
Olearia muelleri			x		x	x																																
Olearia ramosissima																																						
Orianthera exilis (P2)																																						
Orianthera judithiana																																						
Orianthera tortuosa																																						
Persoonia helix		x		x					x				x		x	x			x			x			x		x	x	x	x					x	x	x
Persoonia quinquenervis				x																																		
Persoonia saundersiana																																						
Persoonia striata																																x						
Petrophile merrallii																																						
Petrophile stricta									x						x				x								x											
Petrophile sp.																																						
Phebalium filifolium																																						
Phebalium lepidotum																																						
Phebalium megaphyllum																																						
Phebalium obovatum																												x	x									
Phebalium tuberculosum			x																																			
Phebalium sp.																																						
Philotheca rhomboidea																												x										
Phyllota luehmannii																																						
Pimelea angustifolia																																						
Pimelea sulphurea																																				x		
Pityrodia lepidota																																						
Platysace maxwellii																														x							x	
Platysace sp.																																						
Podolepis capillaris																																						
Podolepis tepperi																																						
Podotheca angustifolia																																						
Psammomoya choretroides															x				x											x								
Pterostylis mutica																																						
Pterostylis sp.																																						

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Ptilotus drummondii var. *minor*																																					
Ptilotus gaudichaudii																																					
Ptilotus holosericeus																																					
Ptilotus humilis																																					
Rhagodia ?drummondii																																		x			
Rhagodia preissii subsp. *preissii*						x																															
Rhodanthe laevis																																					
Rhodanthe pygmaea																																					
Rinzia sessilis											x																										
Santalum acuminatum	x	x	x						x		x				x	x	x	x		x	x			x			x						x		x		
Sarcozona praecox						x																															
Scaevola spinescens	x					x																															x
Schoenus hexandrus																																					
Schoenus nanus																																					
?*Schoenus* sp.																																					
Sclerolaena diacantha						x												x						x		x											
Senecio glossanthus										x																											
Senna artemisioides subsp. *filifolia*																	x																				
Solanum ?plicatile																																					
Stackhousia monogyna																																					
Stackhousia muricata																																				x	
Stenanthemum stipulosum																																					
Stylidium limbatum																																					
Stylidium neglectum																																					
Stylidium sp.																																					
Styphelia exserta																															x						
Synaphea interioris																																					
Templetonia aculeata																																					
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)																																					
Thryptomene kochii			x	x							x								x		x	x			x		x				x		x		x		
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)			x																																		
Thysanotus sp.																																					x
Trachymene pilosa																																					
Trymalium elachophyllum																																					
Trymalium ?myrtillus																																					
Trymalium myrtillus subsp myrtillus																															x						
Verticordia chrysantha																																					
Verticordia plumosa var. *incrassata*																																					
Verticordia roei subsp. *roei*																																					
Verticordia sp.																																					

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Vittadinia humerata																																					
Wahlenbergia gracilenta																																					
Waitzia acuminata var. *acuminata*																																					
Westringia cephalantha											x																										
Westringia cephalantha var. *cephalantha*																																					
Westringia rigida																																					
Wilsonia humilis																																		x			
Xanthorrhoea nana																																					
Zygophyllum glaucum																																					

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	EG186	EG187	EG188	EG189	EG190	EG191	EG192	EG193	EG194	EG195	EG196	EG197	EG198	EG199	EG200	EG201	EG202	EG203	EG204	EG205	EG206	EG207	EG208	EG209	EG210	EG211	EG212	EG213	EG214	Oppo
Acacia acanthoclada subsp. *acanthoclada*																								x				x	x	
Acacia acuminata																														
Acacia assimilis																														
Acacia assimilis subsp. *assimilis*							x		x																					
Acacia camptoclada																	x	x		x										
Acacia colletioides																						x								
Acacia consanguinea																														
Acacia deficiens					x																									x
Acacia erinacea															x											x				
Acacia evenulosa																														
Acacia hemiteles													x	x	x	x										x	x			
Acacia heteroneura var. *jutsonii*																														
Acacia hystrix subsp. *hystrix*	x	x																												
Acacia leptopetala																														
Acacia mackeyana																														
Acacia merrallii								x		x					x	x				x	x	x	x							
Acacia ?sphacelata																												x	x	
Acacia sphacelata subsp. *sphacelata*														x			x			x	x									
Acacia spinosissima																		x												
Acacia steedmanii																														
Acacia steedmanii subsp. *steedmanii*																														x
Acacia sulcata var. *platyphylla*																														
Acacia tetraptera																														
Acacia undosa (P3)																														
Acacia yorkrakinensis subsp. *acrita*																														
Acacia sp.			x																											
Acacia sp. 1																														x
Acacia sp. 2																														x
Adenanthos argyreus																														
Allocasuarina acutivalvis			x			x	x		x				x						x					x				x		
Allocasuarina acutivalvis subsp. *acutivalvis*																														
Allocasuarina campestris				x																										
Allocasuarina helmsii																												x		
Allocasuarina spinosissima													x	x										x	x					
Allocasuarina sp.																														
Amphipogon caricinus var. *caricinus*																														
Asteridea athrixioides																										x	x			x
Astroloma serratifolium																														
Astus subroseus																														
Atriplex sp.															x								x							

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	EG186	EG187	EG188	EG189	EG190	EG191	EG192	EG193	EG194	EG195	EG196	EG197	EG198	EG199	EG200	EG201	EG202	EG203	EG204	EG205	EG206	EG207	EG208	EG209	EG210	EG211	EG212	EG213	EG214	Oppo
Austrostipa hemipogon																														
Austrostipa ?juncifolia																	x													
Austrostipa trichophylla																														
Austrostipa sp.												x	x	x	x	x										x	x			
Baeckea elderiana											x																			
Baeckea sp.											x																			
Banksia elderiana																														
Banksia laevigata																														
Banksia laevigata subsp fuscolutea																									x					
Banksia purdieana						x			x										x											
Banksia sphaerocarpa var dolichostyla (T)						x																			x					
Banksia sp.																														
Beaufortia orbifolia						x			x																					
Beaufortia puberula																														
Beaufortia schaueri																														
Bertya dimerostigma																														
Beyeria ?sulcata																														
Beyeria sulcata var. *brevipes*																				x										
Beyeria sulcata var. *gracilis*						x																								
Beyeria sp.																														
Blennospora drummondii																														
Boronia inornata subsp. *inornata*															x															
Boronia inornata subsp. *leptophylla*	x																													
Boronia ternata var. *foliosa*							x																							
Boronia sp.																														
Brachyloma stenolobum (P1)																														
Brachyscome iberidifolia																														
Brachyscome perpusilla																														
Calandrinia eremaea																														
Calandrinia granulifera																														x
Callitris canescens																								x	x					
Callitris preissii																														
Callitris verrucosa																														
Callitris sp.																														
Calothamnus gilesii											x																			
Calothamnus quadrifidus																			x											
Calotis hispidula																														
Calytrix leschenaultii																														x
Cassytha pomiformis																														
Cassytha sp.							x		x		x														x					

APPENDIX F: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN EACH SURVEY QUADRAT IN THE EARL GREY LITHIUM PROJECT

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Centaurium tenuiflorum																														
Centrolepis cephaloformis subsp cephaloformis																														x
Centrolepis polygyna																														
Centrolepis strigosa subsp. *rupestris*																														x
Chamaexeros fimbriata																														
Chamelaucium ciliatum																														
Chamelaucium pauciflorum subsp. *pauciflorum* ms																														
Chamelaucium virgatum																														x
Chorizema circinale (P3)																														x
Codonocarpus cotinifolius																														
Comesperma drummondii																														
Comesperma volubile				x																					x			x		
Commersonia craurophylla																										x		x	x	
Conostephium drummondii																														
Conostephium ?preissii																														
Conostylis bealiana												x																		
Coopernookia strophiolata												x			x															
Crassula colorata																						x								
Crassula colorata var. *colorata*																														
Crassula sp.																														
Cryptandra distigma																														
Cryptandra intonsa																								x	x					
Cryptandra minutifolia subsp. *brevistyla*																														
Cryptandra minutifolia subsp. *minutifolia*																														x
Cryptandra recurva																														
Cryptandra wilsonii																														
Cyanostegia angustifolia																														
Cyathostemon heterantherus																														
Dampiera eriocephala												x																		
Dampiera sacculata			x			x	x					x						x	x									x	x	
Dampiera tenuicaulis var. *curvula*												x														x				
Dampiera sp.																														
Darwinia sp. Karonie (K. Newbey 8503)																														
Daviesia aphylla																														
Daviesia argillacea		x			x							x																		
Daviesia grahamii																														
Daviesia sarissa subsp. *redacta* (P2)																														
Daviesia scoparia	x	x											x	x				x		x	x									
Daviesia sp.																														
Dianella revoluta					x							x								x	x					x				

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Dillwynia acerosa																														
Diuris picta																			x											
Dodonaea adenophora				x																										
Dodonaea amblyophylla																														
Dodonaea bursariifolia																								x						x
Dodonaea stenozyga								x		x					x															
Dodonaea ?*viscosa*																														
Dodonaea sp.																														
Drosera glanduligera																														
Drosera moorei																														
Drosera sp.																														
Drosera sp. (climbing)												x																		
Drummondita hassellii						x			x																					
Enchylaena tomentosa																														
Eremophila decipiens subsp. *decipiens*																														
Eremophila dempsteri																														
Eremophila densifolia																														
Eremophila drummondii																														
Eremophila ionantha																x						x					x			
Eremophila labrosa																														
Eremophila sp. aff. verticillata																														
Eucalyptus burracoppinensis																														
Eucalyptus capillosa subsp. *polyclada*									x																					
Eucalyptus cylindriflora																														
Eucalyptus cylindrocarpa																														
Eucalyptus eremophila		x										x	x	x				x						x			x	x	x	
Eucalyptus extensa																														
Eucalyptus flocktoniae subsp. *flocktoniae*																										x		x	x	
Eucalyptus gracilis																	x		x	x										
Eucalyptus horistes																														
Eucalyptus incrassata																				x										
Eucalyptus livida																														x
Eucalyptus longicornis										x																				
Eucalyptus pileata	x																													
Eucalyptus platycorys																														
Eucalyptus polita										x																				
Eucalyptus prolixa															x	x						x								
Eucalyptus ravida								x																						
Eucalyptus rigidula						x					x												x							
Eucalyptus salmonophloia													x	x	x	x	x	x												

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Eucalyptus salubris																														
Eucalyptus tenuis																														
Eucalyptus urna	x				x			x										x		x	x			x						
Eucalyptus yilgarnensis																														
Eucalyptus sp.		x	x																	x		x				x		x		
Euryomyrtus maidenii																														
Eutaxia lasiocalyx (P2)																														
Exocarpos aphyllus		x			x			x		x										x										
Fabaceae sp.																														
Gahnia sp. South West (K.L. Wilson & K. Frank KLW 9266)																														x
Gastrolobium floribundum																														
Gastrolobium melanocarpum																														
Gastrolobium spinosum						x	x																		x					
Glischrocaryon aureum																										x				
Glischrocaryon sp.							x					x							x								x	x	x	
Gnephosis drummondii																														
Gompholobium hendersonii																														
Goodenia dyeri																														x
Goodenia occidentalis															x															
Goodenia pinifolia																			x											
Goodenia pusilliflora																														x
Goodenia sp.																														
Grevillea acacioides																														
Grevillea acuaria	x				x			x					x	x						x										
Grevillea cagiana																														
Grevillea ?decipiens																														
Grevillea didymobotrya																														
Grevillea didymobotrya subsp. *didymobotrya*																														
Grevillea excelsior																														
Grevillea hookeriana subsp. *apiciloba*																														
Grevillea huegelii																	x			x			x							x
Grevillea lissopleura (P1)				x																										
Grevillea marriottii (P1)																														
Grevillea oncogyne																														
Grevillea shuttleworthiana subsp. *obovata*																														
Grevillea sp.			x				x					x						x								x				
Gyrostemon racemiger						x																						x		
Hakea erecta																														
Hakea francisiana																														
Hakea invaginata																														

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Hakea meisneriana																														
Hakea minyma			x				x				x																			x
Hakea newbeyana																														
Hakea pendens (P3)																														x
Hakea subsulcata						x	x		x		x	x													x					
Hakea sp.												x			x															
Halgania andromedifolia																				x										x
Halgania lavandulacea																														
Halgania sp.																		x												
Haloragis hamata																										x				
Hemigenia westringioides							x																							
Hibbertia ancistrophylla									x																					
Hibbertia exasperata																														
Hibbertia gracilipes																														
Hibbertia aff. *oligantha*				x																										
Hibbertia psilocarpa																														
Hibbertia rostellata							x																							
Hibbertia stowardii												x																		
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)																														
Hyalosperma demissum																														x
Hybanthus epacroides																														x
Hybanthus floribundus subsp. *floribundus*							x																							
Isopogon gardneri																			x											x
Isopogon scabriusculus subsp. *pubifloris*																														
Isopogon scabriusculus subsp. *stenophyllus*																														
Jacksonia nematoclada							x					x																		
Labichea rossii (P1)																		x												
Lamiaceae sp.																														
Lasiopetalum ferraricollinum			x																											x
Lepidosperma aff. *amantiferrum*																														
Lepidosperma diurnum				x																										
Lepidosperma sanguinolentum												x						x						x	x					
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)																														
Lepidosperma sp.							x												x									x	x	
Leptomeria preissiana																														
Leptosema daviesioides																														
Leptospermum erubescens																														
Leptospermum fastigiatum									x		x																			
Leucopogon cuneifolius																			x											
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)																														

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Leucopogon sp. Forrestania (G.F. Craig 2386)																			x											
Leucopogon sp. outer wheatbelt (M. Hislop 30)																														
Leucopogon sp.																														
Levenhookia stipitata																														x
Lycium australe																						x	x							
Lysinema pentapetalum																														x
Maireana carnosa										x																				
Maireana marginata																						x								
Maireana radiata										x																				
Maireana sp.																				x										
Melaleuca ?acuminata																														
Melaleuca acuminata subsp acuminata																														
Melaleuca calyptroides																														
Melaleuca cliffortioides		x		x																										
Melaleuca condylosa										x							x													
Melaleuca cordata							x		x																x					
Melaleuca ctenoides																														
Melaleuca cucullata								x																						
Melaleuca depauperata																														
Melaleuca eleuterostachya	x	x																												
Melaleuca halmaturorum																														
Melaleuca hamata			x									x							x					x	x	x		x	x	
Melaleuca johnsonii		x																												
Melaleuca lateriflora	x	x																												
Melaleuca laxiflora																								x						
Melaleuca pauperiflora subsp. *fastigiata*																														
Melaleuca pauperiflora subsp. *pauperiflora*	x				x			x		x		x							x		x	x	x	x						
Melaleuca ?pentagona																														
Melaleuca phoidophylla		x	x						x																					
Melaleuca pungens																														
Melaleuca sparsiflora																														
Melaleuca spicigera	x					x														x										x
Melaleuca teuthidoides		x															x													
Melaleuca sp.														x	x												x			
Microcorys ericifolia																														
Microcorys obovata						x													x											x
Microcorys sp. (aff. macredieana)																														
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)			x						x										x						x	x				x
Microcybe ambigua					x																									
Microcybe multiflora										x																				

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Microcybe multiflora subsp. *multiflora*		x						x																						
Micromyrtus erichsenii											x	x																		
Millotia tenuifolia var. *tenuifolia*																														
Mirbelia microphylla																														
Monotaxis grandiflora var. *obtusifolia*																														
Myrtaceae sp.																														
Neurachne alopecuroidea																														x
Olax benthamiana																														
Olearia laciniifolia (P2)																		x											x	
Olearia muelleri										x			x			x	x				x	x								
Olearia ramosissima																														
Orianthera exilis (P2)																			x											
Orianthera judithiana																														x
Orianthera tortuosa																														
Persoonia helix						x	x		x		x	x																		
Persoonia quinquenervis																														x
Persoonia saundersiana																														
Persoonia striata																														
Petrophile merrallii																														x
Petrophile stricta																														
Petrophile sp.											x																			
Phebalium filifolium																														
Phebalium lepidotum																														
Phebalium megaphyllum																			x											
Phebalium obovatum																														
Phebalium tuberculosum																														
Phebalium sp.																														x
Philotheca rhomboidea																														
Phyllota luehmannii																														
Pimelea angustifolia			x				x																							x
Pimelea sulphurea																														x
Pityrodia lepidota			x			x												x						x					
Platysace maxwellii																														
Platysace sp.																														x
Podolepis capillaris																														x
Podotheca angustifolia																														
Psammomoya choretroides																														
Pterostylis mutica																														
Pterostylis sp.																														

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Ptilotus drummondii var. *minor*																														
Ptilotus gaudichaudii																														x
Ptilotus holosericeus																						x					x			x
Ptilotus humilis																														
Rhagodia ?drummondii																														
Rhagodia preissii subsp. *preissii*																														
Rhodanthe laevis																														
Rhodanthe pygmaea																														x
Rinzia sessilis			x																											x
Santalum acuminatum			x		x	x	x			x	x		x	x	x	x														
Sarcozona praecox																														
Scaevola spinescens																														
Schoenus hexandrus																														
Schoenus nanus																														x
?*Schoenus* sp.																			x						x					
Sclerolaena diacantha													x	x								x	x							x
Senecio glossanthus																						x	x			x	x			
Senna artemisioides subsp. *filifolia*													x	x	x	x	x			x										
Solanum ?plicatile																												x	x	
Stackhousia monogyna																													x	
Stackhousia muricata			x			x																								
Stenanthemum stipulosum							x					x						x	x											x
Stylidium limbatum			x			x																								
Stylidium neglectum																														x
Stylidium sp.							x																							
Styphelia exserta				x																										
Synaphea interioris																														
Templetonia aculeata																														x
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)																														x
Thryptomene kochii									x																					
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)																														
Thysanotus sp.																														
Trachymene pilosa																														
Trymalium elachophyllum																														
Trymalium ?myrtillus																														
Trymalium myrtillus subsp myrtillus				x																										
Verticordia chrysantha																														
Verticordia plumosa var. *incrassata*																														
Verticordia roei subsp. *roei*																														x
Verticordia sp.																														

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Vittadinia humerata													x	x																
Wahlenbergia gracilenta													x																	
Waitzia acuminata var. *acuminata*																										x	x	x	x	
Westringia cephalantha																														
Westringia cephalantha var. *cephalantha*																														
Westringia rigida																				x										
Wilsonia humilis															x											x				
Xanthorrhoea nana																														
Zygophyllum glaucum										x										x							x			

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

Note: plants listed as 'oppo' were recorded opportunistically within the EGLP, and not within a survey quadrat.

TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T)	oppo	755532	6445342	1
	oppo	754990	6445604	1
	oppo	755026	6445590	1
	oppo	755027	6445587	1
	oppo	755026	6445587	1
	oppo	755035	6445587	1
	oppo	755035	6445585	1
	oppo	755041	6445581	1
	oppo	755050	6445580	1
	oppo	755004	6445623	1
	oppo	755061	6445602	1
	oppo	755066	6445600	1
	oppo	755069	6445607	1
	oppo	755092	6445593	1
	oppo	755094	6445595	1
	oppo	755098	6445594	1
	oppo	755102	6445594	1
	oppo	755096	6445591	1
	oppo	755094	6445591	1
	oppo	755116	6445607	1
	oppo	755124	6445604	1
	oppo	755126	6445593	1
	oppo	759361	6443634	1
	oppo	759343	6443649	1
	oppo	758895	6443191	1
	oppo	758898	6443194	1
	oppo	758876	6443197	1
	oppo	758862	6443206	1
	oppo	758869	6443211	1
	oppo	758871	6443219	1
	oppo	758860	6443218	1
	oppo	758860	6443226	1
	oppo	758859	6443215	1
	oppo	758860	6443206	1
	oppo	758917	6443168	1
	oppo	758868	6443134	1
	oppo	758924	6443129	1
	oppo	758928	6443115	1
	oppo	759363	6443633	1
	oppo	759361	6443634	1
	oppo	759344	6443649	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

Note: plants listed as 'oppo' were recorded opportunistically within the EGLP, and not within a survey quadrat.

TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	759349	6443691	1
	oppo	759342	6443653	1
	oppo	759344	6443650	1
	oppo	759327	6443623	1
	oppo	759325	6443624	1
	oppo	759317	6443621	1
	oppo	759315	6443622	1
	oppo	759308	6443624	1
	oppo	759327	6443627	1
	oppo	759315	6443636	1
	oppo	759309	6443639	1
	oppo	759310	6443634	1
	oppo	759310	6443634	1
	oppo	759312	6443649	1
	oppo	759335	6443659	1
	oppo	759323	6443664	1
	oppo	759318	6443665	1
	oppo	759307	6443661	1
	oppo	759305	6443663	1
	oppo	759306	6443668	1
	oppo	759319	6443664	1
	oppo	760684	6442914	1
	oppo	760782	6442808	1
	oppo	760778	6442804	1
	oppo	760806	6442788	1
	oppo	760846	6442733	1
	oppo	760847	6442736	1
	oppo	760856	6442734	1
	oppo	760854	6442729	1
	oppo	760857	6442728	1
	oppo	760856	6442726	1
	oppo	760854	6442726	1
	oppo	760860	6442726	1
	oppo	760861	6442720	1
	oppo	760862	6442719	1
	oppo	760865	6442716	1
	oppo	760941	6442768	1
	oppo	763431	6436534	1
	oppo	763434	6436535	1
	oppo	761095	6443004	1
	oppo	763434	6436531	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

Note: plants listed as 'oppo' were recorded opportunistically within the EGLP, and not within a survey quadrat.

TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	761095	6443004	1
	oppo	763423	6436528	1
	oppo	761096	6443005	1
	oppo	763421	6436522	1
	oppo	761092	6443007	1
	oppo	763417	6436526	1
	oppo	761091	6443013	1
	oppo	763413	6436522	1
	oppo	761087	6443018	1
	oppo	763408	6436519	1
	oppo	761084	6443023	1
	oppo	763409	6436516	1
	oppo	761083	6443023	1
	oppo	763410	6436515	1
	oppo	763412	6436515	1
	oppo	763407	6436521	1
	oppo	763404	6436522	1
	oppo	763403	6436515	1
	oppo	763405	6436513	1
	oppo	763406	6436512	1
	oppo	759581	6442110	1
	oppo	759584	6442109	1
	oppo	759584	6442109	1
	oppo	759584	6442109	1
	oppo	759587	6442113	1
	oppo	759583	6442127	1
	oppo	759582	6442129	1
	oppo	759576	6442128	1
	oppo	759566	6442133	1
	oppo	759571	6442131	1
	oppo	759575	6442131	1
	oppo	759579	6442133	1
	oppo	759582	6442132	1
	oppo	759583	6442132	1
	oppo	758242	6443618	1
	oppo	758244	6443609	1
	oppo	758238	6443607	1
	oppo	758238	6443612	1
	oppo	758232	6443614	1
	oppo	758242	6443625	1
	oppo	758244	6443627	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

Note: plants listed as 'oppo' were recorded opportunistically within the EGLP, and not within a survey quadrat.

TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	758248	6443624	1
	oppo	759600	6441960	1
	oppo	759604	6441957	1
	oppo	759605	6441952	1
	oppo	759605	6441941	1
	oppo	759598	6441944	1
	oppo	759589	6441950	1
	oppo	759594	6441935	1
	oppo	759601	6441932	1
	oppo	759600	6441933	1
	oppo	759603	6441926	1
	oppo	759617	6441931	1
	oppo	759626	6441937	1
	oppo	759636	6441935	1
	oppo	759644	6441927	1
	oppo	759645	6441943	1
	oppo	759643	6441944	1
	oppo	759642	6441946	1
	oppo	759643	6441947	1
	oppo	759642	6441948	1
	oppo	759643	6441949	1
	oppo	759647	6441952	1
	oppo	759647	6441953	1
	oppo	759649	6441955	1
	oppo	759654	6441956	1
	oppo	759647	6441961	1
	oppo	759649	6441961	1
	oppo	759648	6441961	1
	oppo	759643	6441953	1
	oppo	759642	6441950	1
	oppo	759642	6441948	1
	oppo	759641	6441948	1
	oppo	759641	6441946	1
	oppo	759642	6441945	1
	oppo	759646	6441945	1
	oppo	759632	6441947	1
	oppo	759632	6441942	1
	oppo	759631	6441951	1
	oppo	759621	6441946	1
	oppo	759620	6441944	1
	oppo	759619	6441944	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

Note: plants listed as 'oppo' were recorded opportunistically within the EGLP, and not within a survey quadrat.

TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	759617	6441947	1
	oppo	759616	6441946	1
	oppo	759616	6441945	1
	oppo	759615	6441945	1
	oppo	759614	6441943	1
	oppo	759615	6441941	1
	oppo	759615	6441941	1
	oppo	759607	6441957	1
	oppo	759603	6441959	1
	oppo	759614	6441960	1
	oppo	759618	6441958	1
	oppo	759623	6441963	1
	oppo	759627	6441963	1
	oppo	759628	6441959	1
	oppo	759630	6441960	1
	oppo	759630	6441963	1
	oppo	759630	6441967	1
	oppo	759632	6441967	1
	oppo	759634	6441968	1
	oppo	759638	6441966	1
	oppo	759639	6441964	1
	oppo	759638	6441960	1
	oppo	759638	6441957	1
	oppo	759641	6441959	1
	oppo	759644	6441963	1
	oppo	759645	6441969	1
	oppo	759647	6441973	1
	oppo	759643	6441972	1
	oppo	759641	6441972	1
	oppo	759641	6441976	1
	oppo	759639	6441976	1
	oppo	759638	6441975	1
	oppo	759638	6441974	1
	oppo	759634	6441970	1
	oppo	759633	6441969	1
	oppo	759630	6441968	1
	oppo	759626	6441968	1
	oppo	759627	6441965	1
	oppo	759595	6441966	1
	oppo	759595	6441969	1
	oppo	759601	6441970	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	759604	6441975	1
	oppo	759606	6441977	1
	oppo	759606	6441975	1
	oppo	759607	6441976	1
	oppo	759608	6441977	1
	oppo	759607	6441979	1
	oppo	759608	6441974	1
	oppo	759612	6441973	1
	oppo	759616	6441972	1
	oppo	759618	6441974	1
	oppo	759617	6441975	1
	oppo	759611	6441981	1
	oppo	759610	6441981	1
	oppo	759609	6441980	1
	oppo	759607	6441981	1
	oppo	759605	6441984	1
	oppo	759600	6441979	1
	oppo	759593	6441979	1
	oppo	759595	6441968	1
	oppo	759653	6441985	1
	oppo	759654	6441987	1
	oppo	759653	6441990	1
	oppo	759648	6441987	1
	oppo	759649	6441986	1
	oppo	759635	6441984	1
	oppo	759635	6441983	1
	oppo	759632	6441984	1
	oppo	759629	6441986	1
	oppo	759626	6441986	1
	oppo	759626	6441988	1
	oppo	759625	6441987	1
	oppo	759612	6441990	1
	oppo	759610	6441991	1
	oppo	759611	6441993	1
	oppo	759596	6442005	1
	oppo	759590	6442015	1
	oppo	759587	6442013	1
	oppo	759589	6442022	1
	oppo	759566	6442016	1
	oppo	759577	6441995	1
	oppo	759574	6441987	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Banksia sphaerocarpa var. *dolichostyla* (T) (continued)	oppo	759571	6441988	1
	oppo	759569	6441985	1
	oppo	759568	6441987	1
	oppo	759567	6441985	1
	oppo	759569	6441984	1
	oppo	759567	6441981	1
	oppo	759561	6441987	1
	oppo	759558	6441988	1
	oppo	759545	6442016	1
	oppo	759542	6442016	1
	oppo	759542	6442020	1
	oppo	759900	6441992	1
	oppo	759904	6441984	1
	oppo	759900	6441982	1
	oppo	759903	6441980	1
	oppo	759904	6441978	1
	oppo	759902	6441976	1
	oppo	759897	6441980	1
	oppo	759894	6441985	1
	EG167	758924	6443130	1
	EG170	760685	6442915	1
	EG173	760868	6442708	1
	EG169	761114	6442970	1
	EG011	755525	6445344	1
	EG079	760591	6446311	2
	EG210	763426	6436539	1
	EG184	759563	6442136	1
	EG191	759583	6441958	5
Acacia undosa (P3)	EG125	764252	6444703	1
	EG071	764048	6446452	1
	EG053	760761	6446911	1
	EG054	760285	6446903	1
	EG050	761532	6447230	1
	EG112	763782	6445300	1
	EG047	761309	6447284	1
Brachyloma stenolobum (P1)	EG017	757137	6445013	1

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Chorizema circinale (P3)	EG167	758924	6443130	1
	oppo	756153	6445232	1
Daviesia sarissa subsp. *redacta* (P2)	EG150	760321	6443638	1
Grevillea lissopleura (P1)	EG189	761692	6442046	1
	EG179	761900	6442300	1
Grevillea marriottii (P1)	EG177	759440	6442368	1
Hakea pendens (P3)	EG026	758371	6448332	1
	oppo	758383	6447974	6
	oppo	758319	6447905	4
	Q070	760512	6445695	1
	oppo	763637	6443584	1
	EG157	758331	6443451	1
	EG165	763604	6443142	3
	oppo	763623	6443174	1
	oppo	763592	6443122	1
	oppo	763589	6443128	1
	EG159	762638	6443426	41
	oppo	762702	6443588	1
	oppo	762701	6443587	1
	oppo	762702	6443602	1
	oppo	762697	6443589	1
	oppo	762694	6443608	1
	oppo	762692	6443585	1
	oppo	762694	6443619	1
	oppo	762692	6443579	1
	oppo	762692	6443620	1
	oppo	762692	6443577	1
	oppo	762694	6443624	1
	oppo	762692	6443575	1
	oppo	762688	6443624	1
	oppo	762692	6443570	1
	oppo	762685	6443624	1
	oppo	762688	6443569	1
	oppo	762685	6443621	1
	oppo	762684	6443568	1
	oppo	762673	6443624	1
	oppo	762679	6443558	1

APPENDIX G: LOCATIONS OF THREATENED AND PRIOIRTY FLORA RECORDED WITHIN THE EARL GREY LITHIUM PROJECT

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Hakea pendens (P3)	oppo	762672	6443622	1
(continued)	oppo	762681	6443555	1
	oppo	762672	6443621	1
	oppo	762680	6443554	1
	oppo	762667	6443623	1
	oppo	762685	6443546	1
	oppo	762664	6443623	1
	oppo	762683	6443545	1
	oppo	762664	6443621	1
	oppo	762682	6443537	1
	oppo	762663	6443620	1
	oppo	762674	6443539	1
	oppo	762659	6443628	1
	oppo	762670	6443538	1
	oppo	762658	6443629	1
	oppo	762663	6443549	1
	oppo	762650	6443626	1
	oppo	762657	6443549	1
	oppo	762654	6443618	1
	oppo	762657	6443549	1
	oppo	762656	6443615	1
	oppo	762654	6443554	1
	oppo	762667	6443610	1
	oppo	762651	6443555	1
	oppo	763592	6443122	1
	oppo	763662	6443095	1
	oppo	762665	6443610	1
	oppo	762651	6443557	1
	oppo	762665	6443608	1
	oppo	762650	6443556	1
	oppo	762663	6443606	1
	oppo	762650	6443556	1
	oppo	762656	6443605	1
	oppo	762648	6443556	1
	oppo	762658	6443609	1
	oppo	762645	6443550	1
	oppo	762669	6443608	1
	oppo	762645	6443551	1
	oppo	762672	6443605	1
	oppo	762643	6443554	1
	oppo	762672	6443605	1

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Hakea pendens (P3)	oppo	762643	6443556	1
(continued)	oppo	762680	6443606	1
	oppo	762643	6443563	1
	oppo	762684	6443613	1
	oppo	762644	6443565	1
	oppo	762738	6443498	1
	oppo	762645	6443565	1
	oppo	762759	6443484	1
	oppo	762643	6443566	1
	oppo	762708	6443504	1
	oppo	762643	6443567	1
	oppo	762701	6443500	1
	oppo	762644	6443567	1
	oppo	762694	6443503	1
	oppo	762643	6443570	1
	oppo	762689	6443499	1
	oppo	762643	6443570	1
	oppo	762687	6443500	1
	oppo	762644	6443573	1
	oppo	762684	6443499	1
	oppo	762643	6443574	1
	oppo	762682	6443496	1
	oppo	762642	6443576	1
	oppo	762682	6443494	1
	oppo	762641	6443578	1
	oppo	762684	6443495	1
	oppo	762641	6443578	1
	oppo	762685	6443495	1
	oppo	762643	6443580	1
	oppo	762685	6443494	1
	oppo	762643	6443580	1
	oppo	762689	6443482	1
	oppo	762642	6443585	1
	oppo	762691	6443486	1
	oppo	762645	6443588	1
	oppo	762691	6443487	1
	oppo	762650	6443591	1
	oppo	762692	6443486	1
	oppo	762693	6443488	1
	oppo	762695	6443487	1
	oppo	762696	6443485	1

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Hakea pendens (P3)	oppo	762695	6443489	1
(continued)	oppo	762681	6443488	1
	oppo	762681	6443486	1
	oppo	762688	6443476	1
	oppo	762692	6443468	1
	oppo	762701	6443465	1
	oppo	762702	6443464	1
	oppo	762702	6443462	1
	oppo	762685	6443453	1
	oppo	762681	6443452	1
	oppo	762685	6443450	1
	oppo	762665	6443431	1
	oppo	762662	6443436	1
	oppo	762659	6443436	1
	oppo	762658	6443431	1
	oppo	762660	6443429	1
	oppo	762663	6443427	1
	oppo	762662	6443424	1
	oppo	762662	6443423	1
	oppo	762660	6443423	1
	oppo	762657	6443426	1
	oppo	762655	6443427	1
	oppo	762653	6443419	1
	oppo	762653	6443418	1
	oppo	762650	6443418	1
	oppo	762651	6443422	1
	oppo	762646	6443418	1
	oppo	762645	6443417	1
	oppo	762643	6443418	1
	oppo	762635	6443425	1
	oppo	762638	6443424	1
	oppo	762638	6443419	1
	oppo	762637	6443417	1
	oppo	762640	6443414	1
	oppo	762639	6443413	1
	oppo	762638	6443412	1
	oppo	762638	6443410	1
	oppo	762637	6443410	1
	oppo	762640	6443411	1
	oppo	762641	6443412	1
	oppo	762642	6443409	1

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Hakea pendens (P3)	oppo	762644	6443409	1
(continued)	oppo	762644	6443410	1
	oppo	762643	6443410	1
	oppo	762645	6443409	1
	oppo	762647	6443408	1
	oppo	762645	6443407	1
	oppo	762646	6443412	1
	oppo	762645	6443415	1
	oppo	762646	6443414	1
	oppo	762645	6443416	1
	oppo	762645	6443416	1
	oppo	762644	6443418	1
	oppo	762644	6443423	1
	oppo	762643	6443421	1
	oppo	762642	6443426	1
	oppo	762644	6443428	1
	oppo	762645	6443426	1
	oppo	762646	6443420	1
	oppo	762656	6443418	1
	oppo	762654	6443425	1
	oppo	763623	6443174	1
Labichea rossii (P1)	EG169	761114	6442970	1
	EG150	760321	6443638	1
	EG203	763008	6439156	1
	EG185	760739	6442122	1
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)	EG059	758929	6446760	1
	EG074	758733	6446439	1
	EG074	758733	6446439	1
	EG092	759627	6446047	1
	EG109	759160	6445506	1
	EG001	752678	6445585	1
	EG017	757137	6445013	1
	EG044	760725	6447447	1
	EG046	759401	6443615	1
	EG047	761309	6447284	1
	EG063	758324	6446694	1
	EG066	760814	6446532	1
	EG077	760709	6446373	1
	EG079	760591	6446311	1

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TAXON	QUADRAT	LOCATION		NUMBER OF PLANTS
		EASTING (mE)	NORTHING (mN)	
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1) (continued)	EG093	757731	6445867	1
	EG112	763782	6445300	1
	EG126	758420	6444664	1
	EG133	760801	6444419	1
	EG138	757789	6444148	1
	EG145	757927	6443919	1
	EG167	758924	6443130	1
	EG169	761114	6442970	1
	EG170	760685	6442915	1
	EG171	761656	6442816	1
	EG173	760868	6442708	1
	EG175	758671	6442661	1
	EG177	759440	6442368	1
	EG180	760888	6442257	1
	EG184	759563	6442136	1
	EG185	760739	6442122	1
	EG188	759912	6442073	1
	EG194	759085	6441920	1
	EG203	763008	6439156	1
	EG209	763287	6436854	1
	EG210	763426	6436539	1
	Oppo	755647	6445391	1
		755078	6445546	1
Olearia laciniifolia (P2)	EG214	763667	6435754	1
	EG203	763008	6439156	1
Orianthera exilis (P2)	EG204	763109	6439100	1

APPENDIX H

DPaW THREATENED AND PRIORITY FLORA REPORT FORMS SUBMITTED

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Banksia sphaerocarpa var. dolichostyla **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS: T** New population ☒

OBSERVER/S: David Angus, Brian Ellery **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☐ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☐	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☒	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐		Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	0-10% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☐	Limestone ☐	10-30% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	30-50% ☐	Peat ☐	Black ☐	
Open depression ☐		50-100% ☐			
Drainage line ☐	Specify other:		Specify other:	Specify other: Orange	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus burracoppinensis)
	2. Open Allocasuarina woodland (Allocasuarina acutivalvis, Allocasuarina spinosissima.)
	3. Dense Banksia and Melaleuca shrubland (Banksia purdieana, Melaleuca cordata)
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Beaufortia orbifolia, Drummondita hassellii, Gastrolobium spinosum, Hakea subsulcata
	Micromyrtus erichsenii, Persoonia helix

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☒ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus), SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16 / 11 / 2017

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Banksia sphaerocarpa var. dolichostyla (T)	-	755532	6445342	1
	-	754990	6445604	1
	-	755026	6445590	1
	-	755027	6445587	1
	-	755026	6445587	1
	-	755035	6445587	1
	-	755035	6445585	1
	-	755041	6445581	1
	-	755050	6445580	1
	-	755004	6445623	1
	-	755061	6445602	1
	-	755066	6445600	1
	-	755069	6445607	1
	-	755092	6445593	1
	-	755094	6445595	1
	-	755098	6445594	1
	-	755102	6445594	1
	-	755096	6445591	1
	-	755094	6445591	1
	-	755116	6445607	1
	-	755124	6445604	1
	-	755126	6445593	1
	-	759361	6443634	1
	-	759343	6443649	1
	-	758895	6443191	1
	-	758898	6443194	1
	-	758876	6443197	1
	-	758862	6443206	1
	-	758869	6443211	1
	-	758871	6443219	1
	-	758860	6443218	1
	-	758860	6443226	1
	-	758859	6443215	1
	-	758860	6443206	1
	-	758917	6443168	1
	-	758868	6443134	1
	-	758924	6443129	1
	-	758928	6443115	1
	-	759363	6443633	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	759361	6443634	1
	-	759344	6443649	1
	-	759349	6443691	1
	-	759342	6443653	1
	-	759344	6443650	1
	-	759327	6443623	1
	-	759325	6443624	1
	-	759317	6443621	1
	-	759315	6443622	1
	-	759308	6443624	1
	-	759327	6443627	1
	-	759315	6443636	1
	-	759309	6443639	1
	-	759310	6443634	1
	-	759310	6443634	1
	-	759312	6443649	1
	-	759335	6443659	1
	-	759323	6443664	1
	-	759318	6443665	1
	-	759307	6443661	1
	-	759305	6443663	1
	-	759306	6443668	1
	-	759319	6443664	1
	-	760684	6442914	1
	-	760782	6442808	1
	-	760778	6442804	1
	-	760806	6442788	1
	-	760846	6442733	1
	-	760847	6442736	1
	-	760856	6442734	1
	-	760854	6442729	1
	-	760857	6442728	1
	-	760856	6442726	1
	-	760854	6442726	1
	-	760860	6442726	1
	-	760861	6442720	1
	-	760862	6442719	1
	-	760865	6442716	1
	-	760941	6442768	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	763431	6436534	1
	-	763434	6436535	1
	-	761095	6443004	1
	-	763434	6436531	1
	-	761095	6443004	1
	-	763423	6436528	1
	-	761096	6443005	1
	-	763421	6436522	1
	-	761092	6443007	1
	-	763417	6436526	1
	-	761091	6443013	1
	-	763413	6436522	1
	-	761087	6443018	1
	-	763408	6436519	1
	-	761084	6443023	1
	-	763409	6436516	1
	-	761083	6443023	1
	-	763410	6436515	1
	-	763412	6436515	1
	-	763407	6436521	1
	-	763404	6436522	1
	-	763403	6436515	1
	-	763405	6436513	1
	-	763406	6436512	1
	-	759581	6442110	1
	-	759584	6442109	1
	-	759584	6442109	1
	-	759584	6442109	1
	-	759587	6442113	1
	-	759583	6442127	1
	-	759582	6442129	1
	-	759576	6442128	1
	-	759566	6442133	1
	-	759571	6442131	1
	-	759575	6442131	1
	-	759579	6442133	1
	-	759582	6442132	1
	-	759583	6442132	1
	-	758242	6443618	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	758244	6443609	1
	-	758238	6443607	1
	-	758238	6443612	1
	-	758232	6443614	1
	-	758242	6443625	1
	-	758244	6443627	1
	-	758248	6443624	1
	-	759600	6441960	1
	-	759604	6441957	1
	-	759605	6441952	1
	-	759605	6441941	1
	-	759598	6441944	1
	-	759589	6441950	1
	-	759594	6441935	1
	-	759601	6441932	1
	-	759600	6441933	1
	-	759603	6441926	1
	-	759617	6441931	1
	-	759626	6441937	1
	-	759636	6441935	1
	-	759644	6441927	1
	-	759645	6441943	1
	-	759643	6441944	1
	-	759642	6441946	1
	-	759643	6441947	1
	-	759642	6441948	1
	-	759643	6441949	1
	-	759647	6441952	1
	-	759647	6441953	1
	-	759649	6441955	1
	-	759654	6441956	1
	-	759647	6441961	1
	-	759649	6441961	1
	-	759648	6441961	1
	-	759643	6441953	1
	-	759642	6441950	1
	-	759642	6441948	1
	-	759641	6441948	1
	-	759641	6441946	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	759642	6441945	1
	-	759646	6441945	1
	-	759632	6441947	1
	-	759632	6441942	1
	-	759631	6441951	1
	-	759621	6441946	1
	-	759620	6441944	1
	-	759619	6441944	1
	-	759617	6441947	1
	-	759616	6441946	1
	-	759616	6441945	1
	-	759615	6441945	1
	-	759614	6441943	1
	-	759615	6441941	1
	-	759615	6441941	1
	-	759607	6441957	1
	-	759603	6441959	1
	-	759614	6441960	1
	-	759618	6441958	1
	-	759623	6441963	1
	-	759627	6441963	1
	-	759628	6441959	1
	-	759630	6441960	1
	-	759630	6441963	1
	-	759630	6441967	1
	-	759632	6441967	1
	-	759634	6441968	1
	-	759638	6441966	1
	-	759639	6441964	1
	-	759638	6441960	1
	-	759638	6441957	1
	-	759641	6441959	1
	-	759644	6441963	1
	-	759645	6441969	1
	-	759647	6441973	1
	-	759643	6441972	1
	-	759641	6441972	1
	-	759641	6441976	1
	-	759639	6441976	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	759638	6441975	1
	-	759638	6441974	1
	-	759634	6441970	1
	-	759633	6441969	1
	-	759630	6441968	1
	-	759626	6441968	1
	-	759627	6441965	1
	-	759595	6441966	1
	-	759595	6441969	1
	-	759601	6441970	1
	-	759604	6441975	1
	-	759606	6441977	1
	-	759606	6441975	1
	-	759607	6441976	1
	-	759608	6441977	1
	-	759607	6441979	1
	-	759608	6441974	1
	-	759612	6441973	1
	-	759616	6441972	1
	-	759618	6441974	1
	-	759617	6441975	1
	-	759611	6441981	1
	-	759610	6441981	1
	-	759609	6441980	1
	-	759607	6441981	1
	-	759605	6441984	1
	-	759600	6441979	1
	-	759593	6441979	1
	-	759595	6441968	1
	-	759653	6441985	1
	-	759654	6441987	1
	-	759653	6441990	1
	-	759648	6441987	1
	-	759649	6441986	1
	-	759635	6441984	1
	-	759635	6441983	1
	-	759632	6441984	1
	-	759629	6441986	1
	-	759626	6441986	1

Threatened and Priority Flora report Form - Attachment – *Banksia sphaerocarpa var. dolichostyla* (T)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Banksia sphaerocarpa var. dolichostyla (T)	-	759626	6441988	1
	-	759625	6441987	1
	-	759612	6441990	1
	-	759610	6441991	1
	-	759611	6441993	1
	-	759596	6442005	1
	-	759590	6442015	1
	-	759587	6442013	1
	-	759589	6442022	1
	-	759566	6442016	1
	-	759577	6441995	1
	-	759574	6441987	1
	-	759571	6441988	1
	-	759569	6441985	1
	-	759568	6441987	1
	-	759567	6441985	1
	-	759569	6441984	1
	-	759567	6441981	1
	-	759561	6441987	1
	-	759558	6441988	1
	-	759545	6442016	1
	-	759542	6442016	1
	-	759542	6442020	1
	-	759900	6441992	1
	-	759904	6441984	1
	-	759900	6441982	1
	-	759903	6441980	1
	-	759904	6441978	1
	-	759902	6441976	1
	-	759897	6441980	1
	-	759894	6441985	1
	EG167	758924	6443130	1
	EG170	760685	6442915	1
	EG173	760868	6442708	1
	EG169	761114	6442970	1
	EG011	755525	6445344	1
	EG079	760591	6446311	2
	EG210	763426	6436539	1
	EG184	759563	6442136	1
	EG191	759583	6441958	5

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Acacia undosa **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P3 New population ☒

OBSERVER/S: David Angus, Sacha Ruoss **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA:** Shire of Yilgarn Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See Attached			See Attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☐	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☒	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus ravida, Eucalyptus cylindrifolia)
	2. Melaleuca shrubland (Melaleuca eleuterostachya, Melaleuca hamata, Melaleuca laterifolia)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Cryptandra minutifolia subsp. minutifolia, Cyathostemon heterantherus,
	Dianella revoluta, Santalum acuminatum, Lepidosperma sanguinolentum

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL011706 (D. Angus), SL012018 (S. Ruoss)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: See attached WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other: Location and numbers

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Acacia undosa* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Acacia undosa (P3)	EG125	764252	6444703	1
	EG071	764048	6446452	1
	EG053	760761	6446911	1
	EG054	760285	6446903	1
	EG050	761532	6447230	1
	EG112	763782	6445300	1
	EG047	761309	6447284	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Brachyloma stenolobum **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P1 New population ☒

OBSERVER/S: David Angus **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	See attached			See attached
Dead				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☒	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus horistes)
	2. Allocasuarina shrubland Melaleuca shrubland (Allocasuarina spinosissima, Melaleuca condylosa)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Daviesia scoparia, Grevillea huegelii, Hibbertia exasperata,
	Leucopogon sp. Forrestania (G.F. Craig 2386), Micromyrtus erichsenii, Phebalium obovatum.

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Brachyloma stenolobum* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Brachyloma stenolobum (P3)	EG017	757137	6445013	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Chorizema circinale **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P3 New population ☒

OBSERVER/S: Brian Ellery **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☐ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☒	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☒	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Mallee woodland (Eucalyptus burracoppinensis, Eucalyptus rigidula)
	2. Dense Banksia shrubland (Banksia purdieana)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Adenanthos argyreus Allocasuarina acutivalvis, Hibbertia rostellata, Melaleuca cordata,
	Melaleuca halmaturorum, Microcorys obovata

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Chorizema circinale* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Chorizema circinale (P3)	EG167	758924	6443130	1
	OPPO	756153	6445232	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Daviesia sarissa subsp. redacta **TPFL Pop. No:**
OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P2 New population [X]
OBSERVER/S: Brian Ellery **PHONE:** 08 9257 1625
ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**
370km East of Perth, 100km SSE of Southern Cross

Reserve No:
DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 [X]
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs [X]
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS [X] Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey [X] Full survey ☐ Area observed (m²): _____
EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____
POP'N COUNT ACCURACY: Actual [X] Extrapolation ☐ Estimate ☐
Count method: (Refer to field manual for list) _____
WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative [X] Flowerbud [X] Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy [X] Moderate ☐ Poor ☐ Senescent ☐
COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☐	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☒	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐		Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	0-10% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	10-30% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	30-50% ☐	Peat ☐	Black ☐	
Open depression ☐		50-100% ☐			
Drainage line ☐	Specify other:		Specify other:	Specify other: Orange	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Malle woodland (Eucalyptus cylindriflora)
	2. Melaleuca and Hakea shrubland (Melaleuca phoidophylla, Melaleuca hamata, Hakea erecta.)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Beaufortia orbifolia, Callitris sp., Gastrolobium spinosum, Isopogon gardneri,
	Persoonia helix, Santalum acuminatum

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Daviesia sarissa subsp. redacta* (P2)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Daviesia sarissa subsp. redacta (P2)	EG150	760321	6443638	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Grevillea lissopleura **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P1 New population ☒

OBSERVER/S: Davis Angus **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☒	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☒	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☐	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Melaleuca scrub (Melaleuca cliffortioides)
	2.
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Allocasuarina campestris, Dodonaea adenophora, Hibbertia aff. oligantha, Styphelia exserta

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Grevillea lissopleura* (P1)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Grevillea lissopleura (P1)	EG189	761692	6442046	1
	EG179	761900	6442300	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Grevillea marriottii **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P1 New population ☒

OBSERVER/S: David Angus **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☒	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Euccalyptus woodland (Eucalyptus rigidula)
	2. Melaleauca shrubland (Melaleuca hamata)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Acacia sphacelata subsp. sphacelata, Callitris canescens, Hibbertia gracilipes, Phebalium obovatum
	Psammomoya choretroides

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Grevillea marriottii* (P1)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Grevillea marriottii (P1)	EG177	759440	6442368	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Hakea pendens. **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P3 New population ☒

OBSERVER/S: David Angus, Sacha Ruoss **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☐	Red ☒	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brow ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☒	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus capillosa subsp. polyclada, Eucalyptus rigidula)
	2. Mixed Melaleuca and Acacia shrubland (Acacia assimilis, Melaleuca phoidophylla)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Allocasuarina acutivalvis, Santalum acuminatu, Petrophile stricta

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☐ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL011706 (D. Angus), SL012018 (S. Ruoss)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Hakea pendens* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Hakea pendens (P3)	EG026	758371	6448332	1
	OPPO	758383	6447974	6
	OPPO	758319	6447905	4
	Q070	760512	6445695	1
	OPPO	763637	6443584	1
	EG157	758331	6443451	1
	EG165	763604	6443142	3
	OPPO	763623	6443174	1
	OPPO	763592	6443122	1
	OPPO	763589	6443128	1
	EG159	762638	6443426	41
	-	762702	6443588	1
	-	762701	6443587	1
	-	762702	6443602	1
	-	762697	6443589	1
	-	762694	6443608	1
	-	762692	6443585	1
	-	762694	6443619	1
	-	762692	6443579	1
	-	762692	6443620	1
	-	762692	6443577	1
	-	762694	6443624	1
	-	762692	6443575	1
	-	762688	6443624	1
	-	762692	6443570	1
	-	762685	6443624	1
	-	762688	6443569	1
	-	762685	6443621	1
	-	762684	6443568	1
	-	762673	6443624	1
	-	762679	6443558	1
	-	762672	6443622	1
	-	762681	6443555	1
	-	762672	6443621	1
	-	762680	6443554	1
	-	762667	6443623	1
	-	762685	6443546	1
	-	762664	6443623	1
	-	762683	6443545	1
	-	762664	6443621	1

Threatened and Priority Flora report Form – Attachment – *Hakea pendens* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Hakea pendens (P3)	-	762682	6443537	1
	-	762663	6443620	1
	-	762674	6443539	1
	-	762659	6443628	1
	-	762670	6443538	1
	-	762658	6443629	1
	-	762663	6443549	1
	-	762650	6443626	1
	-	762657	6443549	1
	-	762654	6443618	1
	-	762657	6443549	1
	-	762656	6443615	1
	-	762654	6443554	1
	-	762667	6443610	1
	-	762651	6443555	1
	-	763592	6443122	1
	-	763662	6443095	1
	-	762665	6443610	1
	-	762651	6443557	1
	-	762665	6443608	1
	-	762650	6443556	1
	-	762663	6443606	1
	-	762650	6443556	1
	-	762656	6443605	1
	-	762648	6443556	1
	-	762658	6443609	1
	-	762645	6443550	1
	-	762669	6443608	1
	-	762645	6443551	1
	-	762672	6443605	1
	-	762643	6443554	1
	-	762672	6443605	1
	-	762643	6443556	1
	-	762680	6443606	1
	-	762643	6443563	1
	-	762684	6443613	1
	-	762644	6443565	1
	-	762738	6443498	1
	-	762645	6443565	1

Threatened and Priority Flora report Form – Attachment – *Hakea pendens* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Hakea pendens (P3)	-	762759	6443484	1
	-	762643	6443566	1
	-	762708	6443504	1
	-	762643	6443567	1
	-	762701	6443500	1
	-	762644	6443567	1
	-	762694	6443503	1
	-	762643	6443570	1
	-	762689	6443499	1
	-	762643	6443570	1
	-	762687	6443500	1
	-	762644	6443573	1
	-	762684	6443499	1
	-	762643	6443574	1
	-	762682	6443496	1
	-	762642	6443576	1
	-	762682	6443494	1
	-	762641	6443578	1
	-	762684	6443495	1
	-	762641	6443578	1
	-	762685	6443495	1
	-	762643	6443580	1
	-	762685	6443494	1
	-	762643	6443580	1
	-	762689	6443482	1
	-	762642	6443585	1
	-	762691	6443486	1
	-	762645	6443588	1
	-	762691	6443487	1
	-	762650	6443591	1
	-	762692	6443486	1
	-	762693	6443488	1
	-	762695	6443487	1
	-	762696	6443485	1
	-	762695	6443489	1
	-	762681	6443488	1
	-	762681	6443486	1
	-	762688	6443476	1
	-	762692	6443468	1

Threatened and Priority Flora report Form – Attachment – *Hakea pendens* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Hakea pendens (P3)	-	762701	6443465	1
	-	762702	6443464	1
	-	762702	6443462	1
	-	762685	6443453	1
	-	762681	6443452	1
	-	762685	6443450	1
	-	762665	6443431	1
	-	762662	6443436	1
	-	762659	6443436	1
	-	762658	6443431	1
	-	762660	6443429	1
	-	762663	6443427	1
	-	762662	6443424	1
	-	762662	6443423	1
	-	762660	6443423	1
	-	762657	6443426	1
	-	762655	6443427	1
	-	762653	6443419	1
	-	762653	6443418	1
	-	762650	6443418	1
	-	762651	6443422	1
	-	762646	6443418	1
	-	762645	6443417	1
	-	762643	6443418	1
	-	762635	6443425	1
	-	762638	6443424	1
	-	762638	6443419	1
	-	762637	6443417	1
	-	762640	6443414	1
	-	762639	6443413	1
	-	762638	6443412	1
	-	762638	6443410	1
	-	762637	6443410	1
	-	762640	6443411	1
	-	762641	6443412	1
	-	762642	6443409	1
	-	762644	6443409	1
	-	762644	6443410	1
	-	762643	6443410	1

Threatened and Priority Flora report Form – Attachment – *Hakea pendens* (P3)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
Hakea pendens (P3)	-	762645	6443409	1
	-	762647	6443408	1
	-	762645	6443407	1
	-	762646	6443412	1
	-	762645	6443415	1
	-	762646	6443414	1
	-	762645	6443416	1
	-	762645	6443416	1
	-	762644	6443418	1
	-	762644	6443423	1
	-	762643	6443421	1
	-	762642	6443426	1
	-	762644	6443428	1
	-	762645	6443426	1
	-	762646	6443420	1
	-	762656	6443418	1
	-	762654	6443425	1
	-	763623	6443174	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Labichea rossii **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P1 New population ☒

OBSERVER/S: David Angus, Brian Ellery **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:

	Mature:	Juveniles:	Seedlings:	Totals:
Alive	See attached			See attached
Dead				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☒	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☒	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☒	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus cylindriflora, Eucalyptus eremophila)
	2. Open Allocasuarina woodland (Allocasuarina acutivalvis, Allocasuarina spinosissima)
	3. Melaleuca and Hakea shrubland (Melaleuca phoidophylla, Hakea subsulcata)
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Dampiera sacculata, Gompholobium hendersonii, Isopogon gardneri, Microcorys obovata

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☒ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus), SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Labichea rossii* (P1)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Labichea rossii (P1)	EG169	761114	6442970	1
	EG150	760321	6443638	1
	EG203	763008	6439156	1
	EG185	760739	6442122	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Microcorys sp. Mt. Holland (D Angus DA2397) **TPFL Pop. No:**

OBSERVATION DATE: 26/10/16-13/09/17 **CONSERVATION STATUS:** P1 New population ☒

OBSERVER/S: David Angus, Sacha Ruoss, Adrian Barrett, Brian Ellery **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA:** Shire of Yilgarn Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See Attached			See Attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☐	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☐	White ☐	Tidal ☐
Slope ☐	Limestone ☐	30-50% ☐	Light clay ☒	Grey ☐	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Open Eucalyptus woodland (Eucalyptus flocktoniae, Eucalyptus eremophila,)
	2. Melaleuca shrubland (Melaleuca depauperata, Melaleuca phoidophylla, Phebalium megaphyllum)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Daviesia scoparia, Allocasuarina acutivalvis

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL011706 (D. Angus), SL012018 (S. Ruoss), SL012024 (B. Ellery), SL011707 (A. Barrett)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: See attached WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other: Location and numbers

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 8/03/18

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – Microcorys sp. Mt Holland (D. Angus DA 2397) (P1)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Microcorys sp. Mt. Holland (D. Angus DA 2397) (P1)	EG059	758929	6446760	1
	EG074	758733	6446439	1
	EG074	758733	6446439	1
	EG092	759627	6446047	1
	EG109	759160	6445506	1
	EG001	752678	6445585	1
	EG017	757137	6445013	1
	EG044	760725	6447447	1
	EG046	759401	6443615	1
	EG047	761309	6447284	1
	EG063	758324	6446694	1
	EG066	760814	6446532	1
	EG077	760709	6446373	1
	EG079	760591	6446311	1
	EG093	757731	6445867	1
	EG112	763782	6445300	1
	EG126	758420	6444664	1
	EG133	760801	6444419	1
	EG138	757789	6444148	1
	EG145	757927	6443919	1
	EG167	758924	6443130	1
	EG169	761114	6442970	1
	EG170	760685	6442915	1
	EG171	761656	6442816	1
	EG173	760868	6442708	1
	EG175	758671	6442661	1
	EG177	759440	6442368	1
	EG180	760888	6442257	1
	EG184	759563	6442136	1
	EG185	760739	6442122	1
	EG188	759912	6442073	1
	EG194	759085	6441920	1
	EG203	763008	6439156	1
	EG209	763287	6436854	1
	EG210	763426	6436539	1
	Oppo	755647	6445391	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Olearia laciniifolia **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P2 New population ☒

OBSERVER/S: David Angus, Brian Ellery **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☐ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☒	Red ☐	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☒	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☒	
Flat ☒	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Eucalyptus woodland (Eucalyptus eremophila, Eucalyptus urna)
	2. Melaleuca shrubland (Melaleuca hamata, Melaleuca pauperiflora subsp. pauperiflora)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Acacia spinosissima, Dampiera sacculata, Lepidosperma sanguinolentum, Platysace maxwellii

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☒ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
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Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus), SL012024 (B. Ellery)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – *Olearia laciniifolia* (P2)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Olearia laciniifolia (P2)	EG214	763667	6435754	1
	EG203	763008	6439156	1

Threatened and Priority Flora Report Form

Version 1.2 August 2013

Please complete as much of the form as possible.
For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DPaW website at http://www.dpaw.wa.gov.au/

TAXON: Orianthera exilis **TPFL Pop. No:**

OBSERVATION DATE: 06/09/17-14/09/17 **CONSERVATION STATUS:** P2 New population ☒

OBSERVER/S: David Angus **PHONE:** 08 9257 1625

ROLE: Botanist **ORGANISATION:** Mattiske Consulting Pty Ltd

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place)**:**

370km East of Perth, 100km SSE of Southern Cross

Reserve No:

DISTRICT: Yilgarn **LGA: Shire of Yilgarn** Land manager present: ☐

DATUM:
GDA94 / MGA94 ☒
AGD84 / AMG84 ☐
WGS84 ☐
Unknown ☐

COORDINATES: (If UTM coords provided, **Zone** is also required)
DecDegrees ☐ DegMinSec ☐ UTMs ☒
Lat / Northing: See attached
Long / Easting: See attached
Zone: 50H

METHOD USED:
GPS ☒ Differential GPS ☐ Map ☐
No. satellites: Map used:
Boundary polygon captured: ☐ Map scale:

LAND TENURE:
Nature reserve ☐ Timber reserve ☐ Private property ☐ Rail reserve ☐ Shire road reserve ☐
National park ☐ State forest ☐ Pastoral lease ☐ MRWA road reserve ☐ Other Crown reserve ☐
Conservation park ☐ Water reserve ☐ UCL ☐ SLK/Pole _____ to _____ Specify other: Mining lease

AREA ASSESSMENT: Edge survey ☐ Partial survey ☒ Full survey ☐ Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m^2: _____

POP'N COUNT ACCURACY: Actual ☒ Extrapolation ☐ Estimate ☐

Count method: (Refer to field manual for list) _____

WHAT COUNTED: Plants ☐ Clumps ☐ Clonal stems ☐

TOTAL POP'N STRUCTURE:	**Mature:**	**Juveniles:**	**Seedlings:**	**Totals:**
Alive	See attached			See attached
Dead				

Area of pop (m²): _____
Note: Pls record count as numbers (not percentages) for database.

QUADRATS PRESENT: No. _____ Size _____ Data attached ☐ Total area of quadrats (m²): _____

Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal ☐ Vegetative ☒ Flowerbud ☒ Flower ☐
Immature fruit ☐ Fruit ☐ Dehisced fruit ☐ Percentage in flower: _____%

CONDITION OF PLANTS: Healthy ☒ Moderate ☐ Poor ☐ Senescent ☐

COMMENT:

THREATS - type, agent and supporting information: E.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. **Specify agent** where relevant. **Rate current and potential threat impact:** N=Nil, L=Low, M=Medium, H=High, E=Extreme **Estimate time to potential impact:** S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)	**Current impact (N-E)**	**Potential Impact (L-E)**	**Potential Threat Onset (S-L)**
• clearing for mining operations	L	H	M
•			
•			

Please return completed form to **Species And Communities Branch** DPaW,
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Department of Parks and Wildlife

Threatened and Priority Flora Report Form

Version 1.2 August 2013

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	**ROCK TYPE:**	**LOOSE ROCK:**	**SOIL TYPE:**	**SOIL COLOUR:**	**DRAINAGE:**
Crest ☐	Granite ☐	(on soil surface; e.g. gravel, quartz fields)	Sand ☐	Red ☒	Well drained ☐
Hill ☐	Dolerite ☐		Sandy loam ☐	Brown ☒	Seasonally inundated ☐
Ridge ☐	Laterite ☐	0-10% ☐	Loam ☐	Yellow ☐	Permanently inundated ☐
Outcrop ☐	Ironstone ☐	10-30% ☐	Clay loam ☒	White ☐	Tidal ☐
Slope ☒	Limestone ☐	30-50% ☐	Light clay ☐	Grey ☐	
Flat ☐	Quartz ☐	50-100% ☐	Peat ☐	Black ☐	
Open depression ☐					
Drainage line ☐	Specify other:		Specify other:	Specify other:	Specify other:
Closed depression ☐					
Wetland ☐					

Specific Landform Element: (Refer to field manual for additional values)

CONDITION OF SOIL:

Dry ☐ Moist ☐ Waterlogged ☐ Inundated ☐ Cracked ☐ Saline ☐ Other:

VEGETATION CLASSIFICATION:* E.g. **1**. Banksia woodland (B. attenuata, B. ilicifolia); **2**. Open shrubland (Hibbertia sp., Acacia spp.) **3**. Isolated clumps of sedges (Mesomelaena tetragona)	1. Allocasuarina and Banksia scrub (Allocasuarina acutivalvis, Banksia purdieana)
	2. Emergent Eucalypts (Eucalyptus gracilis)
	3.
	4.
ASSOCIATED SPECIES: Other (non-dominant) spp	Dampiera sacculata, Goodenia pinifolia, Lepidosperma sp., Schoenus sp.,
	Melaleuca spicigera, Calothamnus quadrifidus

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 *Australian Soil and Land Survey Field Handbook* guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine ☒ Excellent ☐ Very good ☐ Good ☐ Degraded ☐ Completely degraded ☐

COMMENT:

FIRE HISTORY: **Last Fire:** Season/Month: _____ Year: _____ **Fire Intensity:** High ☐ Medium ☐ Low ☐ No signs of fire ☐

FENCING: Not required ☐ Present ☐ Replace / repair ☐ Required ☐ Length req'd: _____

ROADSIDE MARKERS: Not required ☐ Present ☐ Replace / reposition ☐ Required ☐ Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

Please return completed form to **Species And Communities Branch** DPaW,
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RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora Report Form

Version 1.2 August 2013

DRF PERMIT/ LICENCE No: SL012014 (D. Angus)

Note if only observing plants (i.e. no specimens or plant matieral is taken) then no permit/licence is required. For further information on permit and licening requirements see the Threatened Flora and Wildlife Licensing pages on DPaW's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: WA Herb. ☐ Regional Herb. ☐ District Herb. ☐ Other:

ATTACHED: Map ☐ Mudmap ☐ Photo ☐ GIS data ☐ Field notes ☐ Other:

COPY SENT TO: Regional Office ☐ District Office ☐ Other:

Submitter of record: David Angus **Role:** Botanist

Signature: **Date submitted:** 16/11/17 / /

Please return completed form to **Species And Communities Branch** DPaW,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983
RECORDS: Please forward to **Flora Administrative Officer,** Species and Communities Branch.

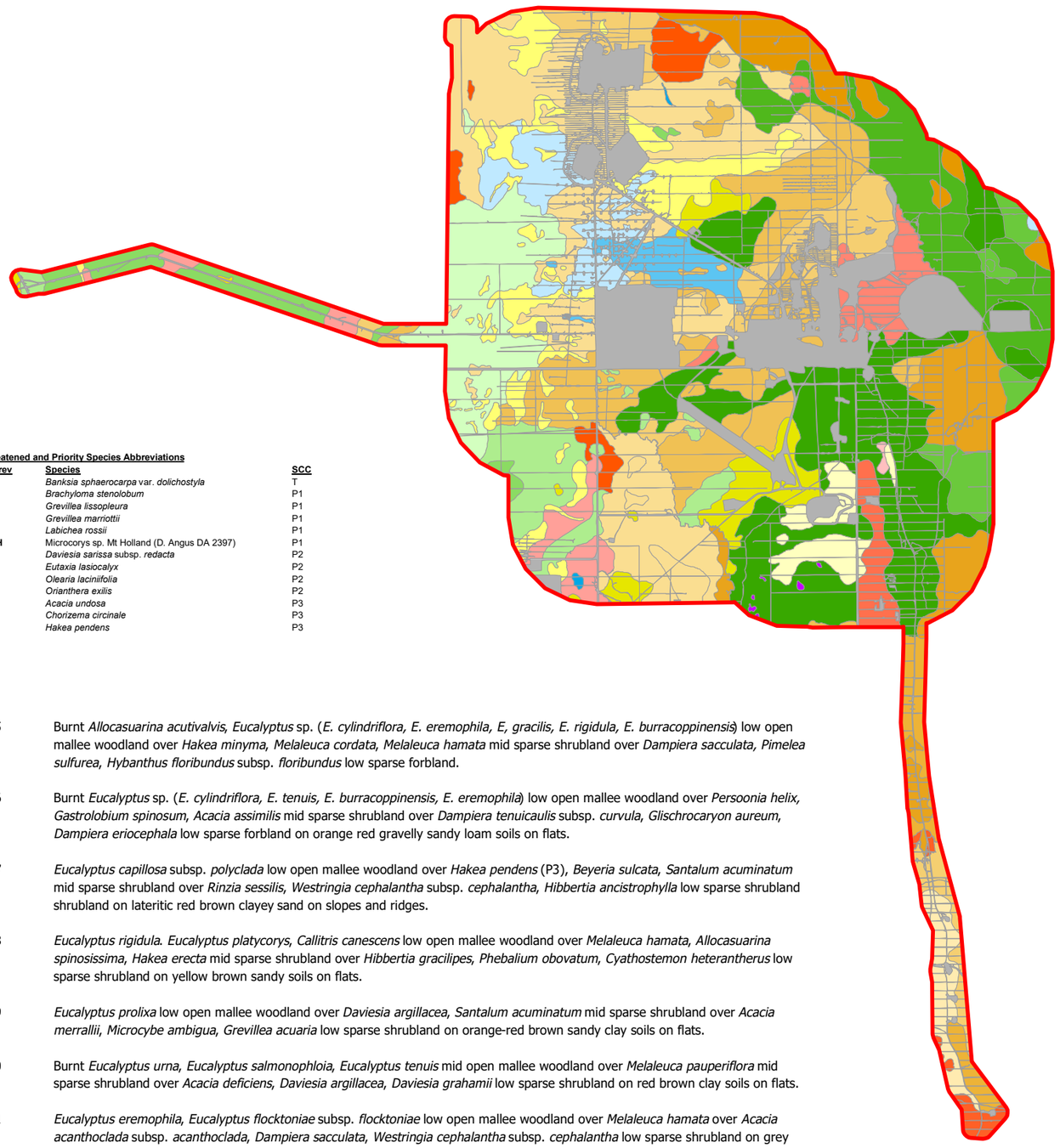
Record entered by:_____ **Sheet No.:**_____ **Record Accepted in Database** ☐

Threatened and Priority Flora report Form – Attachment – Orianthera exilis (P2)

Species	Quadrat Reference	Location (GDA94, Zone 50)		Number of Plants
		Easting (mE)	Northing (mN)	
Orianthera exilis (P2)	EG204	763109	6439100	1

755000 760000 765000 770000

6445000



6440000

6435000

Threatened and Priority Species Abbreviations

Abbrev	Species	SCC
Bsd	*Banksia sphaerocarpa* var. *dolichostyla*	T
Bst	*Brachyloma stenolobum*	P1
Gl	*Grevillea lissopleura*	P1
Gm	*Grevillea marriottii*	P1
Lr	*Labichea rossii*	P1
MMH	Microcorys sp. Mt Holland (D. Angus DA 2397)	P1
Dsr	*Daviesia sarissa* subsp. *redacta*	P2
El	*Eutaxia lasiocalyx*	P2
Ol	*Olearia laciniifolia*	P2
Oe	*Orianthera exilis*	P2
Au	*Acacia undosa*	P3
Cc	*Chorizema circinale*	P3
Hp	*Hakea pendens*	P3

Vegetation Community Legend

Heathlands

H1 *Melaleuca cliffortioides*, *Allocasuarina campestris*, *Dodonaea adenophora* mid open heathland over *Grevillea lissopleura* (P1), *Trymalium myrtillus* subsp. *myrtillus* low sparse shrubland on rocky red-brown sandy clay soils on slopes.

Shrublands

S1 *Allocasuarina acutivalvis, Allocasuarina spinosissima* tall closed shrubland over *Hakea subsulcata*, *Melaleuca cordata*, *Micromyrtus erichsenii* mid sparse heathland on lateritic orange-red clay soils on flats and lower slopes.

S2 *Allocasuarina acutivalvis*, *Allocasuarina spinosissima*, *Eucalyptus burracoppinensis* tall open shrubland over *Thryptomene kochii*, *Persoonia helix*, *Micromyrtus erichsenii* mid sparse heathland over *Cyathostemon heterantherus*, *Hibbertia exasperata*, *Drummondita hassellii* low sparse shrubland on orange brown clayey sand soils on flats.

S3 *Allocasuarina acutivalvis*, *Eucalyptus burracoppinensis* tall sparse shrubland over *Banksia purdieana*, *Hakea subsulcata*, *Melaleuca cordata* mid sparse shrubland over *Micromyrtus erichsenii*, *Persoonia helix* low isolated shrubs on gravelly yellow brown to orange brown clay to clayey sand soils on flats.

Woodlands

MW6 *Eucalyptus burracoppinensis*, *Eucalyptus eremophila* mid open mallee woodland over *Thryptomene kochii*, *Melaleuca laxiflora*, *Acacia acuminata* mid open shrubland over *Drummondita hassellii*, *Microcybe ambigua* low sparse heathland on grey brown to orange brown clay to clayey sand on flats.

MW7 *Eucalyptus capillosa* subsp. *polyclada* mid open mallee woodland over *Allocasuarina spinosissima*, *Callitris canescens*, *Hakea minyma* mid tall sparse shrubland over *Phebalium megaphyllum* low sparse shrubland on orange brown clay soils on flats and slopes.

MW8 *Eucalyptus eremophila* low open mallee woodland over *Melaleuca hamata*, *Leptospermum erubescens*, *Melaleuca lateriflora* mid sparse shrubland over *Thomasia* sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639), *Darwinia* sp. Karonie (K. Newbey 8503) low sparse shrubland on orange brown clay in minor drainage channel.

W4 *Eucalyptus flocktoniae* subsp. *flocktoniae*, *Eucalyptus eremophila* low open mallee woodland over *Melaleuca depauperata*, *Callitris canescens*, *Melaleuca phoidophylla* mid-tall sparse shrubland over *Acacia tetraptera*, *Grevillea acuaria* low isolated heath shrubs on orange brown sandy clay soils with ironstone or quartz pebbles on flats and slopes.

W5 *Eucalyptus rigidula*, *Eucalyptus burracoppinensis* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix*, *Hakea erecta* mid sparse heathland over *Hibbertia rostellata*, *Hibbertia stowardii* low isolated shrubs on gravelly orange brown clayey sand soils on flats and slopes.

W6 *Eucalyptus burracoppinensis*, *Allocasuarina acutivalvis*, *Allocasuarina spinosissima* tall open mallee woodland over *Hakea erecta*, *Petrophile stricta*, *Banksia laevigata* subsp. *fuscolutea* mid sparse heathland over *Drummondita hassellii*, *Hibbertia exasperata*, *Psammomoya choretroides* low sparse shrubland on yellow brown sandy soils on flats.

W7 Burnt *Eucalyptus* sp. (*E. cylindriflora*, *E. flocktoniae* subsp. *flocktoniae*, *E. prolixa*, *E. salmonophloia*, *E. eremophila*, *E. capillosa* subsp. *polyclada*) low open woodland over *Melaleuca hamata*, *Melaleuca eleuterostachya* mid sparse shrubland over *Daviesia argillacea*, *Acacia hemiteles*, *Acacia deficiens* low sparse heathland on orange brown sandy clay soils on flats.

W8 *Eucalyptus prolixa*, *Eucalyptus salmonophloia*, *Eucalyptus urna* mid mallee woodland over *Santalum acuminatum*, *Daviesia argillacea*, *Melaleuca eleuterostachya* mid sparse heathland over *Acacia merrallii*, *Daviesia argillacea*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland on red brown sandy clay flats.

W9 *Eucalyptus urna*, *Eucalyptus ravida*, *Eucalyptus prolixa* low mallee woodland over *Melaleuca pauperiflora*, *Dodonaea stenozyga*, *Daviesia argillacea* mid sparse shrubland over *Acacia merrallii*, *Grevillea acuaria*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland.

W10 *Eucalyptus* sp. (*E. urna*, *E. cylindrocarpa*, *E, rigidula, E gracilis*) low mallee woodland over *Melaleuca pauperiflora*, *Daviesia scoparia* mid sparse shrubland over *Acacia merrallii*, *Grevillea huegelii*, *Olearia muelleri* low sparse shrubland on red clay soils on flats.

W11 *Eucalyptus eremophila*, *Eucalyptus rigidula*, *Eucalyptus flocktoniae* subsp. *flocktoniae* low mallee woodland over *Melaleuca lateriflora*, *Melaleuca eleuterostachya*, *Melaleuca acuminata* subsp. *acuminata* mid sparse shrubland over *Grevillea acuaria*, *Acacia hystrix* subsp. *hystrix*, *Microcybe ambigua* low sparse shrubland on orange brown clay soils on flats.

W12 *Eucalyptus cylindriflora*, *Eucalyptus cylindrocarpa*, *Eucalyptus prolixa* low open mallee woodland over *Melaleuca eleuterostachya*, *Melaleuca lateriflora*, *Daviesia argillacea* mid sparse shrubland over *Grevillea acuaria*, *Acacia merrallii*, *Acacia camptoclada* low sparse shrubland on yellow brown to red brown sandy clay soils on flats.

W13 *Callitris canescens*, *Eucalyptus rigidula* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix*, *Allocasuarina spinosissima* mid tall sparse shrubland over *Beyeria sulcata*, *Drummondita hassellii* low sparse shrubland on yellow brown to orange brown clayey sands on flats and slopes.

W14 Burnt *Eucalyptus salmonophloia*, *Eucalyptus eremophila* mid open woodland over *Santalum acuminatum*, *Senna artemisioides* subsp. *filifolia* mid sparse shrubland over *Acacia hemiteles*, *Olearia muelleri* low sparse shrubland on orange brown clay spoils on flats.

W15 Burnt *Allocasuarina acutivalvis*, *Eucalyptus* sp. (*E. cylindriflora*, *E. eremophila*, *E, gracilis, E. rigidula*, *E. burracoppinensis*) low open mallee woodland over *Hakea minyma*, *Melaleuca cordata*, *Melaleuca hamata* mid sparse shrubland over *Dampiera sacculata*, *Pimelea sulfurea*, *Hybanthus floribundus* subsp. *floribundus* low sparse forbland.

W16 Burnt *Eucalyptus* sp. (*E. cylindriflora*, *E. tenuis, E. burracoppinensis, E. eremophila*) low open mallee woodland over *Persoonia helix, Gastrolobium spinosum*, *Acacia assimilis* mid sparse shrubland over *Dampiera tenuicaulis* subsp. *curvula*, *Glischrocaryon aureum*, *Dampiera eriocephala* low sparse forbland on orange red gravelly sandy loam soils on flats.

W17 *Eucalyptus capillosa* subsp. *polyclada* low open mallee woodland over *Hakea pendens* (P3), *Beyeria sulcata, Santalum acuminatum* mid sparse shrubland over *Rinzia sessilis*, *Westringia cephalantha* subsp. *cephalantha*, *Hibbertia ancistrophylla* low sparse shrubland shrubland on lateritic red brown clayey sand on slopes and ridges.

W18 *Eucalyptus rigidula. Eucalyptus platycorys, Callitris canescens* low open mallee woodland over *Melaleuca hamata, Allocasuarina spinosissima*, *Hakea erecta* mid sparse shrubland over *Hibbertia gracilipes*, *Phebalium obovatum*, *Cyathostemon heterantherus* low sparse shrubland on yellow brown sandy soils on flats.

W19 *Eucalyptus prolixa* low open mallee woodland over *Daviesia argillacea, Santalum acuminatum* mid sparse shrubland over *Acacia merrallii, Microcybe ambigua, Grevillea acuaria* low sparse shrubland on orange-red brown sandy clay soils on flats.

W20 Burnt *Eucalyptus urna*, *Eucalyptus salmonophloia, Eucalyptus tenuis* mid open mallee woodland over *Melaleuca pauperiflora* mid sparse shrubland over *Acacia deficiens*, *Daviesia argillacea*, *Daviesia grahamii* low sparse shrubland on red brown clay soils on flats.

W21 *Eucalyptus eremophila, Eucalyptus flocktoniae* subsp. *flocktoniae* low open mallee woodland over *Melaleuca hamata* over *Acacia acanthoclada* subsp. *acanthoclada*, *Dampiera sacculata*, *Westringia cephalantha* subsp. *cephalantha* low sparse shrubland on grey brown clayey sand soils on flats and slopes.

W22 *Eucalyptus eremophila* low open mallee woodland over *Melaleuca hamata, Melaleuca eleuterostachya, Melaleuca laxiflora* mid sparse shrubland over *Hibbertia exasperata*, *Cyathostemon heterantherus*, *Acacia sphacelata* subsp. *sphacelata* low sparse shrubland on slightly gravelly yellow-orange brown clay soils on flats and slopes.

Other

CL Cleared Land

755000 760000 765000 770000

Legend

Vegetation Survey Area H1 S1 W5 W9 W13 W17 W21 MW6 S2 W6 W10 W14 W18 W22 MW7 S3 W7 W11 W15 W19 CL MW8 W4 W8 W12 W16 W20

N

Client: KIDMAN RESOURCES

0 600 1,200 m

Scale: 1:60,000 MGA94 (Zone 50)

CAD Ref: a2445_R011_i01

Date: Mar 2018 | Rev: D | A3

Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
Author: E M Mattiske | MCPL Ref:KIS1702/025/17
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax (08) 9246 3202

Earl Grey Lithium Project
Vegetation Legend
Showing Sheet Layout

Appendix: **i1**

753000 754000 755000 756000

6446000

6445000

W6 W18 S2 W6 W18 W6 W5 S3 MMH W6 S2 W18 W5 W6 W5 S3 W5 Bsd Bsd Bsd MMH S3 W6 MMH W6 Bsd W6

753000 754000 755000 756000

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
S2
S3
W5
W6
W18
CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN RESOURCES

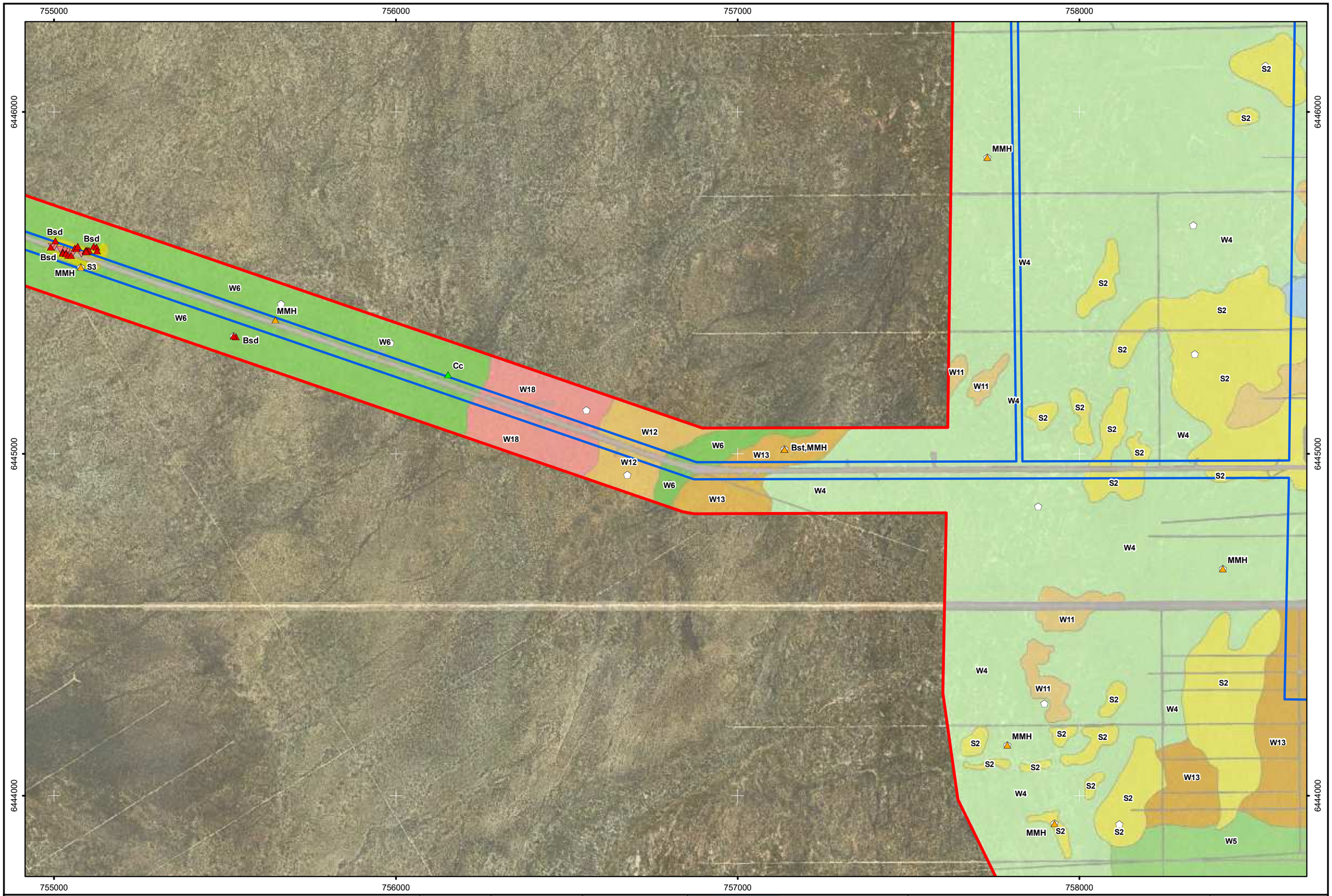
0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
Date: Mar 2018 | Rev: D | A3

Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
Author: E M Mattiske | MCPL Ref:KIS1702/025/17
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax (08) 9246 3202

Earl Grey Lithium Project
Vegetation
Sheet 1 of 10

Appendix:
i2.1



Legend

- Vegetation Survey Area
- Development Envelope
- 2017 Quadrat
- Eren Reid Banksia Site

Species Conservation Code

- T
- P1
- P2
- P3

Vegetation Code

- MW6
- S2
- S3
- W4
- W5
- W6
- W11
- W12
- W13
- W18
- CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN

0 100 200 m

Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02

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Earl Grey Lithium Project

Vegetation

Sheet 2 of 10

Appendix:

i2.2

Legend

- Vegetation Survey Area
- Development Envelope
- 2017 Quadrat
- Eren Reid Banksia Site

Species Conservation Code: T, P1, P2, P3

Vegetation Code: MW6, MW8, S2, S3, W4, W6, W8, W9, W11, W12, W13, W16, W22, CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

Client: KIDMAN RESOURCES

N

0 100 200 m

Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02

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Earl Grey Lithium Project
Vegetation
Sheet 3 of 10

Appendix:

i2.3

762000 763000 764000

6448000

6447000

W16 W8 W11 W19 W16 W8 W8 W16 W13 W8 W11 Au,MMH Au W8 S2 W11 W11 W13 W13 S2 W16 W8 W13 W16 W8 W12 S3 W13 W12 Au W9 W12 W19 W7

762000 763000 764000

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
MW6
S2
S3
W7
W8
W9
W11
W12
W13
W16
W19
CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN RESOURCES

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
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Earl Grey Lithium Project
Vegetation
Sheet 4 of 10

Appendix:
i2.4

758000 759000 760000 761000

6446000 6445000 6444000

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
MW6
MW7
S2
S3
W4
W5
W9
W11
W12
W13
W19
W22
CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN RESOURCES

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
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Earl Grey Lithium Project
Vegetation
Sheet 5 of 10

Appendix:
i2.5

762000 763000 764000

6446000 6445000 6444000

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
MW6
S3
W7
W8
W9
W12
W13
W15
W16
W19
CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN RESOURCES

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
Date: Mar 2018 | Rev: D | A3

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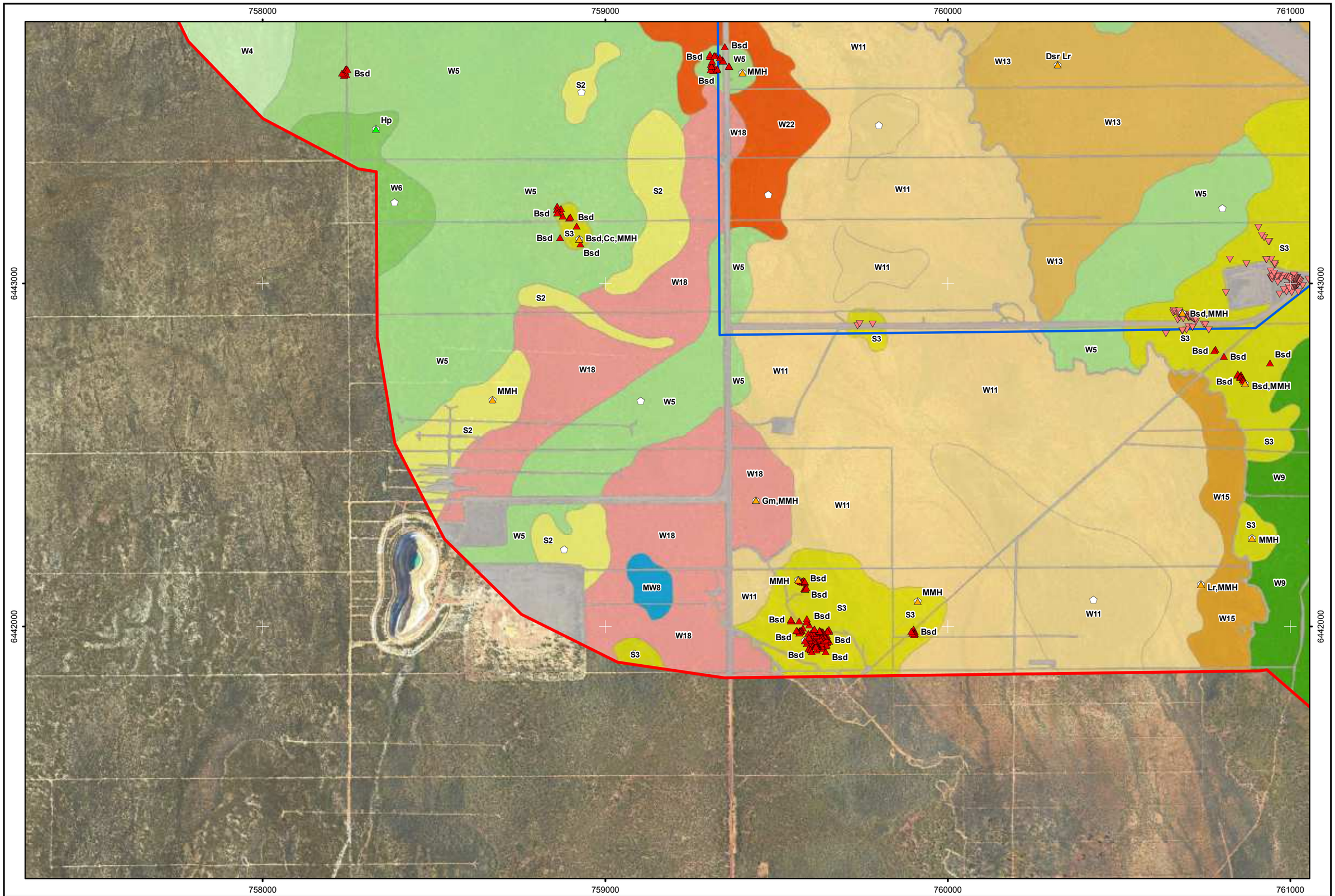
Earl Grey Lithium Project
Vegetation
Sheet 6 of 10

Appendix:
i2.6



Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
MW8
S2
S3
W4
W5
W6
W9
W11
W12
W18
W22
CL
W13
W15

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
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Earl Grey Lithium Project
Vegetation
Sheet 7 of 10

Appendix:
i2.7

762000 763000 764000

6443000

6442000

Bsd
Bsd,Lr,MMH
MMH
Hp
Gl
S1 S3 W9 W17 W20 W7 W15 H1 W13 W14

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
H1
S1
S3
W7
W9
W13
W14
W15
W17
W20
CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

N

Client: KIDMAN RESOURCES

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
Date: Mar 2018 | Rev: D | A3

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Earl Grey Lithium Project
Vegetation
Sheet 8 of 10

Appendix:
i2.8

6442000 6441000 6440000 6439000

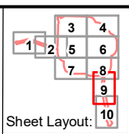
764000

763000

762000

W15 W9 W9 W9 W9 W15 W14 W14 W14 W14 W14 W15 W14 W15 W14 W15 W14 W15 W14 W14 W15 W21 W15 W12 W12 W12 W12 W12 W10 W10 W20 W20 W13 W9

Oe Lr.Ol



Sheet Layout:

Legend

Vegetation Survey Area
Development Envelope
2017 Quadrat
Eren Reid Banksia Site

Species Conservation Code
T
P1
P2
P3

Vegetation Code
W9
W10
W12
W13
W14
W15
W20
W21
CL

N

Client: KIDMAN RESOURCES

0 100 200 m
Scale: 1:10,000
MGA94 (Zone 50)

CAD Ref: a2445_R011_i02
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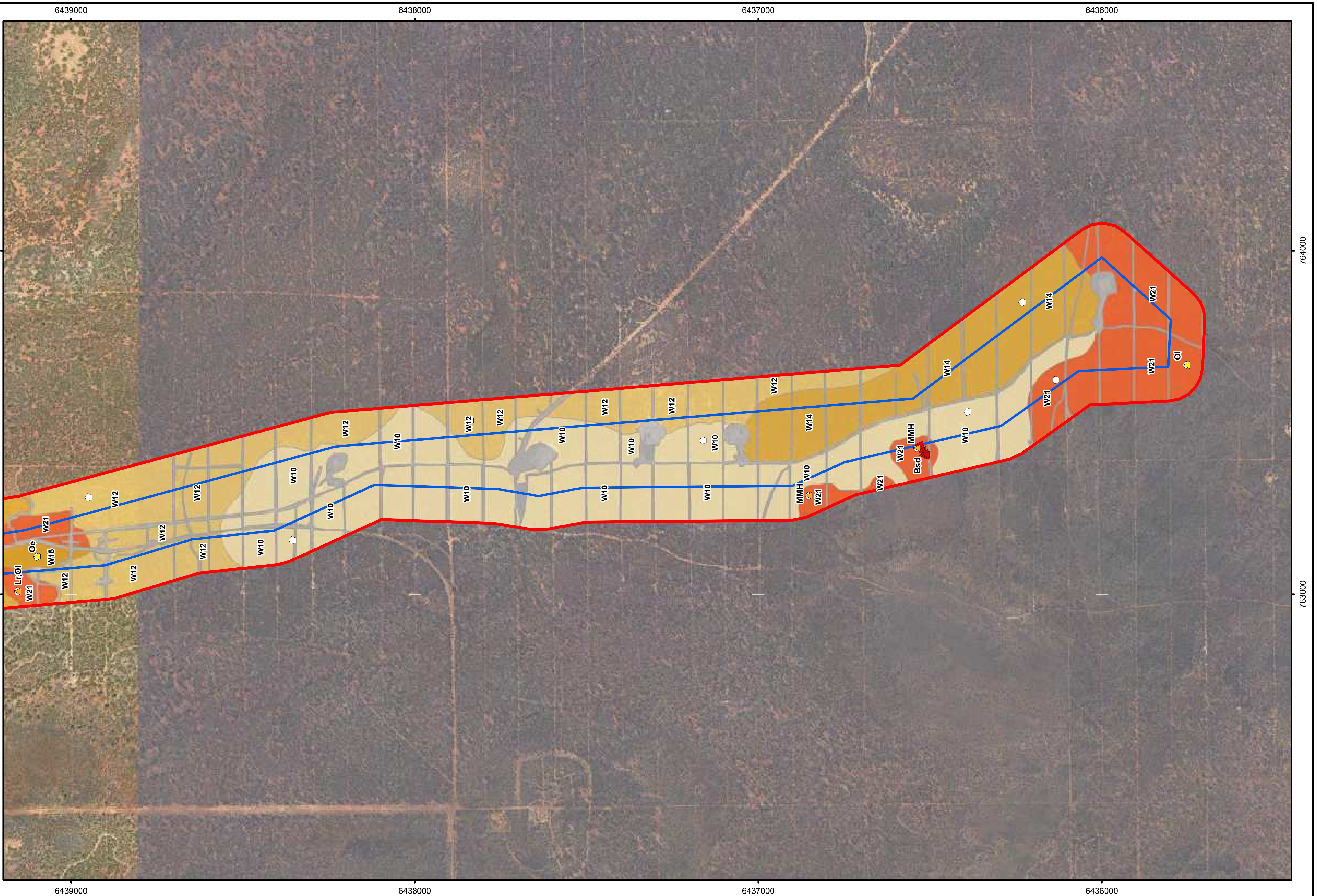
Earl Grey Lithium Project
Vegetation
Sheet 9 of 10

Appendix:
i2.9



Legend

- Vegetation Survey Area
- Development Envelope
- 2017 Quadrat
- Eren Reid Banksia Site

Species Conservation Code

- T
- P1
- P2
- P3

Vegetation Code

- W10
- W12
- W14
- W15
- W21
- CL

Sheet Layout: 1 2 3 4 5 6 7 8 9 10

Client: KIDMAN RESOURCES

0 100 200 m

Scale: 1:10,000

MGA94 (Zone 50)

CAD Ref: a2445_R011_i02

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Earl Grey Lithium Project

Vegetation

Sheet 10 of 10

Appendix:

i2.10

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Acacia acanthoclada subsp. *acanthoclada*																									x	
Acacia acuminata			x		x	x		x		x					x					x						
Acacia assimilis				x						x					x	x	x		x	x		x				
Acacia assimilis subsp. *assimilis*				x	x				x						x				x	x						
Acacia camptoclada								x			x			x	x	x		x				x	x		x	x
Acacia colletioides																x										
Acacia consanguinea			x														x									
Acacia deficiens											x		x		x	x							x	x		x
Acacia erinacea				x							x	x	x			x		x					x			
Acacia evenulosa										x	x				x								x			
Acacia hemiteles											x	x		x	x	x		x		x						
Acacia heteroneura var. *jutsonii*			x		x										x											
Acacia hystrix subsp. *hystrix*								x		x					x	x								x		
Acacia leptopetala																x										
Acacia mackeyana										x					x	x										x
Acacia merrallii												x	x	x	x	x		x					x			
Acacia ?sphacelata																									x	
Acacia sphacelata subsp. *sphacelata*				x				x	x	x	x		x	x			x	x		x		x	x			x
Acacia spinosissima											x	x													x	
Acacia steedmanii											x								x							
Acacia sulcata var. *platyphylla*																x										x
Acacia tetraptera								x							x											
Acacia undosa (P3)			x		x		x				x	x	x		x											
Acacia yorkrakinensis subsp. *acrita*			x	x		x			x	x				x	x		x		x							
Acacia sp.																	x		x	x						
Acacia sp. 2						x		x																		
Adenanthos argyreus			x	x					x	x									x							
Allocasuarina acutivalvis		x	x	x	x			x	x	x	x				x		x		x		x				x	x
Allocasuarina acutivalvis subsp. *acutivalvis*				x	x	x				x					x											x
Allocasuarina campestris	x																									
Allocasuarina helmsii																									x	
Allocasuarina spinosissima		x	x	x	x	x			x	x	x				x	x	x			x		x			x	x
Allocasuarina sp.			x										x							x						
Amphipogon caricinus var. *caricinus*							x																			
Asteridea athrixioides											x							x					x			
Astroloma serratifolium					x																					
Astus subroseus							x		x						x	x										
Atriplex sp.														x				x								
Austrostipa hemipogon							x					x			x											
Austrostipa ?juncifolia																		x								
Austrostipa trichophylla							x									x										

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Austrostipa sp.											x						x	x		x						
Baeckea elderiana			x		x												x									
Baeckea sp.					x					x							x									
Banksia elderiana										x																
Banksia laevigata			x							x																
Banksia laevigata subsp fuscolutea			x		x					x					x										x	
Banksia purdieana		x	x	x		x			x	x					x				x							
Banksia sphaerocarpa var. dolichostyla (T)				x					x	x									x						x	
Banksia sp.																				x						
Beaufortia orbifolia				x											x		x		x				x			
Beaufortia puberula					x										x											
Beaufortia schaueri				x				x	x	x							x									
Beyeria ?*sulcata*					x																					
Beyeria sulcata var. *brevipes*					x	x			x			x	x	x	x						x					x
Beyeria sulcata var. *gracilis*		x							x								x		x							
Beyeria sp.																						x				
Bertya dimerostigma			x																							
Blennospora drummondii							x				x					x										
Boronia inornata subsp. *inornata*																		x								
Boronia inornata subsp. *leptophylla*												x			x											
Boronia ternata var. *foliosa*			x	x											x	x	x		x	x						x
Boronia sp.				x				x		x							x									
Brachyloma stenolobum (P1)																	x									
Brachyscome iberidifolia																x										
Brachyscome perpusilla																							x			
Calandrinia eremaea															x											
Callitris canescens			x	x	x	x	x	x		x					x		x					x			x	
Callitris preissii			x																							
Callitris verrucosa			x	x				x		x	x					x	x					x				
Callitris sp.								x									x									
Calothamnus gilesii																	x									
Calothamnus quadrifidus																			x							
Calotis hispidula																							x			
Calytrix leschenaultii										x												x				
Cassytha pomiformis				x					x																	
Cassytha sp.		x	x	x	x				x	x					x		x		x			x			x	
**Centaurium tenuiflorum*							x																			
Centrolepis polygyna							x																			
Centrolepis strigosa subsp. *rupestris*							x																			
Chamaexeros fimbriata					x					x					x											
Chamelaucium ciliatum																x										

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Chamelaucium pauciflorum subsp. *pauciflorum* ms										x					x		x									x
Chamelaucium virgatum				x					x	x					x											
Chorizema circinale (P3)									x																	
Codonocarpus cotinifolius																			x							
Comesperma drummondii																			x							
Comesperma volubile	x	x	x			x					x					x									x	x
Commersonia craurophylla											x														x	
Conostephium drummondii																						x				
Conostephium ?preissii															x											
Conostylis bealiana										x										x						
Coopernookia strophiolata											x							x		x						
Crassula colorata													x		x	x										
Crassula colorata var. *colorata*															x											
Crassula sp.											x					x										
Cryptandra distigma			x												x	x										
Cryptandra intonsa																									x	
Cryptandra minutifolia subsp. *brevistyla*			x		x										x											
Cryptandra minutifolia subsp. *minutifolia*			x							x	x				x											
Cryptandra recurva										x												x				
Cryptandra wilsonii					x										x	x										
Cyanostegia angustifolia																			x							
Cyathostemon heterantherus			x	x		x		x		x						x	x					x				x
Dampiera eriocephala																				x						
Dampiera sacculata				x													x		x						x	
Dampiera tenuicaulis var. *curvula*										x	x									x						
Dampiera sp.					x																					
Darwinia sp. Karonie (K. Newbey 8503)			x		x		x								x											x
Daviesia aphylla								x							x											
Daviesia argillacea										x	x	x	x		x	x				x			x	x		x
Daviesia grahamii								x												x				x		
Daviesia sarissa subsp. *redacta* (P2)																	x									
Daviesia scoparia			x					x				x	x	x	x		x	x				x	x		x	x
Daviesia sp.																			x							
Dianella revoluta			x		x	x	x				x	x	x	x	x	x				x			x			
Dillwynia acerosa					x	x									x		x					x				x
Diuris picta																			x							
Dodonaea adenophora	x																									
Dodonaea amblyophylla																						x				x
Dodonaea bursariifolia			x					x			x	x			x	x									x	
Dodonaea stenozyga					x			x			x	x	x		x	x		x								
Dodonaea ?viscosa								x																		

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Dodonaea sp.									x						x		x									
Drosera glanduligera																										x
Drosera moorei			x																							
Drosera sp.																			x							
Drosera sp. (climbing)		x								x										x		x				
Drummondita hassellii			x	x	x	x			x	x					x		x		x			x				x
Enchylaena tomentosa					x																					
Eremophila decipiens subsp. *decipiens*																		x								
Eremophila dempsteri													x													
Eremophila densifolia													x													
Eremophila drummondii											x															
Eremophila ionantha												x				x		x						x		
Eremophila labrosa											x		x			x										
Eremophila sp. aff. *verticillata*													x													
Eucalyptus burracoppinensis			x	x	x			x	x	x					x		x		x	x						
Eucalyptus capillosa subsp. *polyclada*			x	x	x	x		x		x	x				x						x					
Eucalyptus cylindriflora			x	x							x		x		x	x	x		x	x		x				
Eucalyptus cylindrocarpa														x		x							x			
Eucalyptus eremophila				x	x	x	x	x			x	x			x	x	x	x	x	x		x			x	x
Eucalyptus extensa													x													
Eucalyptus flocktoniae subsp. *flocktoniae*								x			x	x	x		x	x									x	
Eucalyptus gracilis												x		x				x	x							
Eucalyptus horistes																	x									
Eucalyptus incrassata					x			x						x	x											
Eucalyptus livida					x																					x
Eucalyptus longicornis													x													
Eucalyptus pileata			x									x			x											x
Eucalyptus platycorys									x													x				
Eucalyptus polita													x													
Eucalyptus prolixa											x	x	x		x	x		x					x			
Eucalyptus ravida								x			x		x		x											
Eucalyptus rigidula				x	x				x	x				x	x		x		x			x				
Eucalyptus salmonophloia								x			x	x	x	x		x		x						x	x	
Eucalyptus salubris													x		x											
Eucalyptus tenuis													x		x					x			x	x		
Eucalyptus urna												x	x	x	x		x							x	x	
Eucalyptus yilgarnensis																							x			
Eucalyptus sp.			x	x	x	x		x	x	x	x	x	x	x	x	x	x		x	x			x		x	x
Euryomyrtus maidenii			x		x	x			x	x					x		x			x						
Eutaxia lasiocalyx (P2)															x											
Exocarpos aphyllus			x					x		x	x	x	x	x	x											

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Fabaceae sp.													x				x									
Gastrolobium floribundum				x	x										x				x							
Gastrolobium melanocarpum			x		x										x		x				x					
Gastrolobium spinosum				x	x				x	x							x		x	x					x	
Glischrocaryon aureum				x							x									x						
Glischrocaryon sp.											x							x	x	x					x	
Gnephosis drummondii							x																			
Gompholobium hendersonii			x	x					x	x									x							
Goodenia occidentalis							x											x								
Goodenia pinifolia				x															x	x						
Goodenia sp.																x										
Grevillea acacioides										x																
Grevillea acuaria						x		x		x	x	x	x	x	x	x		x					x			x
Grevillea cagiana										x												x				
Grevillea ?decipiens																x										
Grevillea didymobotrya		x	x							x							x									
Grevillea didymobotrya subsp. *didymobotrya*					x										x											
Grevillea excelsior				x																						
Grevillea hookeriana subsp. *apiciloba*		x							x								x									
Grevillea huegelii			x		x			x		x		x	x	x	x		x	x								
Grevillea lissopleura (P1)	x																									
Grevillea marriottii (P1)																						x				
Grevillea oncogyne														x	x											x
Grevillea shuttleworthiana subsp. *obovata*										x																
Grevillea sp.					x	x		x			x				x				x	x					x	
Gyrostemon racemiger																			x						x	
Hakea erecta			x	x	x				x	x					x		x					x				
Hakea francisiana			x						x	x					x		x			x						
Hakea invaginata		x			x					x					x											x
Hakea meisneriana			x		x					x																
Hakea minyma		x	x	x	x	x											x		x	x						
Hakea newbeyana															x											
Hakea pendens (P3)						x				x	x				x		x				x					
Hakea subsulcata		x	x	x	x	x			x						x		x		x	x	x				x	x
Hakea sp.				x														x		x						
Halgania andromedifolia														x												
Halgania lavandulacea					x										x											
Halgania sp.																									x	
Haloragis hamata											x															
Hemigenia westringioides																			x							
Hibbertia ancistrophylla			x	x					x	x							x		x		x					

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Hibbertia exasperata			x	x	x	x				x					x	x	x					x				x
Hibbertia gracilipes					x					x							x					x				
Hibbertia aff. *oligantha*	x																									
Hibbertia psilocarpa					x					x					x	x	x									x
Hibbertia rostellata		x		x					x								x		x							
Hibbertia stowardii		x	x	x	x				x	x					x		x			x						
Hibbertia sp. Wheatbelt (J.R. Wheeler 3955)					x																					
Hybanthus epacroides																				x						
Hybanthus floribundus subsp. *floribundus*				x															x							
Isopogon gardneri				x					x						x		x		x							
Isopogon scabriusculus subsp. *pubifloris*			x	x					x	x							x			x						x
Isopogon scabriusculus subsp. *stenophyllus*					x										x											
Jacksonia nematoclada			x	x	x				x	x							x		x	x						
Labichea rossii (P1)				x													x		x						x	
Lamiaceae sp.											x					x				x						
Lasiopetalum ferraricollinum				x					x	x							x		x							
Lepidosperma aff. *amantiferrum*										x																
Lepidosperma diurnum	x																									
Lepidosperma sanguinolentum		x	x	x	x					x		x				x	x			x		x			x	
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)			x																							
Lepidosperma sp.		x			x				x		x				x		x		x						x	
Leptomeria preissiana			x		x					x	x				x		x									
Leptosema daviesioides											x						x			x						
Leptospermum erubescens					x	x	x			x							x				x	x				x
Leptospermum fastigiatum		x		x	x					x							x					x				
Leucopogon cuneifolius				x															x							
Leucopogon sp. Coolgardie (M. Hislop & F. Hort MH 3197)					x				x								x									
Leucopogon sp. Forrestania (G.F. Craig 2386)				x	x				x	x							x		x							
Leucopogon sp. outer wheatbelt (M. Hislop 30)		x	x	x													x									
Leucopogon sp.					x										x											
Levenhookia stipitata							x																			
Lycium australe														x		x										
Lysinema pentapetalum										x												x				
Maireana carnosa													x			x										
Maireana marginata																x										
Maireana radiata													x													
Maireana sp.													x	x												
Melaleuca ?acuminata													x		x											
Melaleuca acuminata subsp acuminata										x	x				x	x										
Melaleuca calyptroides					x				x						x	x	x			x		x				x
Melaleuca cliffortioides	x												x		x	x							x			

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Melaleuca condylosa			x	x		x		x					x			x	x	x								x
Melaleuca cordata		x	x	x	x	x			x	x					x	x	x		x	x					x	x
Melaleuca ctenoides					x		x																			
Melaleuca cucullata													x													
Melaleuca depauperata			x					x			x	x			x							x				
Melaleuca eleuterostachya			x		x			x			x	x	x	x	x	x	x									x
Melaleuca halmaturorum								x	x						x								x			
Melaleuca hamata			x	x	x	x	x	x	x	x	x	x			x	x	x		x	x		x			x	x
Melaleuca johnsonii			x						x	x					x	x						x				
Melaleuca lateriflora			x		x		x	x			x	x	x		x	x							x			x
Melaleuca laxiflora			x		x	x				x		x			x	x									x	x
Melaleuca pauperiflora subsp. *fastigiata*															x											
Melaleuca pauperiflora subsp. *pauperiflora*			x	x				x	x	x	x	x	x	x	x	x	x			x		x	x	x	x	
Melaleuca ?pentagona															x											
Melaleuca phoidophylla		x	x	x				x		x					x	x	x		x			x				
Melaleuca pungens				x					x	x																
Melaleuca sparsiflora															x											
Melaleuca spicigera			x		x			x							x	x	x		x	x						x
Melaleuca teuthidoides						x		x					x		x		x	x					x			x
Melaleuca sp.				x	x						x				x			x		x			x			
Microcorys ericifolia																				x						
Microcorys obovata				x	x				x		x	x			x	x	x		x			x			x	x
Microcorys sp. (aff. *macredieana)*					x										x											
Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1)		x	x	x		x		x	x		x	x			x		x		x			x			x	
Microcybe ambigua			x		x				x	x			x		x		x						x			x
Microcybe multiflora													x													
Microcybe multiflora subsp. *multiflora*												x	x		x	x	x									
Micromyrtus erichsenii		x	x	x					x	x					x		x		x	x		x				x
Millotia tenuifolia var. *tenuifolia*																x							x			
Mirbelia microphylla																				x						
Monotaxis grandiflora var. *obtusifolia*																				x						
Myrtaceae sp.					x										x											
Neurachne alopecuroidea							x																			
Olax benthamiana				x																						
Olearia laciniifolia (P2)																									x	
Olearia muelleri						x				x		x	x	x	x	x		x					x			
Olearia ramosissima															x	x										
Orianthera exilis (P2)																			x							
Orianthera tortuosa															x											
Persoonia helix		x	x	x					x	x					x		x		x	x		x				
Persoonia quinquenervis			x		x	x			x	x					x											x

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Persoonia saundersiana			x		x	x									x											
Persoonia striata			x	x					x	x																
Petrophile merrallii										x												x				
Petrophile stricta			x	x	x				x	x					x		x			x		x				
Petrophile sp.																				x						
Phebalium filifolium			x		x	x									x		x									x
Phebalium lepidotum								x								x										
Phebalium megaphyllum					x	x		x			x				x				x							
Phebalium obovatum			x	x		x			x	x						x	x		x			x				x
Phebalium tuberculosum			x							x					x	x										
Phebalium sp.											x															
Philotheca rhomboidea									x																	
Phyllota luehmannii																				x						
Pimelea angustifolia																	x									
Pimelea sulphurea				x															x	x						
Pityrodia lepidota																				x						
Platysace maxwellii			x														x		x	x		x			x	
Platysace sp.			x														x		x	x		x			x	
Podolepis capillaris											x					x										
Podotheca angustifolia																x										
Psammomoya choretroides									x	x										x		x				
Pterostylis mutica																							x			
Pterostylis sp.										x																
Ptilotus drummondii var. *minor*							x																			
Ptilotus holosericeus																x		x								
Ptilotus humilis																x							x			
Rhagodia ?drummondii																								x		
Rhagodia preissii subsp. *preissii*																		x								
Rhodanthe laevis											x					x							x			
Rhodanthe pygmaea											x				x											
Rinzia sessilis			x		x	x					x	x			x	x	x		x	x	x					x
Santalum acuminatum			x	x	x	x			x	x	x	x	x		x	x	x	x	x	x	x		x			x
Sarcozona praecox																		x								
Scaevola spinescens											x	x						x	x							
Schoenus hexandrus																	x									
?*Schoenus* sp.																			x						x	
Sclerolaena diacantha													x	x		x		x								
Senecio glossanthus											x		x			x		x					x			
Senna artemisioides subsp. *filifolia*											x			x				x								
Solanum ?plicatile																									x	
Stackhousia monogyna																									x	

APPENDIX J: VASCULAR PLANT SPECIES RECORDED IN EACH VEGETATION COMMUNITY IN THE EARL GREY LITHIUM PROJECT

Note: * denotes an introduced species; T denotes threatened species; P1 - P4 denotes priority species

SPECIES	VEGETATION COMMUNITY																								
	H1	S1	S2	S3	MW6	MW7	MW8	W4	W5	W6	W7	W8	W9	W10	W11	W12	W13	W14	W15	W16	W17	W18	W19	W20	W21	W22
Stackhousia muricata				x															x							
Stenanthemum stipulosum					x												x		x	x					x	x
Stylidium limbatum											x						x		x	x						
Stylidium sp.																			x							
Styphelia exserta	x																									
Synaphea interioris										x																
Templetonia aculeata					x												x			x						
Thomasia sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639)							x																			x
Thryptomene kochii		x	x	x	x	x			x	x	x	x			x		x		x	x						
Thysanotus sp. Twining Wheatbelt (N.H. Brittan 81/29)							x			x					x											
Thysanotus sp.																			x							
Trachymene pilosa																x										
Trymalium elachophyllum					x																					x
Trymalium ?myrtillus																x										
Trymalium myrtillus subsp myrtillus	x																									
Verticordia chrysantha					x					x					x											
Verticordia plumosa var. *incrassata*										x												x				
Verticordia sp.					x	x									x											x
Vittadinia humerata																		x								
Wahlenbergia gracilenta																		x								
Waitzia acuminata var. *acuminata*											x				x	x		x							x	
Westringia cephalantha																					x					
Westringia cephalantha var. *cephalantha*						x									x											x
Westringia rigida											x	x		x		x										
Wilsonia humilis											x	x	x			x		x					x	x		
Xanthorrhoea nana										x																
Zygophyllum glaucum													x	x				x								

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: H1

Vegetation community description

Melaleuca cliffortioides, *Allocasuarina campestris*, *Dodonaea adenophora* mid open heathland over *Grevillea lissopleura* (P1), *Trymalium myrtillus* subsp. *myrtillus* low sparse shrubland

Statistically associated species

Comesperma voluble, Lepidosperma diurnum

Occasional species:

Hibbertia aff*. oligantha, Styphelia exserta*

Soils and Landforms: rocky red-brown sandy clay soils on slopes

Surface rocks: present

Outcropping: not present

Condition: excellent

Area: 2.006 ha

Proportion of survey area: 0.04%

Number of Quadrats: 2

Average species richness: 9.00 ± 0.00 (s.e.m.)

Range of species richness: n/a

Similarity Percentage: 100.00 %

Representative Photograph

Quadrat EG179

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: S1

Vegetation community description

Allocasuarina acutivalvis, *Allocasuarina spinosissima* tall closed shrubland over *Hakea subsulcata*, *Melaleuca cordata*, *Micromyrtus erichsenii* mid sparse heathland

Statistically associated species

Comesperma volubile, Hibbertia stowardii, Thryptomene kochii

Occasional species:

Banksia purdieana, Beyeria sulcata var. *gracilis, Grevillea didymobotrya, Grevillea hookeriana* subsp. *apiciloba, Hakea invaginata, Hakea minyma, Leptospermum fastigiatum, Leucopogon* sp. outer wheatbelt (M. Hislop 30) *Melaleuca cordata, Melaleuca phoidophylla, Microcorys* sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Persoonia helix*

Soils and Landforms: lateritic orange-red clay soils on flats and lower slopes

Surface rocks: laterite pebbles

Outcropping: not present

Condition: excellent

Area: 65.0408 ha

Proportion of survey area: 1.47 %

Number of Quadrats: 4

Average species richness: 9.75 ± 1.71 (s.e.m.)

Range of species richness: 8 to 12

Similarity Percentage: 44.99 %

Representative Photograph

Quadrat EG161

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: S2

Vegetation community description

Allocasuarina acutivalvis, *Allocasuarina spinosissima*, *Eucalyptus burracoppinensis* tall open shrubland over *Thryptomene kochii*, *Persoonia helix*, *Micromyrtus erichsenii* mid sparse heathland over *Cyathostemon heterantherus*, *Hibbertia exasperata*, *Drummondita hassellii* low sparse shrubland

Statistically associated species

Melaleuca spicigera, Acacia yorkrakinensis subsp*. acrita, Hakea erecta, Banksia laevigata* subsp. *fuscolutea, Callitris canescens, Melaleuca laxiflora, Santalum acuminatum, Lepidosperma sanguinolentum, Melaleuca hamata, Petrophile stricta, Melaleuca condylosa*

Occasional species:

Acacia acuminata, Acacia consanguinea, Acacia heteroneura var*. jutsonii, Acacia undosa (P3), Baeckea elderiana, Banksia laevigata* subsp. *fuscolutea*

Soils and Landforms: orange brown clayey sand soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 228.1599 ha

Proportion of survey area: 5.16 %

Number of Quadrats: 15

Average species richness: 17.33 ± 1.16 (s.e.m.)

Range of species richness: 12 to 25

Similarity Percentage: 32.76 %

Representative Photograph

Quadrat EG146

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: S3

Vegetation community description

Allocasuarina acutivalvis, *Eucalyptus burracoppinensis* tall sparse shrubland over *Banksia purdieana*, *Hakea subsulcata*, *Melaleuca cordata* mid sparse shrubland over *Micromyrtus erichsenii*, *Persoonia helix* low isolated shrubs

Statistically associated species

Acacia assimilis, Acacia yorkrakinensis subsp*. acrita, Banksia sphaerocarpa* var. *dolichostyla (T), Beaufortia orbifolia, Callitris canescens, Drummondita hassellii, Eucalyptus burracoppinensis, Isopogon gardneri, Melaleuca phoidophylla, Microcorys* sp. Mt. Holland (D.A. Angus DA 2397) (P1)*, Micromyrtus erichsenii, Thryptomene kochii*

Occasional species:

Eucalyptus capillosa subsp*. polyclada, Eucalyptus eremophila, Gastrolobium floribundum, Gastrolobium spinosum, Gompholobium hendersonii, Hakea erecta , Hakea minyma, Hibbertia exasperata, Isopogon scabriusculus* subsp*. pubifloris, Leucopogon* sp. Forrestania (G.F. Craig 2386)*, Petrophile stricta*

Soils and Landforms: gravelly yellow brown to orange brown clay to clayey sand soils on flats

Surface rocks: gravel

Outcropping: not present

Condition: excellent

Area: 105.9603 ha

Proportion of survey area: 2.40 %

Number of Quadrats: 11

Average species richness: 20.09 ± 1.37 (s.e.m.)

Range of species richness: 13 to 29

Similarity Percentage: 49.32 %

Representative Photograph

Quadrat EG085

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: MW6

Vegetation community description

Eucalyptus burracoppinensis, *Eucalyptus eremophila* mid open mallee woodland over *Thryptomene kochii*, *Melaleuca laxiflora*, *Acacia acuminata* mid open shrubland over *Drummondita hassellii*, *Microcybe ambigua* low sparse heathland

Statistically associated species

Allocasuarina acutivalvis, Allocasuarina spinosissima, Euryomyrtus maidenii, Grevillea didymobotrya subsp*. didymobotrya, Hakea erecta, Hakea minyma, Hibbertia stowardii, Isopogon scabriusculus, Jacksonia nematoclada, Lepidosperma sanguinolentum, Melaleuca calyptroides, Melaleuca hamata, Melaleuca spicigera, Microcybe ambigua, Persoonia quinquenervis, Phebalium filifolium, Santalum acuminatum*

Occasional species:

Acacia assimilis subsp*. assimilis, Acacia heteroneura* var*. jutsonii, Baeckea elderiana, Banksia laevigata* subsp*. fuscolutea, Callitris canescens, Chamaexeros fimbriata, Gastrolobium melanocarpum, Leptospermum fastigiatum, Microcorys obovata, Microcorys* sp. (aff. macredieana), *Persoonia saundersiana, Verticordia chrysantha*

Soils and Landforms: grey brown to orange brown clay to clayey sand on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 111.9557 ha

Proportion of survey area: 2.53 %

Number of Quadrats: 10

Average species richness: 28.20 ± 2.21 (s.e.m.)

Range of species richness: 21 to 44

Similarity Percentage: 49.73 %

Representative Photograph

Quadrat EG058

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: MW7

Vegetation community description

Eucalyptus capillosa subsp. *polyclada* mid open mallee woodland over *Allocasuarina spinosissima*, *Callitris canescens*, *Hakea minyma* mid tall sparse shrubland over *Phebalium megaphyllum* low sparse shrubland

Statistically associated species

Melaleuca laxiflora, Acacia acuminata, Allocasuarina acutivalvis, Melaleuca hamata, Melaleuca cordata

Occasional species:

Acacia yorkrakinensis subsp*. acrita, Drummondita hassellii, Hakea subsulcata, Microcorys* sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Rinzia sessilis*

Soils and Landforms: orange brown clay soils on flats and slopes

Surface rocks: some lateritic pebbles

Outcropping: not present

Condition: excellent

Area: 63.0570 ha

Proportion of survey area: 1.43 %

Number of Quadrats: 4

Average species richness: 17.00 ± 1.16 (s.e.m.)

Range of species richness: 15 to 19

Similarity Percentage: 45.06 %

Representative Photograph

Quadrat EG102

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: MW8

Vegetation community description

Eucalyptus eremophila low open mallee woodland over *Melaleuca hamata*, *Leptospermum erubescens*, *Melaleuca lateriflora* mid sparse shrubland over *Thomasia* sp. Salmon Gums (C.A. Gardner s.n. PERTH 02708639), *Darwinia* sp. Karonie (K. Newbey 8503) low sparse shrubland

Statistically associated species

n/a

Other species:

Acacia undosa (P3), *Astus subroseus, Blennospora drummondii, Callitris canescens, Melaleuca ctenoides, Ptilotus drummondii* var*. minor, Thysanotus* sp. Twining Wheatbelt (N.H. Brittan 81/29)

Soils and Landforms: orange brown clay in minor drainage channel.

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 2.4874 ha

Proportion of survey area: 0.06 %

Number of Quadrats: 1

S**pecies richness:** 25.00

Range of species richness: n/a

Similarity Percentage: n/a (< 2 samples)

Representative Photograph

Quadrat EG039

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W4

Vegetation community description

Eucalyptus flocktoniae subsp. *flocktoniae*, *Eucalyptus eremophila* low open mallee woodland over *Melaleuca depauperata*, *Callitris canescens*, *Melaleuca phoidophylla* mid-tall sparse shrubland over *Acacia tetraptera*, *Grevillea acuaria* low isolated heath shrubs

Statistically associated species

Exocarpos aphyllus, Melaleuca eleuterostachya, Phebalium megaphyllum

Occasional species:

Acacia sp. 2, *Allocasuarina acutivalvis, Daviesia scoparia, Eucalyptus ravida, Microcorys s*p. Mt. Holland (D.A. Angus DA 2397) (P1)

Soils and Landforms: orange brown sandy clay soils on flats and slopes

Surface rocks: ironstone or quartz pebbles

Outcropping: not present

Condition: excellent

Area: 235.8104 ha

Proportion of survey area: 5.34 %

Number of Quadrats: 6

Average species richness: 13.33 ± 1.89 (s.e.m.)

Range of species richness: 8 to 20

Similarity Percentage: 35.07 %

Representative Photograph

Quadrat EG122

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W5

Vegetation community description

Eucalyptus rigidula, *Eucalyptus burracoppinensis* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix, Hakea erecta* mid sparse heathland over *Hibbertia rostellata*, *Hibbertia stowardii* low isolated shrubs

Statistically associated species

Acacia yorkrakinensis subsp*. acrita, Allocasuarina acutivalvis, Banksia purdieana, Drummondita hassellii, Melaleuca calyptroides, Melaleuca cordata, Thryptomene kochii*

Occasional species:

Gastrolobium spinosum, Gompholobium hendersonii, Grevillea hookeriana subsp*. apiciloba, Isopogon scabriusculus* subsp*. pubifloris, Microcorys* sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Microcybe ambigua*

Soils and Landforms: gravelly orange brown clayey sand soils on flats and slopes

Surface rocks: gravel

Outcropping: not present

Condition: excellent

Area: 138.7004 ha

Proportion of survey area: 3.14 %

Number of Quadrats: 6

Average species richness: 19.83 ± 2.06 (s.e.m.)

Range of species richness: 14 to 29

Similarity Percentage: 45.43 %

Representative Photograph

Quadrat EG164

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W6

Vegetation community description

Eucalyptus burracoppinensis, Allocasuarina acutivalvis, *Allocasuarina spinosissima* tall open mallee woodland over *Hakea erecta*, *Petrophile stricta*, *Banksia laevigata* subsp. *fuscolutea* mid sparse heathland over *Drummondita hassellii*, *Hibbertia exasperata*, *Psammomoya choretroides* low sparse shrubland

Statistically associated species

Banksia purdieana, Beaufortia schaueri, Chamelaucium virgatum, Cyathostemon heterantherus, Isopogon scabriusculus, Lepidosperma sanguinolentum, Leucopogon sp. Forrestania (G.F. Craig 2386), *Melaleuca cordata, Melaleuca phoidophylla, Micromyrtus erichsenii, Persoonia helix*

Occasional species:

Acacia acuminata, Acacia assimilis, Acacia yorkrakinensis subsp*. acrita, Calytrix leschenaultii, Chamelaucium pauciflorum* subsp*. pauciflorum* ms, *Gastrolobium spinosum, Grevillea didymobotrya, Hakea invaginata, Hakea meisneriana, Hibbertia ancistrophylla, Leptospermum fastigiatum, Lysinema pentapetalum, Microcybe ambigua, Petrophile merrallii, Thryptomene kochii, Verticordia chrysantha, Verticordia plumosa* var*. incrassata*

Soils and Landforms: yellow brown sandy soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 82.3411 ha

Proportion of survey area: 1.86 %

Number of Quadrats: 12

Average species richness: 25.08 ± 0.94 (s.e.m.)

Range of species richness: 21 to 30

Similarity Percentage: 50.94 %

Representative Photograph

Quadrat EG006

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W7

Vegetation community description

Burnt *Eucalyptus* sp. (*E. cylindriflora, E. flocktoniae* subsp*. flocktoniae, E. prolixa, E. salmonophloia, E. eremophila, E. capillosa* subsp*. polyclada*) low open woodland over *Melaleuca hamata*, *Melaleuca eleuterostachya* mid sparse shrubland over *Daviesia argillacea*, *Acacia hemiteles*, *Acacia deficiens* low sparse heathland

Statistically associated species

Acacia erinacea, Acacia hemiteles, Coopernookia strophiolata, Dampiera tenuicaulis var*. curvula, Dianella revoluta, Eremophila labrosa, Glischrocaryon aureum, Santalum acuminatum, Wilsonia humilis*

Occasional species:

Acacia spinosissima, Acacia steedmanii, Acacia undosa (P3)*, Dodonaea bursariifolia, Dodonaea stenozyga, Leptosema daviesioides, Melaleuca pauperiflora* subsp*. pauperiflora, Rinzia sessilis*

Soils and Landforms: orange brown sandy clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: good to very good

Area: 85.1873 ha

Proportion of survey area: 1.93 %

Number of Quadrats: 9

Average species richness: 16.33 ± 1.84 (s.e.m.)

Range of species richness: 11 to 29

Similarity Percentage: 32.55 %

Representative Photograph

Quadrat EG112

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W8

Vegetation community description

Eucalyptus prolixa, *Eucalyptus salmonophloia*, *Eucalyptus urna* mid mallee woodland over *Santalum acuminatum*, *Daviesia argillacea*, *Melaleuca eleuterostachya* mid sparse heathland over *Acacia merrallii*, *Daviesia argillacea*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland

Statistically associated species

Acacia erinacea, Melaleuca lateriflora, Melaleuca pauperiflora, Microcorys obovata, Scaevola spinescens, Westringia rigida

Occasional species:

Boronia inornata subsp*. leptophylla, Dodonaea stenozyga, Eremophila ionantha, Grevillea acuaria, Grevillea huegelii, Olearia muelleri, Thryptomene kochii*

Soils and Landforms: red brown sandy clay flats

Surface rocks: not present

Outcropping: not present

Condition: good to excellent

Area: 259.0385 ha

Proportion of survey area: 5.86 %

Number of Quadrats: 6

Average species richness: 16.50 ± 1.59 (s.e.m.)

Range of species richness: 14 to 24

Similarity Percentage: 48.74 %

Representative Photograph

Quadrat EG047

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W9

Vegetation community description

Eucalyptus urna, *Eucalyptus ravida*, *Eucalyptus prolixa* low mallee woodland over *Melaleuca pauperiflora*, *Dodonaea stenozyga*, *Daviesia argillacea* mid sparse shrubland over *Acacia merrallii*, *Grevillea acuaria*, *Microcybe multiflora* subsp. *multiflora* low sparse shrubland

Statistically associated species

Exocarpos aphyllus, Melaleuca cucullata, Santalum acuminatum

Occasional species:

Acacia deficiens, Melaleuca cliffortioides, Sclerolaena diacantha

Soils and Landforms: orange brown to red brown clay to sandy clay soils on flats and slopes

Surface rocks: occasional rocks

Outcropping: not present

Condition: very good to excellent

Area: 559.0100 ha

Proportion of survey area: 12.65 %

Number of Quadrats: 20

Average species richness: 10.80 ± 0.71 (s.e.m.)

Range of species richness: 6 to 17

Similarity Percentage: 51.71 %

Representative Photograph

Quadrat EG166

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W10

Vegetation community description

Eucalyptus sp. (*E. urna, E. cylindrocarpa, E, rigidula, E gracilis*) low mallee woodland over *Melaleuca pauperiflora*, *Daviesia scoparia* mid sparse shrubland over *Acacia merrallii*, *Grevillea huegelii*, *Olearia muelleri* low sparse shrubland

Statistically associated species

Acacia sphacelata subsp*. sphacelata, Daviesia scoparia, Dianella revoluta, Grevillea huegelii, Melaleuca eleuterostachya, Melaleuca pauperiflora, Olearia muelleri*

Occasional species:

Acacia sphacelata subsp. sphacelata, Dianella revoluta, Grevillea acuaria, Lycium australe

Soils and Landforms: red clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 49.0121 ha

Proportion of survey area: 1.11 %

Number of Quadrats: 4

Average species richness: 11.25 ± 2.84 (s.e.m.)

Range of species richness: 7 to 19

Similarity Percentage: 38.72 %

Representative Photograph

Quadrat EG070

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W11

Vegetation community description

Eucalyptus eremophila, *Eucalyptus rigidula*, *Eucalyptus flocktoniae* subsp. *flocktoniae* low mallee woodland over *Melaleuca lateriflora*, *Melaleuca eleuterostachya*, *Melaleuca acuminata* subsp. *acuminata* mid sparse shrubland over *Grevillea acuaria*, *Acacia hystrix* subsp. *hystrix*, *Microcybe ambigua* low sparse shrubland

Statistically associated species

Acacia tetraptera, Daviesia aphylla, Daviesia argillacea, Daviesia scoparia, Dodonaea stenozyga, Exocarpos aphyllus, Melaleuca halmaturorum, Melaleuca hamata, Melaleuca johnsonii, Melaleuca laxiflora, Melaleuca pauperiflora, Melaleuca spicigera, Olearia muelleri, Santalum acuminatum

Occasional species:

Acacia camptoclada, Acacia deficiens, Acacia evenulosa, Acacia mackeyana, Acacia merrallii, Allocasuarina acutivalvis subsp*. acutivalvis, Allocasuarina spinosissima, Boronia inornata* subsp*. leptophylla, Eucalyptus ravida, Grevillea huegelii, Hakea invaginata, Hibbertia exasperata ,Melaleuca phoidophylla, Melaleuca teuthidoides, Microcorys obovata, Microcybe multiflora* subsp*. multiflora, Phebalium megaphyllum, Thryptomene kochii*

Soils and Landforms: orange brown clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: very good to excellent

Area: 600.1110 ha

Proportion of survey area: 13.58 %

Number of Quadrats: 31

Average species richness: 18.03 ± 1.30 (s.e.m.)

Range of species richness: 10 to 42

Similarity Percentage: 31.52 %

Representative Photograph

Quadrat IB01

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W12

Vegetation community description

Eucalyptus cylindriflora, *Eucalyptus cylindrocarpa*, *Eucalyptus prolixa* low open mallee woodland over *Melaleuca eleuterostachya*, *Melaleuca lateriflora*, *Daviesia argillacea* mid sparse shrubland over *Grevillea acuaria*, *Acacia merrallii*, *Acacia camptoclada* low sparse shrubland

Statistically associated species

Dianella revoluta, Dodonaea bursariifolia, Melaleuca acuminata subsp acuminata, Melaleuca calyptroides, Melaleuca hamata, Melaleuca pauperiflora subsp*. pauperiflora, Santalum acuminatum*

Occasional species:

Acacia hemiteles, Acacia mackeyana, Chamelaucium ciliatum, Cyathostemon heterantherus, Lepidosperma sanguinolentum, Melaleuca calyptroides, Melaleuca cliffortioides, Microcybe multiflora subsp*. multiflora, Phebalium tuberculosum*

Soils and Landforms: yellow brown to red brown sandy clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: good to excellent

Area: 186.7521 ha

Proportion of survey area: 4.23 %

Number of Quadrats: 12

Average species richness: 14.83 ± 1.08 (s.e.m.)

Range of species richness: 10 to 19

Similarity Percentage: 28.00 %

Representative Photograph

Quadrat EG207

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W13

Vegetation community description

Callitris canescens, *Eucalyptus rigidula* low open mallee woodland over *Micromyrtus erichsenii*, *Persoonia helix*, *Allocasuarina spinosissima* mid tall sparse shrubland over *Beyeria sulcata* var*. gracilis*, *Drummondita hassellii* low sparse shrubland

Statistically associated species

Gastrolobium spinosum, Hakea erecta, Hakea minyma, Hakea subsulcata, Hibbertia ancistrophylla, Leptospermum fastigiatum, Melaleuca calyptroides, Melaleuca cordata, Melaleuca hamata, Melaleuca phoidophylla, Santalum acuminatum, Thryptomene kochii

Occasional species:

Acacia assimilis, Acacia sphacelata subsp*. sphacelata, Allocasuarina acutivalvis, Beaufortia orbifolia, Cyathostemon heterantherus, Eucalyptus burracoppinensis, Euryomyrtus maidenii, Grevillea huegelii, Hibbertia exasperata, Microcorys* sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Petrophile stricta, Phebalium obovatum*

Soils and Landforms: yellow brown to orange brown clayey sands on flats and slopes

Surface rocks: not present

Outcropping: not present

Condition: very good to excellent

Area: 370.4494 ha

Proportion of survey area: 8.39 %

Number of Quadrats: 18

Average species richness: 18.00 ± 1.00 (s.e.m.)

Range of species richness: 13 to 32

Similarity Percentage: 38.58 %

Representative Photograph

Quadrat EG142

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W14

Vegetation community description

Burnt *Eucalyptus salmonophloia*, *Eucalyptus eremophila* mid open woodland over *Santalum acuminatum, Senna artemisioides* subsp. *filifolia* mid sparse shrubland over *Acacia hemiteles*, *Olearia muelleri* low sparse shrubland

Statistically associated species

Sclerolaena diacantha

Occasional species:

Acacia erinacea, Acacia merrallii, Acacia sphacelata subsp*. sphacelata, Dodonaea stenozyga, Eremophila ionantha, Grevillea acuaria, Sclerolaena diacantha, Vittadinia humerata*

Soils and Landforms: orange brown clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: good to excellent

Area: 61.0361 ha

Proportion of survey area: 1.38 %

Number of Quadrats: 7

Average species richness: 11.86 ± 0.80 (s.e.m.)

Range of species richness: 9 to 16

Similarity Percentage: 41.67 %

Representative Photograph

Quadrat EG200

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W15

Vegetation community description

Burnt *Allocasuarina acutivalvis*, *Eucalyptus* sp. (*E. cylindriflora, E. eremophila, E, gracilis, E. rigidula, E. burracoppinensis*) low open mallee woodland over *Hakea minyma*, *Melaleuca cordata*, *Melaleuca hamata* mid sparse shrubland over *Dampiera sacculata, Pimelea sulfurea*, *Hybanthus floribundus* subsp. *floribundus* low sparse forbland

Statistically associated species

Banksia purdieana, Beaufortia orbifolia, Boronia ternata var*. foliosa, Goodenia pinifolia, Gyrostemon racemiger, Hakea subsulcata, Hemigenia westringioides, Isopogon gardneri, Melaleuca spicigera, Platysace maxwellii, Santalum acuminatum*

Occasional species:

Gastrolobium floribundum, Gompholobium hendersonii, Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Persoonia helix*

Soils and Landforms: orange brown sandy clay soils on flats and slopes

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 174.3199 ha

Proportion of survey area: 3.95 %

Number of Quadrats: 8

Average species richness: 18.13 ± 1.76 (s.e.m.)

Range of species richness: 14 to 29

Similarity Percentage: 33.25 %

Representative Photograph

Quadrat EG185

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W16

Vegetation community description

Burnt *Eucalyptus* sp. (*E. cylindriflora, E. tenuis, E. burracoppinensis, E. eremophila*) low open mallee woodland over *Persoonia helix, Gastrolobium spinosum*, *Acacia assimilis* mid sparse shrubland over *Dampiera tenuicaulis* subsp. *curvula*, *Glischrocaryon aureum*, *Dampiera eriocephala* low sparse forbland

Statistically associated species

Daviesia grahamii, Hakea minyma, Melaleuca hamata, Melaleuca pauperiflora subsp*. pauperiflora, Micromyrtus erichsenii, Pityrodia lepidota, Santalum acuminatum*

Occasional species:

Acacia sphacelata subsp*. sphacelata, Allocasuarina spinosissima, Melaleuca cordata, Monotaxis grandiflora* var*. obtusifolia, Stenanthemum stipulosum*

Soils and Landforms: orange red gravelly sandy loam soils on flats

Surface rocks: not present

Outcropping: not present

Condition: good to excellent

Area: 113.7040 ha

Proportion of survey area: 2.57 %

Number of Quadrats: 7

Average species richness: 17.57 ± 1.25 (s.e.m.)

Range of species richness: 13 to 22

Similarity Percentage: 29.18 %

Representative Photograph

Quadrat EG068

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W17

Vegetation community description

Eucalyptus capillosa subsp. *polyclada* low open mallee woodland over *Hakea pendens* (P3), *Beyeria sulcata*, *Santalum acuminatum* mid sparse shrubland over *Rinzia sessilis*, *Westringia cephalantha* subsp. *cephalantha*, *Hibbertia ancistrophylla* low sparse shrubland shrubland

Statistically associated species

n/a

Occasional species:

Allocasuarina acutivalvis, Gastrolobium melanocarpum, Hakea subsulcata, Leptospermum erubescens

Soils and Landforms: red brown clayey sand on slopes and ridges.

Surface rocks: laterite

Outcropping: not present

Condition: excellent

Area: 2.7872 ha

Proportion of survey area: 0.06%

Number of Quadrats: 1

Species richness: 11.00

Range of species richness: n/a

Similarity Percentage: n/a (< 2 sample)

Representative Photograph

Quadrat EG159

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W18

Vegetation community description

Eucalyptus rigidula. *Eucalyptus platycorys*, *Callitris canescens* low open mallee woodland over *Melaleuca hamata*, *Allocasuarina spinosissima*, *Hakea erecta* mid sparse shrubland over *Hibbertia gracilipes*, *Phebalium obovatum*, *Cyathostemon heterantherus* low sparse shrubland

Statistically associated species

Drummondita hassellii, Hibbertia exasperata, Lepidosperma sanguinolentum, Melaleuca johnsonii, Persoonia helix, Verticordia plumosa var*. incrassata*

Occasional species:

Calytrix leschenaultii, Dillwynia acerosa, Persoonia helix

Soils and Landforms: yellow brown sandy soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 69.2503 ha

Proportion of survey area: 1.57 %

Number of Quadrats: 4

Average species richness: 20.00 ± 1.08 (s.e.m.)

Range of species richness: 17 to 22

Similarity Percentage: 45.58 %

Representative Photograph

Quadrat EG009

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W19

Vegetation community description

Eucalyptus prolixa low open mallee woodland over *Daviesia argillacea*, *Santalum acuminatum* mid sparse shrubland over *Acacia merrallii*, *Microcybe ambigua*, *Grevillea acuaria* low sparse shrubland

Statistically associated species

Acacia erinacea, Acacia evenulosa

Occasional species:

Dodonaea stenozyga, Melaleuca pauperiflora subsp*. pauperiflora, Melaleuca teuthidoides*

Soils and Landforms: orange-red brown sandy clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 68.6240 ha

Proportion of survey area: 1.55 %

Number of Quadrats: 5

Average species richness: 13.40 ± 1.21 (s.e.m.)

Range of species richness: 11 to 18

Similarity Percentage: 55.12 %

Representative Photograph

Quadrat EG081

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W20

Vegetation community description

Burnt *Eucalyptus urna*, *Eucalyptus salmonophloia*, *Eucalyptus tenuis* mid open mallee woodland over *Melaleuca pauperiflora subsp. pauperiflora* mid sparse shrubland over *Acacia deficiens*, *Daviesia argillacea*, *Daviesia grahamii* low sparse shrubland

Statistically associated species

n/a

Occasional species:

Acacia hystrix subsp*. hystrix, Eremophila ionantha, Rhagodia drummondii, Wilsonia humilis*

Soils and Landforms: red brown clay soils on flats

Surface rocks: not present

Outcropping: not present

Condition: excellent

Area: 48.2853 ha

Proportion of survey area: 1.09 %

Number of Quadrats: 1

Species richness: 11.00

Range of species richness: n/a

Similarity Percentage: n/a (< 2 samples)

Representative Photograph

Quadrat EG182

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W21

Vegetation community description

Eucalyptus eremophila, *Eucalyptus flocktoniae* subsp. *flocktoniae* low open mallee woodland over *Melaleuca hamata* over *Acacia acanthoclada* subsp. *acanthoclada*, *Dampiera sacculata*, *Westringia cephalantha* subsp. *cephalantha* low sparse shrubland

Statistically associated species

Acacia sphacelata subsp*. sphacelata, Allocasuarina acutivalvis, Allocasuarina spinosissima, Callitris canescens, Comesperma volubile, Commersonia craurophylla, Glischrocaryon aureum, Lepidosperma sanguinolentum*

Occasional species:

Microcorys sp. Mt. Holland (D.A. Angus DA 2397) (P1), *Olearia laciniifolia* (P2), *Platysace maxwellii*

Soils and Landforms: grey brown clayey sand soils on flats and slopes

Surface rocks: not present

Outcropping: not present

Condition: good to excellent

Area: 21.3412 ha

Proportion of survey area: 0.48 %

Number of Quadrats: 5

Average species richness: 14.80 ± 0.97 (s.e.m.)

Range of species richness: 13 to 18

Similarity Percentage: 33.26 %

Representative Photograph

Quadrat EG209

APPENDIX K: SUMMARY OF VEGETATION COMMUNITIES DEFINED IN THE EGLP

Vegetation Community Description

Vegetation map code: W22

Vegetation community description

Eucalyptus eremophila low open mallee woodland over *Melaleuca hamata*, *Melaleuca eleuterostachya*, *Melaleuca laxiflora* mid sparse shrubland over *Hibbertia exasperata*, *Cyathostemon heterantherus*, *Acacia sphacelata* subsp. *sphacelata* low sparse shrubland

Statistically associated species

Allocasuarina acutivalvis, Boronia ternata var*. foliosa, Daviesia scoparia, Dillwynia acerosa, Dodonaea amblyophylla*

Occasional species:

Beyeria sulcata var*. brevipes, Comesperma volubile, Grevillea oncogyne, Melaleuca calyptroides, Rinzia sessilis*

Soils and Landforms: yellow-orange brown clay soils on flats and slopes

Surface rocks: gravel

Outcropping: not present

Condition: excellent

Area: 66.0345 ha

Proportion of survey area: 1.49 %

Number of Quadrats: 5

Average species richness: 17.80 ± 1.46 (s.e.m.)

Range of species richness: 15 to 23

Similarity Percentage: 33.37 %

Representative Photograph

Quadrat EG162

APPENDIX L: SUMMARY OF ANOSIM *R* RESULTS FOR VEGETATION COMMUNITIES WITHIN THE EGLP SURVEY AREA AND THE FORRESTANIA GREENSTONE BELT (MT HOLLAND AREA)

Notes: Forrestania Grenstone Belt (Communities 1-8) - from Thompson and Allen (2013)

[a] - An ANOSIM *R* value of 1 indicates complete dissimilarity between pairs of communties; 0 corresponds to complete similarity between pairs of communties

[b] - significance level of sample statistic (%); 0.1% = <0.001

a total of a total of 264 combined survey quadrats were used in the ANOSIM analysis

Vegetation Communties	R[a]	P[b]
H1, Community 1	1	10
H1, Community 4	1	3.6
H1, Community 2	1	4.8
H1, Community 6	1	3.6
H1, Community 7	1	1.3
H1, Community 8	1	4.8
H1, Community 5	0.786	6.7
H1, Community 3	1	3.6
S1, Community 1	0.963	2.9
S1, Community 4	0.972	0.5
S1, Community 2	0.963	0.8
S1, Community 6	1	0.5
S1, Community 7	1	0.1
S1, Community 8	1	0.8
S1, Community 5	1	2.9
S1, Community 3	1	0.5
S2, Community 1	0.343	2.9
S2, Community 4	0.669	0.1
S2, Community 2	0.826	0.1
S2, Community 6	0.911	0.1
S2, Community 7	0.955	0.1
S2, Community 8	0.924	0.1
S2, Community 5	0.94	0.1
S2, Community 3	0.777	0.1
S3, Community 1	0.956	0.3
S3, Community 4	0.984	0.2
S3, Community 2	0.999	0.3
S3, Community 6	1	0.1
S3, Community 7	1	0.1
S3, Community 8	1	0.1
S3, Community 5	1	0.1
S3, Community 3	1	0.1

Vegetation Communties	R[a]	P[b]
W4, Community 1	0.981	1.2
W4, Community 4	0.819	0.2
W4, Community 2	1	0.2
W4, Community 6	0.961	0.2
W4, Community 7	0.994	0.1
W4, Community 8	0.995	0.2
W4, Community 5	0.968	0.5
W4, Community 3	0.994	0.2
W5, Community 1	0.923	1.2
W5, Community 4	0.982	0.2
W5, Community 2	1	0.2
W5, Community 6	1	0.2
W5, Community 7	1	0.1
W5, Community 8	1	0.2
W5, Community 5	1	0.5
W5, Community 3	1	0.2
W6, Community 1	0.945	0.2
W6, Community 4	0.994	0.1
W6, Community 2	1	0.1
W6, Community 6	1	0.1
W6, Community 7	1	0.1
W6, Community 8	1	0.1
W6, Community 5	1	0.2
W6, Community 3	1	0.1
W7, Community 1	0.971	0.5
W7, Community 4	0.85	0.1
W7, Community 2	0.984	0.3
W7, Community 6	0.811	0.1
W7, Community 7	0.926	0.1
W7, Community 8	0.949	0.1
W7, Community 5	0.934	0.1
W7, excluded 1	0.89	1.8

APPENDIX L: SUMMARY OF ANOSIM *R* RESULTS FOR VEGETATION COMMUNITIES WITHIN THE EGLP SURVEY AREA AND THE FORRESTANIA GREENSTONE BELT (MT HOLLAND AREA)

Notes: Forrestania Grenstone Belt (Communities 1-8) - from Thompson and Allen (2013)

[a] - An ANOSIM *R* value of 1 indicates complete dissimilarity between pairs of communties; 0 corresponds to complete similarity between pairs of communties

[b] - significance level of sample statistic (%); 0.1% = <0.001

a total of a total of 264 combined survey quadrats were used in the ANOSIM analysis

Vegetation Communties	R[a]	P[b]
W8, Community 1	1	1.2
W8, Community 4	0.897	0.2
W8, Community 2	1	0.2
W8, Community 6	0.851	0.2
W8, Community 7	0.892	0.1
W8, Community 8	0.889	0.2
W8, Community 5	0.992	0.5
W8, Community 3	1	0.2
W9, Community 1	1	0.1
W9, Community 4	0.98	0.1
W9, Community 2	1	0.1
W9, Community 6	0.967	0.1
W9, Community 7	0.925	0.1
W9, Community 8	0.975	0.1
W9, Community 5	0.958	0.1
W9, Community 3	1	0.1
W10, Community 1	1	2.9
W10, Community 4	0.94	0.5
W10, Community 2	1	0.8
W10, Community 6	0.972	0.5
W10, Community 7	0.957	0.2
W10, Community 8	0.816	0.8
W10, Community 5	1	2.9
W10, Community 3	1	0.5
W11, Community 1	0.851	0.1
W11, Community 4	0.325	0.4
W11, Community 2	0.972	0.1
W11, Community 6	0.573	0.1
W11, Community 7	0.931	0.1
W11, Community 8	0.875	0.1
W11, Community 5	0.924	0.1
W11, Community 3	0.804	0.1

Vegetation Communties	R[a]	P[b]
W12, Community 1	0.728	0.2
W12, Community 4	0.34	1
W12, Community 2	0.833	0.2
W12, Community 6	0.528	0.1
W12, Community 7	0.78	0.1
W12, Community 8	0.566	0.1
W12, Community 5	0.675	0.2
W12, Community 3	0.725	0.1
W13, Community 1	0.844	0.1
W13, Community 4	0.955	0.1
W13, Community 2	0.963	0.1
W13, Community 6	0.995	0.1
W13, Community 7	0.998	0.1
W13, Community 8	0.998	0.1
W13, Community 5	0.998	0.2
W13, Community 3	0.931	0.1
W14, Community 1	0.984	0.8
W14, Community 4	0.966	0.1
W14, Community 2	1	0.1
W14, Community 6	0.88	0.2
W14, Community 7	0.9	0.1
W14, Community 8	0.759	0.1
W14, Community 5	0.939	0.3
W14, Community 3	0.995	0.1
W15, Community 1	0.914	0.6
W15, Community 4	0.939	0.2
W15, Community 2	0.927	0.2
W15, Community 6	1	0.1
W15, Community 7	1	0.1
W15, Community 8	1	0.2
W15, Community 5	1	0.2
W15, Community 3	0.969	0.1

APPENDIX L: SUMMARY OF ANOSIM *R* RESULTS FOR VEGETATION COMMUNITIES WITHIN THE EGLP SURVEY AREA AND THE FORRESTANIA GREENSTONE BELT (MT HOLLAND AREA)

Notes: Forrestania Grenstone Belt (Communities 1-8) - from Thompson and Allen (2013)

[a] - An ANOSIM *R* value of 1 indicates complete dissimilarity between pairs of communties; 0 corresponds to complete similarity between pairs of communties

[b] - significance level of sample statistic (%); 0.1% = <0.001

a total of a total of 264 combined survey quadrats were used in the ANOSIM analysis

Vegetation Communties	R[a]	P[b]
W16, Community 1	0.843	0.8
W16, Community 4	0.889	0.1
W16, Community 2	0.848	0.1
W16, Community 6	0.981	0.2
W16, Community 7	0.996	0.1
W16, Community 8	0.987	0.1
W16, Community 5	0.964	0.3
W16, Community 3	0.849	0.1
W17, Community 1	1	25
W17, Community 4	0.911	14.3
W17, Community 2	1	16.7
W17, Community 6	1	14.3
W17, Community 7	1	8.3
W17, Community 8	1	16.7
W17, Community 5	1	20
W17, Community 3	1	14.3
W18, Community 1	1	2.9
W18, Community 4	0.944	0.5
W18, Community 2	1	0.8
W18, Community 6	1	0.5
W18, Community 7	1	0.2
W18, Community 8	1	0.8
W18, Community 5	1	2.9
W18, Community 3	1	0.5
W19, Community 1	1	1.8
W19, Community 4	0.881	0.2
W19, Community 2	1	0.8
W19, Community 6	0.872	0.2
W19, Community 7	0.923	0.1
W19, Community 8	0.988	0.8
W19, Community 5	0.916	0.8
W19, Community 3	1	0.2

Vegetation Communties	R[a]	P[b]
W20, Community 1	1	25
W20, Community 4	0.978	14.3
W20, Community 2	1	16.7
W20, Community 6	0.978	14.3
W20, Community 7	0.95	8.3
W20, Community 8	1	16.7
W20, Community 5	1	20
W20, Community 3	1	14.3
W21, Community 1	0.933	1.8
W21, Community 4	0.728	0.2
W21, Community 2	0.944	0.8
W21, Community 6	0.984	0.2
W21, Community 7	0.998	0.1
W21, Community 8	0.988	0.8
W21, Community 5	0.994	0.8
W21, Community 3	0.871	0.2
MW6, Community 1	0.913	0.3
MW6, Community 4	0.968	0.1
MW6, Community 2	1	0.1
MW6, Community 6	1	0.1
MW6, Community 7	1	0.1
MW6, Community 8	1	0.1
MW6, Community 5	1	0.2
MW6, Community 3	0.997	0.1
MW7, Community 1	0.471	0.5
MW7, Community 4	0.553	0.1
MW7, Community 2	0.861	0.1
MW7, Community 6	0.899	0.2
MW7, Community 7	0.983	0.1
MW7, Community 8	0.955	0.2
MW7, Community 5	0.953	0.1
MW7, Community 3	0.653	0.1

APPENDIX L: SUMMARY OF ANOSIM *R* RESULTS FOR VEGETATION COMMUNTIES WITHIN THE EGLP SURVEY AREA AND THE FORRESTANIA GREENSTONE BELT (MT HOLLAND AREA)

Notes: Forrestania Grenstone Belt (Communities 1-8) - from Thompson and Allen (2013)

[a] - An ANOSIM *R* value of 1 indicates complete dissimilarity between pairs of communties; 0 corresponds to complete similarity between pairs of communties

[b] - significance level of sample statistic (%); 0.1% = <0.001

a total of a total of 264 combined survey quadrats were used in the ANOSIM analysis

Vegetation Communties	R[a]	P[b]
MW8, Community 1	1	25
MW8, Community 4	0.867	14.3
MW8, Community 2	1	16.7
MW8, Community 6	1	14.3

Vegetation Communties	R[a]	P[b]
MW8, Community 7	1	8.3
MW8, Community 8	1	16.7
MW8, Community 5	1	20
MW8, Community 3	1	14.3