



Appendix 5

Kidman Resources flora surveys

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/215

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

April 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/046/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	17/04/2019
FINAL	Final report	FR	EM	18/04/2019



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LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/215, locality of Mount Holland. Together with a 50m buffer, this constituted the search area.

A desktop survey of the search area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the search area which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

The desktop survey identified that the entirety of the search area lies 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. No banded ironstone formations or any form of outcropping within the search area was noted during the field survey. Neither threatened flora taxa nor priority flora taxa were recorded within the search area. Nonetheless, existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts to vegetation.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area.

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Matiske Consulting Pty Ltd (Matiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/215.

1.1 Location and Scope of Project

Tenement M77/215 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 110 km south of Southern Cross and 95 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located on the eastern boundary of the tenement, and together with a 50m buffer, constitute the search area (Figure 2).

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Matiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Matiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Matiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Matiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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.*

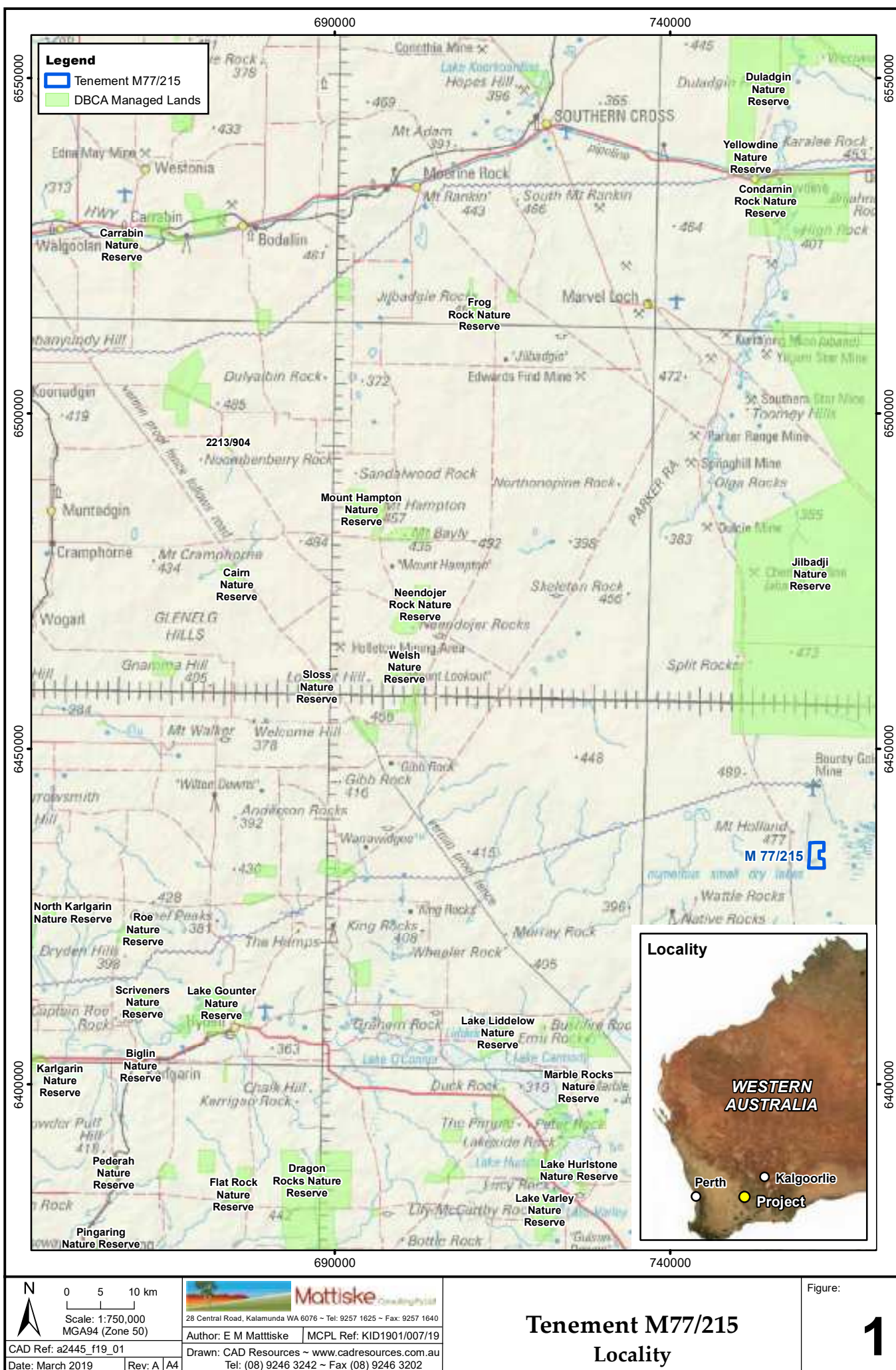
The following key Western Australian (state) legislation relevant to this survey include the:

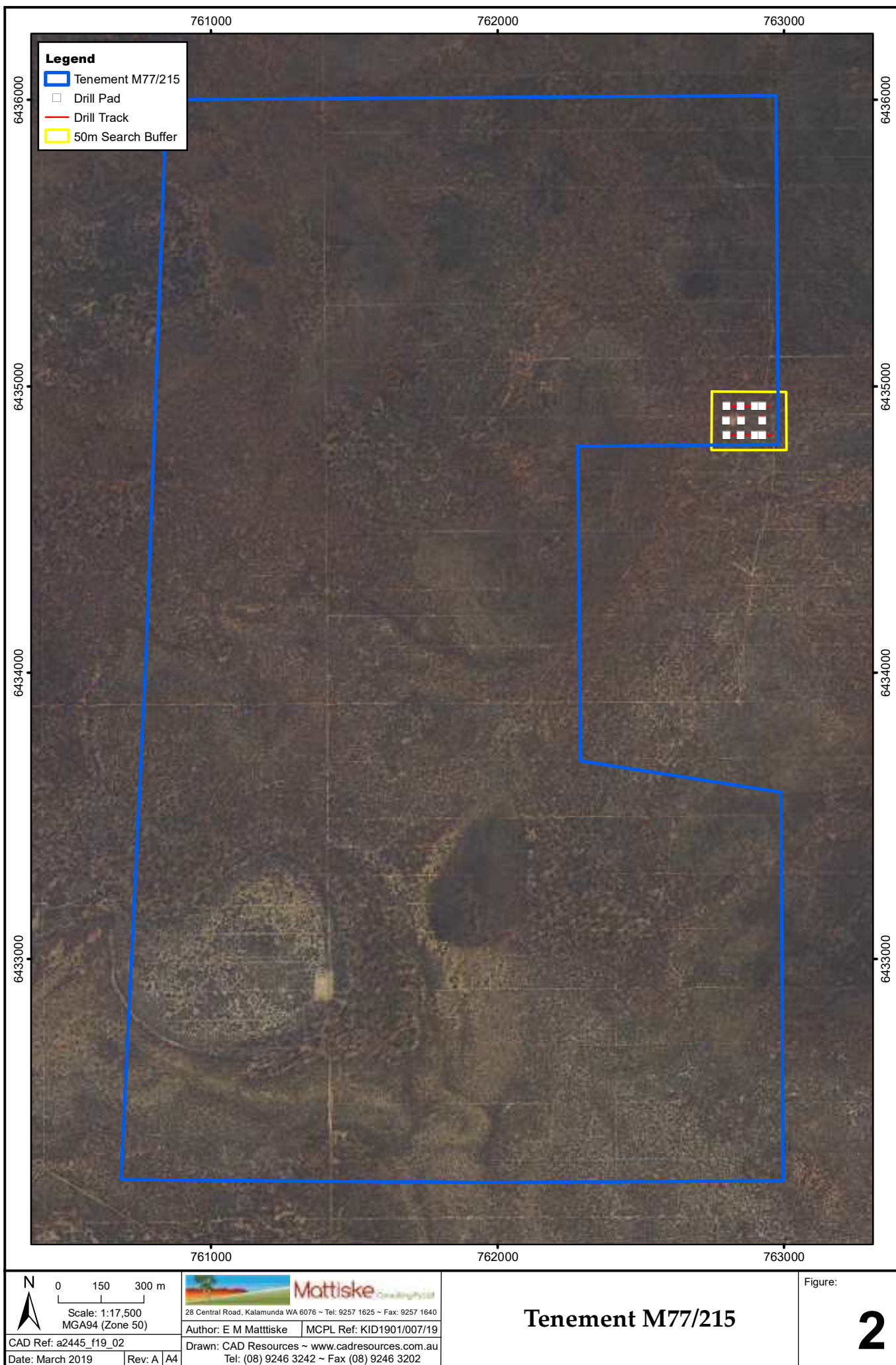
- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; and
- *Wildlife Conservation Act 1999* (WC Act).

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 A1-3.





2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the search area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the search area as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the search area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the search area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the search area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the search area.

3.2 Field Survey

The threatened and priority flora assessment of the search area was undertaken by four experienced botanists from Mattiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundary of the search area, as supplied by Kidman, are set out in Table 2.

Table 2: Coordinates delineating the M77/215 mining tenement search area

WAY POINT	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
1	762749	6434982
2	763008	6434980
3	763009	6434777
4	762747	6434778

The search area was digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within the search area. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched was 5.299629 ha.

During the field survey, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundary of the planned conservation significant flora search area and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the search area, tenement M77/215, and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/215 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 95 km to the south west of the search area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

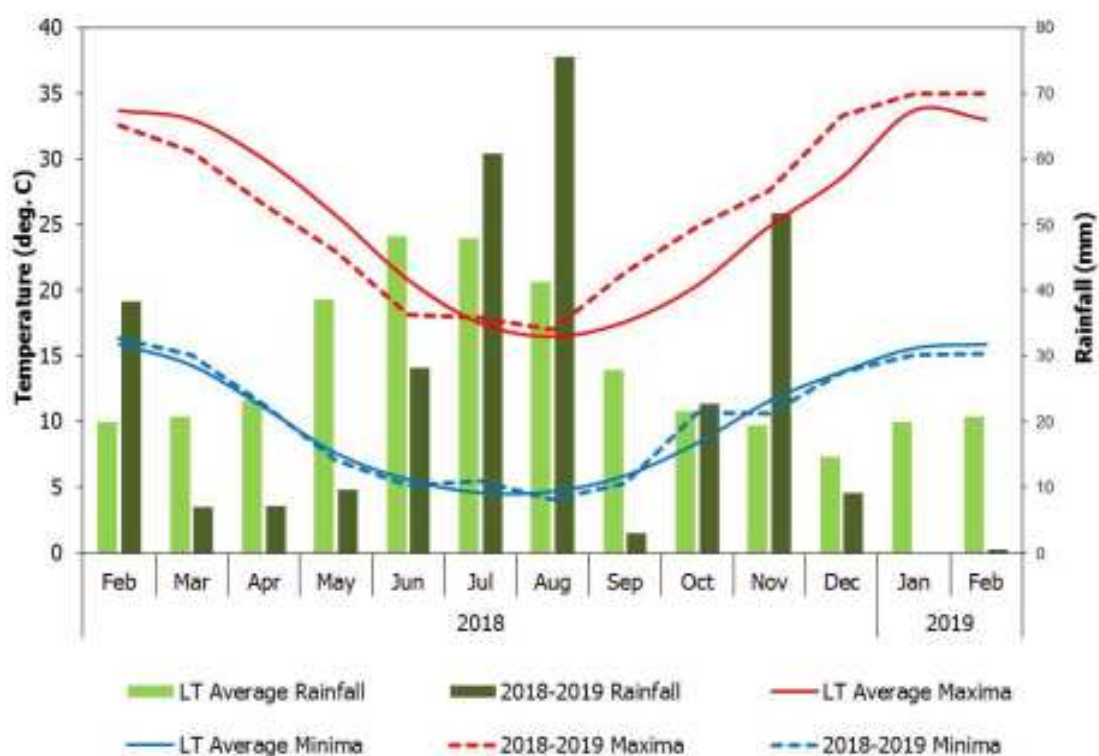


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The search area 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. Whilst the

search area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/215

Previous vegetation mapping and targeted conservation significant flora surveys at the nearby Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current search area suggests that similar vegetation communities and landforms may exist within the search area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the search area.

4.5 Priority Ecological Communities

Approximately the norther half of tenement M77/215, and hence, the entirety of the search area, 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 DBCA (2018c) (Figure 4). The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

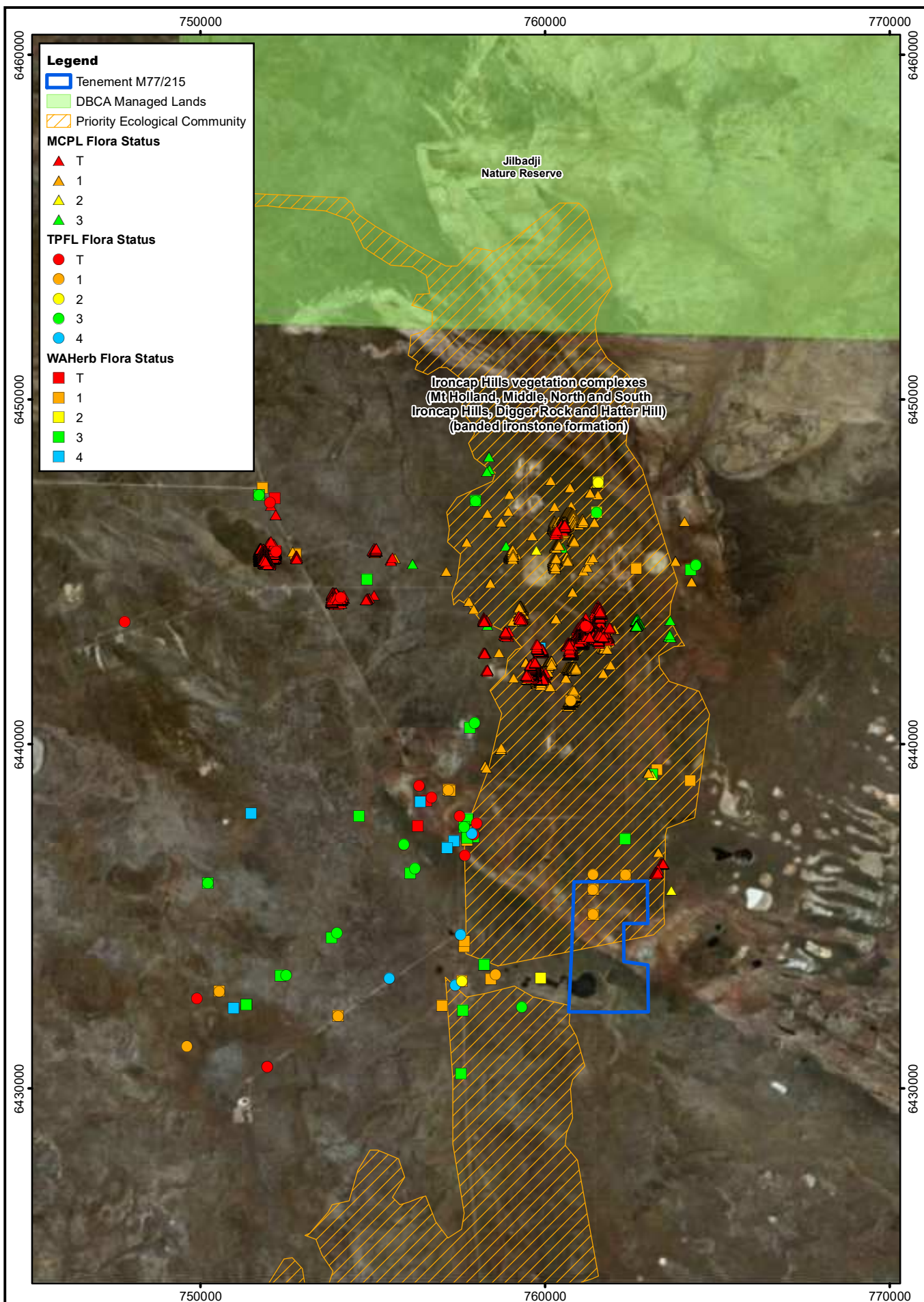
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 15 km north of the search area, along the Forrestania Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the search area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix B). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the search area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix B. Based on this assessment, no taxa were ranked as being highly likely to be recorded in the field survey. Forty three were ranked with a medium likelihood of being recorded in the search area, of which five are listed threatened taxa. The remaining 61 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Mattiske Consulting (2017, 2018a, 2018b, 2018c) in surveys nearby to tenement M77/215. These taxa and the likelihood of recording them in the current survey are: *Banksia sphaerocarpa* var. *dolichostyla* (T) medium, *Eremophila verticillata* (T) medium, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Labichea rossii* (P1) medium, *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 3). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone of tenement M77/215 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/215

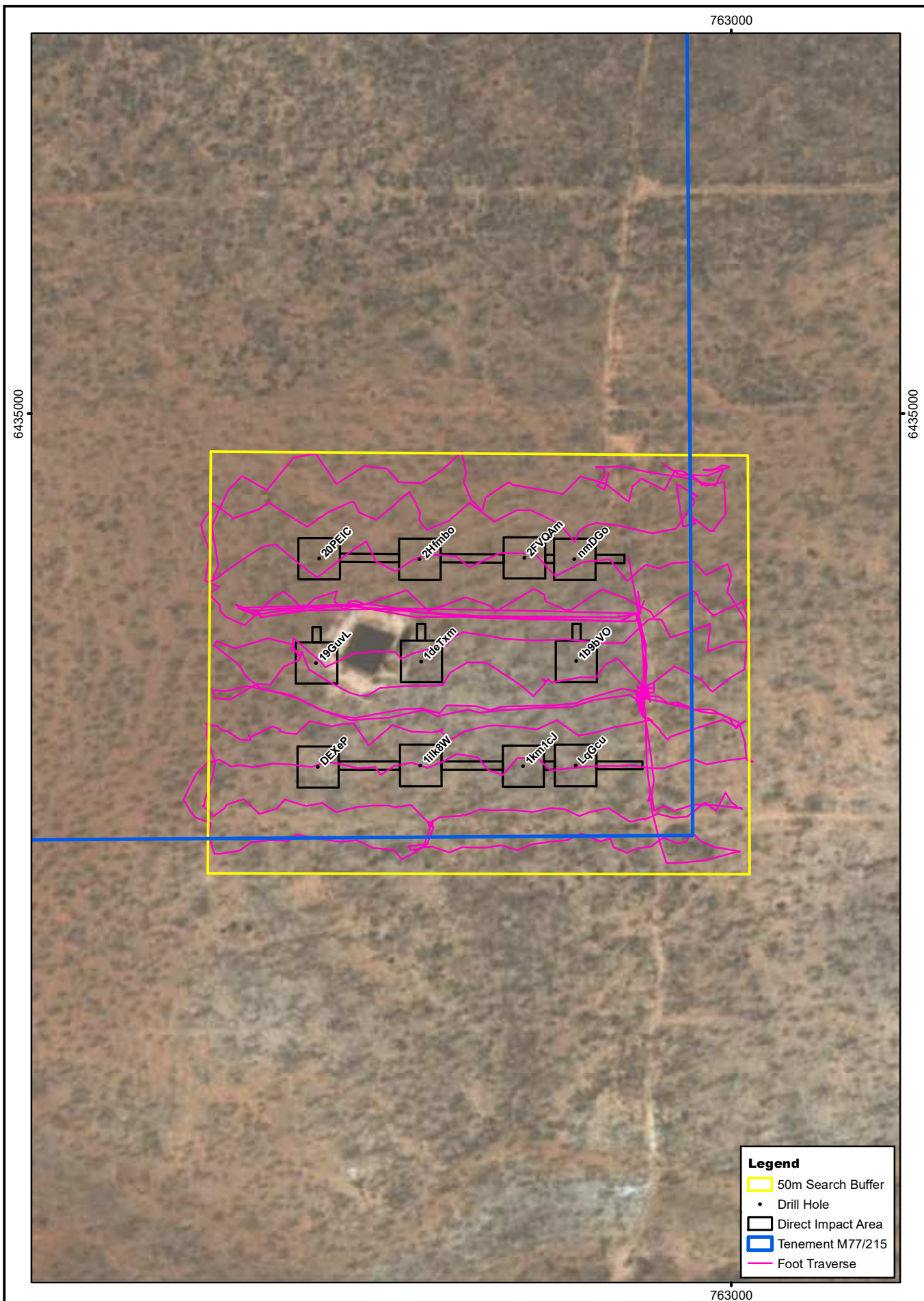
POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Sources of information and availability of contextual information (i.e. pre-existing background versus new material).	Not a constraint. Reference resources such as Beard's mapping, historical survey data in both the vicinity of the search area (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix B were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/215 (continued)

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Disturbances (fire, flood, accidental human intervention, etc.).	Minor constraint. The search area intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey. The search area had been subject to a fire in November 2015. Species which have no or little ability to resprout after fire (e.g. <i>Acacia</i> spp., <i>Daviesia</i> spp., <i>Verticordia</i> spp.) are more likely to be killed and return from seed. The potential immaturity of individuals of these species at the time of the survey may have made them more difficult to notice or identify.
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 search area was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the search area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	Not a constraint. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

No threatened flora taxa pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), were recorded within the search area. No priority flora taxa, as listed by WAH (1998-), were recorded within the search area.



6. DISCUSSION

Kidman commissioned Mattiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/215. The tenement is nearby the abandoned Bounty Mine site.

Priority Ecological Community

Desktop results indicate that the entirety of the search area is 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), (P3) (Figure 4). While botanists noted no banded ironstone formations or any form of outcropping within the search area, it was beyond the scope of this survey to make definitive assessment of the impact of the proposed exploration tracks and drill holes on the PEC. The vegetation survey by Mattiske Consulting (2018a) in the nearby EGLP area also found little evidence of outcropping or of vegetation communities known to be associated with this. However, Mattiske Consulting (2018a) concluded that the absence of most of the communities listed for the PEC within the EGLP area, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). Consequently, while it is unlikely that the proposed exploration tracks and drill holes would have major adverse effects in relation to the PEC, the use of cleared and disturbed areas from past mining activities can reduce impacts to any vegetation potentially associated with the PEC.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded, and a fire in November 2015 may have rendered some target taxa too immature to confidently identify for recording. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

No threatened or priority flora taxa were recorded within the search area. However, several taxa have been recorded in surveys in nearby tenements (Mattiske Consulting 2017, 2018a, 2018b, 2018c) and several were identified as having a medium likelihood of occurring in the search area. While their absence is likely due to the search area not intersecting the preferred habitat of these taxa, their presence in the search area cannot be discluded given the limitations the field survey was subject to.

7. CONCLUSION AND RECOMMENDATIONS

Impacts to the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

9. PERSONNEL

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

NAME	POSITION	SURVEY INVOLVEMENT	FLORA COLLECTION PERMIT
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APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/215 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	Medium Preferred soil & habitat combination may occur within survey area. Species has been recorded in the adjacent EGLP(Mattiske Consulting 2018b)

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/215 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Medium Preferred soils may occur within survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c)
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: white Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/215 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-)
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-)
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/215 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: white-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	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
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP(Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: white with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Erect, narrow shrub to 1 high Flowers: Unknown Flowering period: September to October Soils: yellow-brown sandy soils. Sometimes with laterite or greenstone. IBRA Distribution: COO Florabase records: 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Ascending perennial herb to 0.2m high Flowers: Blue-purple/pink Flowering period: October Soils: Sandy clay. Margins of salt lakes IBRA Distribution: AVW, COO, MAL Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Caespitose perennial herb to 0.3m high Flowers: White-pink Flowering period: September-October Soils: Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. IBRA Distribution: COO Florabase records: 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	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 soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-)
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P1	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Blue-purple Flowering period: May Soils: Loamy sand, sandy loam, with open mallee woodlands IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c)
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16	Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/215 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-)
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-)
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: white Flowering period: unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-)
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c)
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: unknown Flowering period: unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: pale pink Flowering period: unknown Soils: light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c)
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	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
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area.
<i>Myriophyllum petraeum</i>	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.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area (DPaW 2007-).

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/542

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

April 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/043/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	17/04/2019
FINAL	Final report	FR	EM	18/04/2019



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- 4:** PECs and threatened and priority flora
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- B:** Assessment of threatened and priority flora potentially present in the search area

LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/542, locality of Mount Holland. Together with a 50m buffer, this constituted the search area.

A desktop survey of the search area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the search area which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

The desktop survey identified that the search area adjoins 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. No banded ironstone formations or any form of outcropping within the search area was noted during the field survey. Neither threatened flora taxa nor priority flora taxa were recorded within the search area. Nonetheless, existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts to vegetation.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area.

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Matiske Consulting Pty Ltd (Matiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/542.

1.1 Location and Scope of Project

Tenement M77/542 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 110 km south of Southern Cross and 95 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located on the eastern boundary of the tenement, and together with a 50m buffer, constitute the search area (Figure 2).

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Matiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Matiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Matiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Matiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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*.

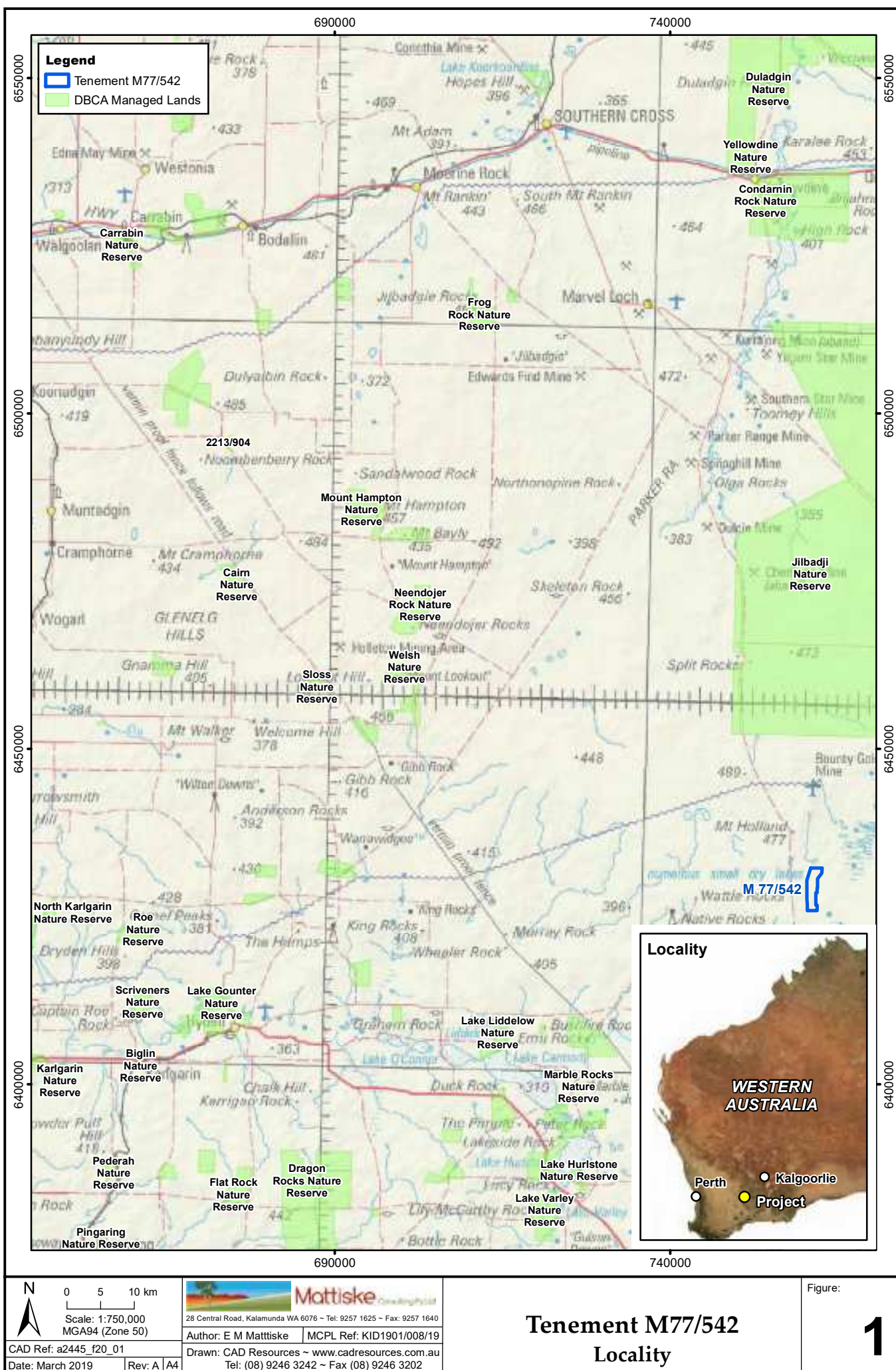
The following key Western Australian (state) legislation relevant to this survey include the:

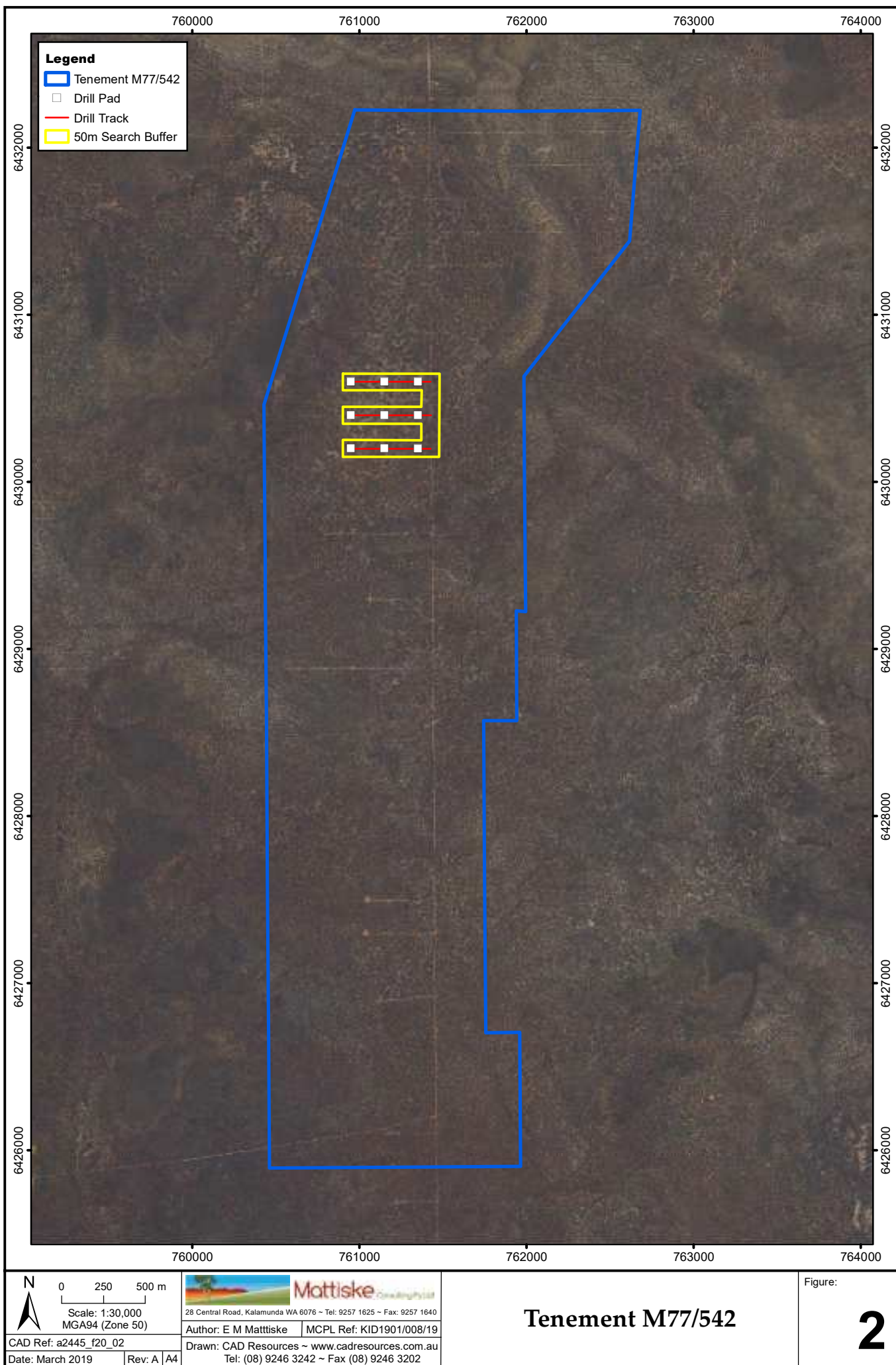
- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; and
- *Wildlife Conservation Act 1999* (WC Act).

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 A1-3.





2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the search area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the search area as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the search area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the search area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the search area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the search area.

3.2 Field Survey

The threatened and priority flora assessment of the search area was undertaken by four experienced botanists from Mattiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundary of the search area, as supplied by Kidman, are set out in Table 2.

Table 2: Coordinates delineating the M77/542 mining tenement search area

WAY POINT	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
1	760901	6430650
2	760901	6430550
3	761372	6430550
4	761371	6430450
5	760900	6430451
6	760900	6430349
7	761372	6430349
8	761371	6430251
9	760900	6430252
10	760900	6430150
11	761478	6430151
12	761479	6430649

The search area was digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within the search area. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched was 19.528128 ha.

During the field survey, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundary of the planned conservation significant flora search area and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the search area, tenement M77/542, and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/542 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 95 km to the south west of the search area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

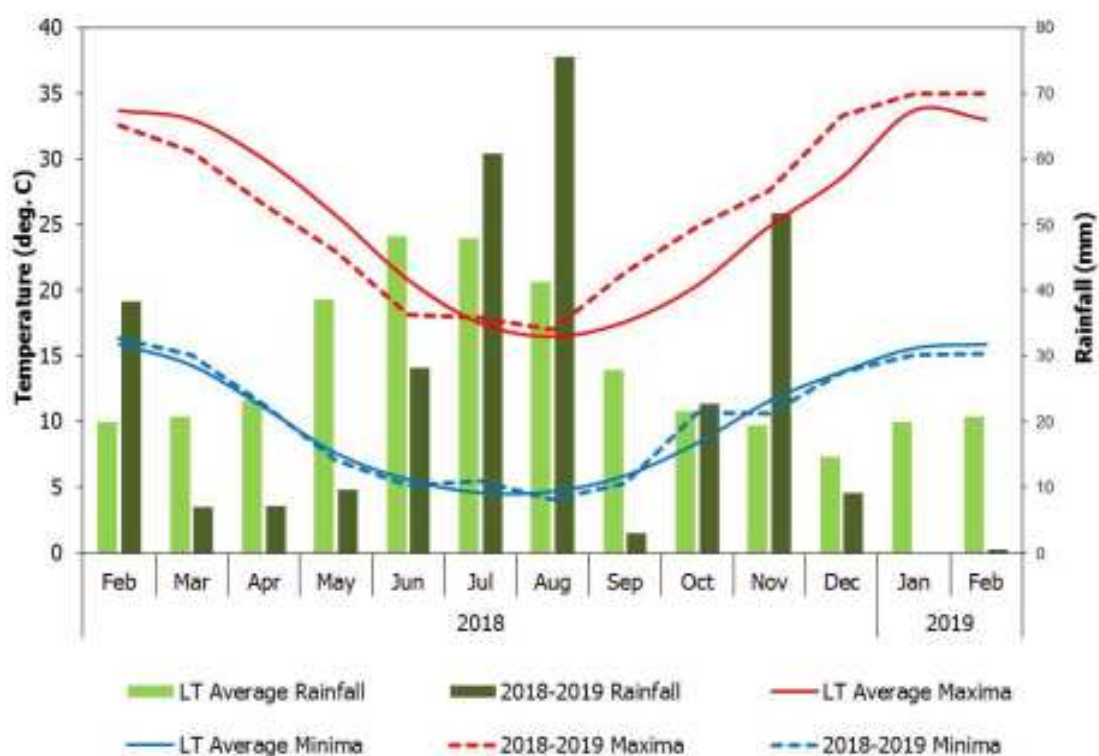


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The search area 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. Whilst the

search area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/542

Previous vegetation mapping and targeted conservation significant flora surveys at the nearby Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current search area suggests that similar vegetation communities and landforms may exist within the search area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the search area.

4.5 Priority Ecological Communities

The western edge of tenement M77/542 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 DBCA (2018c) (Figure 4). The search area adjoins its boundary. The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

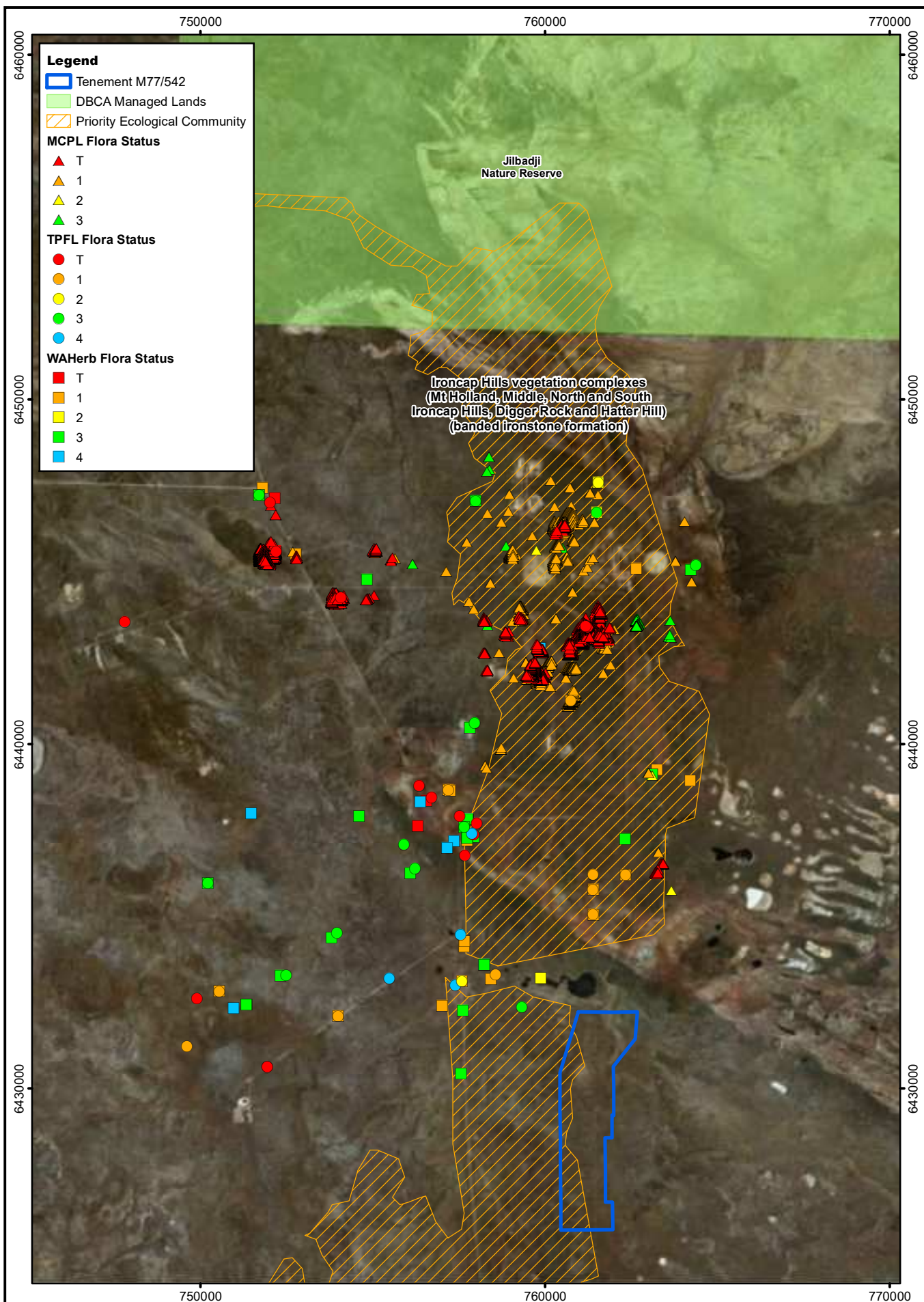
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 15 km north of the search area, along the Forresteria Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the search area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix B). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the search area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix B. Based on this assessment, no taxa were ranked as being highly likely to be recorded in the field survey. Forty three were ranked with a medium likelihood of being recorded in the search area, of which five are listed threatened taxa. The remaining 61 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Mattiske Consulting (2017, 2018a, 2018b, 2018c) in surveys nearby to tenement M77/542. These taxa and the likelihood of recording them in the current survey are: *Banksia sphaerocarpa* var. *dolichostyla* (T) medium, *Eremophila verticillata* (T) medium, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Labichea rossii* (P1) medium, *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 3). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone of tenement M77/542 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/542

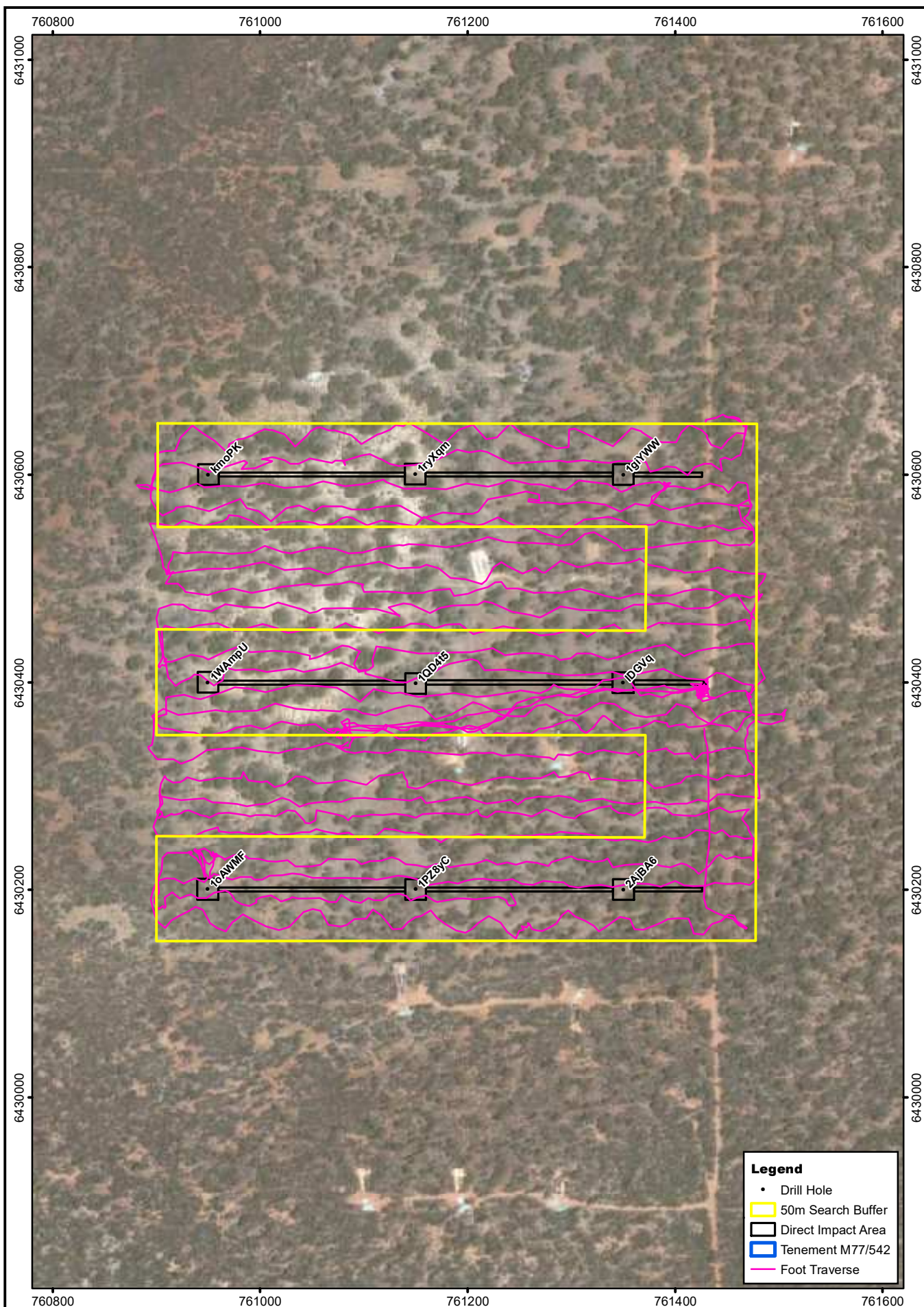
POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Sources of information and availability of contextual information (i.e. pre-existing background versus new material).	Not a constraint. Reference resources such as Beard's mapping, historical survey data in both the vicinity of the search area (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix B were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).
Disturbances (fire, flood, accidental human intervention, etc.).	Not a constraint. The search area intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/542 (continued)

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 search area was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the search area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	Not a constraint. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

No threatened flora taxa pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), were recorded within the search area. No priority flora taxa, as listed by WAH (1998-), were recorded within the search area.



6. DISCUSSION

Kidman commissioned Mattiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/542. The tenement is nearby the abandoned Bounty Mine site.

Priority Ecological Community

Desktop results indicate that the search area adjoins the buffer of the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (banded ironstone), (P3) (Figure 4). While botanists noted no banded ironstone formations or any form of outcropping within the search area, it was beyond the scope of this survey to make definitive assessment of the impact of the proposed exploration tracks and drill holes on the PEC. The vegetation survey by Mattiske Consulting (2018a) in the nearby EGLP area also found little evidence of outcropping or of vegetation communities known to be associated with this. However, Mattiske Consulting (2018a) concluded that the absence of most of the communities listed for the PEC within the EGLP area, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). Consequently, while it is unlikely that the proposed exploration tracks and drill holes would have major adverse effects in relation to the PEC, the use of cleared and disturbed areas from past mining activities can reduce impacts to any vegetation potentially associated with the PEC.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

No threatened or priority flora taxa were recorded within the search area. However, several taxa have been recorded in surveys in nearby tenements (Mattiske Consulting 2017, 2018a, 2018b, 2018c) and several were identified as having a medium likelihood of occurring in the search area. While their absence is likely due to the search area not intersecting the preferred habitat of these taxa, their presence in the search area cannot be discluded given the limitations the field survey was subject to.

7. CONCLUSION AND RECOMMENDATIONS

Impacts to the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

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	planning, data analysis	N/A
Mr S. Ruoss	Experienced Ecologist	planning, fieldwork	FB62000031 / TFL-1819
Ms F. Riviera	Senior Botanist	data analysis, report preparation	N/A
Mr Z. Sims	Botanist	fieldwork, data analysis, report preparation	FB62000025
Mr B. Ellery	Experienced Botanist / Taxonomist	fieldwork, plant identification	FB62000024
Ms L. Taaffe	Botanist	fieldwork	FB62000021
Ms M. Van Wees	Botanist	fieldwork	N/A

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APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	Medium Preferred soil & habitat combination may occur within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Medium Preferred soils may occur within survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: White Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-).
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-).
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: White-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	Myrtaceae	P1	-	Habit: Tree or (mallee), to 12 m high, with smooth bark, decorated in strips, grey-olive over silvery 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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: White with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Erect, narrow shrub to 1 high Flowers: Unknown Flowering period: September to October Soils: Yellow-brown sandy soils. Sometimes with laterite or greenstone. IBRA Distribution: COO Florabase records: 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Ascending perennial herb to 0.2m high Flowers: Blue-purple/pink Flowering period: October Soils: Sandy clay. Margins of salt lakes IBRA Distribution: AVW, COO, MAL Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Caespitose perennial herb to 0.3m high Flowers: White-pink Flowering period: September-October Soils: Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. IBRA Distribution: COO Florabase records: 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	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 soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils are not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-).
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P1	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Blue-purple Flowering period: May Soils: Loamy sand, sandy loam, with open mallee woodlands IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: Simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c).
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: Cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: Yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: Yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: Yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16	Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-).
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: Yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: White Flowering period: Unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-).
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: Unknown Flowering period: Unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: Brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: Red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: Pale pink Flowering period: Unknown Soils: Light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/542 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: Yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	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
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Myriophyllum petraeum</i>	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.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area (DPaW 2007-).

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/1065

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

June 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/039/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	15/04/2019
FINAL	Final report	FR	EM	18/04/2019
V3	Report updated to reflect changes to impacts resulting from modified drilling program	DA	EM	7/06/2019
V4	Minor text clarifications	DA	EM	17/07/2019



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- C:** Assessment of threatened and priority flora potentially present in the survey area
- D:** Locations of threatened and priority flora recorded within the survey area

LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1065, locality of Mount Holland. The proposed tracks and drill holes are located in four discrete impact areas, and together with a 50m buffer, constitute four search areas (M77/1065_a, M77/1065_b, M77/1065_c, M77/1065_d). The four search areas are, collectively, the survey area.

A desktop survey of the survey area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the four search areas which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

The desktop survey identified that the entirety of the survey areas lies 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. No banded ironstone formations or any form of outcropping within the survey area was noted during the field survey.

One threatened flora taxon, *Banksia sphaerocarpa* subsp. *dolichostyla* (T), was recorded within the survey area. Three priority flora taxa, as listed by WAH (1998-), *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), *Labichea rossii* (P1), and *Grevillea lissopleura* (P1) were recorded within the survey area. An additional priority taxon, *Daviesia sarissa* subsp. ?*redacta* (P2), could not be definitively identified due to insufficient reproductive material. However, this taxon has been found and definitively identified previously by Mattiske Consulting Pty Ltd in an adjacent tenement and should be treated as other priority flora. Records from both surveys represent a 150km southern extension to its currently acknowledged range. The threatened and priority flora recorded during the field survey, and their numbers in impact and search areas, are given below. The search areas intersect four previously documented populations and one new population of *Banksia sphaerocarpa* subsp. *dolichostyla* (T).

Summary of the threatened and priority flora recorded in the impact and search areas of tenement M77/1065

AREA	SPECIES	IMPACT AREA	SEARCH AREA
M77/1065_A	-		
M77/1065_B	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	10	648
	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	53
	<i>Labichea rossii</i> (P1)	0	65
M77/1065_C	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	686
	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	91	1854
	<i>Daviesia sarissa</i> subsp. ? <i>redacta</i> (P2)	0	76
	<i>Labichea rossii</i> (P1)	0	8
	<i>Grevillea lissopleura</i> (P1)	0	52
M77/1065_D	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	0	105
	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	66
	<i>Labichea rossii</i> (P1)	0	46

*Search area numbers are inclusive of impact area numbers.

Populations of *Banksia sphaerocarpa* var. *dolichostyla* (T) must be left undisturbed, with a minimum 50m buffer between populations of this taxon and any clearing associated with the proposed tracks and drill

holes. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999* cannot be destroyed, damaged or cleared without prior Ministerial approval. Kidman Resources Ltd have made modifications to their originally planned drill hole program such that all drill holes which fell within 50 m of *Banksia sphaerocarpa* var. *dolichostyla* (T) plants have been either excised from the drilling program or moved such that they no longer fall within the 50 m buffer zone about any *Banksia sphaerocarpa* var. *dolichostyla* (T) plant. This process has also reduced impacts to other conservation significant taxa. As such, the proposed tracks and drill holes are unlikely to have a major impact on priority flora. Impacts to other conservation significant flora and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Mattiske Consulting Pty Ltd (Mattiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1065.

1.1 Location and Scope of Project

Tenement M77/1065 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 105 km south of Southern Cross and 95 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located in four discrete impact areas, and together with a 50m buffer, constitute four search areas (M77/1065_a, M77/1065_b, M77/1065_c, M77/1065_d; Figure 2). These four search areas are collectively, the survey area.

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Mattiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Mattiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Mattiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Mattiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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:

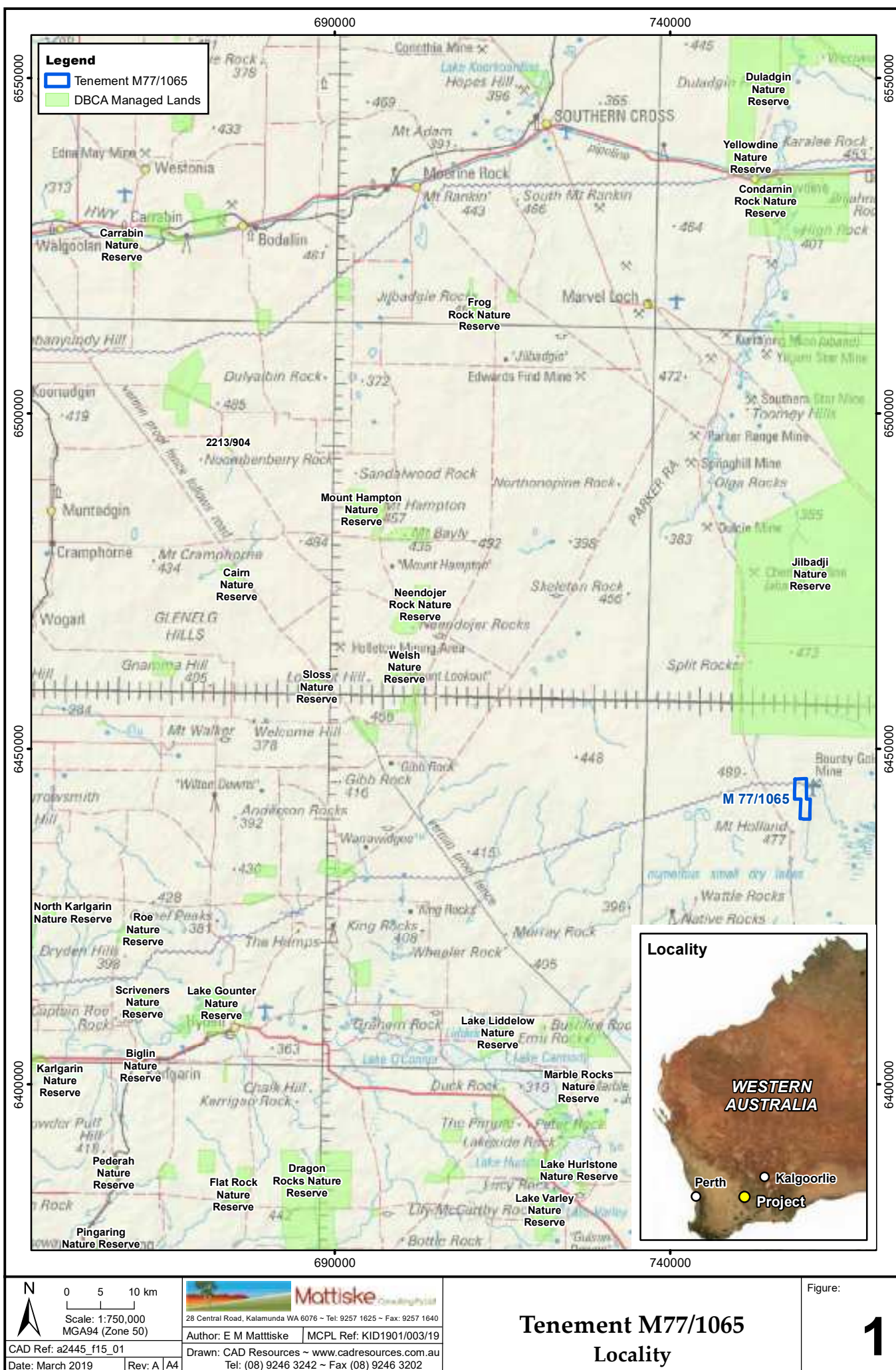
- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; and

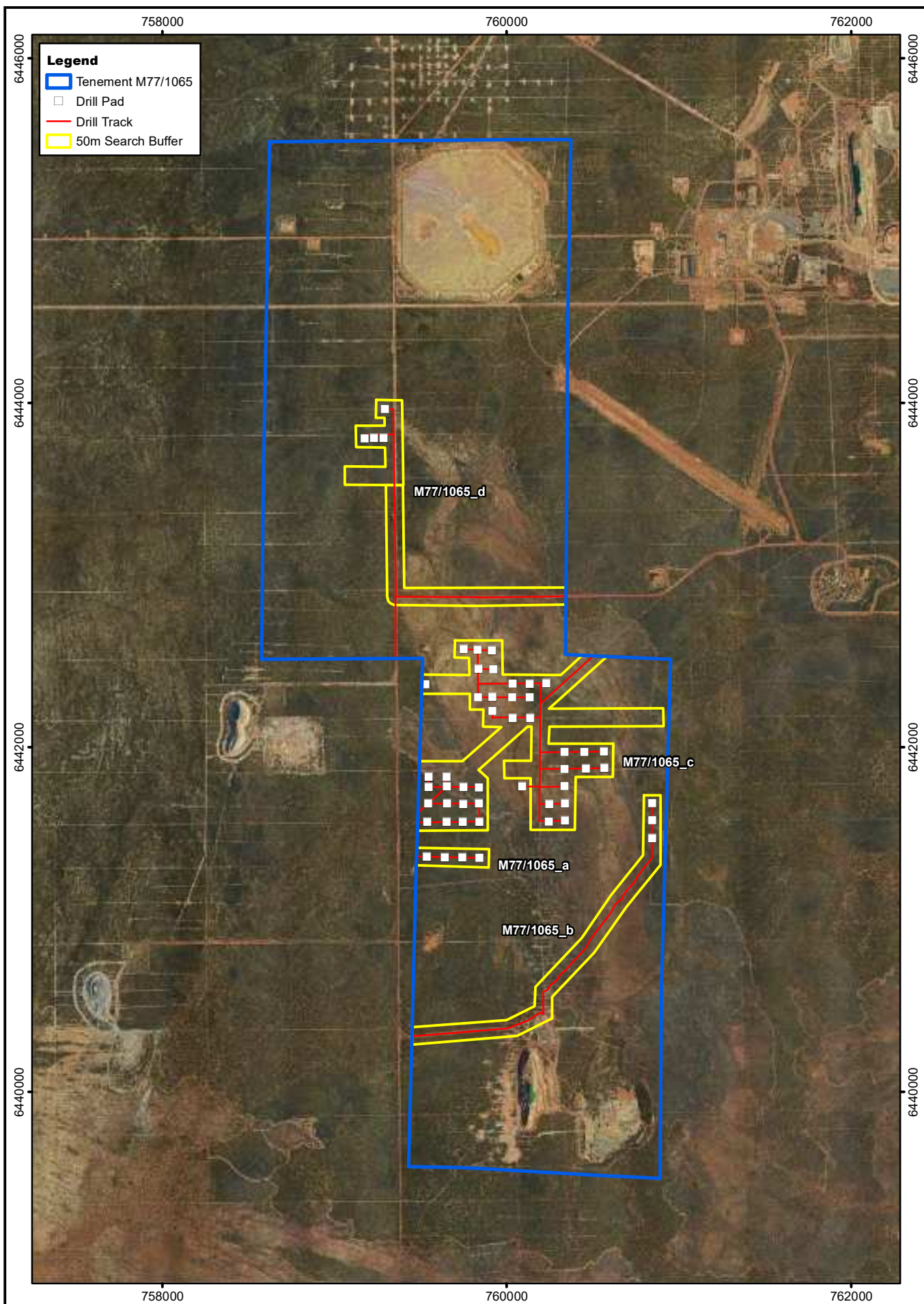
- *Wildlife Conservation Act 1999* (WC Act).

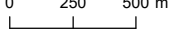
Furthermore, key Western Australian guidelines relevant to this survey are the:

- *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 A1-3.





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CAD Ref: a2445_f15_02		Drawn: CAD Resources ~ www.cadresources.com.au		
Date: June 2019		Tel: (08) 9246 3242 ~ Fax (08) 9246 3202		
Rev: A A4				

Tenement M77/1065

Figure:

2

2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the survey area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the survey areas as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the survey area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the survey area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the survey area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the survey area.

3.2 Field Survey

The threatened and priority flora assessment of the survey area was undertaken by four experienced botanists from Mattiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundaries of the four search areas, as supplied by Kidman, are set out in Appendix B.

Each of the four search areas were digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within each of the search areas. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched for each search area was M77/1065_a = 4.323249 ha, M77/1065_b = 23.894423 ha, M77/1065_c = 70.273911 ha, and M77/1065_d = 10.200437 ha. The southern portion of M77/1065_d however, was only searched by vehicle as it comprises of a large access road approximately 25m wide with degraded edges, and that it was also partially surveyed as part of a previous survey targeting *Banksia sphaerocarpa* var. *dolichostyla* (T) (Mattiske Consulting 2018b).

During the field surveys, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundaries of planned conservation significant flora search areas and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the survey area and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/1065 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 95 km to the south west of the survey area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

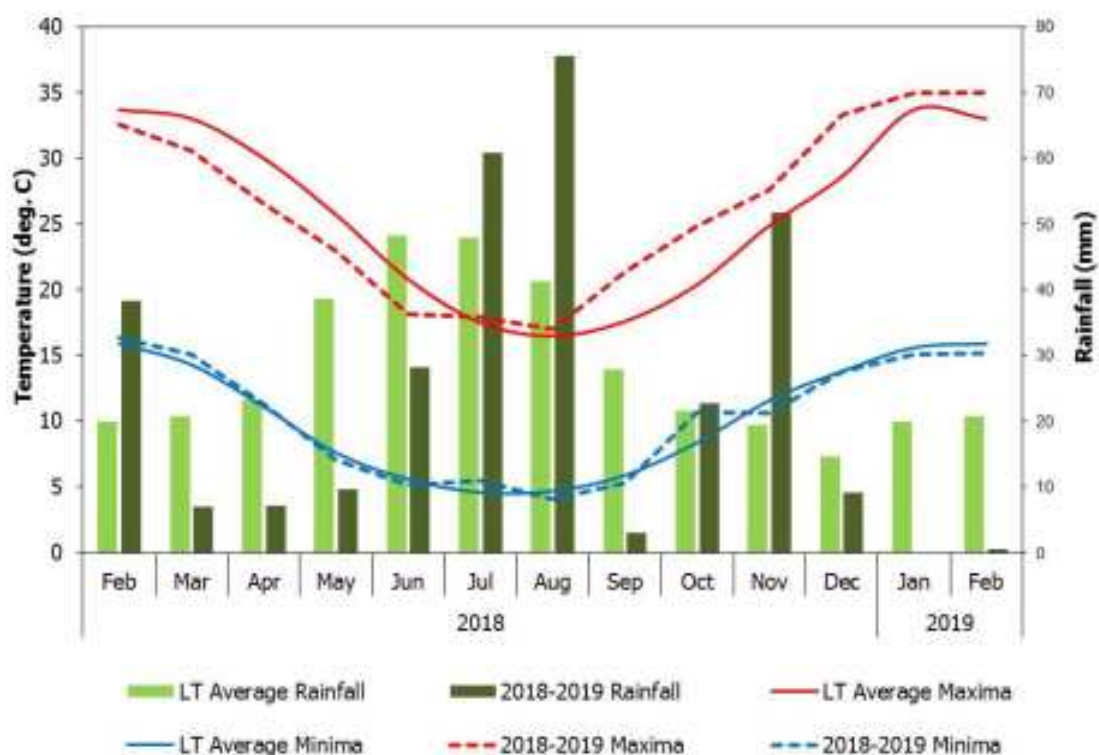


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The survey area 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. Whilst the survey area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western

Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/1065

Previous vegetation mapping and targeted conservation significant flora surveys at the adjacent Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current survey areas suggests that similar vegetation communities and landforms may exist within the survey area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the survey area.

4.5 Priority Ecological Communities

The large majority of tenement M77/1065 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 DBCA (2018c). The entirety of the survey area intersects this PEC (Figure 4). The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

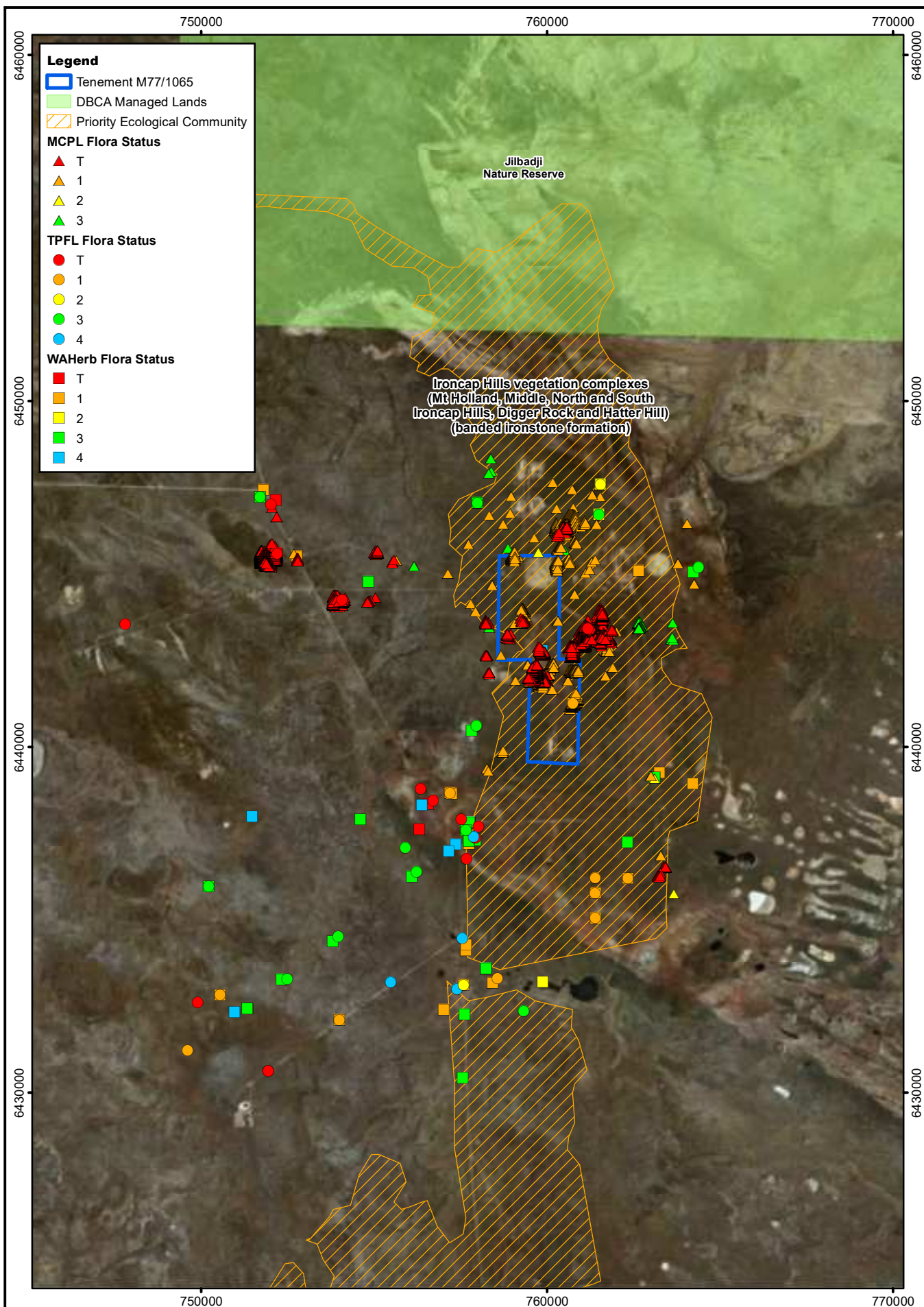
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 10 km north of the survey area, along the Forrestania Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the survey area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix C). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the survey area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix C. Based on this assessment, three taxa (*Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1), *Labichea rossii* (P1)), were ranked as being highly likely to be recorded in a field survey. Thirty nine were ranked with a medium likelihood of being recorded in the survey area, of which four are listed threatened taxa. The remaining 62 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Mattiske Consulting (2017, 2018a, 2018b, 2018c) in surveys adjacent to tenement M77/1065. These taxa and the likelihood of recording them in the current survey are: *Eremophila verticillata* (T) unlikely, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the four search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 2). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone in the survey area of tenement M77/1065 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 2: Potential survey limitations for threatened and priority flora in search areas of tenement M77/1065

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 (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix C were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic Priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also. As of the writing of this report, one specimen is awaiting identification, if possible, by specialist taxonomists at the WAH.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).

Table 2: Potential survey limitations for threatened and priority flora in search areas of tenement M77/1065 (continued)

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Disturbances (fire, flood, accidental human intervention, etc.).	Minor constraint. All four search areas intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey. Parts of search areas M77/1065_b, M77/1065_c, and M77/1065_d had been subject to a fire in February 2015. Species which have no or little ability to resprout after fire (e.g. <i>Acacia</i> spp., <i>Daviesia</i> spp., <i>Verticordia</i> spp.) are more likely to be killed and return from seed. The potential immaturity of individuals of these species at the time of the survey may have made them more difficult to notice or identify.
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 survey area 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. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

One threatened flora taxon pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), *Banksia sphaerocarpa* subsp. *dolichostyla* (T), was recorded within the survey area. *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is listed as vulnerable, pursuant to the *Environment Protection and Biodiversity Conservation Act 1999* and as listed by the DoEE (2017a). A total of 805 plants were recorded within the survey area. These 805 plants are combination of 318 plants recorded in the present survey, together with 487 plants recorded during a search for *Banksia sphaerocarpa* subsp. *dolichostyla* (T) in 2018 (Mattiske Consulting 2018b). Three priority flora taxa, as listed by WAH (1998-), *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), *Labichea rossii* (P1), and *Grevillea lissopleura* (P1), were recorded within the survey area. An additional priority taxon, *Daviesia sarissa* subsp. ?*redacta* (P2), could not be definitively identified due to insufficient reproductive material. However, this taxon has been found and definitively identified previously by Mattiske Consulting (2018a) in the adjacent EGLP area. Figures 5a and 5b illustrate the location of recorded threatened and priority taxa. No threatened and priority flora were recorded in search area M77/1065_a. In order to place these results in context, records of these threatened and priority flora within the tenement from previous surveys (Mattiske Consulting 2018a; 2018b; 2018c) and of external *Banksia sphaerocarpa* subsp. *dolichostyla* (T) populations intersecting the tenement (Mattiske Consulting 2018b), are also illustrated. The geographical locations where each of the threatened and priority taxa were recorded within the survey area are listed in Appendix D. Table 3 presents the number of each threatened and priority taxa found in each impact area, each search area (impact area plus 50 m buffer) and the entire tenement. Numbers for the tenement include those for records from previous Mattiske surveys.

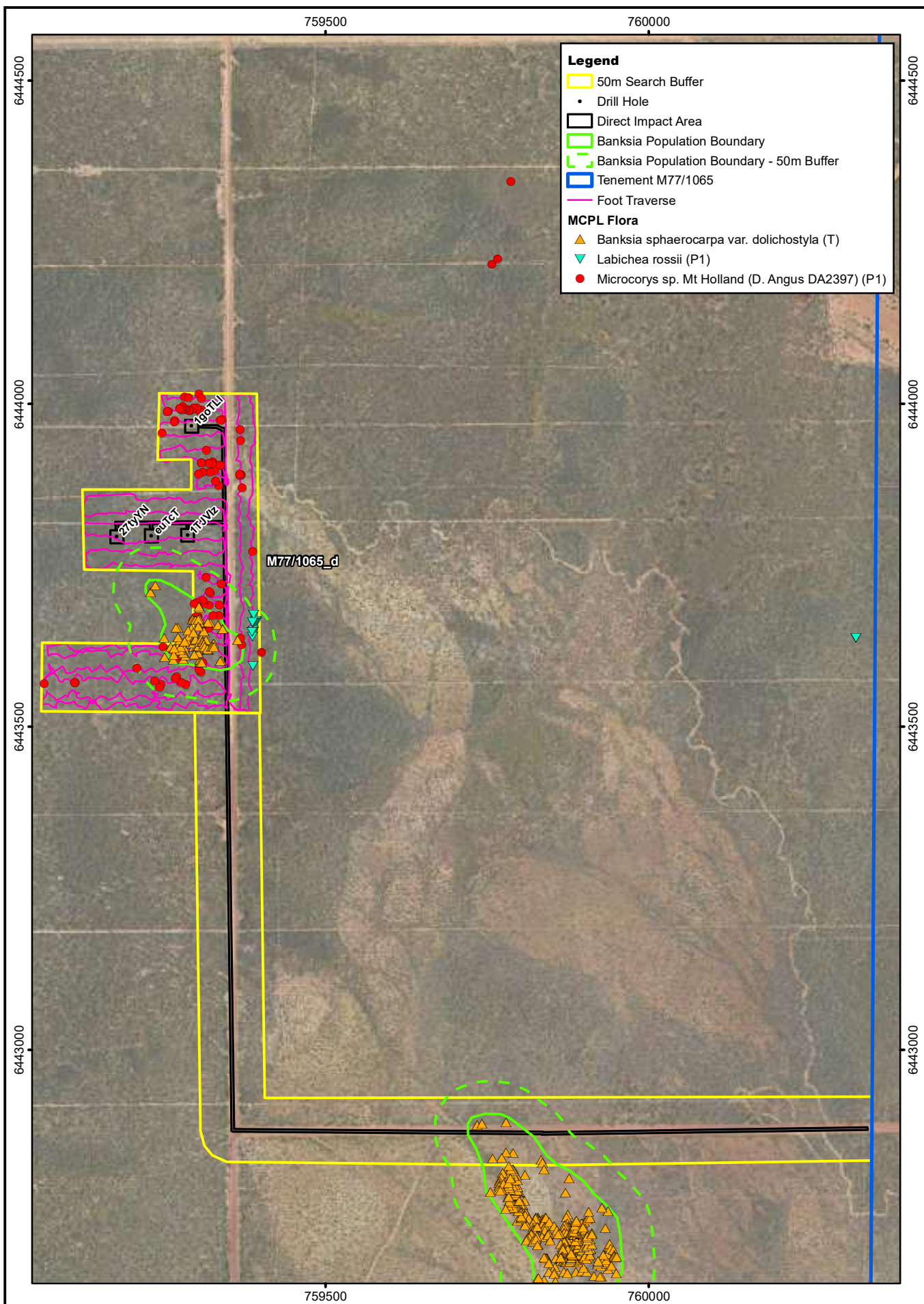
Table 3: Numbers of plants of each threatened and priority species recorded in impact areas, search areas and tenement M77/1065

AREA	SPECIES	IMPACT AREA	SEARCH AREA	TENEMENT
M77/1065_A	-			
M77/1065_B	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	10	648	3933
	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	53	3154
	<i>Labichea rossii</i> (P1)	0	65	121
M77/1065_C	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	686	3154
	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	91	1854	3933
	<i>Daviesia sarissa</i> subsp. ? <i>redacta</i> (P2)	0	76	76
	<i>Labichea rossii</i> (P1)	0	8	121
	<i>Grevillea lissopleura</i> (P1)	0	52	52
M77/1065_D	<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	0	105	3933
	<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	66	3154
	<i>Labichea rossii</i> (P1)	0	46	121

* Search area records are inclusive of impact areas records. Tenement records are inclusive of search area and impact area records.

5.3 Taxa with range extensions

Records of from this survey *Daviesia sarissa* subsp. ?*redacta* (P2), represent an approximately 150 km southern extension to the taxon's currently acknowledged range (WAH 1998-). As previously stated, the taxon has been previously recorded in the adjacent EGLP area by Mattiske Consulting (2018a).



6. DISCUSSION

Kidman commissioned Mattiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1065. The tenement is situated on and adjacent to the abandoned Bounty Mine site.

Priority Ecological Community

Desktop results indicate that the survey area is entirely 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), (P3) (Figure 4). While botanists noted no banded ironstone formations or any form of outcropping within the survey area, it was beyond the scope of this survey to make definitive assessment of the impact of the proposed exploration tracks and drill holes on the PEC. The vegetation survey by Mattiske Consulting (2018a) in the adjacent EGLP area also found little evidence of outcropping or of vegetation communities known to be associated with this. However, Mattiske Consulting (2018a) concluded that the absence of most of the communities listed for the PEC within the EGLP area, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). Consequently, while it is unlikely that the proposed exploration tracks and drill holes would have major adverse effects in relation to the PEC, the use of cleared and disturbed areas from past mining activities can reduce impacts to any vegetation potentially associated with the PEC.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1), *Labichea rossii* (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded. Three of the search areas were also almost entirely affected by a fire in February 2105. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

One threatened flora taxon, *Banksia sphaerocarpa* subsp. *dolichostyla* (T), was recorded within the survey area. *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 805 individuals were recorded within the survey area of which none in an impact area. Three priority flora taxa, *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1) *Grevillea lissopleura* (P1), *Labichea rossii* (P1), were recorded within the survey area. A fourth priority taxon, *Daviesia sarissa* subsp. ?*redacta* (P2) could not be definitively identified due to a lack of flowering material but until suitable material can be collected, it should be treated as other priority flora. Its presence in the survey area represents an approximately 150 km southern extension to its currently acknowledged distribution (WAH 1998-). The threatened and priority taxa recorded in the survey area were all identified as having a high or medium possibility of occurring in the survey area based on results of the desktop survey (Appendix C).

Search areas M77/1065_c and M77/1065_d intersect four known *Banksia sphaerocarpa* subsp. *dolichostyla* (T) populations, and the eastern portions of M77/1065_b and M77/1065_c intersect a likely new population (Figures 5a and 5b). All locations of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) plus a 50 m buffer around each must be avoided. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999*

respectively, cannot be destroyed, damaged or cleared without prior Ministerial approval. Avoiding the populations may involve omitting or changing the location of portions of the proposed exploration tracks and drill holes. Anecdotal field observations indicate that *Banksia sphaerocarpa* subsp. *dolichostyla* (T) is distributed even further within the tenement than currently documented so the relocating of any tracks and drill holes should entail further survey within the tenement. Utilising existing areas of disturbance can reduce impacts to both documented and potential populations. Of the conservation significant flora recorded, *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1) recorded the highest number of plants (101 plants) within impact areas. Anecdotally in this survey, and formally in previous surveys, it was also noted outside search areas. Kidman Resources Ltd have made modifications to their originally planned drill hole program such that all drill holes which fell within 50 m of *Banksia sphaerocarpa* var. *dolichostyla* (T) plants have been either excised from the drilling program or moved such that they no longer fall within the 50 m buffer zone about any *Banksia sphaerocarpa* var. *dolichostyla* (T) plant. This process has also reduced impacts to other conservation significant taxa. As such, the proposed tracks and drill holes are unlikely to have a major impact on priority flora but their locations should be avoided, and survey work in the remainder of the tenement considered to document their local distribution more thoroughly.

Several taxa have been recorded in surveys in adjacent tenements (Mattiske Consulting 2017, 2018a, 2018b, 2018c) but not in the current survey area. This is likely due to the search areas not intersecting the preferred habitat of these taxa. However, their presence in the tenement as a whole cannot be discluded and further survey would be required should the proposed tracks and drill holes be moved to accommodate other significant taxa.

7. CONCLUSION AND RECOMMENDATIONS

Populations of *Banksia sphaerocarpa* var. *dolichostyla* (T) must be left undisturbed, with a minimum 50m buffer between populations of this taxon and any clearing. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999* cannot be destroyed, damaged or cleared without prior Ministerial approval.

Impacts to other conservation significant flora and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

9. PERSONNEL

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

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APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: COORDINATES DELINEATING THE M77/1065 MINING TENEMENT SEARCH AREAS

SUB-TENEMENT	WAY POINT	LOCATION (GDA94 ZONE 50J)		SUB-TENEMENT	WAY POINT	LOCATION (GDA94 ZONE 50J)	
		EASTING (mE)	NORTHING (mN)			EASTING (mE)	NORTHING (mN)
M77/1065_a	1	759479	6441416	M77/1065_c (continued)	41	759986	6441924
	2	759897	6441409		42	760140	6441923
	3	759894	6441305		43	760145	6442121
	4	759476	6441315		44	759836	6441869
	5	759479	6441416		45	759891	6441821
M77/1065_b	6	760796	6441723		46	759891	6441519
	7	760891	6441724		47	759480	6441516
	8	760893	6441318		48	759494	6441919
	9	760692	6441070		49	759743	6441921
	10	760508	6440808		50	759969	6442119
	11	760265	6440550		51	759863	6442120
	12	760262	6440426		52	759864	6442220
	13	760059	6440326		53	759787	6442220
	14	759453	6440276		54	759786	6442312
	15	759453	6440376		55	759506	6442311
	16	759997	6440418		56	759510	6442424
	17	760162	6440499		57	759784	6442419
	18	760167	6440610		58	759783	6442519
	19	760434	6440893		59	759698	6442522
	20	760605	6441141		60	759700	6442622
	21	760790	6441375	M77/1065_d	61	759241	6444021
	22	760796	6441723		62	759241	6443867
M77/1065_c	23	759700	6442622		63	759124	6443868
	24	759975	6442622		64	759126	6443743
	25	759975	6442423		65	759127	6443632
	26	760315	6442421		66	759062	6443631
	27	760438	6442533		67	759061	6443524
	28	760581	6442527		68	759417	6443521
	29	760245	6442225		69	759411	6444021
	30	760910	6442226		70	759241	6444021
	31	760910	6442125				
	32	760248	6442121				
	33	760244	6442021				
	34	760619	6442023				
	35	760618	6441829				
	36	760402	6441828				
	37	760395	6441523				
	38	760140	6441523				
	39	760141	6441822				
	40	759987	6441821				

APPENDIX C: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1065 SURVEY AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	High Preferred soil & habitat combination likely to occur within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b)

APPENDIX C: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1065 SURVEY AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Low Preferred soils not expected within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: white Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-).
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-).
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: white-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region. Identification may be difficult due to timing of survey.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	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
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	Proteaceae	P1	-	Habit: Open, multi-stemmed, lignotuberos 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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	High Preferred soil & habitat combination are likely to occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: white with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	High Preferred soil & habitat combination known to occur within the survey area Records of this taxon exist within the adjacent EGLP (Matiske Consulting 2018a; Matiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT		POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Erect, narrow shrub to 1 high Unknown September to October yellow-brown sandy soils. Sometimes with laterite or greenstone. COO 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Ascending perennial herb to 0.2m high Blue-purple/pink October Sandy clay. Margins of salt lakes AVW, COO, MAL 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Caespitose perennial herb to 0.3m high White-pink September-October Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. COO 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	Fabaceae	P2	-	Habit: Flowers: Flowering period: Soils: IBRA Distribution: Florabase records:	Diffuse, much-branched shrub, 0.5 to 1.5 m high Yellow August Red-brown sandy loam. Undulating plains, along drainage lines COO, MAL 17	Medium Preferred soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils are not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P2	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Yellow-red Flowering period: September Soils: Yellow sand. Plains IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017)
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c)
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

APPENDIX C: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1065 SURVEY AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT		POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19		Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19		Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16		Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16		Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-)
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-)
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: white Flowering period: unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-)
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c)
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

APPENDIX C: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1065 SURVEY AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: unknown Flowering period: unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: pale pink Flowering period: unknown Soils: light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c)
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-)

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	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
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area.
<i>Myriophyllum petraeum</i>	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.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area.

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760785	6441188		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760792	6441197		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760810	6441225		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760803	6441226		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760822	6441241		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760796	6441245		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6441245		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760831	6441248		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760788	6441249		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760837	6441252		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760834	6441252		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760837	6441253		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760840	6441254		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760847	6441261		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760847	6441261		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760846	6441262		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760836	6441262		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760846	6441263		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760845	6441264		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760847	6441265		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760836	6441266		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760831	6441266		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760840	6441266		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760846	6441266		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760842	6441266		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760846	6441267		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6441267		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760830	6441268		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760834	6441268		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760833	6441269		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760710	6441269		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6441270		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6441276		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760845	6441276		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760834	6441276		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760845	6441280		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760846	6441285		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760845	6441286		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760841	6441289		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760838	6441289		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760842	6441289		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760847	6441290		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760831	6441292		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6441294		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760828	6441306		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760833	6441306		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760827	6441307		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760827	6441310		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760771	6441318		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760758	6441321		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760764	6441337		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760828	6441343		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760847	6441346		M 77/1065_b
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760717	6442173	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760816	6442174	M 77/1065_c	M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
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TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760820	6442176	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760758	6442179	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759817	6441919	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759822	6441923	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759828	6441931	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759832	6441932	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759864	6441959	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759867	6441962	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759875	6441972	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759875	6441972	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441988	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441988	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759901	6441994	M 77/1065_c	M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759707	6441880		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759789	6441882		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760715	6442156		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760730	6442159		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760795	6442161		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760849	6442162		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760809	6442163		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760706	6442164		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760852	6442164		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760781	6442165		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760807	6442165		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760429	6442165		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760725	6442166		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760816	6442166		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760705	6442167		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760844	6442168		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760806	6442168		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760722	6442169		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760722	6442169		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760627	6442170		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760798	6442171		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760810	6442172		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760810	6442172		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760714	6442172		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760715	6442179		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760814	6442179		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760705	6442185		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760674	6442185		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760719	6442185		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760714	6442186		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760715	6442186		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760719	6442186		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760700	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760702	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760571	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760799	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760840	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760708	6442187		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760575	6442188		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760840	6442188		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760705	6442188		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760698	6442189		M 77/1065_c

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TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760710	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760519	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760703	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760577	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760570	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760844	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760707	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760706	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760799	6442189		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760810	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760807	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760696	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760265	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760801	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760804	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760709	6442190		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760848	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760699	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760843	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760754	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760808	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760706	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760798	6442191		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760801	6442192		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760805	6442192		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760778	6442192		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760262	6442192		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760757	6442192		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760797	6442193		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760673	6442193		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760844	6442193		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760783	6442194		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442194		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760783	6442195		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760674	6442196		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760786	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760830	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760813	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760678	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760738	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760775	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760795	6442197		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760780	6442198		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760784	6442198		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760783	6442198		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760778	6442198		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760782	6442198		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760826	6442199		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760776	6442199		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760702	6442199		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760779	6442199		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760779	6442199		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760790	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760814	6442200		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760815	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760790	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760750	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760821	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760742	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760774	6442200		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760782	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760782	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760705	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760740	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760781	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760782	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760768	6442201		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760790	6442202		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760739	6442202		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760793	6442202		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760739	6442202		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760866	6442202		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760744	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760794	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760720	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760869	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760768	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760776	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760776	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760777	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760781	6442203		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760670	6442204		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760795	6442204		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760763	6442204		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760796	6442204		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760792	6442204		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760780	6442205		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760784	6442205		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760796	6442205		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760781	6442206		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760824	6442206		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760698	6442206		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760784	6442206		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760654	6442206		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760813	6442207		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760806	6442207		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760811	6442207		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760796	6442207		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760729	6442207		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760815	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760796	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760806	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760696	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760751	6442208		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760813	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760745	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760813	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442209		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760806	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760696	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760751	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760750	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760806	6442209		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760680	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760743	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760742	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760676	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760807	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760720	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760823	6442210		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760815	6442211		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760686	6442211		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760803	6442211		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760685	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760746	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760814	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760685	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760813	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760830	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760804	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760726	6442212		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760694	6442213		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760831	6442213		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760791	6442213		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760759	6442213		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760805	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760808	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760811	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760803	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760749	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760752	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760811	6442214		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760849	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760757	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760798	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760832	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760797	6442215		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760812	6442216		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760761	6442216		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760695	6442216		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760825	6442216		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760718	6442216		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760799	6442217		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760811	6442217		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760765	6442217		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760695	6442218		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760686	6442221		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760802	6442221		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760809	6442221		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760657	6442221		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760828	6442221		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760684	6442221		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760861	6442222		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760825	6442222		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760742	6442222		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760823	6442222		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760695	6442222		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760687	6442223		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760828	6442223		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760680	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760818	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760676	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760643	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760710	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760756	6442224		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760753	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760860	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760669	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760682	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760683	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760661	6442225		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760819	6442226		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760859	6442227		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759710	6442351		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759710	6442351		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759708	6442354		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759706	6442355		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759702	6442355		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759715	6442361		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759705	6442362		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759703	6442363		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759876	6441831		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441854		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441854		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759843	6441856		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759843	6441856		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759843	6441856		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759843	6441856		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759819	6441856		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759823	6441876		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759783	6441881		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759811	6441882		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759811	6441882		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759791	6441883		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759812	6441884		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759812	6441884		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759756	6441884		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759841	6441885		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759841	6441885		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759756	6441886		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759842	6441886		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759842	6441886		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759807	6441886		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759807	6441888		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759857	6441888		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759857	6441888		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759812	6441888		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759813	6441889		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759817	6441889		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759814	6441890		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759858	6441890		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759807	6441891		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759810	6441891		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759756	6441892		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759756	6441892		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759756	6441892		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759807	6441893		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759807	6441893		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759854	6441894		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759821	6441894		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759854	6441895		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759806	6441895		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759864	6441897		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759745	6441899		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759866	6441899		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759603	6441901		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441904		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441904		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759810	6441904		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759821	6441907		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759837	6441908		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759837	6441908		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759870	6441908		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759814	6441908		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759870	6441909		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759819	6441909		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759866	6441909		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759851	6441909		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759851	6441909		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759840	6441910		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759840	6441910		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759822	6441911		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759751	6441911		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759775	6441912		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759794	6441912		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759504	6441912		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759760	6441913		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759852	6441913		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759852	6441913		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759862	6441913		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759882	6441914		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759571	6441914		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759797	6441914		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441914		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759763	6441915		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759656	6441915		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759865	6441915		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759888	6441916		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441917		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759839	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759839	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759796	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759821	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759554	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759845	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759845	6441917		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759849	6441918		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759849	6441918		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759839	6441918		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759839	6441918		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759784	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759867	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759564	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759888	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759804	6441919		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759795	6441920		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759663	6441920		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759890	6441920		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759890	6441920		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759797	6441920		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759816	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759780	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759796	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759881	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759895	6441921		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441922		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759795	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759830	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759835	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759806	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759778	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759862	6441923		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759850	6441924		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759850	6441924		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759893	6441924		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759893	6441924		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441924		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759810	6441925		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759821	6441926		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759854	6441926		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759854	6441926		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759815	6441926		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441927		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441927		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759815	6441927		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759865	6441927		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759857	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759857	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441928		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759862	6441929		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759862	6441929		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441929		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441929		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759779	6441929		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759888	6441938		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759888	6441938		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441939		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759768	6441939		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759855	6441939		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759768	6441940		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441940		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441940		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759789	6441940		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759856	6441940		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759858	6441941		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441941		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441941		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441941		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441941		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441942		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441942		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759817	6441943		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759866	6441944		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6441944		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6441944		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759777	6441945		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759883	6441945		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759883	6441945		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441946		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441946		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441946		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441946		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759868	6441946		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759777	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759799	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759886	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759914	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759863	6441947		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759879	6441948		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759879	6441948		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441948		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759885	6441948		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759800	6441949		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759812	6441949		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759787	6441949		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759787	6441950		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759893	6441950		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759832	6441950		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759786	6441951		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759906	6441951		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759868	6441951		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759826	6441951		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759870	6441951		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759824	6441952		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759867	6441952		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759787	6441952		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759871	6441953		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759786	6441953		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759890	6441953		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759890	6441953		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441954		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441954		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759906	6441954		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759922	6441954		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441955		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759925	6441955		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759902	6441955		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759844	6441955		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759831	6441955		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759844	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759832	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759820	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759849	6441956		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759850	6441957		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759806	6441957		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759851	6441957		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759822	6441957		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759935	6441958		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759922	6441958		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759914	6441958		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759921	6441958		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759850	6441959		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759850	6441959		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759918	6441960		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441961		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441961		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441961		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441961		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759811	6441962		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441962		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759863	6441962		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759812	6441962		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6441962		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759825	6441964		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759833	6441964		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759858	6441965		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759824	6441965		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759880	6441966		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759880	6441966		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759882	6441966		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759882	6441966		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759851	6441966		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441967		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759932	6441967		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759836	6441967		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759849	6441968		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759933	6441968		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759813	6441968		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759813	6441969		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759929	6441969		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759930	6441970		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759940	6441970		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759813	6441970		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759817	6441970		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759823	6441971		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759833	6441971		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759835	6441972		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759819	6441973		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759901	6441973		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441974		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759861	6441974		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759853	6441974		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759853	6441975		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759829	6441977		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759832	6441977		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759902	6441978		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759905	6441979		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759936	6441980		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759830	6441981		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759878	6441981		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759878	6441981		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759935	6441981		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759861	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759858	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759931	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759934	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759937	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759881	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759881	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759856	6441982		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759904	6441983		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441983		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759895	6441984		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759837	6441985		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759854	6441985		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759847	6441985		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759930	6441985		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759901	6441986		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759904	6441987		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759936	6441988		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759844	6441989		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759862	6441989		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759832	6441989		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441989		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759848	6441990		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759925	6441990		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759834	6441991		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759853	6441992		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759895	6441992		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759846	6441993		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759867	6441993		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759836	6441994		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759838	6441995		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759831	6441995		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441998		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759887	6441998		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759841	6441998		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759863	6441999		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759894	6442001		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759864	6442004		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759868	6442005		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6442011		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759884	6442011		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6442017		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6442017		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759865	6442018		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759875	6442020		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759875	6442020		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6442026		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759877	6442026		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760013	6442069		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	760013	6442069		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759881	6442132		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759881	6442132		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759866	6442155		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759721	6442312		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759658	6442313		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759632	6442313		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759720	6442313		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759620	6442313		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759649	6442313		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759660	6442314		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759628	6442314		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759653	6442314		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759660	6442314		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759648	6442315		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759635	6442315		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759653	6442315		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759661	6442316		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759570	6442316		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759658	6442318		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759655	6442319		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759654	6442319		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759646	6442319		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759638	6442320		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759725	6442322		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759731	6442323		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759638	6442324		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759645	6442324		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759720	6442324		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759641	6442325		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759634	6442326		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759636	6442326		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759721	6442326		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759729	6442327		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759721	6442328		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759722	6442331		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759731	6442333		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759732	6442334		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759718	6442338		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759720	6442339		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759718	6442340		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759715	6442340		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759741	6442341		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759721	6442343		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759719	6442343		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759720	6442344		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759714	6442345		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759713	6442349		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759713	6442349		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759725	6442349		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759712	6442349		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759712	6442349		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759711	6442350		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759717	6442350		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759735	6442351		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759709	6442351		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759734	6442352		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759713	6442354		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759690	6442355		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759722	6442357		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759680	6442358		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759686	6442359		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759714	6442360		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759686	6442360		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759691	6442360		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759728	6442361		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759677	6442361		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759731	6442361		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759660	6442368		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759670	6442371		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759668	6442372		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759710	6442374		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759695	6442375		M 77/1065_c
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759251	6443608		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759317	6443619		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759282	6443620		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759282	6443623		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759272	6443625		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759309	6443600		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759307	6443600		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759306	6443600		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759337	6443602		M 77/1065_d

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759339	6443603		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759306	6443604		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759265	6443604		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759280	6443605		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759284	6443611		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759265	6443611		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759299	6443611		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759297	6443612		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759280	6443614		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759303	6443615		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759275	6443618		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759318	6443620		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759317	6443621		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759266	6443621		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759310	6443623		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759260	6443623		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759300	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759313	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759325	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759327	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759276	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759296	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759323	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759303	6443624		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759303	6443625		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759312	6443628		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759327	6443629		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759310	6443632		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759297	6443632		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759309	6443633		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759364	6443635		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759315	6443635		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759299	6443635		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759308	6443637		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759299	6443637		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759299	6443638		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759298	6443639		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759296	6443646		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759312	6443648		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759311	6443649		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759341	6443651		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759341	6443651		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759303	6443655		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759304	6443656		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759304	6443656		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759333	6443658		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759306	6443659		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759322	6443661		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759305	6443662		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759318	6443662		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759299	6443665		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759297	6443665		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759303	6443666		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759305	6443667		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759305	6443667		M 77/1065_d

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759306	6443684		M 77/1065_d
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	759304	6443686		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760753	6441235	M 77/1065_b	M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760821	6441332	M 77/1065_b	M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760825	6441332	M 77/1065_b	M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760853	6441368	M 77/1065_b	M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760659	6441086		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760669	6441090		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760672	6441092		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760715	6441126		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760678	6441133		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760667	6441139		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760745	6441148		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760739	6441150		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760721	6441155		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760721	6441155		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760751	6441157		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760730	6441158		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760636	6441160		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760669	6441162		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760710	6441166		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760732	6441169		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760731	6441172		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760777	6441177		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760777	6441182		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760776	6441187		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760700	6441190		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760674	6441190		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760710	6441193		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760792	6441202		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760704	6441203		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760692	6441204		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760797	6441206		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760676	6441207		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760700	6441209		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760737	6441210		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760805	6441213		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760810	6441218		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760691	6441221		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760800	6441222		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760769	6441224		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760810	6441226		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760706	6441229		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760697	6441229		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760722	6441232		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760692	6441232		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760713	6441233		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760802	6441233		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760782	6441233		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760787	6441233		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760767	6441237		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760701	6441241		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760700	6441246		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760699	6441247		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760834	6441248		M 77/1065_b

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760834	6441248		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760798	6441249		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760814	6441249		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760810	6441249		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760822	6441254		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760705	6441254		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760848	6441264		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760712	6441269		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760803	6441269		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760851	6441274		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760826	6441276		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760839	6441278		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760726	6441285		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760856	6441288		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760868	6441294		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760807	6441301		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760776	6441307		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760748	6441308		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760859	6441310		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760872	6441310		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760855	6441326		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760777	6441329		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760818	6441330		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760764	6441331		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760818	6441334		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760816	6441346		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760848	6441346		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760852	6441348		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760830	6441351		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760868	6441352		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760867	6441354		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760884	6441364		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760887	6441365		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760877	6441366		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760884	6441366		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760883	6441367		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760874	6441367		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760885	6441368		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760856	6441368		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760886	6441369		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760858	6441371		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760861	6441371		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760864	6441373		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760818	6441374		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760864	6441375		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760865	6441376		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760886	6441379		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760824	6441383		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760824	6441385		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760852	6441391		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760851	6441392		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760796	6441407		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760891	6441473		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760875	6441484		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760885	6441502		M 77/1065_b

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760826	6441503		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760819	6441524		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760802	6441556		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760839	6441558		M 77/1065_b
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441768	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759773	6441768	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759839	6441769	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759847	6441773	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759742	6441850	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759760	6441866	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759740	6441868	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759770	6441877	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759782	6441890	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759828	6441927	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441927	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441927	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441927	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441927	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441929	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441929	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441929	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441929	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441929	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759828	6441930	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759845	6441942	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759845	6441942	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759851	6441949	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759851	6441949	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441950	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441950	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759855	6441951	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759855	6441951	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759855	6441954	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759855	6441954	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759857	6441956	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759866	6441962	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441963	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759869	6441967	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759888	6441979	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759898	6441992	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759924	6442011	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759970	6442052	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442053	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759975	6442061	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442165	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760029	6442166	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760029	6442167	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760021	6442169	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760020	6442171	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760003	6442172	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760762	6442172	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760815	6442175	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760751	6442176	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760758	6442176	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760817	6442177	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760042	6442178	M 77/1065_c	M 77/1065_c

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* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760100	6442291	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760197	6442311	M 77/1065_c	M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760152	6441668		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760148	6441670		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441714		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759774	6441738		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759768	6441742		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759763	6441745		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759747	6441746		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759763	6441748		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759770	6441761		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759790	6441762		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759775	6441764		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759882	6441768		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759852	6441771		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759787	6441773		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759862	6441774		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759866	6441785		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759763	6441790		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441791		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759766	6441792		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759760	6441792		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441793		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759771	6441794		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759785	6441794		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759830	6441794		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759782	6441795		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759774	6441795		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759761	6441795		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759769	6441796		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759762	6441796		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759843	6441796		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759778	6441797		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759812	6441797		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759887	6441799		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759756	6441799		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759754	6441799		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759758	6441799		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441829		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759736	6441829		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759829	6441858		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759510	6441861		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759509	6441862		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759512	6441863		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759533	6441867		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759507	6441867		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759510	6441868		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759782	6441869		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441869		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759521	6441872		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759998	6441873		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6441873		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760010	6441874		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759789	6441874		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759804	6441874		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760005	6441874		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759997	6441874		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759994	6441874		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759825	6441876		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760010	6441876		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759528	6441876		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759816	6441878		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759792	6441881		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759793	6441883		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759793	6441883		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759554	6441883		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759574	6441884		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759835	6441885		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759751	6441886		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759520	6441887		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759527	6441887		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759679	6441889		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759815	6441893		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759706	6441894		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759696	6441894		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759763	6441895		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759726	6441895		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759726	6441895		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759726	6441895		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759845	6441896		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759586	6441896		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759842	6441897		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441897		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441897		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759514	6441897		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759778	6441898		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441898		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759741	6441899		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759804	6441900		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759760	6441900		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759596	6441901		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759772	6441901		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759722	6441902		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759695	6441902		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759714	6441902		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759497	6441902		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759661	6441904		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441904		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759817	6441905		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759748	6441905		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441905		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759794	6441906		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441906		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759859	6441907		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759668	6441907		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759685	6441907		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759531	6441908		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759737	6441908		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759775	6441909		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759832	6441910		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760611	6441910		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760612	6441911		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759700	6441911		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759527	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759804	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759550	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759516	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759755	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759548	6441912		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759548	6441913		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759878	6441915		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759788	6441915		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759824	6441916		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759812	6441917		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441919		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759860	6441920		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759885	6441921		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759887	6441921		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759887	6441922		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759832	6441923		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759858	6441923		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759862	6441924		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759857	6441924		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759812	6441925		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441925		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759812	6441925		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759833	6441926		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441926		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441927		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441927		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441928		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759815	6441928		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441928		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441928		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759885	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759862	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759885	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759885	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759886	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759798	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759877	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759860	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441929		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441930		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759873	6441930		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441930		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441930		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759852	6441930		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759798	6441931		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759798	6441931		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759823	6441931		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441932		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441932		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759850	6441932		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441932		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441932		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441932		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759847	6441933		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441933		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441933		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441933		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441933		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759817	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759891	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759906	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759857	6441934		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759872	6441935		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759872	6441935		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759888	6441936		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759887	6441936		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759821	6441936		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759834	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759833	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759834	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759820	6441937		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759797	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759797	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759870	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759819	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759819	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759819	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759798	6441938		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759867	6441939		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759833	6441939		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759859	6441939		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759835	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759819	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759819	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759865	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441941		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759820	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759801	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759801	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759861	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759887	6441942		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759822	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759803	6441942		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759804	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759868	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759867	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759861	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759920	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441943		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759823	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759889	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759888	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759804	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759920	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759826	6441944		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759771	6441945		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759806	6441945		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759806	6441945		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759798	6441945		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759889	6441945		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759897	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759872	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759896	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759896	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441946		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759838	6441947		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759908	6441947		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759908	6441947		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759837	6441947		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441948		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441948		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759784	6441948		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759784	6441948		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759784	6441948		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759785	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759784	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759786	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759787	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759783	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759783	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441949		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759909	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759838	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759876	6441950		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759782	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759909	6441950		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759865	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759814	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759885	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759879	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759904	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759904	6441951		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759909	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759791	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759791	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759791	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759883	6441952		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759818	6441953		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759818	6441953		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759818	6441953		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759815	6441953		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759880	6441953		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759880	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759792	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759863	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759812	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759792	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759792	6441954		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759793	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759793	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759793	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759862	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759909	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759813	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759863	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759863	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759863	6441955		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759882	6441956		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759818	6441956		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441956		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759864	6441957		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759865	6441957		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759906	6441957		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759867	6441958		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759867	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759796	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759797	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759866	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759799	6441959		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759936	6441960		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759806	6441961		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759937	6441961		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759800	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441962		M 77/1065_c

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IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759802	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759938	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759874	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759937	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759840	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759839	6441962		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759943	6441963		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759878	6441963		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759849	6441963		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759873	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759873	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759816	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759816	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759920	6441964		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759820	6441965		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759820	6441965		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759820	6441965		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759936	6441965		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759857	6441965		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441966		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759919	6441967		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759919	6441967		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441967		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759861	6441968		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441969		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759950	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759867	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759807	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441970		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759928	6441971		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759943	6441971		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759943	6441971		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759933	6441971		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759893	6441972		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759942	6441972		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759941	6441972		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759941	6441972		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759941	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759935	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759808	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759950	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759934	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759889	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441973		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759810	6441974		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759949	6441974		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759865	6441975		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759931	6441975		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759934	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759934	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759934	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759934	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759935	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759851	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759850	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759844	6441976		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759946	6441977		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759932	6441977		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759931	6441979		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759931	6441979		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759827	6441980		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6441980		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759830	6441981		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759830	6441981		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6441982		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759894	6441983		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759848	6441984		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441984		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759850	6441985		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6441986		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759922	6441986		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759899	6441986		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759899	6441986		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759844	6441986		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759921	6441987		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759891	6441987		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759891	6441987		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759844	6441987		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759844	6441987		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759891	6441988		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441988		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441988		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759921	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759844	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759845	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759845	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759846	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759893	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759833	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441989		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759930	6441990		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441990		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759854	6441990		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759834	6441991		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759853	6441991		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759930	6441991		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759855	6441991		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441992		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441992		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759834	6441992		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759940	6441993		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759939	6441994		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759939	6441994		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6441997		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6441998		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6441999		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759978	6441999		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759916	6441999		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759916	6441999		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759977	6442000		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759837	6442000		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442000		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759950	6442002		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759949	6442005		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759928	6442006		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759926	6442006		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759925	6442008		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759927	6442008		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759973	6442008		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759973	6442008		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759927	6442008		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759984	6442009		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442010		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442010		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442012		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442013		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442013		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759984	6442013		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759945	6442013		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442014		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442018		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442018		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759936	6442019		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760004	6442019		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760004	6442019		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760006	6442019		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760005	6442019		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442020		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760003	6442021		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442022		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442022		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759995	6442022		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759968	6442022		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759965	6442023		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442023		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442023		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759966	6442023		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442023		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442024		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442024		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759998	6442025		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760001	6442025		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442025		M 77/1065_c

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* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760001	6442025		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760012	6442026		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760000	6442026		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759990	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760012	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760010	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760000	6442027		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759999	6442028		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759992	6442028		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759992	6442028		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442029		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759981	6442029		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442029		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442029		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759991	6442029		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760014	6442030		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760014	6442030		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759967	6442030		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759990	6442030		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759990	6442030		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759975	6442031		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442032		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760014	6442032		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760010	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760017	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760017	6442033		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442035		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759988	6442035		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442036		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759987	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759987	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759987	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442037		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442038		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760017	6442038		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442038		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442038		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760018	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759997	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760011	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442039		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442039		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442040		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760022	6442040		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759979	6442040		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760023	6442040		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759981	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759981	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759984	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759981	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760006	6442041		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760008	6442042		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442042		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442042		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759978	6442044		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759988	6442045		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442045		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760006	6442045		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760005	6442046		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442046		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442047		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442047		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760015	6442047		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759979	6442048		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760035	6442049		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760018	6442051		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442051		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760034	6442052		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760034	6442052		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759990	6442052		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442053		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759973	6442053		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759991	6442054		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759992	6442055		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759996	6442055		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442055		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442055		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760010	6442056		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760044	6442056		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760025	6442057		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442057		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760043	6442057		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6442058		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442059		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760014	6442059		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759995	6442059		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760035	6442060		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759995	6442061		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442062		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760049	6442067		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760049	6442067		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760050	6442069		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759973	6442069		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760026	6442069		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442069		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759970	6442070		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760035	6442071		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442071		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760055	6442071		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760054	6442072		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442072		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442072		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759959	6442073		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760043	6442073		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759959	6442073		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442074		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760053	6442074		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760040	6442074		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760040	6442074		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760017	6442074		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759965	6442081		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442082		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442082		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442082		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442082		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442083		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442083		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760032	6442083		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6442083		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6442083		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760051	6442084		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442084		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442084		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759979	6442085		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759968	6442085		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760050	6442085		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442086		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442086		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759963	6442086		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442086		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442087		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759946	6442087		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442087		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759966	6442088		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442088		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759950	6442088		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759950	6442088		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442089		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442089		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442089		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759977	6442089		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442089		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759978	6442091		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759984	6442092		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759953	6442092		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442092		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442092		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759959	6442092		M 77/1065_c

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

[illegible]

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759974	6442116		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759983	6442116		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442117		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442118		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442118		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759996	6442119		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760021	6442119		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442119		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759943	6442120		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442121		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442121		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759978	6442122		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759946	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759972	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759944	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759944	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759944	6442124		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759949	6442125		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442125		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759987	6442126		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759986	6442126		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759978	6442126		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759956	6442126		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759956	6442126		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759958	6442127		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759949	6442127		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6442127		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760781	6442128		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759959	6442128		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760711	6442128		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759977	6442128		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442129		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759967	6442129		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760733	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759963	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759963	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760715	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759980	6442130		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759970	6442131		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442131		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759979	6442131		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760714	6442131		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759966	6442132		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442132		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442132		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6442132		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760739	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760785	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759953	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759953	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759953	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760720	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760714	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760726	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759956	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759956	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759962	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759956	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759958	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759958	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759973	6442133		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760718	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760722	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760725	6442134		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759970	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759959	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759949	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760785	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759965	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760724	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760784	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759977	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760778	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759982	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759963	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442135		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760724	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759955	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759947	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760778	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760802	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760811	6442136		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759989	6442137		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760796	6442137		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760801	6442137		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759968	6442137		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759987	6442137		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759948	6442138		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760787	6442138		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760792	6442138		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760009	6442138		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759994	6442138		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760773	6442139		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760788	6442139		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760775	6442139		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759964	6442139		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442139		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760770	6442140		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760778	6442140		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759957	6442140		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759952	6442140		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759995	6442140		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760681	6442141		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759942	6442142		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759997	6442142		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760683	6442143		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759997	6442143		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760022	6442143		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759953	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759954	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759998	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760685	6442144		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760788	6442145		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760783	6442146		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760686	6442146		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760707	6442146		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760778	6442147		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760725	6442147		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760779	6442147		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759999	6442148		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760824	6442148		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760017	6442148		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760816	6442148		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760801	6442148		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760779	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760700	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760794	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760822	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760726	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760756	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760764	6442149		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760016	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760711	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760023	6442150		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760023	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760688	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760771	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760765	6442150		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760722	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760004	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760811	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760697	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760005	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760843	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760797	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759960	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760024	6442151		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760006	6442152		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760717	6442152		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760801	6442152		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760693	6442152		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759992	6442152		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760843	6442153		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760734	6442153		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760694	6442153		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760828	6442153		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759979	6442154		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760803	6442154		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442154		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760014	6442154		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760807	6442155		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760808	6442155		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759961	6442155		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760807	6442156		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759976	6442158		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760735	6442158		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760814	6442160		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759975	6442161		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759969	6442162		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759971	6442162		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760796	6442163		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760743	6442163		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760822	6442163		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760696	6442165		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760782	6442165		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760726	6442165		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760703	6442167		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760688	6442168		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760671	6442169		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760826	6442170		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760768	6442170		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760835	6442172		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759990	6442172		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760907	6442172		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760015	6442179		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760016	6442181		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760016	6442182		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759985	6442182		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760880	6442185		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760672	6442186		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760669	6442186		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760662	6442187		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760679	6442188		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760691	6442189		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760730	6442191		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760004	6442191		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760007	6442192		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760675	6442193		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760006	6442193		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760904	6442194		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760678	6442195		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760689	6442195		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760021	6442195		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760630	6442195		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760671	6442199		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760670	6442200		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760674	6442200		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760675	6442201		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760817	6442201		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760674	6442202		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760669	6442203		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760719	6442203		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760739	6442204		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760735	6442204		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760739	6442205		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760671	6442205		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760023	6442207		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760727	6442208		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760648	6442208		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760904	6442209		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760899	6442209		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760656	6442209		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760026	6442209		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760654	6442209		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760026	6442210		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760907	6442210		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760660	6442212		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760626	6442213		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760616	6442218		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760746	6442220		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760717	6442220		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760089	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760893	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760893	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760049	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760049	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760728	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760715	6442222		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760805	6442223		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760747	6442223		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760729	6442223		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760758	6442224		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760680	6442224		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760712	6442224		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760048	6442224		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760048	6442224		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760796	6442224		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760714	6442225		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760783	6442225		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760832	6442225		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760905	6442225		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760800	6442226		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760669	6442226		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760904	6442226		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760781	6442226		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442230		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442230		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442230		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760030	6442231		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760032	6442231		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760027	6442231		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442232		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760029	6442232		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760028	6442232		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442235		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760083	6442236		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760080	6442237		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760028	6442237		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760070	6442238		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760038	6442239		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760027	6442239		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760026	6442240		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760003	6442243		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760072	6442244		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760073	6442244		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760002	6442246		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760072	6442246		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760072	6442246		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760002	6442246		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760072	6442246		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760032	6442250		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760029	6442251		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442251		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442252		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442253		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442253		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442254		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760031	6442254		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760062	6442260		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760063	6442260		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760065	6442261		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760066	6442261		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442261		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760033	6442261		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760064	6442262		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760045	6442262		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760064	6442263		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760064	6442263		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760082	6442263		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760068	6442263		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760068	6442264		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760088	6442264		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760065	6442265		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760065	6442265		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760063	6442265		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760062	6442265		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760068	6442265		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760097	6442266		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760065	6442266		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760061	6442267		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760083	6442267		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760093	6442267		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760061	6442268		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760090	6442268		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442268		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760050	6442268		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442269		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760059	6442270		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760057	6442271		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442272		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760076	6442272		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442273		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442273		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442274		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760056	6442274		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760056	6442274		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760022	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760089	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760090	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760090	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760087	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760100	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760046	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760088	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760056	6442275		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760073	6442276		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442276		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760089	6442277		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760098	6442277		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760097	6442277		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760089	6442278		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760104	6442280		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442280		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760097	6442281		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760097	6442282		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760097	6442282		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760099	6442285		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760099	6442285		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760076	6442296		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760075	6442297		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760078	6442297		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760075	6442298		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760074	6442299		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760074	6442299		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760075	6442300		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760177	6442302		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760055	6442303		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760056	6442304		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760049	6442304		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760051	6442304		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760053	6442305		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760052	6442305		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760175	6442305		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760164	6442308		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760165	6442310		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760050	6442312		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760051	6442314		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760068	6442314		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760055	6442315		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760189	6442316		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760167	6442317		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760165	6442320		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760079	6442321		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760072	6442322		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760082	6442323		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760081	6442323		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760080	6442323		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760078	6442325		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760079	6442325		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760079	6442325		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759624	6442325		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760082	6442329		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442330		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760089	6442332		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760082	6442333		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760083	6442333		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442335		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442335		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442335		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760076	6442337		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760077	6442338		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760058	6442338		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760086	6442339		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760172	6442339		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760085	6442340		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760084	6442340		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760140	6442380		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760140	6442380		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760138	6442381		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760150	6442383		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760136	6442384		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760143	6442384		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760143	6442385		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760143	6442385		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760149	6442390		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760144	6442391		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760146	6442393		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760135	6442395		M 77/1065_c

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760140	6442396		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760183	6442399		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760178	6442400		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760176	6442400		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760186	6442402		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760177	6442404		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760180	6442405		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760196	6442408		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760190	6442409		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760186	6442414		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760192	6442417		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	760167	6442418		M 77/1065_c
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759236	6443572	M 77/1065_d	M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759270	6443577	M 77/1065_d	M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759243	6443561		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759284	6443566		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759246	6443566		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759064	6443567		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759277	6443568		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759113	6443569		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759112	6443569		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759268	6443575		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759307	6443584		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759304	6443589		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759208	6443591		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759310	6443600		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759272	6443607		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759262	6443620		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759249	6443624		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759370	6443627		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759369	6443637		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759319	6443653		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759299	6443670		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759303	6443671		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759326	6443672		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759336	6443673		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759320	6443688		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759336	6443688		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759297	6443690		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759311	6443690		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759301	6443693		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759312	6443694		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759310	6443696		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759322	6443707		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759320	6443709		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759339	6443721		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759315	6443732		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759388	6443771		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759371	6443870		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759335	6443873		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759330	6443880		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759368	6443889		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759370	6443889		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759368	6443890		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759368	6443891		M 77/1065_d

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759304	6443891		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759321	6443894		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759310	6443894		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759329	6443897		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759337	6443905		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759338	6443905		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759332	6443905		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759325	6443907		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759319	6443908		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759308	6443909		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759308	6443909		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759325	6443910		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759316	6443928		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759369	6443942		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759248	6443954		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759368	6443960		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759266	6443973		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759267	6443974		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759338	6443975		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759340	6443976		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759312	6443977		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759255	6443988		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759313	6443988		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759257	6443988		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759305	6443989		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759290	6443989		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759306	6443989		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759293	6443990		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759288	6443990		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759278	6443990		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759308	6443990		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759285	6443991		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759302	6443991		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759282	6443992		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759276	6443993		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759274	6443993		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759279	6443993		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759280	6443993		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759296	6443994		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759301	6443994		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759279	6443996		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759308	6444008		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759288	6444010		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759282	6444010		M 77/1065_d
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	759304	6444015		M 77/1065_d
<i>Grevillea lissopleura</i> (P1)	760411	6441948		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760397	6441949		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760397	6441961		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760420	6441963		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760390	6441967		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760406	6441968		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760416	6441971		M 77/1065_c
<i>Grevillea lissopleura</i> (P1)	760406	6441972		M 77/1065_c
<i>Labichea rossii</i> (P1)	760847	6441487		M 77/1065_b
<i>Labichea rossii</i> (P1)	760808	6441552		M 77/1065_b

**APPENDIX D: LOCATIONS OF THREATENED AND PRIORITY FLORA RECORDED WITHIN THE
IMPACT AND SEARCH AREAS OF TENEMENT M77/1065**

* locations include those for records from previous surveys by Mattiske Consulting (2018a, 2018b, 2018c)

TAXON	LOCATION (GDA94 ZONE 50J)		IMPACT AREA	SEARCH AREA
	EASTING (mE)	NORTHING (mN)		
<i>Labichea rossii</i> (P1)	760807	6441569		M 77/1065_b
<i>Labichea rossii</i> (P1)	760812	6441570		M 77/1065_b
<i>Labichea rossii</i> (P1)	760805	6441590		M 77/1065_b
<i>Labichea rossii</i> (P1)	760815	6441592		M 77/1065_b
<i>Labichea rossii</i> (P1)	760802	6441605		M 77/1065_b
<i>Labichea rossii</i> (P1)	760823	6441630		M 77/1065_b
<i>Labichea rossii</i> (P1)	760812	6441665		M 77/1065_b
<i>Labichea rossii</i> (P1)	760803	6441666		M 77/1065_b
<i>Labichea rossii</i> (P1)	760828	6442134		M 77/1065_c
<i>Labichea rossii</i> (P1)	760817	6442135		M 77/1065_c
<i>Labichea rossii</i> (P1)	760804	6442136		M 77/1065_c
<i>Labichea rossii</i> (P1)	760807	6442138		M 77/1065_c
<i>Labichea rossii</i> (P1)	760809	6442143		M 77/1065_c
<i>Labichea rossii</i> (P1)	760814	6442149		M 77/1065_c
<i>Labichea rossii</i> (P1)	760832	6442152		M 77/1065_c
<i>Labichea rossii</i> (P1)	760796	6442161		M 77/1065_c
<i>Labichea rossii</i> (P1)	759388	6443594		M 77/1065_d
<i>Labichea rossii</i> (P1)	759387	6443639		M 77/1065_d
<i>Labichea rossii</i> (P1)	759386	6443646		M 77/1065_d
<i>Labichea rossii</i> (P1)	759387	6443646		M 77/1065_d
<i>Labichea rossii</i> (P1)	759388	6443648		M 77/1065_d
<i>Labichea rossii</i> (P1)	759388	6443649		M 77/1065_d
<i>Labichea rossii</i> (P1)	759390	6443661		M 77/1065_d
<i>Labichea rossii</i> (P1)	759392	6443661		M 77/1065_d
<i>Labichea rossii</i> (P1)	759391	6443661		M 77/1065_d
<i>Labichea rossii</i> (P1)	759388	6443662		M 77/1065_d
<i>Labichea rossii</i> (P1)	759388	6443662		M 77/1065_d
<i>Labichea rossii</i> (P1)	759387	6443662		M 77/1065_d
<i>Labichea rossii</i> (P1)	759393	6443663		M 77/1065_d
<i>Labichea rossii</i> (P1)	759393	6443664		M 77/1065_d
<i>Labichea rossii</i> (P1)	759392	6443664		M 77/1065_d
<i>Labichea rossii</i> (P1)	759389	6443674		M 77/1065_d
<i>Labichea rossii</i> (P1)	759389	6443674		M 77/1065_d
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760749	6442169	M 77/1065_c	M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760721	6442173	M 77/1065_c	M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760711	6442174	M 77/1065_c	M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760589	6441837		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760581	6441837		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760737	6442158		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760693	6442163		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760787	6442165		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760725	6442167		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760818	6442177		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760718	6442190		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760730	6442190		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760749	6442191		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760809	6442192		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760787	6442197		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760737	6442198		M 77/1065_c
<i>Daviesia sarissa</i> subsp. ?redacta (P2)	760817	6442201		M 77/1065_c

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/1067

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

April 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/041/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	17/04/2019
FINAL	Final report	FR	EM	18/04/2019



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- A1:** Threatened and priority flora definitions
- A2:** Threatened and priority ecological community definitions
- A3:** Other definitions
- B:** Assessment of threatened and priority flora potentially present in the search area

LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1067, locality of Mount Holland. Together with a 50m buffer, this constituted the search area.

A desktop survey of the search area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the search area which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

The desktop survey identified that the entirety of the search area lies 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. No banded ironstone formations or any form of outcropping within the search area was noted during the field survey.

No threatened flora taxa were recorded within the search area. One priority flora taxon, *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), was recorded within the search area. Its numbers in the impact and search area, are given below.

Summary of the priority flora recorded in the impact and search area of tenement M77/1067

SPECIES	IMPACT AREA	SEARCH AREA
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	0	24

Impacts to *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1) and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impacts area as well as to clarify the status and spatial extent of some of the flora species of interest within the tenement, including *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1).

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Matiske Consulting Pty Ltd (Matiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1067.

1.1 Location and Scope of Project

Tenement M77/1067 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 105 km south of Southern Cross and 95 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located on the eastern boundary of the tenement, and together with a 50m buffer, constitute the search area (Figure 2).

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Matiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Matiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Matiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Matiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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.*

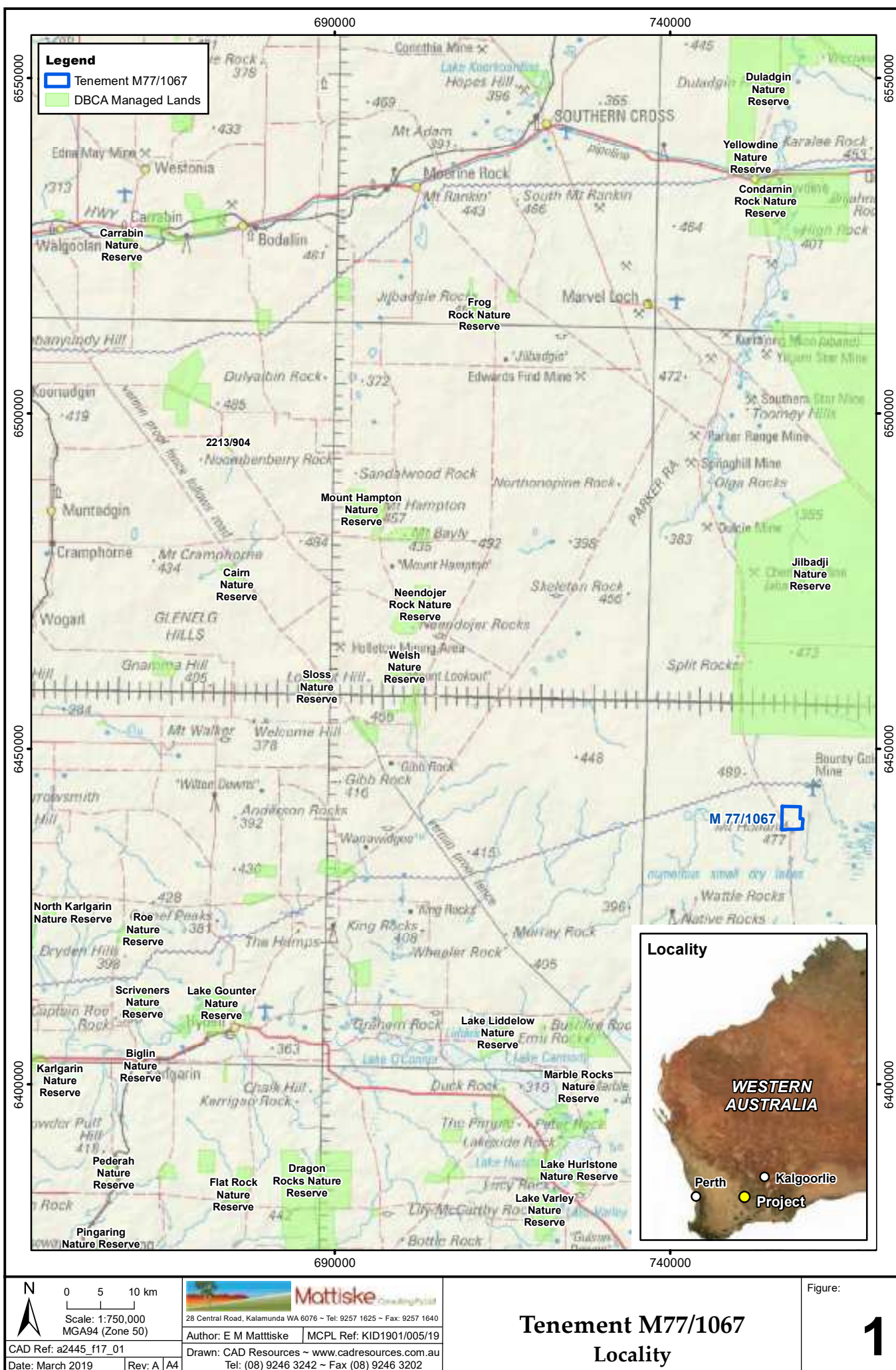
The following key Western Australian (state) legislation relevant to this survey include the:

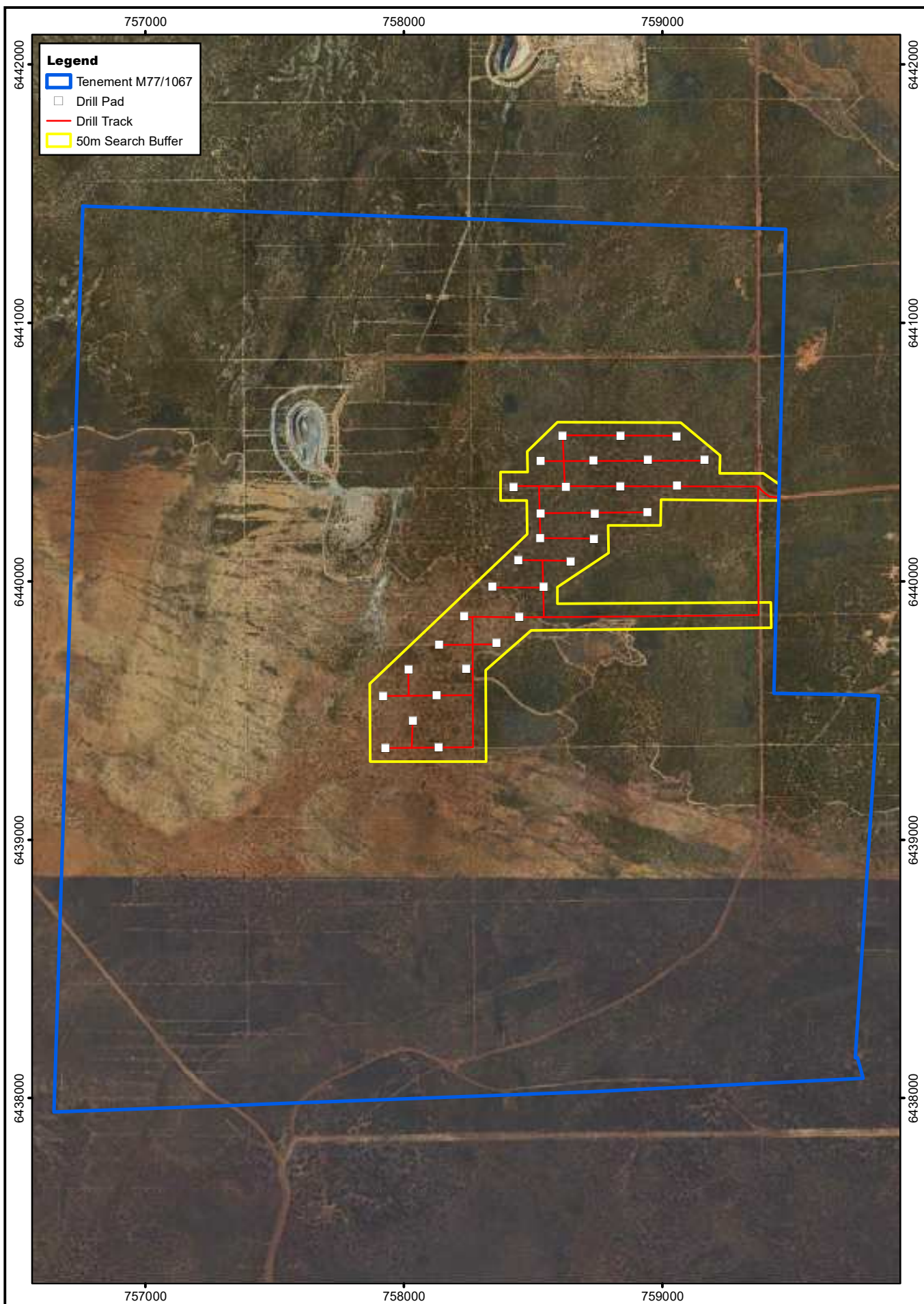
- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; and
- *Wildlife Conservation Act 1999* (WC Act).

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 A1-3.





2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the search area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the search area as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the search area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the search area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the search area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the search area.

3.2 Field Survey

The threatened and priority flora assessment of the search area was undertaken by four experienced botanists from Matiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundary of the search area, as supplied by Kidman, are set out in Table 2.

Table 2: Coordinates delineating the M77/1067 mining tenement search area

WAY POINT	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
1	758563	6440616
2	759108	6440615
3	759452	6440376
4	759450	6440313
5	758994	6440316
6	758995	6440216
7	758594	6439916
8	759421	6439921
9	759423	6439819
10	758500	6439810
11	758318	6439612
12	758319	6439304
13	757869	6439303
14	757868	6439604
15	758373	6440136
16	758375	6440422
17	758563	6440616

The search area was digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within the search area. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched was 74.774967 ha.

During the field survey, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundary of the planned conservation significant flora search area and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the search area, tenement M77/1067, and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Matiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/1067 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 95 km to the south west of the search area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

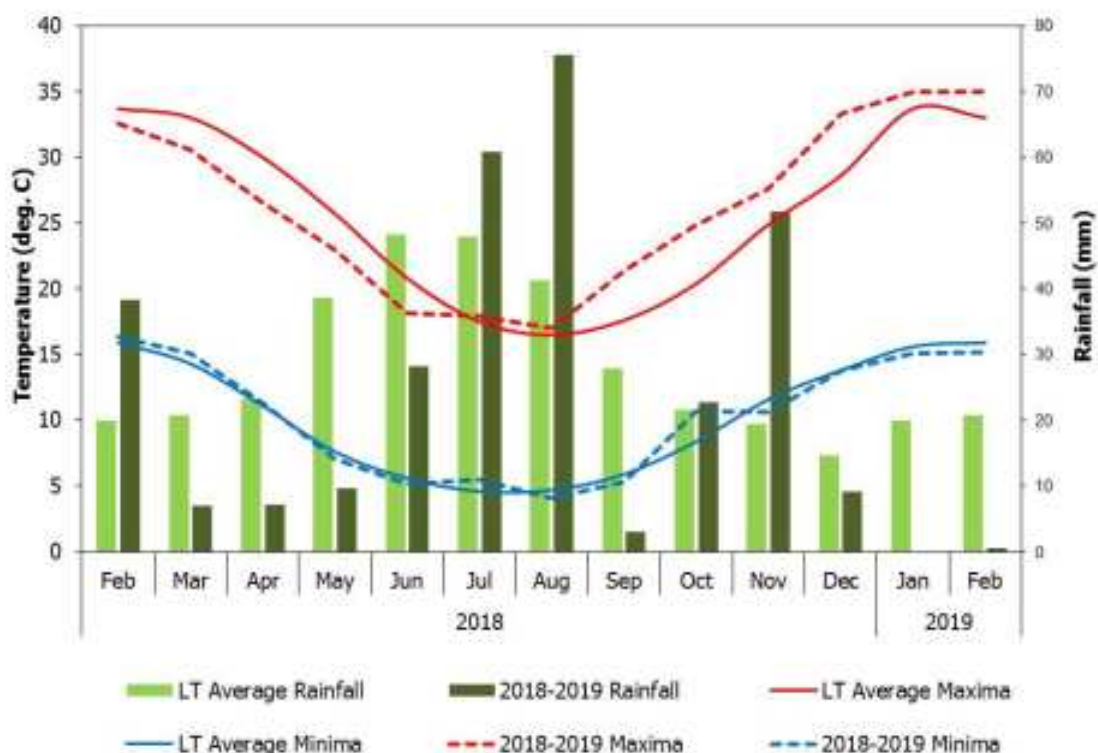


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The search area 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. Whilst the search area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/1067

Previous vegetation mapping and targeted conservation significant flora surveys at the adjacent Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current search area suggests that similar vegetation communities and landforms may exist within the search area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the search area.

4.5 Priority Ecological Communities

Approximately the eastern half of tenement M77/1067, and hence, the entirety of the search area, 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 DBCA (2018c) (Figure 4). The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

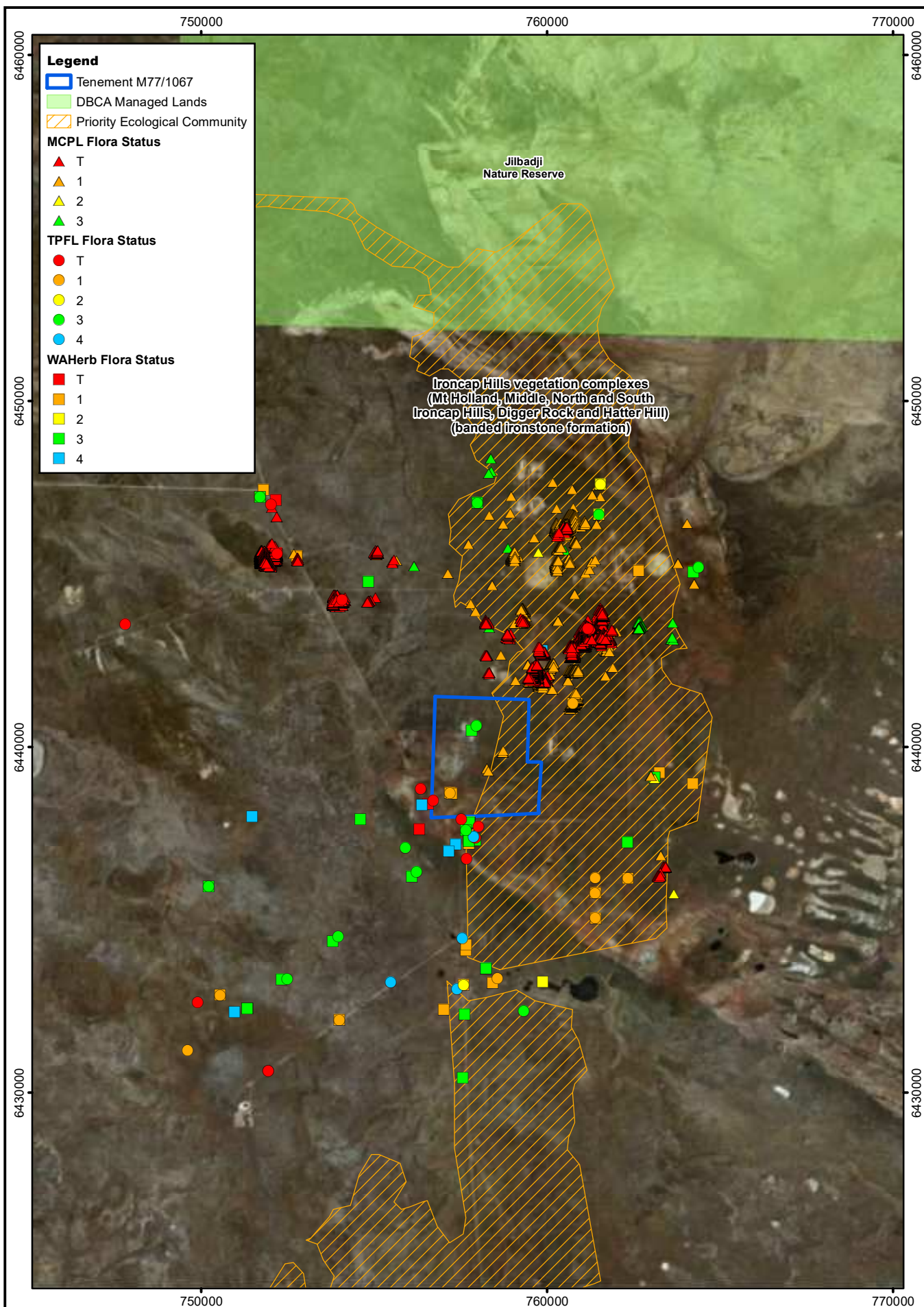
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 10 km north of the search area, along the Forrestania Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the search area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix B). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the search area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix B. Based on this assessment, one taxon, *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1), was ranked as being highly likely to be recorded in the field survey. Forty one were ranked with a medium likelihood of being recorded in the search area, of which five are listed threatened taxa. The remaining 62 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Mattiske Consulting (2017, 2018a, 2018b, 2018c) in surveys nearby to tenement M77/1067. These taxa and the likelihood of recording them in the current survey are: *Banksia sphaerocarpa* var. *dolichostyla* (T) medium, *Eremophila verticillata* (T) low, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Labichea rossii* (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 3). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone of tenement M77/1067 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/1067

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 search area (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix B were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/1067 (continued)

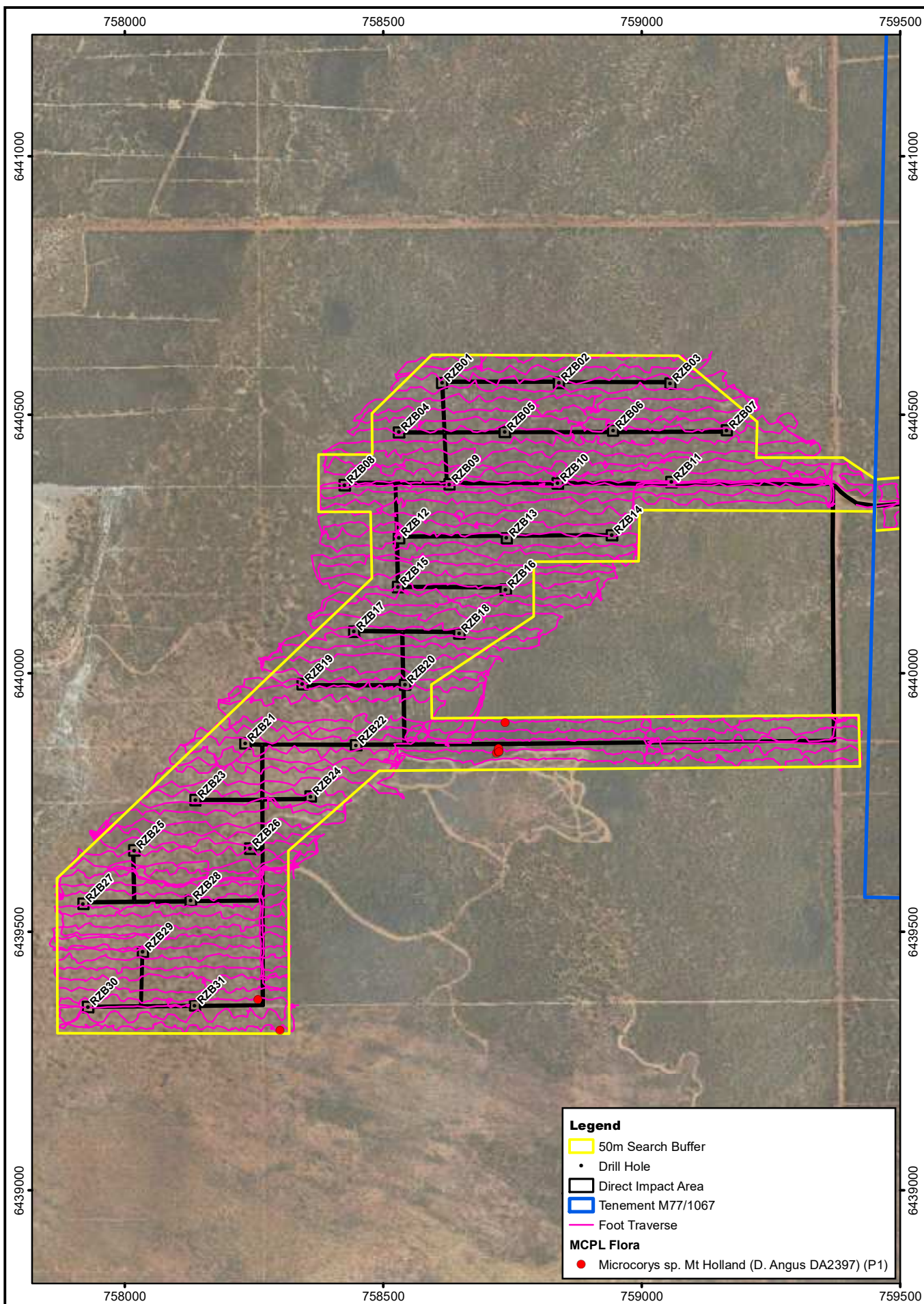
POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Disturbances (fire, flood, accidental human intervention, etc.).	Minor constraint. The search area intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey. The southern portion of the search area had been subject to a fire in November 2015. Species which have no or little ability to resprout after fire (e.g. <i>Acacia</i> spp., <i>Daviesia</i> spp., <i>Verticordia</i> spp.) are more likely to be killed and return from seed. The potential immaturity of individuals of these species at the time of the survey may have made them more difficult to notice or identify.
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 search area was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the search area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	Not a constraint. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

No threatened flora taxa pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), were recorded within the search area. One priority flora taxon, as listed by WAH (1998-), *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), was recorded within the search area. Figure 5 illustrates the location of the records made. Table 4 presents the number of *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1) found in the impact and search area, as well as the geographical locations of records within the search area.

Table 4: Numbers of plants of *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1) recorded in the impact area and search area of tenement M77/1067, and their geographical location within the search area

SPECIES	IMPACT AREA	SEARCH AREA	SEARCH AREA LOCATION (GDA94 ZONE 50J)	
			EASTING (mE)	NORTHING (mN)
Microcorys sp. Mt Holland (D. Angus DA2397) (P1)	0	24	758301	6439309
			758259	6439368
			758720	6439846
			758724	6439848
			758725	6439849
			758724	6439850
			758724	6439851
			758724	6439854
			758724	6439854
			758736	6439904



6. DISCUSSION

Kidman commissioned Mattiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1067. The tenement is situated on and adjacent to the abandoned Bounty Mine site.

Priority Ecological Community

Desktop results indicate that the entirety of the search area is 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), (P3) (Figure 4). While botanists noted no banded ironstone formations or any form of outcropping within the search area, it was beyond the scope of this survey to make definitive assessment of the impact of the proposed exploration tracks and drill holes on the PEC. The vegetation survey by Mattiske Consulting (2018a) in the adjacent EGLP area also found little evidence of outcropping or of vegetation communities known to be associated with this. However, Mattiske Consulting (2018a) concluded that the absence of most of the communities listed for the PEC within the EGLP area, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). Consequently, while it is unlikely that the proposed exploration tracks and drill holes would have major adverse effects in relation to the PEC, the use of cleared and disturbed areas from past mining activities can reduce impacts to any vegetation potentially associated with the PEC.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded, and a fire in November 2015 may have rendered some target taxa too immature to confidently identify for recording. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

No threatened flora taxa were recorded within the survey area. One priority flora taxon, *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1), was recorded within the search area. This taxon was identified as having a high possibility of occurring in the search area based on results of the desktop survey (Appendix B).

The proposed tracks and drill holes are unlikely to have an impact on *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1). Its current locations should be avoided, and survey work in the remainder of the tenement considered to document its local distribution more thoroughly, should the impact area be altered.

Several taxa have been recorded in surveys in adjacent tenements (Mattiske Consulting 2017, 2018a, 2018b, 2018c) but not in the current search area. This is likely due to the search area not intersecting the preferred habitat of these taxa. However, their presence in the tenement as a whole cannot be discluded and further survey would be required should the proposed tracks and drill holes be moved to accommodate *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1).

7. CONCLUSION AND RECOMMENDATIONS

Impacts to *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1) and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area as well as to clarify the status and spatial extent of some of the flora species of interest within the tenement.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

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	planning, data analysis	N/A
Mr S. Ruoss	Experienced Ecologist	planning, fieldwork	FB62000031 / TFL-1819
Ms F. Riviera	Senior Botanist	data analysis, report preparation	N/A
Mr Z. Sims	Botanist	fieldwork, data analysis, report preparation	FB62000025
Mr B. Ellery	Experienced Botanist / Taxonomist	fieldwork, plant identification	FB62000024
Ms L. Taaffe	Botanist	fieldwork	FB62000021
Ms M. Van Wees	Botanist	fieldwork	N/A

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APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	Medium Preferred soil & habitat combination may occur within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Medium Preferred soils may occur within survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: White Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-).
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-).
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: White-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	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
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP(Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	Myrtaceae	P1	-	Habit: Tree or (mallee), to 12 m high, with smooth bark, decorated in strips, grey-olive over silvery 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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: White with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	High Preferred soil & habitat combination known to occur within the survey area Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Erect, narrow shrub to 1 high Flowers: Unknown Flowering period: September to October Soils: yellow-brown sandy soils. Sometimes with laterite or greenstone. IBRA Distribution: COO Florabase records: 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Ascending perennial herb to 0.2m high Flowers: Blue-purple/pink Flowering period: October Soils: Sandy clay. Margins of salt lakes IBRA Distribution: AVW, COO, MAL Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Caespitose perennial herb to 0.3m high Flowers: White-pink Flowering period: September-October Soils: Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. IBRA Distribution: COO Florabase records: 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	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 soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils are not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-).
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P1	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Blue-purple Flowering period: May Soils: Loamy sand, sandy loam, with open mallee woodlands IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017).
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017).
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c).
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: Cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: Yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: Yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: Yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: white-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16	Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-).
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: Yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: White Flowering period: unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-)
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c)
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: Unknown Flowering period: Unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: Brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: Red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: Pale pink Flowering period: Unknown Soils: Light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: Yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-).

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Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Myriophyllum petraeum</i>	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 B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1067 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area (DPaW 2007-).

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/1068

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

June 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/040/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	16/04/2019
FINAL	Final report	FR	EM	18/04/2019
V3	Report updated to reflect changes resulting from modified drilling program	DA	EM	7/06/2019



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- A1:** Threatened and priority flora definitions
- A2:** Threatened and priority ecological community definitions
- A3:** Other definitions
- B:** Assessment of threatened and priority flora potentially present in the search area

LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1068, locality of Mount Holland. Together with a 50m buffer, this constituted the search area.

A desktop survey of the search area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the search area which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

The desktop survey identified that the entirety of the search areas lies 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. No banded ironstone formations or any form of outcropping within the search area was noted during the field survey.

One threatened flora taxon, *Banksia sphaerocarpa* subsp. *dolichostyla* (T), and one priority flora taxon, *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), were recorded within the search area. The threatened and priority flora recorded during the field survey, and their numbers in the impact and search area, are given below.

Summary of the threatened and priority flora recorded in the impact and search area of tenement M77/1068

SPECIES	IMPACT AREA	SEARCH AREA
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	1
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	0	16

The impact area intersects the buffer of one previously documented population of *Banksia sphaerocarpa* subsp. *dolichostyla* (T). Kidman Resources Ltd have made modifications to their originally planned drill hole program such that all drill holes which fell within 50 m of *Banksia sphaerocarpa* var. *dolichostyla* (T) plants have been either excised from the drilling program or moved such that they no longer fall within the 50 m buffer zone about any *Banksia sphaerocarpa* var. *dolichostyla* (T) plant. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999* respectively, cannot be destroyed, damaged or cleared without prior Ministerial approval. Impacts to *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1) and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Matiske Consulting Pty Ltd (Matiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1068.

1.1 Location and Scope of Project

Tenement M77/1068 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 105 km south of Southern Cross and 95 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located on the eastern boundary of the tenement, and together with a 50m buffer, constitute the search area (Figure 2).

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Matiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Matiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Matiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Matiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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*.

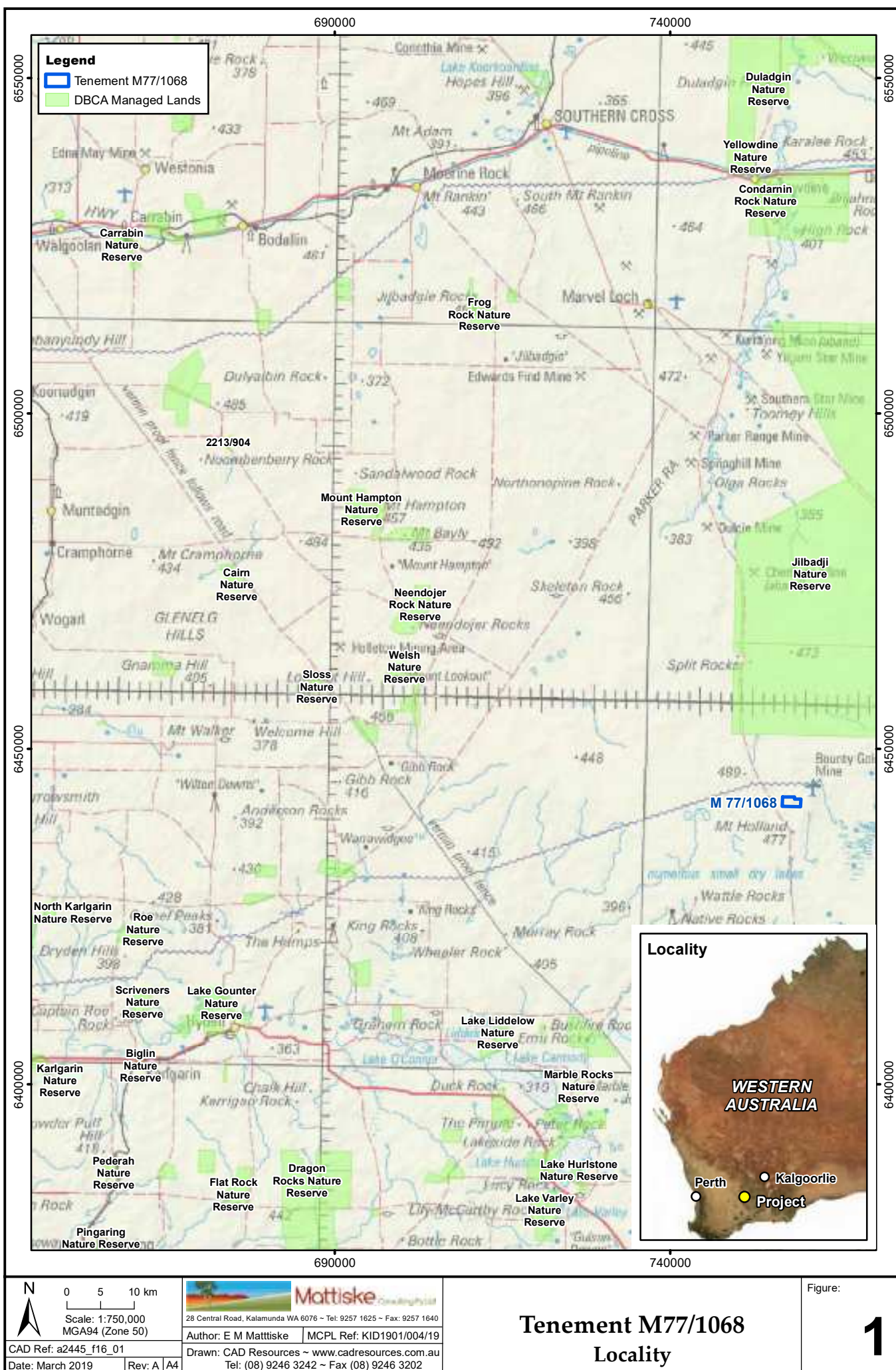
The following key Western Australian (state) legislation relevant to this survey include the:

- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; 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 A1-3.





N
 0 140 280 m
 Scale: 1:17,500
 MGA94 (Zone 50)
 CAD Ref: a2445_f16_02
 Date: June 2019

 **Mattiske** Consulting Pty Ltd
 28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
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 Drawn: CAD Resources ~ www.cadresources.com.au
 Tel: (08) 9246 3242 ~ Fax (08) 9246 3202

Tenement M77/1068

Figure:

2

2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the search area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the search area as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the search area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the search area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the search area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the search area.

3.2 Field Survey

The threatened and priority flora assessment of the search area was undertaken by four experienced botanists from Mattiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundary of the search area, as supplied by Kidman, are set out in Table 2.

Table 2: Coordinates delineating the M77/1068 mining tenement search area

WAY POINT	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
1	762749	6434982
2	763008	6434980
3	763009	6434777
4	762747	6434778

The search area was digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within the search area. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched was 11.882286 ha.

During the field survey, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundary of the planned conservation significant flora search area and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the search area, tenement M77/1068, and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/1068 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 95 km to the south west of the search area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

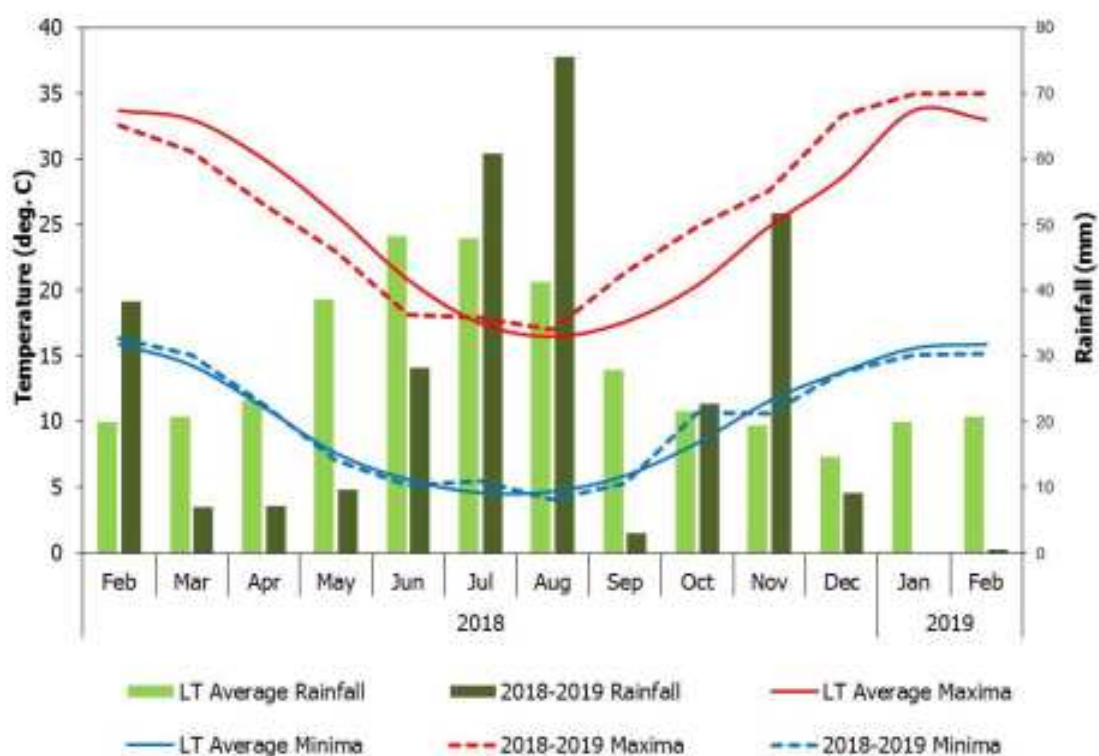


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The search area 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. Whilst the

search area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/1068

Previous vegetation mapping and targeted conservation significant flora surveys at the adjacent Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current search area suggests that similar vegetation communities and landforms may exist within the search area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the search area.

4.5 Priority Ecological Communities

Approximately the eastern third of tenement M77/1068, and hence, the entirety of the search area, 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 DBCA (2018c) (Figure 4). The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

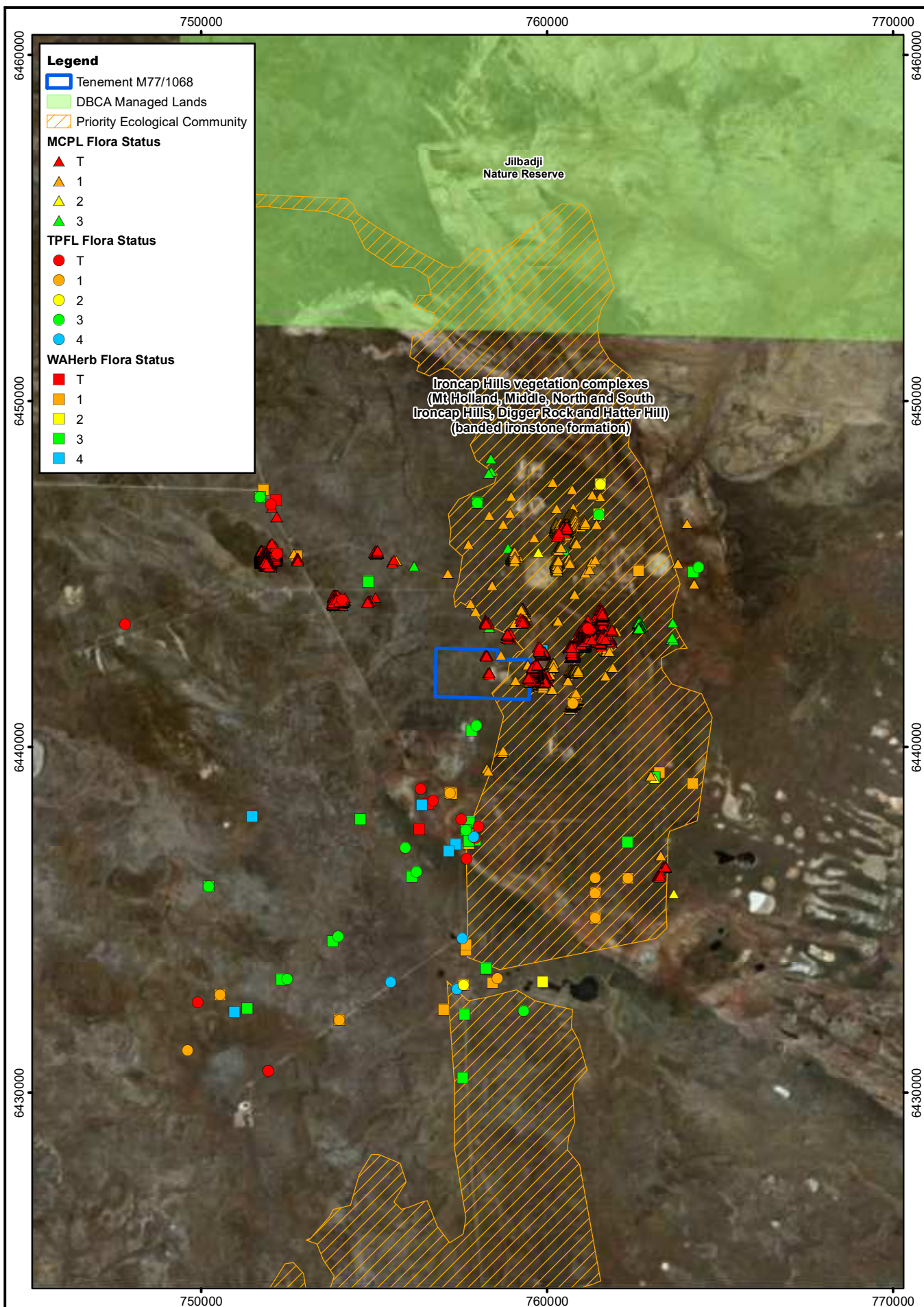
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 10 km north of the search area, along the Forresteria Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the search area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix B). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the search area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix B. Based on this assessment, two taxa, *Banksia sphaerocarpa* var. *dolichostyla* (T) and *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1), were ranked as being highly likely to be recorded in the field survey. Forty were ranked with a medium likelihood of being recorded in the search area, of which four are listed threatened taxa. The remaining 62 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Matiske Consulting (2017, 2018a, 2018b, 2018c) in surveys nearby to tenement M77/1068. These taxa and the likelihood of recording them in the current survey are: *Eremophila verticillata* (T) low, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Labichea rossii* (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 3). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone of tenement M77/1068 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/1068

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 search area (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix B were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).
Disturbances (fire, flood, accidental human intervention, etc.).	Not a constraint. The search area intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/1068 (continued)

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 search area was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the search area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	Not a constraint. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

One threatened flora taxon pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), *Banksia sphaerocarpa* subsp. *dolichostyla* (T), was recorded within the search area. *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). One plant was recorded within the search area. One priority flora taxon, as listed by WAH (1998-), *Microcorys* sp. Mt Holland (D. Angus DA2397) (P1), was recorded within the search area. Figures 5 illustrates the location of recorded threatened and priority taxa. In order to place these results in context, records of these threatened and priority flora within the tenement from previous surveys (Mattiske Consulting 2018a; 2018b; 2018c) which are nearby to the search area, and of external *Banksia sphaerocarpa* subsp. *dolichostyla* (T) populations intersecting the search area (Mattiske Consulting 2018b), are also illustrated. Table 4 presents the number of each threatened and priority taxa found in the impact area, the search area and the entire tenement, as well as the geographical locations where each of the threatened and priority taxa were recorded within the search area.

Table 4: Numbers of plants of each threatened and priority species recorded in the impact area, search area and tenement M77/1068, and their geographical location within the search area

SPECIES	IMPACT AREA	SEARCH AREA	TENEMENT	SEARCH AREA LOCATION (GDA94 ZONE 50J)	
				EASTING (mE)	NORTHING (mN)
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T)	0	1	36	759475	6441896
<i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1)	0	16	18	759483	6441891
				759471	6441893
				759480	6441904
				759477	6441904
				759461	6441915

* Tenement records are inclusive of search area records.

6. DISCUSSION

Kidman commissioned Mattiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/1068. The tenement is situated on and adjacent to the abandoned Bounty Mine site.

Priority Ecological Community

Desktop results indicate that the entirety of the search area is 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), (P3) (Figure 4). While botanists noted no banded ironstone formations or any form of outcropping within the search area, it was beyond the scope of this survey to make definitive assessment of the impact of the proposed exploration tracks and drill holes on the PEC. The vegetation survey by Mattiske Consulting (2018a) in the adjacent EGLP area also found little evidence of outcropping or of vegetation communities known to be associated with this. However, Mattiske Consulting (2018a) concluded that the absence of most of the communities listed for the PEC within the EGLP area, does not exclude them as being a component of the Ironcap Hills Vegetation Complexes (P3). Consequently, while it is unlikely that the proposed exploration tracks and drill holes would have major adverse effects in relation to the PEC, the use of cleared and disturbed areas from past mining activities can reduce impacts to any vegetation potentially associated with the PEC.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

One threatened flora taxon, *Banksia sphaerocarpa* subsp. *dolichostyla* (T), was recorded within the survey area. *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). One individual was recorded within the search area but outside the impact area. One priority flora taxon, *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1), was recorded within the search area. Both taxa were identified as having a high possibility of occurring in the search area based on results of the desktop survey (Appendix B).

The search and impact areas intersect the buffer of one known *Banksia sphaerocarpa* subsp. *dolichostyla* (T) population (Figures 5). Based on the results of this survey, it appears that the boundary of the population should be expanded westward, intersecting the impact area further. All locations of *Banksia sphaerocarpa* subsp. *dolichostyla* (T) plus a 50 m buffer around each must be avoided. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999* cannot be destroyed, damaged or cleared without prior Ministerial approval. Avoiding the population may involve omitting or changing the location of portions of the proposed exploration tracks and drill holes. An additional two populations occur in tenement M77/1068 (Figure 4), as based on records from a previous survey (Mattiske 2018b). Therefore, the relocating of proposed tracks and drill holes should entail further survey within the

tenement. Kidman Resources Ltd have made modifications to their originally planned drill hole program such that all drill holes which fell within 50 m of *Banksia sphaerocarpa* var. *dolichostyla* (T) plants have been either excised from the drilling program or moved such that they no longer fall within the 50 m buffer zone about any *Banksia sphaerocarpa* var. *dolichostyla* (T) plant. The proposed tracks and drill holes are unlikely to have an impact on *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1). Anecdotally in this survey, and formally in previous surveys, it was also noted outside the search area (Figure 4). As such, its locations should be avoided, and survey work in the remainder of the tenement considered to document its local distribution more thoroughly, should the impact area be altered.

Several taxa have been recorded in surveys in adjacent tenements (Mattiske Consulting 2017, 2018a, 2018b, 2018c) but not in the current search area. This is likely due to the search area not intersecting the preferred habitat of these taxa. However, their presence in the tenement as a whole cannot be discluded and further survey would be required should the proposed tracks and drill holes be moved to accommodate other significant taxa.

7. CONCLUSION AND RECOMMENDATIONS

Populations of *Banksia sphaerocarpa* var. *dolichostyla* (T) must be left undisturbed, with a minimum 50m buffer between populations of this taxon and any clearing. All taxa listed as threatened at the State and Federal levels under the *Biodiversity Conservation Act 2016* and the *Environment Protection and Biodiversity Conservation Act 1999* cannot be destroyed, damaged or cleared without prior Ministerial approval.

Impacts to *Microcorys* sp. Mt. Holland (D Angus DA2397) (P1) and the Ironcap Hills Vegetation Complexes (Mt Holland, Middle, North and South Ironcap Hills, Digger Rock and Hatter Hill) (P3) PEC are likely to be minimal but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area as well as to clarify the status and spatial extent of some of the flora species of interest within the tenement.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

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	planning, data analysis	N/A
Mr S. Ruoss	Experienced Ecologist	planning, fieldwork	FB62000031 / TFL-1819
Ms F. Riviera	Senior Botanist	data analysis, report preparation	N/A
Mr Z. Sims	Botanist	fieldwork, data analysis, report preparation	FB62000025
Mr B. Ellery	Experienced Botanist / Taxonomist	fieldwork, plant identification	FB62000024
Ms L. Taaffe	Botanist	fieldwork	FB62000021
Ms M. Van Wees	Botanist	fieldwork	N/A

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APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority's *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	High Preferred soil & habitat combination likely to occur within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Low Preferred soils not expected within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: White Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-).
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-).
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: White-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region. Identification may be difficult due to timing of survey.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	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
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP(Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: white with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	High Preferred soil & habitat combination known to occur within the survey area Records of this taxon exist within the adjacent EGLP (Matiske Consulting 2018a; Matiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Erect, narrow shrub to 1 high Flowers: Unknown Flowering period: September to October Soils: yellow-brown sandy soils. Sometimes with laterite or greenstone. IBRA Distribution: COO Florabase records: 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Ascending perennial herb to 0.2m high Flowers: Blue-purple/pink Flowering period: October Soils: Sandy clay. Margins of salt lakes IBRA Distribution: AVW, COO, MAL Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Caespitose perennial herb to 0.3m high Flowers: White-pink Flowering period: September-October Soils: Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. IBRA Distribution: COO Florabase records: 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	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 soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils are not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P1	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Yellow-red Flowering period: September Soils: Yellow sand. Plains IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017).
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017).
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: Simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c).
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: Cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: Yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: Yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: Yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16	Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-).
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: Yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: White Flowering period: unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-).
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: Unknown Flowering period: Unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: Brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: Red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: Pale pink Flowering period: Unknown Soils: light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: Yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-).

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Myriophyllum petraeum</i>	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 B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/1068 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area (DPaW 2007-).

THREATENED AND PRIORITY FLORA ASSESSMENT

TENEMENT M77/478

PROPOSED TRACKS AND DRILL HOLE LOCATIONS

Prepared By



Prepared For

Kidman Resources Limited

Date

July 2019



DOCUMENT STATUS				
DOCUMENT REFERENCE: KID1901/045/19				
VERSION	TYPE	AUTHOR/S	REVIEWER/S	DATE DISTRIBUTED
V1	Internal review	FR/ZS	EM	-
V2	Draft for client	FR/ZS	EM	17/04/2019
FINAL	Final report	FR	EM	18/04/2019
Rev.1	Final report with updated results data	DA	EM	17/07/2019



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LIST OF ABBREVIATIONS

BC Act:	<i>Biodiversity Conservation Act 2016 (WA)</i>
BOM:	Bureau of Meteorology
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)
EP Act:	<i>Environmental Protection Act 1986 (WA)</i>
EPA:	Environmental Protection Authority
EPBC Act:	<i>Environment Protection and Biodiversity Conservation Act 1999 (Commonwealth)</i>
IBRA:	Interim Biogeographical Regionalisation for Australia
Mattiske Consulting	Mattiske Consulting Pty Ltd
PEC:	Priority ecological community
TEC:	Threatened ecological community
WAH:	Western Australian Herbarium (PERTH)
WC Act:	<i>Wildlife Conservation Act 1950 (WA)</i>

EXECUTIVE SUMMARY

Kidman Resources Ltd commissioned Mattiske Consulting Pty Ltd in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/478, locality of Mount Holland. Together with a 50m buffer, this constituted the search area.

A desktop survey of the search area was undertaken utilising government databases and results of prior surveys in the Mount Holland area, in order to identify matters of botanical or conservation significance. A field survey was undertaken of the search area which entailed botanists traversing parallel transect lines spaced 20 m apart, recording locations of threatened and priority flora. The results of the field survey were subject to minor constraints, largely due to the timing of the survey and spacing of traverses.

No threatened flora taxa were recorded within the search area. One priority flora taxon, *Eutaxia lasiocalyx* (P2), was recorded within the search area. Its numbers in the impact and search area, are given below.

Summary of the priority flora recorded in the impact and search area of tenement M77/478

SPECIES	IMPACT AREA	50 m BUFFERED DRILL TRACKS & PADS AREA	WITHIN AREA SEARCHED
<i>Eutaxia lasiocalyx</i> (P2)	426	10645	15013

Impacts to *Eutaxia lasiocalyx* (P2) are not likely to be major but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area as well as to clarify the status and spatial extent of some of the flora species of interest within the tenement, including *Eutaxia lasiocalyx* (P2).

1. INTRODUCTION

Kidman Resources Limited (Kidman) proposes to develop lithium deposits associated with and adjacent to the abandoned Bounty Mine, Mount Holland. As such, Kidman commissioned Mattiske Consulting Pty Ltd (Mattiske Consulting) in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/478.

1.1 Location and Scope of Project

Tenement M77/478 is located in the locality of Mount Holland, Shire of Yilgarn, approximated 105 km south of Southern Cross and 80 km northeast of Hyden (Figure 1). The proposed tracks and drill holes are located on in the eastern half of the tenement, and together with a 50m buffer, constitute the search area (Figure 2).

The Mt Holland area has been the subject of a number of flora and vegetation surveys. These are summarized in Table 1.

Table 1: Previous flora and vegetation surveys in the Mount Holland area

SURVEY TYPE AND REFERENCE	SURVEY AREA	SURVEY DATE
Threatened and priority flora survey (Craig 2006)	Bounty Mine	2006
Targeted threatened flora survey (Native Vegetation Solutions 2016)	Early Grey Prospect	Sep 2016
Reconnaissance survey (Mattiske Consulting 2017)	Earl Grey, Irish Breakfast and Prince of Wales Prospects	Oct-Nov 2016
Vegetation survey (Western Wildlife 2017)	Areas surrounding the Early Grey Lithium Deposit	Jan 2017
Targeted <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Blueprint Environmental Strategies 2017)	Earl Grey Lithium Project	Apr 2017
Flora and vegetation survey (Mattiske Consulting 2018a)	Earl Grey Lithium Project	Sep 2017
Targeted threatened flora survey (Native Vegetation Solutions 2017)	Mount Holland area	2017
Targeted survey of significant flora, focusing on <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) survey (Mattiske Consulting 2018b)	Earl Grey Lithium Project	Jun 2018
Targeted survey of significant flora, focusing on <i>Microcorys</i> sp. Mt Holland (D. Angus DA2397) (P1) and reconnaissance survey of nature reserve (Mattiske Consulting 2018c)	Earl Grey Lithium Project Jilbadji Nature Reserve	Nov 2018

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.*

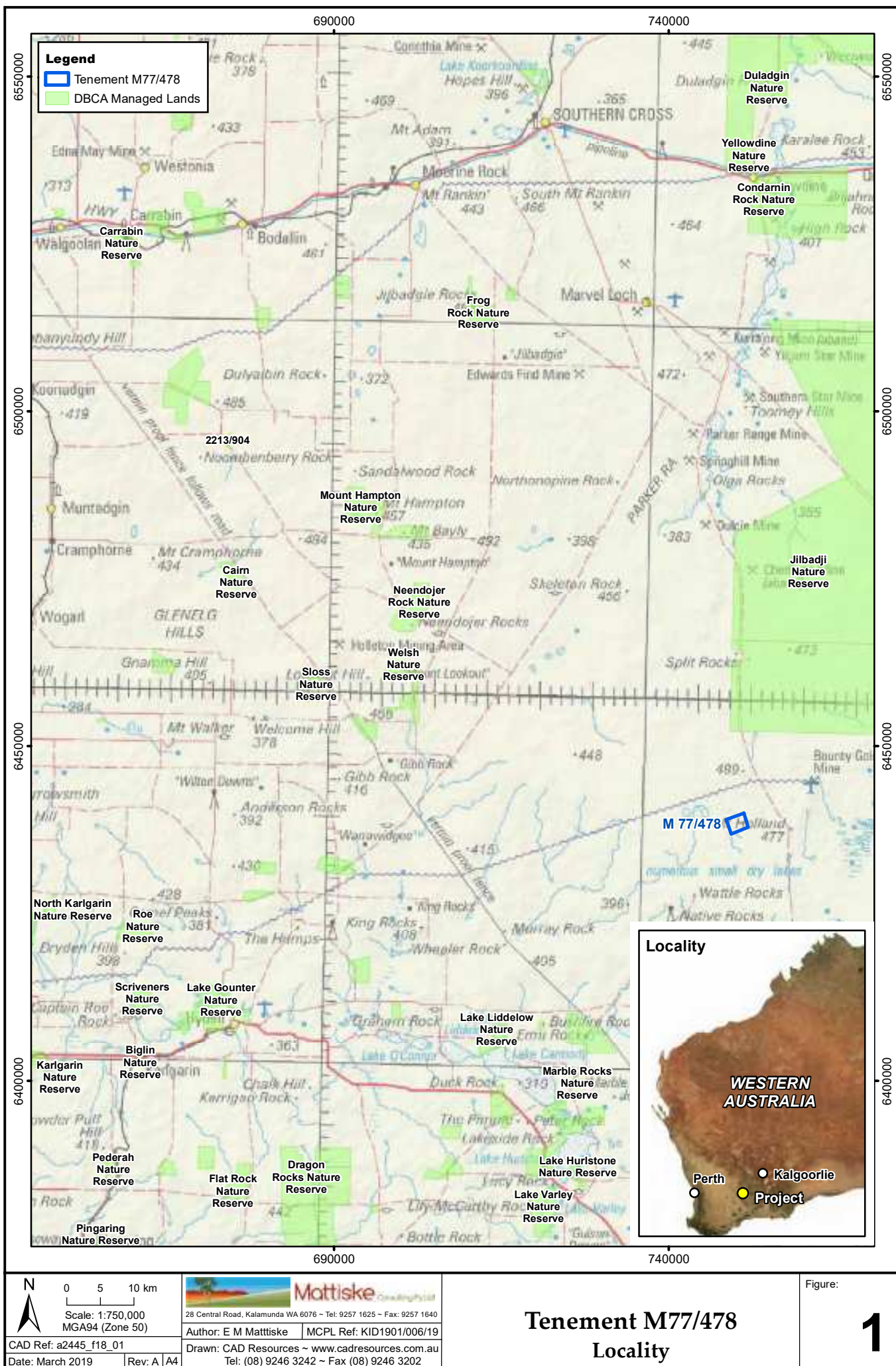
The following key Western Australian (state) legislation relevant to this survey include the:

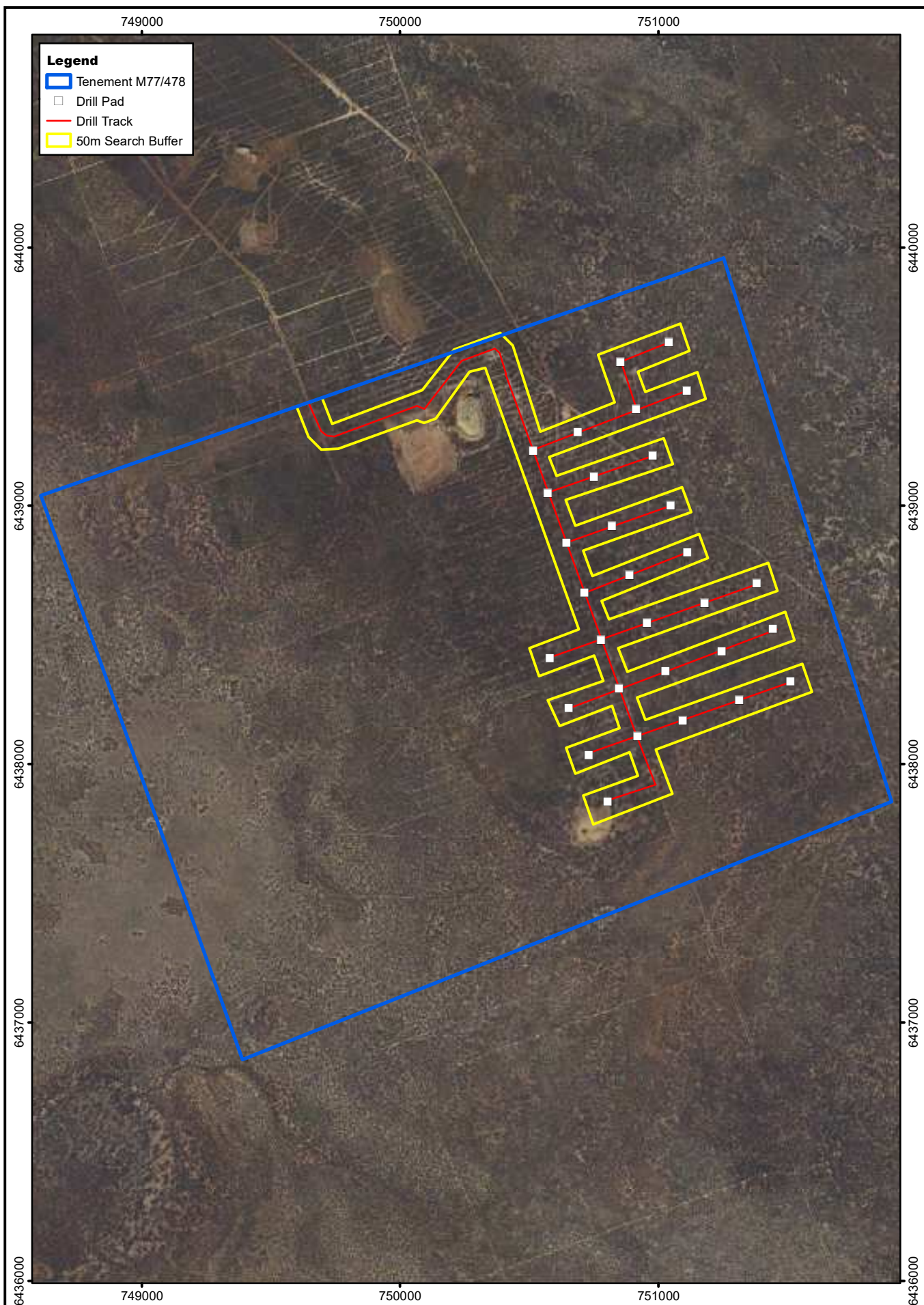
- *Biodiversity Conservation Act 2016* (BC Act);
- *Environmental Protection Act 1986* (EP Act);
- *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*; and
- *Wildlife Conservation Act 1999* (WC Act).

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 A1-3.





2. OBJECTIVES

The objective of this survey was to complete a targeted threatened and priority flora survey of the search area. Specifically, the objectives included:

- Undertake a desktop assessment to evaluate the botanical values of the search area as well as the broader Mount Holland area to identify any matters of botanical or conservation significance;
- Review previous literature and current databases associated with the Mt Holland area;
- 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;
- Collect and identify the vascular plant species present in the search area that are known to be, or are suspected to be, threatened or priority flora;
- Review the conservation status of the vascular plant species recorded by reference to current literature and current listings by the Department of Biodiversity, Conservation and Attractions (DBCA) and plant collections held at the Western Australian State Herbarium (WAH), and listed by the Department of the Environment (DotEE) under the *Environment Protection and Biodiversity Conservation Act 1999*;
- Evaluate the distributions of any conservation significant flora recorded within the search area and evaluate their local significance;
- Assess the impacts on threatened and priority flora of the proposed tracks and drill holes; and
- Prepare a report summarizing the findings.

3. METHODS

3.1 Desktop Survey

The desktop assessment for the search area was undertaken using the databases of the DBCA (2018a, 2018b, 2018c), the DotEE (2018a, 2018b, 2018c), the DPaW (DPaW 2007-) and the WAH (WAH 1998-), together with recent surveys in the Mt Holland area (Blueprint 2017; Craig 2006; Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c; Native Vegetation Solution 2016; Native Vegetation Solution 2017; Western Wildlife 2017). The parameters used for database searches were a 40 km radius 'by circle' at 757500 mE, 6437500 mN, (MGA94 zone 50).

These databases and surveys were utilised to identify the documented occurrence or likelihood of 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 or in the vicinity of the search area.

3.2 Field Survey

The threatened and priority flora assessment of the search area was undertaken by four experienced botanists from Matiske Consulting from 11th to 16th March 2019. All botanists held a valid license to collect flora for scientific purposes, issued under the *Biodiversity Conservation Act 2016*. Additionally, one botanist held a valid permit to take Declared Rare Flora, issued under the *Biodiversity Conservation Act 2016*. The field survey was completed to the standards set out in Technical Guidance – Flora and Vegetation Surveys for Environmental Impact Assessment (EPA 2016a) and Environmental Factor Guideline: Flora and Vegetation (EPA 2016b). The coordinates delineating the boundary of the search area, as supplied by Kidman, are set out in Table 2. This search area is shown in Figure 2.

Table 2: Coordinates delineating the M77/478 mining tenement search area

WAY POINT	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
1	749597	6439383
2	749696	6439418
3	749737	6439320
4	750090	6439447
5	750206	6439602
6	750363	6439661
7	750410	6439645
8	750434	6439622
9	750541	6439300
10	750829	6439418
11	750762	6439595
12	751082	6439715
13	751187	6439412
14	750991	6439341
15	751227	6438708
16	751425	6438781
17	751595	6438278
18	750988	6438056
19	751059	6437884
20	750752	6437765
21	750496	6438451
22	750695	6438518
23	750330	6439533
24	750268	6439519
25	750126	6439336
26	750108	6439325
27	750067	6439331
28	749764	6439223
29	749742	6439218
30	749700	6439224
31	749666.4	6439246
32	749648.9	6439270
33	749597.2	6439383

The search area traversed during the field survey was expanded to include the areas between each of the buffered drill line areas (Figure 2), as this was a more efficient method to ensure the target areas were thoroughly searched. The search area was digitally populated with parallel transect lines spaced 20 m apart. These lines were used as a guide for foot traverses within the search area. Botanists searched for threatened and priority flora between parallel transect lines, using a sinuous walk path to ensure the 20 m width between transect lines was searched as thoroughly as possible. The area searched was 88.000915 ha.

During the field survey, botanists had access to necessary data in the Esri iOS application, Collector for ArcGIS on Apple iPads (provided and maintained by CAD Resources). Data layers accessible in the field included the tenement boundary (Figure 2), the boundary of the planned conservation significant flora search area and associated 20 m spaced search transect lines, boundaries of proposed drill tracks and drill holes (Figure 2), high resolution areal imagery supplied by Kidman, and the locations of all known conservation significant flora from both historical and contemporary surveys in the search area, tenement M77/478, and adjacent tenements. The locations of any conservation significant flora were recorded with the Esri iOS application, Collector for ArcGIS. During the field survey botanists also had access to detailed descriptions of all conservation significant flora which may potentially be encountered.

3.3 Identification of collected plant specimens

Specimens of all conservation significant flora recorded in the field were collected for later confirmation by a taxonomist. All plant specimens collected during the field survey were dried and processed in accordance with the requirements of the WAH (1998-). All plant specimens were identified through comparisons with pressed specimens housed at the Mattiske Consulting herbarium and the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the WAH (1998-).

4. DESKTOP SURVEY RESULTS

4.1 Climate

Beard (1972) described the climate of the wider region in which tenement M77/478 is situated as being Mediterranean, with pronounced winter maximum rainfall and a long dry summer. Annual precipitation is approximately 330 mm, consistent with descriptions of a characteristically arid to semi-arid climate (Beard 1990, Cowan *et al.*, 2001). Hyden, located approximately 80 km to the south west of the search area, has an average annual rainfall of 343.9 mm (Bureau of Meteorology, BOM 2019). Rainfall and temperature data for Hyden is illustrated in Figure 3. The rainfall and temperature data displayed covers the period February 2018 to February 2019. Rainfall in the four months preceding the March 2019 survey was 61.30 mm, which is approximately 82% of the long term average for the corresponding period.

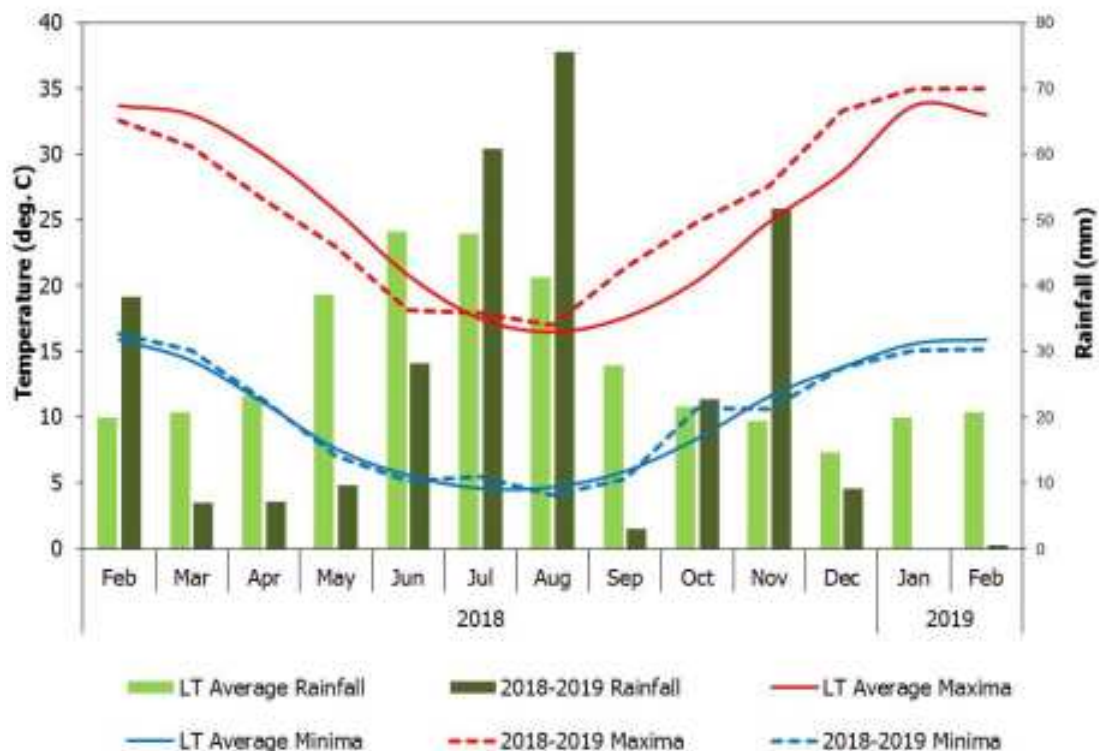


Figure 3: Rainfall and temperature data for Hyden (BOM station 10568)

Long term average rainfall and temperature data, together with monthly rainfall data for the period February 2018 to February 2019 are shown (BOM 2019).

4.2 IBRA7 Biogeographical Sub-regions

The Interim Biogeographic Regionalisation for Australia (IBRA) Version 7 delineated 89 bioregions and 419 sub-regions across Australia, based on a range of biotic and abiotic factors, including climate, vegetation, fauna, geology and landform (Thackway and Cresswell 1995; DotEE 2018d). The sub-regions represent more localised and homogenous geomorphological units in each bioregion.

The search area 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. Whilst the search area only intersects the COO2 (Southern Cross) sub-region, a description of the adjacent MAL2 (Western Mallee) and AW1 (Ancient Drainage) sub-regions are presented as it is reasonable to expect some degree of floristic commonality due to their close proximity.

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.

4.3 Vegetation Surveys in the vicinity of tenement M77/478

Previous vegetation mapping and targeted conservation significant flora surveys at the nearby Earl Grey Lithium Project (EGLP) (Mattiske Consulting 2017; Mattiske Consulting 2018a; Mattiske Consulting 2018b; Mattiske Consulting 2018c) were reviewed to provide localized botanical knowledge. The majority of the EGLP area 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 (Mattiske Consulting 2018a). Vegetation structure reported by Mattiske Consulting (2018a) was consistent with the historical mapping by Beard (1972) and more recent localised surveys (Craig 2006, Native Vegetation Solutions 2014, Convergent Minerals Limited 2014, Native Vegetation Solutions 2016). The close proximity of the EGLP area to the current search area suggests that similar vegetation communities and landforms may exist within the search area.

4.4 Threatened Ecological Communities

No TECs as listed by the DBCA (2018b) or pursuant to the *EPBC Act* and as listed by the DotEE (2018b), occur within or in the vicinity of the search area.

4.5 Priority Ecological Communities

No PECs as listed by the DBCA (2018b) occur within the search area. 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 DBCA (2018c), occurs approximately 5 km to the west of the search area (Figure 4). The principle threat to the PEC is mining (DBCA 2018c).

4.6 Nature Reserves

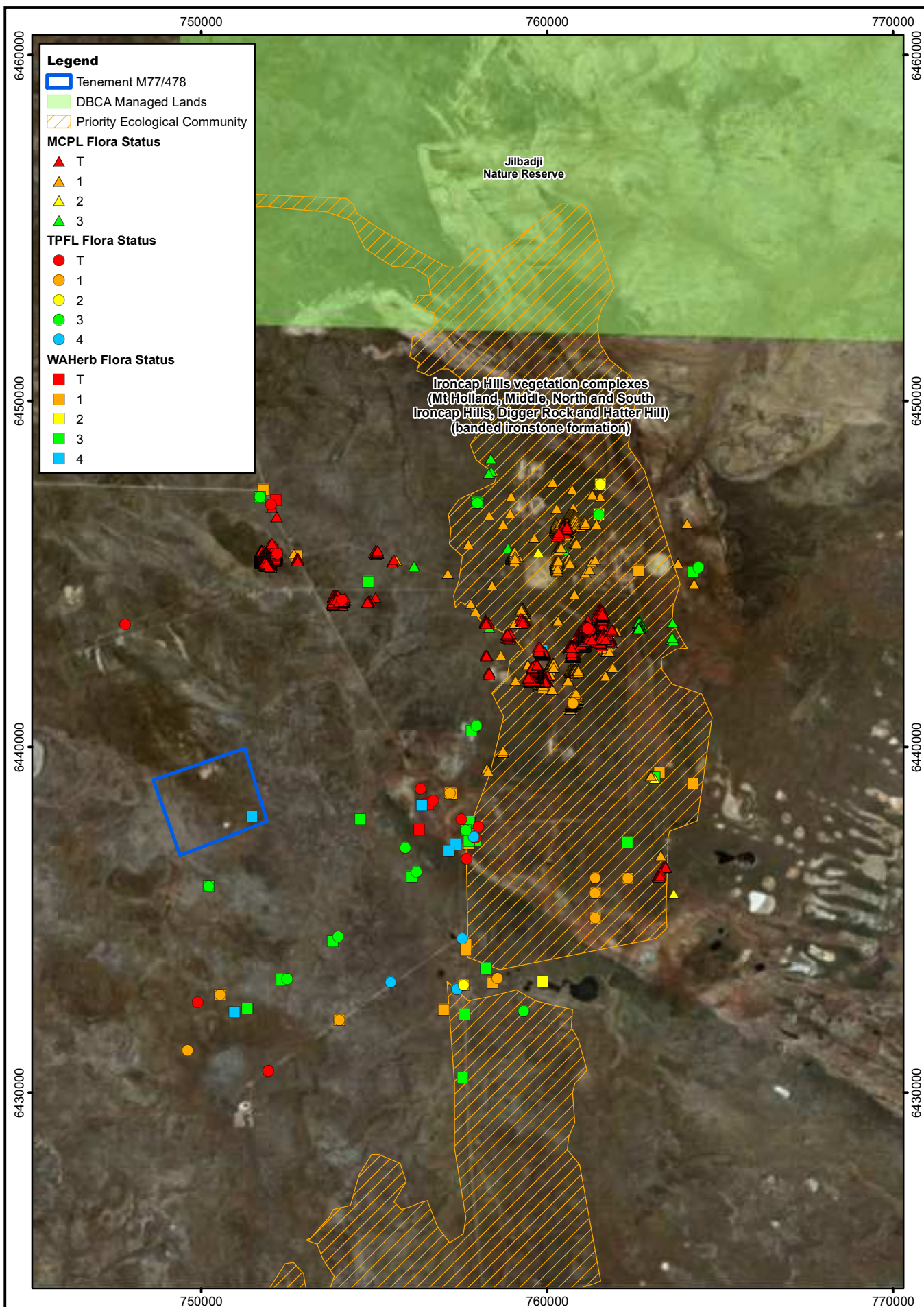
Jilbadji Nature Reserve (Reserve C 24049) is situated approximately 10 km north of the search area, along the Forrestania Southern Cross Road, west of Barker Lake, 20 km east-south-east of Marvel Loch. The Reserve is on the Register of the National Estate and was registered in 1978 (DotEE n.d.). This north-eastern part of the Wheatbelt region is rich in endemic species at a national scale (DotEE n.d.). Given the extent of clearing in the Wheatbelt for dryland agriculture, the 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.

4.7 Threatened and Priority Flora

The combined search of records from prior surveys and government databases resulted in 105 conservation significant taxa which occur or have the potential to occur in the search area: one presumed extinct taxon, nine Threatened taxa, and 95 Priority taxa (Appendix B). The priority taxa comprised 29 Priority 1, 12 Priority 2, 37 Priority 3 and 17 Priority 4 taxa. The distribution of these records is illustrated in Figure 4.

An assessment of the likelihood of recording any of the listed threatened and priority taxa within the search area, based on factors including past survey records, known soil type, topography and distribution, is given in Appendix B. Based on this assessment, no taxa were ranked as being highly likely to be recorded in the field survey. Forty five were ranked with a medium likelihood of being recorded in the search area, of which five are listed threatened taxa. The remaining 59 taxa were ranked with a low likelihood of being recorded, and the single taxon presumed to be extinct ranked as unlikely.

Several taxa have been previously recorded by Mattiske Consulting (2017, 2018a, 2018b, 2018c) in surveys nearby to tenement M77/478. These taxa and the likelihood of recording them in the current survey are: *Banksia sphaerocarpa* var. *dolichostyla* (T) medium, *Eremophila verticillata* (T) medium, *Acacia* sp. Mt Holland (B. Ellery BE1147) (P1) medium, *Brachyloma stenolobum* (P1) medium, *Grevillea lissopleura* (P1) medium, *Grevillea marriottii* (P1) medium, *Labichea rossii* (P1) medium, *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1) medium, *Daviesia sarissa* subsp. *redacta* (P2) medium, *Eutaxia lasiocalyx* (P2) medium, *Olearia lanciniifolia* (P2) medium, *Acacia undosa* (P3) medium, *Chorizema circinale* (P3) medium, *Hakea pendens* (P3) medium, *Teucrium* sp. dwarf (R. Davis 8813) (P3) medium, and *Verticordia stenopetala* (P3) medium.



5. FIELD SURVEY RESULTS

5.1 Field Survey Coverage, Limitations and Constraints

The coverage of the search area, based on foot traverses, is illustrated in Figure 5. An assessment of the survey against a range of factors which may have had an impact on its outcomes is presented below (Table 3). Based on this assessment, the survey of the proposed drill tracks, drill holes, and associated 50 m buffer zone of tenement M77/478 has been subject to several minor constraints, likely affecting the thoroughness of the survey and the conclusions which have been reached.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/478

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 search area (Mattiske Consulting 2017; 2018; 2018c; other consultants' reports) and government databases provided an appropriate level of information for this survey.
Scope (i.e. what life forms, etc., were sampled).	Minor constraint. The 105 conservation significant species listed in Appendix B were the focus of this survey. Some taxa were not readily identifiable in the field or indeed present due to survey timing (discussed below).
Proportion of flora collected and identified (based on sampling, timing and intensity).	Minor constraint. The survey was not undertaken in the recommended spring period (see below). While large and conspicuous target taxa such as <i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i> (T) and <i>Microcorys</i> sp. Mt Holland (D. Angus DA2379) (P1) were identifiable in the field, smaller and more cryptic priority species were often sterile. This not only rendered them more difficult to recognise in the field but more difficult to identify as collected specimens also.
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed).	Minor constraint. The 20 m spacing of the foot traverses, while adequate for large and conspicuous species, may have been too wide for the detection of sterile, smaller, and cryptic conservation significant taxa (e.g. <i>Acacia undosa</i> (P3), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Eremophila verticillata</i> (T)).
Timing, weather, season, cycle.	Minor constraint. The EPA (2016a) recommends that flora and vegetation surveys in the Coolgardie region should be undertaken after the main rainfall period of the winter months when peak species richness and flowering occurs. Further, rainfall in the four months preceding the survey was below average (Figure 3). The majority of flora present during the field survey were not flowering or had undergone senescence. Consequently, all specimens collected were either sterile or had only partial remnants of old fruits or flowers. Several perennial conservation significant taxa are not readily identifiable without flowers and/or fruit (e.g. <i>Dampiera orchardii</i> (P2), <i>Daviesia sarissa</i> subsp. <i>redacta</i> (P2), <i>Stylidium sejunctum</i> (P3), <i>Verticordia gracilis</i> (P3), <i>Verticordia stenopetala</i> (P3)). Several annual conservation significant taxa would not have been present at this time of the year (e.g. <i>Paragoodia crenulata</i> (T)).
Disturbances (fire, flood, accidental human intervention, etc.).	Not a constraint. The search area intersected disturbance from past mining activities but given its historical nature, it is unlikely to have affected the presence or otherwise of targeted flora in this survey.

Table 3: Potential survey limitations for threatened and priority flora in the search area of tenement M77/478 (continued)

POTENTIAL SURVEY LIMITATION	IMPACT ON SURVEY
Intensity (in retrospect, was the intensity adequate).	Minor constraint. The intensity of the survey effort, 20 m spaced transects, was considered to be less than adequate for the reasons described above (smaller and less readily identified conservation significant flora).
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 search area was via a range of tracks that traversed the length and width of the prospect. These provided excellent access to the entirety of the search area.
Experience levels (e.g. degree of expertise in plant identification to taxon level).	Not a constraint. Three of the four botanists undertaking the survey were familiar with the species being searched for. The fourth botanist was either physically shown specimens of the taxa being searched for prior to the survey, or were instructed to consult with the more experienced botanists in the field where unusual taxa were encountered. Three of the four botanists undertaking the survey had participated in previous surveys in adjacent tenements.

5.2 Threatened and Priority Flora

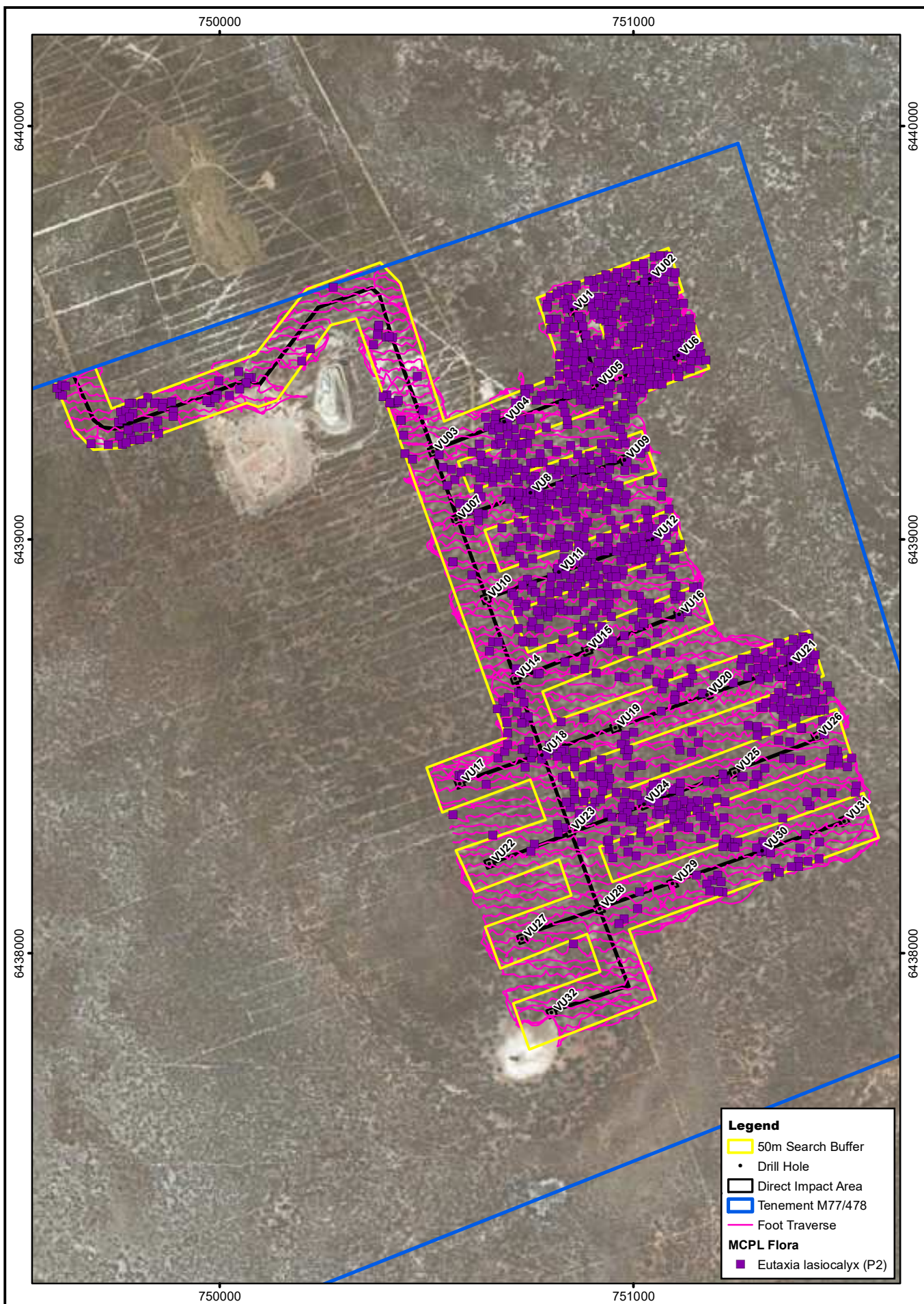
No threatened flora taxa pursuant to Division 1, Subdivision 2 of the *Biodiversity Conservation Act 2016* and as listed by the WAH (1998-), were recorded within the search area. One priority flora taxon, as listed by WAH (1998-), *Eutaxia lasiocalyx* (P2), was recorded within the search area. Figure 5 illustrates the location of the records made, including 4368 records made in the immediately outside the search area. Table 4 presents the number of *Eutaxia lasiocalyx* (P2) found in the impact and search area. Appendix C gives the geographical locations of records within the search area.

Table 4: Numbers of plants of *Eutaxia lasiocalyx* (P2) recorded in the impact area and search area of tenement M77/478

SPECIES	IMPACT AREA	50 m BUFFERED DRILL TRACKS & PADS AREA ¹	WITHIN SEARCH AREA ²
<i>Eutaxia lasiocalyx</i> (P2)	426	10645	15013

1: plants in 50m search buffer area (Figures 2 and 5)

2: plants recorded across foot traverses both inside and outside the 50m buffer area (Figure 5)



Legend

- 50m Search Buffer
- Drill Hole
- Direct Impact Area
- Tenement M77/478
- Foot Traverse
- MCPL Flora**
- Eutaxia lasiocalyx (P2)

 0 100 200 m Scale: 1:12,500 MGA94 (Zone 50)	 28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640	
	Author: E M Mattiske Drawn: CAD Resources ~ www.cadresources.com.au Tel: (08) 9246 3242 ~ Fax (08) 9246 3202	MCPL Ref: KID1901/006/19 CAD Ref: a2445_f18_04 Date: April 2019 Rev: A A4

Kidman Resources Limited Foot Traverses & Significant Flora Tenement M77/478	Figure: 5

6. DISCUSSION

Kidman commissioned Matiske Consulting in March 2019 to undertake a threatened and priority flora survey of proposed exploration tracks and drill hole locations in mining tenement M77/478. The tenement is nearby the abandoned Bounty Mine site.

Constraints to Field Survey

Many of the targeted taxa (e.g. *Banksia sphaerocarpa* var. *dolichostyla* (T), *Microcorys* sp. Mt Holland (D. Angus DA 2397) (P1)) were large and conspicuous, allowing for confident identification and recording in the field. However, the field survey was conducted outside the recommended post-winter rainfall period, and rainfall in the months preceding the survey was also below average (Figure 3). Hence, the majority of flora were sterile. These factors potentially limited field sightings and identification, and the quality of specimens collected for herbarium identification of smaller and more cryptic species. The spacing of the traverses was also perhaps too wide to allow small and cryptic species to be recorded. A review of the potential constraints associated with the survey (Table 2) determined that the survey was subject to minor constraints that could potentially adversely affect the outcome of the surveys and the conclusions formed from the results. Consequently, it is reasonable to conclude that an additional survey in spring would be desirable.

Threatened and Priority flora

No threatened flora taxa were recorded within the search area. One priority flora taxon, *Eutaxia lasiocalyx* (P2), was recorded within the search area. This taxon was identified as having a medium possibility of occurring in the search area based on results of the desktop survey (Appendix B).

Given the large numbers of *Eutaxia lasiocalyx* (P2) found outside of the impact areas, both within the search area and in its immediate vicinity, the proposed tracks and drill holes are unlikely to have a major local impact on the taxon. However, as with all priority flora, its current locations should be avoided if possible. Survey work in the remainder of the tenement should be considered to document its local distribution more thoroughly, particularly given the high density of records, should the impact area be altered.

Several taxa have been recorded in surveys in nearby tenements (Matiske Consulting 2017, 2018a, 2018b, 2018c) but not in the current search area. This is likely due to the search area not intersecting the preferred habitat of these taxa. However, their presence in the tenement as a whole cannot be discluded and further survey would be required should the proposed tracks and drill holes be moved to accommodate *Eutaxia lasiocalyx* (P2).

7. CONCLUSION AND RECOMMENDATIONS

Impacts to *Eutaxia lasiocalyx* (P2) and are not likely to be major but existing disturbed areas should be prioritized for use for exploration purposes in order to minimize impacts.

An additional survey in spring is recommended in order to better confirm the occurrence or otherwise of additional conservation significant flora within the impact area as well as to clarify the status and spatial extent of some of the flora species of interest within the tenement.

8. ACKNOWLEDGEMENTS

The authors would like to thank Mr M. Hislop of the Western Australian Herbarium for his assistance in identifying a number of the flora collected during the course of the field survey work.

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	planning, data analysis	N/A
Mr S. Ruoss	Experienced Ecologist	planning, fieldwork	FB62000031 / TFL-1819
Ms F. Riviera	Senior Botanist	data analysis, report preparation	N/A
Mr Z. Sims	Botanist	fieldwork, data analysis, report preparation	FB62000025
Mr B. Ellery	Experienced Botanist / Taxonomist	fieldwork, plant identification	FB62000024
Ms L. Taaffe	Botanist	fieldwork	FB62000021
Ms M. Van Wees	Botanist	fieldwork	N/A

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Wildlife Conservation Act 1950

APPENDIX A1: THREATENED AND PRIORITY FLORA DEFINITIONS

Under section 179 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), **threatened flora** are categorised as extinct, extinct in the wild, critically endangered, endangered, vulnerable and conservation dependent (Table A1.1).

Table A1.1 Federal definition of threatened flora species

Note: Adapted from section 179 of the EPBC Act.

CODE	CATEGORY	DEFINITION
Ex	Extinct	Species which at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
ExW	Extinct in the Wild	Species which is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
CE	Critically Endangered	Species which at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
E	Endangered	Species which is not critically endangered and it is facing a very high risk of extinction in the wild in the immediate or near future, as determined in accordance with the prescribed criteria.
V	Vulnerable	Species which is not critically endangered or endangered and is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
CD	Conservation Dependent	Species which at a particular time if, at that time, the species is the focus of a specific conservation program, the cessation of which would result in the species becoming vulnerable, endangered or critically endangered within a period of 5 years.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) the protection of flora that is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future in Western Australia under Part 10 (Division 2).

Threatened flora are listed in the *Wildlife Conservation (Rare Flora) Notice 2018* (under Part 2, Division 1, Subdivision 2 of the BC Act; DBCA 2018a) and are categorised under Schedules 1-3. A flora species is defined as **threatened** if it is facing an extremely high risk of extinction in the wild in the immediate, near or medium-term future, pursuant to sections 20, 21 and 22 of the BC Act. Threatened species are categorised as critically endangered, endangered, and vulnerable (Table A1.2).

Table A1.2 State definition of threatened flora species

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act);

CODE	CATEGORY	DEFINITION
CR	Critically endangered	Species considered to be facing an extremely high risk of becoming extinct in the wild (listed under Schedule 1 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
EN	Endangered	Species considered to be facing a very high risk of becoming extinct in the wild (listed under Schedule 2 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).
VU	Vulnerable	Species considered to be facing a high risk of becoming extinct in the wild (listed under Schedule 3 of the <i>Wildlife Conservation (Rare Flora) Notice 2018</i>).

Priority flora species are defined as “possibly threatened species that do not meet the survey criteria, or are otherwise data deficient” or species that are “adequately known, are rare but not threatened, meet criteria for near threatened” or “have recently been removed from the threatened species list for other than taxonomic reasons” (DBCA 2019). Priority species are not afforded any additional protection under state or federal legislation, however are considered significant under the Environmental Protection Authority’s *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a). The Department of Biodiversity, Conservation and Attractions categorises priority flora into four categories: Priority 1; Priority 2, Priority 3 and Priority 4 (Table A1.3).

Table A1.3: State definition of priority flora species

Note: Adapted from DBCA (2019).

CODE	CATEGORY	DEFINITION
P1	Priority 1: Poorly-known species	Known from one or a few locations (< 5) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation; or are otherwise under threat of habitat destruction or degradation. In urgent need of further survey.
P2	Priority 2: Poorly-known species	Known from one or a few locations (< 5). Some occurrences are on lands managed primarily for nature conservation. In urgent need of further survey.
P3	Priority 3: Poorly-known species	Known from several locations and the species does not appear to be under imminent threat; or from few but widespread locations with either a large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. In need of further survey.
P4	Priority 4: Rare, Near Threatened, and other species in need of monitoring	a) Rare - Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These species are usually represented on conservation lands. b) Near Threatened - Species that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. c) Other - Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

APPENDIX A2: THREATENED AND PRIORITY ECOLOGICAL COMMUNITY DEFINITIONS

Under section 181 of the EPBC Act, **threatened ecological communities** are categorised as critically endangered, endangered and vulnerable (Table A2.1).

Table A2.1 Federal definition of threatened ecological communities

Note: Adapted from section 181 and section 182 of the EPBC Act.

CATEGORY	DEFINITION
Critically Endangered	If, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future.
Endangered	If, at that time, it is not critically endangered and is facing a very high risk of extinction in the wild in the near future.
Vulnerable	If, at that time, it is not critically endangered or endangered, and is facing a high risk of extinction in the wild in the medium-term future.

The *Biodiversity Conservation Act 2016* (BC Act) provides for (amongst other things) some protection of ecological communities at risk of collapse in Western Australia under Part 3 (Division 2).

Threatened ecological communities (TECs) are listed in the *List of Threatened Ecological Communities endorsed by the Western Australian Minister for Environment (28 June 2018)* (under Part 2, Division 2, Subdivision 1 of the BC Act; DBCA 2018b). An ecological community is defined as **threatened** if it is facing an extremely high risk of collapse in the immediate, near or medium-term future, pursuant to sections 28, 29 and 30 of the BC Act. Threatened ecological communities are categorised as critically endangered, endangered, and vulnerable (Table A2.2). Some of these TECs are also endorsed by the Federal Minister as threatened, and some of these are listed under the EPBC Act and therefore afforded legislative protection at the Commonwealth level.

Table A2.2 State definition of threatened ecological communities

Note: Adapted from *Biodiversity Conservation Act 2016* (BC Act).

CODE	CATEGORY	DEFINITION
CR	Critically Endangered	An ecological community will be listed as CR when it has been adequately surveyed and is found to be facing an extremely high risk of total destruction in the immediate future, meeting any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 90% and is either continuing to decline with total destruction imminent, or is unlikely to be substantially rehabilitated in the immediate future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the immediate future.
EN	Endangered	An ecological community will be listed as EN when it has been adequately surveyed and is not CR, but is facing a very high risk of total destruction in the near future. The ecological community must meet any one or more of the following criteria: 1. The estimated geographic range and distribution has been reduced by at least 70% and is either continuing to decline with total destruction imminent in the short term future, or is unlikely to be substantially rehabilitated in the short term future due to modification; 2. The current distribution is limited i.e. highly restricted, having very few small or isolated occurrences, or covering a small area; or 3. The ecological community is highly modified with potential of being rehabilitated in the short term future.
VU	Vulnerable	An ecological community will be listed as VU when it has been adequately surveyed and is not Critically Endangered or Endangered but is facing high risk of total destruction in the medium to long term future. The ecological community must meet any one or more of the following criteria: 1. The ecological community exists largely as modified occurrences that are likely to be able to be substantially restored or rehabilitated; 2. The ecological community may already be modified and would be vulnerable to threatening process, and restricted in range or distribution; or 3. The ecological community may be widespread but has potential to move to a higher threat category due to existing or impending threatening processes.

Priority ecological communities (PECs) are defined as possible threatened ecological communities that do not meet the stringent survey criteria for the assessment of threatened ecological communities, and are listed by the Department of Biodiversity, Conservation and Attractions (2018c) in the *Priority Ecological Communities for Western Australia – Version 28 (17 January 2019)*. Similarly to priority flora, PECs are not afforded legislative protection, however are considered significant under the Environmental Protection Authority's (2016a) *Environmental Factor Guideline: Flora and Vegetation*. The Department of Biodiversity, Conservation and Attractions categorises priority ecological communities into five categories: Priority 1; Priority 2, Priority 3, Priority 4 and Priority 5 (Table A2.3).

Table A2.3 State definition of priority ecological communities

Note: Adapted from Department of Environment and Conservation (2013).

CODE	CATEGORY	DEFINITION
P1	Priority 1 (Poorly known ecological communities)	Ecological communities that are known from very few, restricted occurrences (generally ≤ 5 occurrences or a total area of ≤ 100 ha). Most of these occurrences are not actively managed for conservation (e.g. located within agricultural or pastoral lands, urban areas, or active mineral leases) and for which immediate threats exist.
P2	Priority 2 (Poorly known ecological communities)	Communities that are known from few small occurrences (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat of destruction or degradation.
P3	Priority 3 (Poorly known ecological communities)	1. Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation; 2. Communities known from a few widespread occurrences, which are either large or within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat; or 3. Communities made up of large, and/or widespread occurrences, that may or not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing and inappropriate fire regimes.
P4	Priority 4 (Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring)	1. Rare – Communities known from few occurrences that are considered to have been adequately surveyed, sufficient knowledge is available, and are considered not to be currently threatened. 2. Near Threatened – Communities considered to have been adequately surveyed and do not qualify for Conservation Dependent, but are close to qualifying for Vulnerable. 3. Communities that have been removed from the list of threatened communities during the past five years.
P5	Priority 5 (Conservation Dependent ecological communities)	Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

APPENDIX A3: OTHER DEFINITIONS

Environmentally sensitive areas

Environmentally sensitive areas are declared by the State Minister under section 51B of the *Environmental Protection Act 1986* (EP Act) and are listed in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*, gazetted 8 April 2005. Specific environmentally sensitive areas relevant to this report include: a defined wetland and the area within 50 metres of the wetland; the area covered by vegetation within 50 metres of rare flora; the area covered by a threatened ecological community; a Bush Forever site – further areas and information are described in the *Environmental Protection (Environmentally Sensitive Areas) Notice 2005*.

Conservation significant flora

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), flora may be considered significant for a range of reasons, including, but not limited to the following:

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

Conservation significant vegetation

Under the *Environmental Factor Guideline: Flora and Vegetation* (EPA 2016a), vegetation may be considered significant for a range of reasons, including, but not limited to the following:

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

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/478 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Thomasia gardneri</i>	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 (WAH 1998-). Records of this species are from the Mt Holland area.
<i>Acacia lanuginophylla</i>	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 Preferred soil & habitat combination not expected within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Acacia lobulata</i>	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: AVW, COO Florabase records: 25	Low Preferred soil & habitat combination not expected within survey area. Majority of records occur 200 km from the survey area (DPaW 2007-).
<i>Banksia sphaerocarpa</i> var. <i>dolichostyla</i>	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: 40	Medium Preferred soil & habitat combination may occur within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Boronia revoluta</i>	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 not expected to be present within survey area.
<i>Eremophila verticillata</i>	Scrophulariaceae	T	E	Habit: Low spreading shrub to 0.8 m high and 1 m wide Flowers: Purple-violet Flowering period: November - December Soils: Clay loam, loam over limestone IBRA Distribution: MAL Florabase records: 11	Medium Preferred soils may occur within survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Eucalyptus steedmanii</i>	Myrtaceae	T	V	Habit: Smooth-barked tree, 2 – 8 (12) m high Flowers: White Flowering period: January - March Soils: Gravelly loam over ironstone, sand; low hills, undulating plains IBRA Distribution: COO, ESP, MAL Florabase records: 41	Medium Preferred soil & habitat combination may occur within survey area. A record of this taxon exists approximately 15 km south-west of the survey area (DPaW 2007-).
<i>Isopogon robustus</i>	Proteaceae	T	CE	Habit: Shrub, to 1.5m high Flowers: Pink Flowering period: October Soils: Skeletal grey sandy loam, laterite. Ridges. IBRA Distribution: AVW Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 50km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Paragoodia crenulata</i>	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	Medium Preferred soil & habitat combination may be occur survey area. Records of this taxon exist within 30 km of the survey area (DPaW 2007-).
<i>Roycea pycnophylloides</i>	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: AVW, 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 (WAH 1998-).
<i>Acacia</i> sp. Mt Holland (B. Ellery BE1147)	Fabaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Undescribed Flowering period: Unknown Soils: Orange brown sandy clay soils on flats and slopes. IBRA Distribution: COO Florabase records: 1	Medium Preferred soil and landforms likely to occur within the survey area. Records of this taxon exist in the adjacent Earl Grey Lithium Project (Mattiske Consulting 2018c).
<i>Austrostipa</i> sp. Carlingup Road (S. Kern & R. Jasper LCH 18459)	Poaceae	P1	-	Habit: Grass to approximately 40 cm high Flowers: Undescribed Flowering period: Unknown Soils: Potentially clay loam soils in mallee or eucalypt woodland IBRA Distribution: COO, ESP, MAL Florabase records: 16	Low Preferred vegetation and soils may occur within survey area, but existing record of this taxon are sparse within the Coolgardie bioregion. Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/478 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Austrostipa</i> sp. Mt Holland (W.A. Thompson & J. Allen 948)	Poaceae	P1		Habit: Grass to approximately 0.2 m high (unconfirmed) Flowers: Brown Flowering period: Unknown Soils: Brown-red ironstone gravel. Breakaways, outcrops IBRA Distribution: COO Florabase records: 2	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to timing of the survey.
<i>Baeckea</i> sp. Crossroads (B.L. Rye & M.E. Trudgen 241186)	Myrtaceae	P1	-	Habit: Spreading shrub to 0.8m high Flowers: Red and white, occasionally blue (unconfirmed) Flowering period: November Soils: Silt and sand over laterite, breakaways (unconfirmed) IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> 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. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Baeckea</i> sp. Lake Cronin (K.R. Newbey 9191)	Myrtaceae	P1	-	Habit: Spreading shrub, height unknown Flowers: White-pink Flowering period: October Soils: Well-drained gravelly sands, undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Baeckea</i> sp. North Ironcap (R.J. Cranfield 10580)	Myrtaceae	P1	-	Habit: Erect, open shrub to 0.4m high Flowers: White-pink Flowering period: October Soils: Red clay, gently undulating sandplains IBRA Distribution: COO Florabase records: 5	Low Preferred soil & habitat combination not expected within the survey area.
<i>Baeckea</i> sp. Sheoaks Rocks (M.E. Trudgen MET5452)	Myrtaceae	P1	-	Habit: Open shrub to 0.3m high Flowers: White-pink Flowering period: November Soils: Yellow-brown silty sand on mid and upper gentle slopes IBRA Distribution: MAL Florabase records: 4	Low Preferred soil & habitat combination not expected within the survey area.
<i>Brachyloma nguba</i>	Ericaceae	P1	-	Habit: Erect, compact to spreading, mid-dense shrub to 0.8 high Flowers: Red Flowering period: April-May Soils: White to brown sandy clay, shallow sandy loam. Flat plains IBRA Distribution: MAL Florabase records: 11	Medium Preferred soil and landform combination may occur within the survey area. Records of this taxon are restricted to the Mallee IBRA region (DPaW 2007-).
<i>Brachyloma stenolobum</i>	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: 4	Medium Preferred soils & habitat combination not expected within the survey area One record of this taxon exists within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera scaevolina</i>	Goodeniaceae	P1	-	Habit: Erect to ascending perennial herb or shrub to 0.5m high Flowers: Blue-white Flowering period: September-November Soils: Sandy and gravelly soils, granite IBRA Distribution: AVW, MAL Florabase records: 16	Low Preferred soils/parent material not expected within the survey area. No records of this taxon occur within the Coolgardie IBRA region.
<i>Dicrastylis capitellata</i>	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 & habitat combination may occur within the survey area.
<i>Drummondita wilsonii</i>	Rutaceae	P1	-	Habit: Erect shrub to 1m high Flowers: Red, green and pink Flowering period: June-September Soils: Gravelly sand IBRA Distribution: AVW Florabase records: 9	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Eremophila lucida</i>	Scrophulariaceae	P1	-	Habit: Shrub to 1.8m high Flowers: Cream-yellow Flowering period: October Soils: Sandy loam. Adjacent to samphire communities and granite outcrops IBRA Distribution: COO Florabase records: 18	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
<i>Eutaxia</i> sp. North Ironcap (P. Armstrong PA 06/898)	Fabaceae	P1	-	Habit: Low shrub to 0.2m high Flowers: Unknown Flowering period: Unknown Soils: Red sandy clay. Undulating plains IBRA Distribution: COO Florabase records: 1	Low Preferred soil & habitat combination not expected within survey area. Insufficient information exists on this taxon.
<i>Gastrolobium tenue</i>	Fabaceae	P1	-	Habit: Low bushy shrub to 0.6m high Flowers: Orange, red and purple Flowering period: September-October Soils: Yellow sand or sandy clay. Undulating dunes, stony outcrops IBRA Distribution: AVW, COO Florabase records: 21	Low Preferred soil & habitat combination not expected within the survey area
<i>Grevillea lissopleura</i>	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	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP(Mattiske Consulting 2018b).
<i>Grevillea marriottii</i>	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: 8	Medium Preferred soil & habitat combination not expected within survey area. Species has been recorded in the adjacent EGLP (Mattiske Consulting 2018b).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus myriadena</i> subsp. <i>parviflora</i>	Myrtaceae	P1	-	Habit: Tree or (mallee), to 12 m high, with smooth bark, decorated in strips, grey-olive over silvery 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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Hemigenia</i> 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: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Hysterobaeckea pterocera</i>	Myrtaceae	P1	-	Habit: Erect shrub to 1 m tall Flowers: White Flowering period: December (unconfirmed) Soils: Yellow-brown fine sand. Drainage channels IBRA Distribution: COO Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Labichea rossii</i>	Fabaceae	P1	-	Habit: Subshrub to 50 cm Flowers: Yellow Flowering period: Unknown Soils: Hillslopes with BIF, mallee woodlands on gentle slopes. IBRA Distribution: COO Florabase records: 2	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Lepidosperma amantiferrum</i>	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: 13	Low Preferred soil & habitat combination not expected within survey area.
<i>Lepidosperma ferriculmen</i>	Cyperaceae	P1	-	Habit: Tufted rhizomatous, perennial, herb to 0.4m high Flowers: Black Flowering period: Unknown Soils: Well-drained orange-red sandy loam with banded ironstone gravel and rocks. Stony slopes IBRA Distribution: COO Florabase records: 8	Low Preferred soil & habitat combination not expected within the survey area.
<i>Microcorys</i> sp. Mt Holland (D. Angus DA 2397)	Lamiaceae	P1	-	Habit: Erect compact shrub to 1.5 high Flowers: White with purple flecks Flowering period: November Soils: Yellow-brown sandy clay IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within the survey area Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Mirbelia taxifolia</i>	Fabaceae	P1	-	Habit: Shrub to 0.9m high Flowers: Orange-yellow Flowering period: September Soils: Red or yellow sand IBRA Distribution: COO Florabase records: 9	Medium Preferred soil may occur within the survey area. Records of this taxa occur within 35 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Rinzia medifila</i>	Myrtaceae	P1	-	Habit: Erect, narrow shrub to 1 high Flowers: Unknown Flowering period: September to October Soils: Yellow-brown sandy soils. Sometimes with laterite or greenstone. IBRA Distribution: COO Florabase records: 3	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist within 25km of the survey area (DPaW 2007-).
<i>Scaevola tortuosa</i>	Goodeniaceae	P1	-	Habit: Ascending perennial herb to 0.2m high Flowers: Blue-purple/pink Flowering period: October Soils: Sandy clay. Margins of salt lakes IBRA Distribution: AVW, COO, MAL Florabase records: 18	Low Preferred soil & habitat combination not expected within survey area.
<i>Stylidium validum</i>	Goodeniaceae	P1	-	Habit: Caespitose perennial herb to 0.3m high Flowers: White-pink Flowering period: September-October Soils: Clayey sand or loam, ironstone, greenstone gravel. Hilltops and hill slopes. IBRA Distribution: COO Florabase records: 12	Medium Preferred soil & habitat combination may exist within the survey area. Records of this taxon exist within 5km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Acacia asepala</i>	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 soil & habitat combination may exist within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia kerryana</i>	Fabaceae	P2	-	Habit: Low spreading, domed shrub to 1 m high Flowers: Yellow Flowering period: October-December or January-February Soils: Granitic loamy sand, stony clayey loam or clayey sand IBRA Distribution: COO Florabase records: 15	Low Preferred soil and soil parent material not expected within the survey area.
<i>Bentleya diminuta</i>	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: 12	Low Preferred soils are not expected within the survey area.
<i>Boronia westringioides</i>	Rutaceae	P2	-	Habit: Erect shrub to 0.75 m high Flowers: Pink Flowering period: July-September Soils: Loamy sand. Plains IBRA Distribution: COO, MAL Florabase records: 15	Low Preferred soil & habitat combination not expected within the survey area.
<i>Conospermum sigmoideum</i>	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: 13	Medium Preferred soil may exist within the survey area A record of this taxon exist within 5km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Dampiera orchardii</i>	Goodeniaceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Preferred soil may occur within survey area. Records of this taxon exist within 5km south of the survey area (DPaW 2007-).
<i>Daviesia sarissa</i> subsp. <i>redacta</i>	Fabaceae	P1	-	Habit: Spreading or sprawling, glaucous shrub, to 0.6 m high Flowers: Blue-purple Flowering period: May Soils: Loamy sand, sandy loam, with open mallee woodlands IBRA Distribution: COO Florabase records: 5	Medium Preferred soil & habitat combination may occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017).
<i>Eutaxia lasiocalyx</i>	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	Medium Preferred soil & habitat combination likely to occur within survey area. Species recorded within the adjacent EGLP (Mattiske Consulting 2017). Identification may be difficult due to timing of the survey.
<i>Olearia lanciniifolia</i>	Asteraceae	P2	-	Habit: Erect perennial herb, 0.2 – 0.4 m high Flowers: Golden yellow hairs on flower Flowering period: Information not available Soils: Sand IBRA Distribution: COO, MAL Florabase records: 9	Medium Species recorded within the adjacent EGLP (Mattiske Consulting 2018c). Identification may be difficult due to timing of the survey.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/478 SEARCH AREA

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Orianthera exilis</i>	Loganiaceae	P2	-	Habit: Leafless shrub to 30cm high Flowers: White Flowering period: Unknown Soils: Brown loam over laterite, Band ironstone (unconfirmed) IBRA Distribution: COO, MAL Florabase records: 9	Low Insufficient information available.
<i>Stylidium thylax</i>	Goodeniaceae	P2	-	Habit: Creeping perennial her to 0.08m high Flowers: White and pink Flowering period: October Soils: Sand. Gentle slopes and plains IBRA Distribution: COO, MAL Florabase records: 9	Medium Records of this taxon exist within 35 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Verticordia multiflora</i> subsp. <i>solox</i>	Myrtaceae	P2	-	Habit: Erect to spreading shrub to 0.6 m high Flowers: Yellow Flowering period: October-December Soils: Yellow sand over gravel, sand over granite IBRA Distribution: AVW, COO, MAL Florabase records: 29	Low Preferred soil not expected within the survey area.
<i>Acacia repanda</i>	Fabaceae	P3	-	Habit: Rounded to obconic, single-stemmed shrub to 2 m high Flowers: Yellow Flowering period: June-August Soils: Loam, sandy or gravel loam. Near granite outcrops IBRA Distribution: AVW, COO, MAL Florabase records: 19	Low Preferred soil, habitat, and soil parent material not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Acacia undosa</i>	Fabaceae	P3	-	Habit: Dense, domed or obconic shrub, 0.3-1.5 m high Flowers: Simple, globular, yellow, 2 flowers per leaf axil Flowering period: July - September Soils: Clayey sand or loam in open shrub mallee IBRA Distribution: AW, COO, MAL Florabase records: 21	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a, Mattiske Consulting 2018c).
<i>Adenanthos gracilipes</i>	Proteaceae	P3	-	Habit: Erect, lignotuberous shrub to 1.5m high Flowers: Cream, red, and pink Flowering period: March or August-December Soils: White sand IBRA Distribution: COO, MAL Florabase records: 22	Low Preferred soil not expected within the survey area.
<i>Angianthus micropodioides</i>	Asteraceae	P3	-	Habit: White-woolly, erect or decumbent annual herb to 15 cm high Flowers: White, yellow-white Flowering period: November - February Soils: Saline sandy soils; river edges, saline depressions, clay pans IBRA Distribution: AW, COO, SCP Florabase records: 40	Low Preferred soil & habitat combination not expected within survey area. Identification may be difficult due to timing of the survey.
<i>Banksia lullfitzii</i>	Proteaceae	P3	-	Habit: Lignotuberous shrub to 2m high Flowers: Yellow-orange or orange-brown Flowering period: March-May Soils: Yellow sandplains IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 21	Low Preferred soil not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia rufa</i> subsp. <i>flavescens</i>	Proteaceae	P3	-	Habit: Prostrate shrub to 0.45 m high Flowers: Cream-yellow Flowering period: July-August Soils: Sandy loam or sand with gravel IBRA Distribution: AVW, COO, MAL Florabase records: 28	Low Preferred soil not expected within the survey area.
<i>Banksia viscida</i>	Myrtaceae	P3	-	Habit: Densely branched, non-lignotuberous shrub, 0.4 to 1 m high Flowers: Yellow-orange Flowering period: July to October Soils: Gravelly soils, lateritic rises IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil not expected within the survey area.
<i>Bossiaea atrata</i>	Fabaceae	P3	-	Habit: Compact, dense, intricately branched, rigid, spinescent her to 1.2 m high. Flowers: Yellow-orange Flowering period: May-August Soils: White sand or sandy loam over laterite or clay IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 30	Low Preferred soil not expected within the survey area.
<i>Chorizema circinale</i>	Fabaceae	P3	-	Habit: Prostrate, scrambling, wiry shrub to 0.4 m high Flowers: Yellow, orange and red Flowering period: September to December Soils: Yellow sandy soils, sandy clay with gravel; on flats; usually associated with heath vegetation IBRA Distribution: COO, ESP, MAL Florabase records: 15	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Cryptandra polyclada</i> subsp. <i>polyclada</i>	Rhamnaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia implexa</i>	Fabaceae	P3	-	Habit: Mat-forming or upright shrub to 0.7 m high Flowers: White-cream Flowering period: January-May or August-October Soils: Well drained deep yellow sand. Sometimes with gravel. IBRA Distribution: COO, JAF, MAL Florabase records: 19	Medium Preferred soil may occur within survey area. Records of this taxon exist with 30km of the survey area (DPaW 2007-).
<i>Daviesia newbeyi</i>	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: 16	Low Preferred soil and soil parent material not expected within the survey area.
<i>Elatine macrocalyx</i>	Elatinaceae	P3	-	Habit: Prostrate, glabrous mat-forming annual Flowers: White Flowering period: May to October (probably opportunistic) Soils: Shallow sand over clay. Margins of playa lakes and clay pans. IBRA Distribution: AVW, COO, GAS, GIB, GVD, MUR Florabase records: 16	Low Preferred soil & habitat combination not expected within the survey area. Identification may be difficult due to survey timing.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus exigua</i>	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: AVW, COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within the survey area. A record of this taxon is located exists within 5 km of the survey area (DPaW 2007-).
<i>Eutaxia acanthoclada</i>	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: 20	Medium Preferred soils & habitat combination likely to occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of the survey.
<i>Eutaxia nanophylla</i>	Fabaceae	P3	-	Habit: Straggly, rounded shrub to 0.35 m high Flowers: Yellow, orange and red Flowering period: October to November Soils: Clayey sand, red clay, stony clayey loam. Low lying areas, damp areas, low stony ridges IBRA Distribution: COO, JAF, MAL, MUR Florabase records: 10	Medium Preferred soils & habitat combination likely to occur within the survey area. Identification may be difficult due to timing of the survey.
<i>Eutaxia rubricarina</i>	Fabaceae	P3	-	Habit: Straggly, shrub to 0.5 m high Flowers: Yellow, orange and red Flowering period: August or October Soils: Gravelly sand, grey to pinkish-white sandy clay. Flats, slopes, valley floors, disturbed areas. IBRA Distribution: AVW, COO, MAL, MUR Florabase records: 10	Medium Preferred soils & habitat combination likely to occur within the survey area. Identification may be difficult due to timing of the survey.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Frankenia drummondii</i>	Frankeniaceae	P3	-	Habit: Prostrate shrub to 0.3 m high Flowers: White Flowering period: Unknown Soils: Lake edges and salt affected drainage tracts IBRA Distribution: AVW, COO, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within the survey area.
<i>Grevillea pilosa</i> subsp. <i>redacta</i>	Proteaceae	P3	-	Habit: Spreading to prostrate shrub to 1.2 m high Flowers: Red Flowering period: February, October, or December Soils: Sand, laterite IBRA Distribution: COO, MAL Florabase records: 17	Medium Preferred soil & habitat may occur within the survey area. Records of this taxon exist with 5 km of the survey area (DPaW 2007-).
<i>Hakea pendens</i>	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	Medium Preferred soil & habitat combination not expected within the survey area. Records of this taxon exist in the adjacent EGLP (Mattiske Consulting 2018a; Mattiske Consulting 2018c).
<i>Hibbertia pachyphylla</i>	Dilleniaceae	P3	-	Habit: Shrub to 0.5 m high Flowers: Yellow Flowering period: September-November Soils: White to yellow sand, brown sandy gravel, gravelly loam, laterite, granite, quartz. IBRA Distribution: COO, MAL Florabase records: 14	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Hydrocotyle eichleri</i>	Araliaceae	P3	-	Habit: Low, spreading, annual herb to 10cm high Flowers: Unknown Flowering period: Unknown Soils: Saline clay pans or drainage channels IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 7	Low Preferred soil & habitat combination not expected within the survey area.
<i>Isolepis australiensis</i>	Cyperaceae	P3	-	Habit: Annual, grass-like herb to 0.06 m high Flowers: Brown Flowering period: June or September Soils: Silty sand, sandy clay. Lake margins, pools. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 9	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca macrorychia</i> subsp. <i>trygonoides</i>	Myrtaceae	P3	-	Habit: Multi-stemmed, spreading shrub to 4 m high Flowers: Red Flowering period: February or July to August or October. Soils: Sandy soils. Granite outcrops. IBRA Distribution: AVW, COO, ESP, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within the survey area.
<i>Melaleuca ochroma</i>	Myrtaceae	P3	-	Habit: Erect, multi-stemmed shrub to 1.8 m high (unconfirmed) Flowers: Pale pink Flowering period: Unknown Soils: light brown sandy clay. Low lying areas IBRA Distribution: COO, MAL Florabase records: 3	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Mirbelia densiflora</i>	Fabaceae	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: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 25 km of the survey area (DPaW 2007-).
<i>Notisia intonsa</i>	Asteraceae	P3	-	Habit: Prostrate clumping annual to 0.1 m high Flowers: Brown Flowering period: Unknown Soils: Brown clay, clayey loam. Variable gravel content. Saline areas IBRA Distribution: AVW, COO, ESP, MAL, MUR Florabase records: 25	Low Preferred soil & habitat combination not expected within the survey area.
<i>Oxymyrrhine plicata</i>	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 Insufficient data available.
<i>Persoonia cymbifolia</i>	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: 32	Low Preferred soil & habitat combination not expected within the survey area.

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Pityrodia scabra</i> subsp. <i>dendrotricha</i>	Lamiaceae	P3	-	Habit: Erect, few branched shrub to 1 m (unconfirmed) Flowers: White (unconfirmed) Flowering period: Unknown Soils: Yellow sand. Salt lake edges IBRA Distribution: COO, MAL Florabase records: 27	Low Preferred soil & habitat combination not expected within the survey area.
<i>Pultenaea daena</i>	Fabaceae	P3	-	Habit: Dense, prostrate, domed shrub to 0.7 m high. Flowers: Yellow Flowering period: March Soils: White to yellow sand or sandy loam, sandy or loamy clay, gravel, limestone, dolomite, laterite. Gently undulating plains, adjacent to salt lakes, disturbed areas. IBRA Distribution: COO, MAL Florabase records: 19	Low Preferred soil & habitat combination not expected within the survey area.
<i>Rinzia torquata</i>	Myrtaceae	P3	-	Habit: Low spreading shrub, 0.3 to 1.2 m high to 0.7 m wide Flowers: White/pink Flowering period: August-September Soils: Well drained gravelly sand, yellow loamy sand, laterite. Sandplains, slightly undulating sites, near creeks, on exposed small rises IBRA Distribution: COO, MAL Florabase records: 27	Medium Preferred soils & habitat combination may occur within the survey area. Records of this taxon exist within 20 km of the survey area (DPaW 2007-).
<i>Seringia adenogyna</i>	Malvaceae	P3	-	Habit: Shrub to 50 cm (unconfirmed) Flowers: Mauve-purple Flowering period: Unknown Soils: Sand or loam over laterite-ironstone base (unconfirmed) IBRA Distribution: COO, ESP, MAL Florabase records: 27	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stylidium sejunctum</i>	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	Low Preferred soil & habitat combination potentially present within survey area. Records of this taxon exist within 2 km of the survey area (DPaW 2007-). Identification may be difficult due to timing of survey.
<i>Teucrium</i> sp. dwarf (R. Davis 8813)	Lamiaceae	P3	-	Habit: Compact dwarf shrub to 0.1 m high, 0.1 m wide Flowers: White Flowering period: April Soils: Hills, disturbed areas IBRA Distribution: COO Florabase records: 14	Medium Preferred habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).
<i>Verticordia gracilis</i>	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: AVW, COO, MAL Florabase records: 13	Medium Preferred soil & habitat combination may occur within survey area. Records of this taxon exist within 4km of the survey area (DPaW 2007-).
<i>Verticordia stenopetala</i>	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: AVW, COO, MAL Florabase records: 23	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within the adjacent EGLP (Mattiske Consulting 2018c).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Banksia shanklandiorum</i>	Proteaceae	P4	-	Habit: Upright shrub to 2.5 m high and 3 m high. Flowers: White-yellow Flowering period: June to August Soils: White/yellow sand with lateritic gravel IBRA Distribution: AVW Florabase records: 36	Low Preferred soil not expected within the survey area. Records of this taxon are restricted to the Avon Wheatbelt IBRA region (DPaW 2007-).
<i>Calamphoreus inflatus</i>	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: 26	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Eremophila biserrata</i>	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 & habitat type not expected within the survey area.
<i>Eremophila caerulea</i> subsp. <i>merrallii</i>	Scrophulariaceae	P4	-	Habit: Spreading or sprawling shrub to 0.35 m high and 0.8 m wide Flowers: Blue-purple Flowering period: October-December Soils: Sand, clay, or loam. Undulating plains IBRA Distribution: AVW, COO, MAL Florabase records: 23	Medium Preferred soil& habitat combination may occur within the survey area. Records of this taxon exist within 35km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eremophila racemosa</i>	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 Preferred soil & habitat type not expected within the survey area.
<i>Eucalyptus cerasiformis</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3.5 m high Flowers: Yellow Flowering period: December or January to March Soils: Red loamy soils IBRA Distribution: COO Florabase records: 31	Low Preferred soil not expected within the survey area.
<i>Eucalyptus deflexa</i>	Myrtaceae	P4	-	Habit: Mallee, smooth bark, to 3 m high Flowers: Pink/cream-white Flowering period: March or May to October Soils: Clay loam, sandy loam, white or yellow sand, often with gravel. Flats and small rises IBRA Distribution: COO, MAL Florabase records: 57	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus georgei</i> subsp. <i>fulgida</i>	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	Medium Preferred soil & habitat combination may occur within the survey area. Records of this taxon exist within 10km of the survey area (DPaW 2007-).

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TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Eucalyptus rhomboidea</i>	Myrtaceae	P4	-	Habit: Tree to 10 m high Flowers: Pale yellow (unconfirmed) Flowering period: Insufficient information Soils: Gravelly sand, slight rises IBRA Distribution: COO, MAL Florabase records: 36	Low Preferred soil & habitat combination not expected within survey area.
<i>Eucalyptus rugulata</i>	Myrtaceae	P4	-	Habit: Tree or (mallet), 3 - 10 m high, with rough bark Flowers: Yellow-cream Flowering period: November Soils: Clay, loam swamps, near salt lakes IBRA Distribution: AW, COO, MAL Florabase records: 17	Low Preferred soil & habitat combination not expected within survey area.
<i>Grevillea neodissecta</i>	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: 8	Low Preferred soil not expected within survey area.
<i>Grevillea prostrata</i>	Proteaceae	P4	-	Habit: Loose, prostrate shrub to 0.1 m high, 1.2 m high. Flowers: Cream-white or pink-red Flowering period: August-December or January Soils: White, grey, or yellow sand, gravel. Sandplains IBRA Distribution: COO, ESP, MAL Florabase records: 38	Low Preferred soil & habitat combination not expected within survey area.

APPENDIX B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/478 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Gyrostemon ditrigynus</i>	Proteaceae	P4	-	Habit: Shrub to 1.5 m high Flowers: Orange (unconfirmed) Flowering period: Insufficient information Soils: Sand, sandy clay, loam, Plain, low ironstone ridges. IBRA Distribution: COO, MAL Florabase records: 32	Low Preferred soil & habitat combination not expected within survey area.
<i>Haegiela tatei</i>	Asteraceae	P4	-	Habit: Ascending to erect annual herb, to 0.08 (0.2) m high Flowers: White-yellow Flowering period: August to November Soils: Clay, sandy loam, gypsum. Salt affected areas IBRA Distribution: COO, ESP, MAL, YAL Florabase records: 22	Low Preferred soil & habitat combination not expected within survey area.
<i>Microcorys</i> 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 combination may occur within the survey area. Records of this taxon exist within 5 km of the survey area (DPaW 2007-).
<i>Myriophyllum petraeum</i>	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 B: ASSESSMENT OF THREATENED AND PRIORITY FLORA POTENTIALLY PRESENT IN THE M77/478 SEARCH AREA

Refer to Appendix A for State (SCC) and Federal (FCC; EPBC Act) conservation code definitions. IBRA Distribution: AVW – Avon Wheatbelt; COO – Coolgardie; ESP – Esperance Plains; GAS – Gascoyne; GES – Geraldton Sandplains; GIB – Gibson Desert; GVD – Great Victoria Desert; JAF – Jarrah Forest; MAL – Mallee; MUR – Murchison, YAL – Yalgoo.

TAXON	FAMILY	SCC	FCC	DESCRIPTION AND HABITAT	POTENTIAL TO OCCUR IN SURVEY AREA
<i>Stenanthemum bremerense</i>	Rhamnaceae	P4	-	Habit: Erect or low and spreading shrub, (0.2-)0.3-0.6(-1.4) m high Flowers: White Flowering period: Unknown Soils: Orange-brown sandy loam, orange-red gravelly loam, skeletal red loam, laterite, ironstone. Top or sides of outcrops and breakaways IBRA Distribution: COO Florabase records: 33	Medium Preferred soil & habitat combination potentially present within survey area. Records of this taxon occur within 2km of the survey area (DPaW 2007-).

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750765	6439107
<i>Eutaxia lasiocalyx</i> (P2)	751062	6439418
<i>Eutaxia lasiocalyx</i> (P2)	751155	6439445
<i>Eutaxia lasiocalyx</i> (P2)	750831	6439182
<i>Eutaxia lasiocalyx</i> (P2)	751062	6439393
<i>Eutaxia lasiocalyx</i> (P2)	750860	6439352
<i>Eutaxia lasiocalyx</i> (P2)	750756	6439117
<i>Eutaxia lasiocalyx</i> (P2)	751127	6439417
<i>Eutaxia lasiocalyx</i> (P2)	750693	6439278
<i>Eutaxia lasiocalyx</i> (P2)	750853	6439114
<i>Eutaxia lasiocalyx</i> (P2)	750873	6439358
<i>Eutaxia lasiocalyx</i> (P2)	750716	6439245
<i>Eutaxia lasiocalyx</i> (P2)	750860	6438464
<i>Eutaxia lasiocalyx</i> (P2)	750827	6438559
<i>Eutaxia lasiocalyx</i> (P2)	751103	6438625
<i>Eutaxia lasiocalyx</i> (P2)	751011	6438108
<i>Eutaxia lasiocalyx</i> (P2)	750848	6438352
<i>Eutaxia lasiocalyx</i> (P2)	750779	6439349
<i>Eutaxia lasiocalyx</i> (P2)	750738	6439257
<i>Eutaxia lasiocalyx</i> (P2)	751001	6439398
<i>Eutaxia lasiocalyx</i> (P2)	751495	6438488
<i>Eutaxia lasiocalyx</i> (P2)	750748	6438512
<i>Eutaxia lasiocalyx</i> (P2)	750918	6439354
<i>Eutaxia lasiocalyx</i> (P2)	750738	6439364
<i>Eutaxia lasiocalyx</i> (P2)	751382	6438663
<i>Eutaxia lasiocalyx</i> (P2)	751112	6438811
<i>Eutaxia lasiocalyx</i> (P2)	751196	6438670
<i>Eutaxia lasiocalyx</i> (P2)	751059	6438775
<i>Eutaxia lasiocalyx</i> (P2)	750983	6439350
<i>Eutaxia lasiocalyx</i> (P2)	750906	6439610
<i>Eutaxia lasiocalyx</i> (P2)	750981	6439596
<i>Eutaxia lasiocalyx</i> (P2)	750907	6438366
<i>Eutaxia lasiocalyx</i> (P2)	750980	6439435
<i>Eutaxia lasiocalyx</i> (P2)	751218	6438148
<i>Eutaxia lasiocalyx</i> (P2)	751037	6439582
<i>Eutaxia lasiocalyx</i> (P2)	751112	6438981
<i>Eutaxia lasiocalyx</i> (P2)	750887	6438486
<i>Eutaxia lasiocalyx</i> (P2)	750859	6438372
<i>Eutaxia lasiocalyx</i> (P2)	751099	6439455
<i>Eutaxia lasiocalyx</i> (P2)	751319	6438447
<i>Eutaxia lasiocalyx</i> (P2)	750882	6439394
<i>Eutaxia lasiocalyx</i> (P2)	750941	6439584
<i>Eutaxia lasiocalyx</i> (P2)	750980	6439006
<i>Eutaxia lasiocalyx</i> (P2)	750901	6439453
<i>Eutaxia lasiocalyx</i> (P2)	751112	6439480
<i>Eutaxia lasiocalyx</i> (P2)	750999	6439367
<i>Eutaxia lasiocalyx</i> (P2)	750995	6439638
<i>Eutaxia lasiocalyx</i> (P2)	750422	6439331
<i>Eutaxia lasiocalyx</i> (P2)	750896	6438928
<i>Eutaxia lasiocalyx</i> (P2)	751314	6438269
<i>Eutaxia lasiocalyx</i> (P2)	750439	6439289
<i>Eutaxia lasiocalyx</i> (P2)	750936	6439469
<i>Eutaxia lasiocalyx</i> (P2)	750925	6438972
<i>Eutaxia lasiocalyx</i> (P2)	751349	6438751
<i>Eutaxia lasiocalyx</i> (P2)	750669	6439303
<i>Eutaxia lasiocalyx</i> (P2)	750886	6439179
<i>Eutaxia lasiocalyx</i> (P2)	750993	6439602
<i>Eutaxia lasiocalyx</i> (P2)	750921	6438372

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750198	6439432
<i>Eutaxia lasiocalyx</i> (P2)	749689	6439232
<i>Eutaxia lasiocalyx</i> (P2)	749731	6439230
<i>Eutaxia lasiocalyx</i> (P2)	750744	6438904
<i>Eutaxia lasiocalyx</i> (P2)	749788	6439331
<i>Eutaxia lasiocalyx</i> (P2)	751450	6438228
<i>Eutaxia lasiocalyx</i> (P2)	750761	6438264
<i>Eutaxia lasiocalyx</i> (P2)	750875	6439536
<i>Eutaxia lasiocalyx</i> (P2)	750732	6438493
<i>Eutaxia lasiocalyx</i> (P2)	750769	6438676
<i>Eutaxia lasiocalyx</i> (P2)	750977	6438346
<i>Eutaxia lasiocalyx</i> (P2)	751107	6439413
<i>Eutaxia lasiocalyx</i> (P2)	750939	6438991
<i>Eutaxia lasiocalyx</i> (P2)	750868	6439540
<i>Eutaxia lasiocalyx</i> (P2)	751115	6438350
<i>Eutaxia lasiocalyx</i> (P2)	750985	6439189
<i>Eutaxia lasiocalyx</i> (P2)	751139	6438364
<i>Eutaxia lasiocalyx</i> (P2)	750776	6439086
<i>Eutaxia lasiocalyx</i> (P2)	751029	6439224
<i>Eutaxia lasiocalyx</i> (P2)	749978	6439332
<i>Eutaxia lasiocalyx</i> (P2)	751141	6439489
<i>Eutaxia lasiocalyx</i> (P2)	750989	6439384
<i>Eutaxia lasiocalyx</i> (P2)	751058	6438409
<i>Eutaxia lasiocalyx</i> (P2)	750901	6439585
<i>Eutaxia lasiocalyx</i> (P2)	751100	6439595
<i>Eutaxia lasiocalyx</i> (P2)	751344	6438207
<i>Eutaxia lasiocalyx</i> (P2)	751031	6438750
<i>Eutaxia lasiocalyx</i> (P2)	751101	6439482
<i>Eutaxia lasiocalyx</i> (P2)	750729	6439290
<i>Eutaxia lasiocalyx</i> (P2)	750860	6439450
<i>Eutaxia lasiocalyx</i> (P2)	750796	6438490
<i>Eutaxia lasiocalyx</i> (P2)	750921	6439006
<i>Eutaxia lasiocalyx</i> (P2)	749969	6439337
<i>Eutaxia lasiocalyx</i> (P2)	751410	6438766
<i>Eutaxia lasiocalyx</i> (P2)	750723	6438786
<i>Eutaxia lasiocalyx</i> (P2)	749758	6439252
<i>Eutaxia lasiocalyx</i> (P2)	751086	6439687
<i>Eutaxia lasiocalyx</i> (P2)	751013	6439452
<i>Eutaxia lasiocalyx</i> (P2)	750713	6439270
<i>Eutaxia lasiocalyx</i> (P2)	750732	6439338
<i>Eutaxia lasiocalyx</i> (P2)	751341	6438703
<i>Eutaxia lasiocalyx</i> (P2)	751077	6439404
<i>Eutaxia lasiocalyx</i> (P2)	751422	6438706
<i>Eutaxia lasiocalyx</i> (P2)	750900	6438953
<i>Eutaxia lasiocalyx</i> (P2)	750833	6438305
<i>Eutaxia lasiocalyx</i> (P2)	751044	6439411
<i>Eutaxia lasiocalyx</i> (P2)	751042	6439393
<i>Eutaxia lasiocalyx</i> (P2)	751045	6438988
<i>Eutaxia lasiocalyx</i> (P2)	750724	6438632
<i>Eutaxia lasiocalyx</i> (P2)	750947	6439134
<i>Eutaxia lasiocalyx</i> (P2)	750890	6438952
<i>Eutaxia lasiocalyx</i> (P2)	750858	6438392
<i>Eutaxia lasiocalyx</i> (P2)	750748	6439105
<i>Eutaxia lasiocalyx</i> (P2)	751050	6438834
<i>Eutaxia lasiocalyx</i> (P2)	750799	6439535
<i>Eutaxia lasiocalyx</i> (P2)	750874	6439152
<i>Eutaxia lasiocalyx</i> (P2)	750914	6439484
<i>Eutaxia lasiocalyx</i> (P2)	751042	6438368

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751362	6438669
<i>Eutaxia lasiocalyx</i> (P2)	751400	6438223
<i>Eutaxia lasiocalyx</i> (P2)	751037	6439605
<i>Eutaxia lasiocalyx</i> (P2)	751020	6439356
<i>Eutaxia lasiocalyx</i> (P2)	750740	6438450
<i>Eutaxia lasiocalyx</i> (P2)	750905	6439629
<i>Eutaxia lasiocalyx</i> (P2)	751426	6438762
<i>Eutaxia lasiocalyx</i> (P2)	750869	6439405
<i>Eutaxia lasiocalyx</i> (P2)	751313	6438675
<i>Eutaxia lasiocalyx</i> (P2)	750842	6439584
<i>Eutaxia lasiocalyx</i> (P2)	750885	6439149
<i>Eutaxia lasiocalyx</i> (P2)	750961	6439648
<i>Eutaxia lasiocalyx</i> (P2)	750611	6439212
<i>Eutaxia lasiocalyx</i> (P2)	750938	6439430
<i>Eutaxia lasiocalyx</i> (P2)	751400	6438210
<i>Eutaxia lasiocalyx</i> (P2)	750998	6439592
<i>Eutaxia lasiocalyx</i> (P2)	750643	6439297
<i>Eutaxia lasiocalyx</i> (P2)	751015	6439374
<i>Eutaxia lasiocalyx</i> (P2)	750650	6439273
<i>Eutaxia lasiocalyx</i> (P2)	751007	6438950
<i>Eutaxia lasiocalyx</i> (P2)	750736	6438608
<i>Eutaxia lasiocalyx</i> (P2)	751318	6438712
<i>Eutaxia lasiocalyx</i> (P2)	751409	6438674
<i>Eutaxia lasiocalyx</i> (P2)	751428	6438691
<i>Eutaxia lasiocalyx</i> (P2)	750841	6439350
<i>Eutaxia lasiocalyx</i> (P2)	751289	6438686
<i>Eutaxia lasiocalyx</i> (P2)	750703	6439108
<i>Eutaxia lasiocalyx</i> (P2)	750879	6438979
<i>Eutaxia lasiocalyx</i> (P2)	750791	6439271
<i>Eutaxia lasiocalyx</i> (P2)	750881	6438568
<i>Eutaxia lasiocalyx</i> (P2)	750895	6439327
<i>Eutaxia lasiocalyx</i> (P2)	750723	6439139
<i>Eutaxia lasiocalyx</i> (P2)	751102	6438855
<i>Eutaxia lasiocalyx</i> (P2)	750945	6439373
<i>Eutaxia lasiocalyx</i> (P2)	750944	6439198
<i>Eutaxia lasiocalyx</i> (P2)	750951	6439195
<i>Eutaxia lasiocalyx</i> (P2)	750826	6439601
<i>Eutaxia lasiocalyx</i> (P2)	750978	6438082
<i>Eutaxia lasiocalyx</i> (P2)	751082	6439592
<i>Eutaxia lasiocalyx</i> (P2)	751218	6438263
<i>Eutaxia lasiocalyx</i> (P2)	750980	6438365
<i>Eutaxia lasiocalyx</i> (P2)	751101	6438612
<i>Eutaxia lasiocalyx</i> (P2)	750834	6439183
<i>Eutaxia lasiocalyx</i> (P2)	751130	6439444
<i>Eutaxia lasiocalyx</i> (P2)	749853	6439258
<i>Eutaxia lasiocalyx</i> (P2)	750569	6439145
<i>Eutaxia lasiocalyx</i> (P2)	750737	6438572
<i>Eutaxia lasiocalyx</i> (P2)	749785	6439251
<i>Eutaxia lasiocalyx</i> (P2)	750774	6439073
<i>Eutaxia lasiocalyx</i> (P2)	750064	6439378
<i>Eutaxia lasiocalyx</i> (P2)	750816	6438311
<i>Eutaxia lasiocalyx</i> (P2)	750910	6438971
<i>Eutaxia lasiocalyx</i> (P2)	751001	6438807
<i>Eutaxia lasiocalyx</i> (P2)	750406	6439350
<i>Eutaxia lasiocalyx</i> (P2)	750830	6439367
<i>Eutaxia lasiocalyx</i> (P2)	750916	6438970
<i>Eutaxia lasiocalyx</i> (P2)	751398	6438669
<i>Eutaxia lasiocalyx</i> (P2)	751046	6438956

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	749889	6439311
<i>Eutaxia lasiocalyx</i> (P2)	750960	6438972
<i>Eutaxia lasiocalyx</i> (P2)	750823	6439169
<i>Eutaxia lasiocalyx</i> (P2)	751364	6438471
<i>Eutaxia lasiocalyx</i> (P2)	751010	6438971
<i>Eutaxia lasiocalyx</i> (P2)	751136	6438654
<i>Eutaxia lasiocalyx</i> (P2)	750939	6439635
<i>Eutaxia lasiocalyx</i> (P2)	750758	6438890
<i>Eutaxia lasiocalyx</i> (P2)	750867	6439371
<i>Eutaxia lasiocalyx</i> (P2)	750993	6438355
<i>Eutaxia lasiocalyx</i> (P2)	751055	6438995
<i>Eutaxia lasiocalyx</i> (P2)	751366	6438683
<i>Eutaxia lasiocalyx</i> (P2)	750975	6438353
<i>Eutaxia lasiocalyx</i> (P2)	751013	6439420
<i>Eutaxia lasiocalyx</i> (P2)	750638	6439062
<i>Eutaxia lasiocalyx</i> (P2)	749761	6439309
<i>Eutaxia lasiocalyx</i> (P2)	751191	6438176
<i>Eutaxia lasiocalyx</i> (P2)	750983	6439369
<i>Eutaxia lasiocalyx</i> (P2)	751063	6439469
<i>Eutaxia lasiocalyx</i> (P2)	750662	6438753
<i>Eutaxia lasiocalyx</i> (P2)	749843	6439330
<i>Eutaxia lasiocalyx</i> (P2)	751015	6439367
<i>Eutaxia lasiocalyx</i> (P2)	751417	6438729
<i>Eutaxia lasiocalyx</i> (P2)	750941	6439573
<i>Eutaxia lasiocalyx</i> (P2)	751019	6439413
<i>Eutaxia lasiocalyx</i> (P2)	751132	6438826
<i>Eutaxia lasiocalyx</i> (P2)	750897	6438787
<i>Eutaxia lasiocalyx</i> (P2)	750761	6439063
<i>Eutaxia lasiocalyx</i> (P2)	751026	6439365
<i>Eutaxia lasiocalyx</i> (P2)	751026	6438973
<i>Eutaxia lasiocalyx</i> (P2)	751065	6438836
<i>Eutaxia lasiocalyx</i> (P2)	750993	6438969
<i>Eutaxia lasiocalyx</i> (P2)	750880	6438770
<i>Eutaxia lasiocalyx</i> (P2)	751000	6439416
<i>Eutaxia lasiocalyx</i> (P2)	751399	6438690
<i>Eutaxia lasiocalyx</i> (P2)	750685	6438608
<i>Eutaxia lasiocalyx</i> (P2)	750697	6439277
<i>Eutaxia lasiocalyx</i> (P2)	750846	6439566
<i>Eutaxia lasiocalyx</i> (P2)	750958	6438297
<i>Eutaxia lasiocalyx</i> (P2)	750839	6438366
<i>Eutaxia lasiocalyx</i> (P2)	751429	6438726
<i>Eutaxia lasiocalyx</i> (P2)	751361	6438709
<i>Eutaxia lasiocalyx</i> (P2)	750835	6439112
<i>Eutaxia lasiocalyx</i> (P2)	750899	6438352
<i>Eutaxia lasiocalyx</i> (P2)	750777	6439113
<i>Eutaxia lasiocalyx</i> (P2)	751375	6438731
<i>Eutaxia lasiocalyx</i> (P2)	750966	6438072
<i>Eutaxia lasiocalyx</i> (P2)	749756	6439284
<i>Eutaxia lasiocalyx</i> (P2)	750645	6438409
<i>Eutaxia lasiocalyx</i> (P2)	750879	6439106
<i>Eutaxia lasiocalyx</i> (P2)	751059	6439452
<i>Eutaxia lasiocalyx</i> (P2)	750958	6439544
<i>Eutaxia lasiocalyx</i> (P2)	751040	6439433
<i>Eutaxia lasiocalyx</i> (P2)	750874	6438897
<i>Eutaxia lasiocalyx</i> (P2)	751303	6438714
<i>Eutaxia lasiocalyx</i> (P2)	750967	6439606
<i>Eutaxia lasiocalyx</i> (P2)	751336	6438728
<i>Eutaxia lasiocalyx</i> (P2)	750797	6439110

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751043	6438391
<i>Eutaxia lasiocalyx</i> (P2)	750752	6439255
<i>Eutaxia lasiocalyx</i> (P2)	750823	6439447
<i>Eutaxia lasiocalyx</i> (P2)	750404	6439490
<i>Eutaxia lasiocalyx</i> (P2)	750937	6438749
<i>Eutaxia lasiocalyx</i> (P2)	750932	6438972
<i>Eutaxia lasiocalyx</i> (P2)	750846	6439383
<i>Eutaxia lasiocalyx</i> (P2)	751082	6439409
<i>Eutaxia lasiocalyx</i> (P2)	751144	6438673
<i>Eutaxia lasiocalyx</i> (P2)	751020	6439387
<i>Eutaxia lasiocalyx</i> (P2)	750977	6439613
<i>Eutaxia lasiocalyx</i> (P2)	751117	6438644
<i>Eutaxia lasiocalyx</i> (P2)	750773	6438677
<i>Eutaxia lasiocalyx</i> (P2)	751367	6438734
<i>Eutaxia lasiocalyx</i> (P2)	750478	6439395
<i>Eutaxia lasiocalyx</i> (P2)	751399	6438714
<i>Eutaxia lasiocalyx</i> (P2)	751108	6438400
<i>Eutaxia lasiocalyx</i> (P2)	749774	6439314
<i>Eutaxia lasiocalyx</i> (P2)	751081	6439011
<i>Eutaxia lasiocalyx</i> (P2)	751040	6439375
<i>Eutaxia lasiocalyx</i> (P2)	751180	6438366
<i>Eutaxia lasiocalyx</i> (P2)	750884	6438707
<i>Eutaxia lasiocalyx</i> (P2)	751020	6439387
<i>Eutaxia lasiocalyx</i> (P2)	750984	6439565
<i>Eutaxia lasiocalyx</i> (P2)	750917	6439587
<i>Eutaxia lasiocalyx</i> (P2)	751036	6439451
<i>Eutaxia lasiocalyx</i> (P2)	750846	6439168
<i>Eutaxia lasiocalyx</i> (P2)	751131	6439495
<i>Eutaxia lasiocalyx</i> (P2)	751398	6438750
<i>Eutaxia lasiocalyx</i> (P2)	750804	6438498
<i>Eutaxia lasiocalyx</i> (P2)	750778	6439101
<i>Eutaxia lasiocalyx</i> (P2)	751021	6438302
<i>Eutaxia lasiocalyx</i> (P2)	751005	6439664
<i>Eutaxia lasiocalyx</i> (P2)	751388	6438760
<i>Eutaxia lasiocalyx</i> (P2)	750995	6438995
<i>Eutaxia lasiocalyx</i> (P2)	751002	6439033
<i>Eutaxia lasiocalyx</i> (P2)	750962	6439232
<i>Eutaxia lasiocalyx</i> (P2)	750885	6439408
<i>Eutaxia lasiocalyx</i> (P2)	750837	6439471
<i>Eutaxia lasiocalyx</i> (P2)	750974	6439626
<i>Eutaxia lasiocalyx</i> (P2)	751078	6439466
<i>Eutaxia lasiocalyx</i> (P2)	750856	6439143
<i>Eutaxia lasiocalyx</i> (P2)	750852	6439491
<i>Eutaxia lasiocalyx</i> (P2)	751161	6439433
<i>Eutaxia lasiocalyx</i> (P2)	751224	6438421
<i>Eutaxia lasiocalyx</i> (P2)	751071	6438640
<i>Eutaxia lasiocalyx</i> (P2)	750894	6439204
<i>Eutaxia lasiocalyx</i> (P2)	750672	6438592
<i>Eutaxia lasiocalyx</i> (P2)	750701	6439296
<i>Eutaxia lasiocalyx</i> (P2)	751052	6438391
<i>Eutaxia lasiocalyx</i> (P2)	750766	6439336
<i>Eutaxia lasiocalyx</i> (P2)	749614	6439350
<i>Eutaxia lasiocalyx</i> (P2)	750697	6438532
<i>Eutaxia lasiocalyx</i> (P2)	750982	6439233
<i>Eutaxia lasiocalyx</i> (P2)	751043	6439573
<i>Eutaxia lasiocalyx</i> (P2)	751111	6439408
<i>Eutaxia lasiocalyx</i> (P2)	750814	6439156
<i>Eutaxia lasiocalyx</i> (P2)	750858	6439413

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751041	6439010
<i>Eutaxia lasiocalyx</i> (P2)	751389	6438661
<i>Eutaxia lasiocalyx</i> (P2)	750751	6439293
<i>Eutaxia lasiocalyx</i> (P2)	751084	6438347
<i>Eutaxia lasiocalyx</i> (P2)	750492	6439312
<i>Eutaxia lasiocalyx</i> (P2)	750833	6439571
<i>Eutaxia lasiocalyx</i> (P2)	750882	6438478
<i>Eutaxia lasiocalyx</i> (P2)	751051	6439684
<i>Eutaxia lasiocalyx</i> (P2)	750551	6439130
<i>Eutaxia lasiocalyx</i> (P2)	750729	6438627
<i>Eutaxia lasiocalyx</i> (P2)	751226	6438265
<i>Eutaxia lasiocalyx</i> (P2)	751071	6439660
<i>Eutaxia lasiocalyx</i> (P2)	751065	6439687
<i>Eutaxia lasiocalyx</i> (P2)	751303	6438688
<i>Eutaxia lasiocalyx</i> (P2)	751302	6438427
<i>Eutaxia lasiocalyx</i> (P2)	751218	6438432
<i>Eutaxia lasiocalyx</i> (P2)	751343	6438685
<i>Eutaxia lasiocalyx</i> (P2)	751319	6438666
<i>Eutaxia lasiocalyx</i> (P2)	750976	6438924
<i>Eutaxia lasiocalyx</i> (P2)	751379	6438471
<i>Eutaxia lasiocalyx</i> (P2)	750946	6439405
<i>Eutaxia lasiocalyx</i> (P2)	750881	6439466
<i>Eutaxia lasiocalyx</i> (P2)	750826	6438888
<i>Eutaxia lasiocalyx</i> (P2)	751099	6439635
<i>Eutaxia lasiocalyx</i> (P2)	750793	6439569
<i>Eutaxia lasiocalyx</i> (P2)	749765	6439290
<i>Eutaxia lasiocalyx</i> (P2)	751001	6439611
<i>Eutaxia lasiocalyx</i> (P2)	750602	6439069
<i>Eutaxia lasiocalyx</i> (P2)	750661	6439265
<i>Eutaxia lasiocalyx</i> (P2)	751130	6438655
<i>Eutaxia lasiocalyx</i> (P2)	750742	6439067
<i>Eutaxia lasiocalyx</i> (P2)	751062	6439016
<i>Eutaxia lasiocalyx</i> (P2)	750883	6438689
<i>Eutaxia lasiocalyx</i> (P2)	750881	6438989
<i>Eutaxia lasiocalyx</i> (P2)	750892	6439626
<i>Eutaxia lasiocalyx</i> (P2)	749885	6439334
<i>Eutaxia lasiocalyx</i> (P2)	751075	6438652
<i>Eutaxia lasiocalyx</i> (P2)	751261	6438696
<i>Eutaxia lasiocalyx</i> (P2)	751352	6438515
<i>Eutaxia lasiocalyx</i> (P2)	751021	6439431
<i>Eutaxia lasiocalyx</i> (P2)	751410	6438701
<i>Eutaxia lasiocalyx</i> (P2)	751025	6439405
<i>Eutaxia lasiocalyx</i> (P2)	750918	6438906
<i>Eutaxia lasiocalyx</i> (P2)	751000	6439431
<i>Eutaxia lasiocalyx</i> (P2)	750918	6438770
<i>Eutaxia lasiocalyx</i> (P2)	749817	6439273
<i>Eutaxia lasiocalyx</i> (P2)	751320	6438694
<i>Eutaxia lasiocalyx</i> (P2)	750429	6439332
<i>Eutaxia lasiocalyx</i> (P2)	751239	6438267
<i>Eutaxia lasiocalyx</i> (P2)	750666	6439294
<i>Eutaxia lasiocalyx</i> (P2)	750861	6439168
<i>Eutaxia lasiocalyx</i> (P2)	750749	6439365
<i>Eutaxia lasiocalyx</i> (P2)	750685	6439275
<i>Eutaxia lasiocalyx</i> (P2)	750899	6439141
<i>Eutaxia lasiocalyx</i> (P2)	750872	6439337
<i>Eutaxia lasiocalyx</i> (P2)	750755	6439105
<i>Eutaxia lasiocalyx</i> (P2)	751061	6439427
<i>Eutaxia lasiocalyx</i> (P2)	751008	6438955

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750956	6439576
<i>Eutaxia lasiocalyx</i> (P2)	751092	6438346
<i>Eutaxia lasiocalyx</i> (P2)	750834	6438492
<i>Eutaxia lasiocalyx</i> (P2)	751019	6439209
<i>Eutaxia lasiocalyx</i> (P2)	750863	6439616
<i>Eutaxia lasiocalyx</i> (P2)	751383	6438210
<i>Eutaxia lasiocalyx</i> (P2)	750989	6438953
<i>Eutaxia lasiocalyx</i> (P2)	751086	6439647
<i>Eutaxia lasiocalyx</i> (P2)	750857	6439125
<i>Eutaxia lasiocalyx</i> (P2)	750831	6439326
<i>Eutaxia lasiocalyx</i> (P2)	751106	6438864
<i>Eutaxia lasiocalyx</i> (P2)	750923	6439410
<i>Eutaxia lasiocalyx</i> (P2)	750742	6438844
<i>Eutaxia lasiocalyx</i> (P2)	750589	6438434
<i>Eutaxia lasiocalyx</i> (P2)	751262	6438426
<i>Eutaxia lasiocalyx</i> (P2)	750721	6438850
<i>Eutaxia lasiocalyx</i> (P2)	750798	6438871
<i>Eutaxia lasiocalyx</i> (P2)	751001	6438384
<i>Eutaxia lasiocalyx</i> (P2)	750916	6438936
<i>Eutaxia lasiocalyx</i> (P2)	750934	6439528
<i>Eutaxia lasiocalyx</i> (P2)	750859	6439469
<i>Eutaxia lasiocalyx</i> (P2)	751354	6438195
<i>Eutaxia lasiocalyx</i> (P2)	750865	6438887
<i>Eutaxia lasiocalyx</i> (P2)	750827	6438487
<i>Eutaxia lasiocalyx</i> (P2)	751149	6438354
<i>Eutaxia lasiocalyx</i> (P2)	750413	6439331
<i>Eutaxia lasiocalyx</i> (P2)	751082	6439425
<i>Eutaxia lasiocalyx</i> (P2)	751400	6438730
<i>Eutaxia lasiocalyx</i> (P2)	750998	6439448
<i>Eutaxia lasiocalyx</i> (P2)	750220	6439461
<i>Eutaxia lasiocalyx</i> (P2)	751097	6439423
<i>Eutaxia lasiocalyx</i> (P2)	750807	6438507
<i>Eutaxia lasiocalyx</i> (P2)	751062	6438365
<i>Eutaxia lasiocalyx</i> (P2)	750046	6439407
<i>Eutaxia lasiocalyx</i> (P2)	750667	6439231
<i>Eutaxia lasiocalyx</i> (P2)	750916	6439190
<i>Eutaxia lasiocalyx</i> (P2)	750942	6439451
<i>Eutaxia lasiocalyx</i> (P2)	751130	6438343
<i>Eutaxia lasiocalyx</i> (P2)	750800	6439587
<i>Eutaxia lasiocalyx</i> (P2)	751497	6438474
<i>Eutaxia lasiocalyx</i> (P2)	751000	6438975
<i>Eutaxia lasiocalyx</i> (P2)	750986	6439412
<i>Eutaxia lasiocalyx</i> (P2)	750981	6438505
<i>Eutaxia lasiocalyx</i> (P2)	751027	6438956
<i>Eutaxia lasiocalyx</i> (P2)	750605	6439023
<i>Eutaxia lasiocalyx</i> (P2)	750941	6438915
<i>Eutaxia lasiocalyx</i> (P2)	749620	6439350
<i>Eutaxia lasiocalyx</i> (P2)	750717	6439112
<i>Eutaxia lasiocalyx</i> (P2)	750937	6438929
<i>Eutaxia lasiocalyx</i> (P2)	751022	6438994
<i>Eutaxia lasiocalyx</i> (P2)	750881	6439449
<i>Eutaxia lasiocalyx</i> (P2)	751293	6438410
<i>Eutaxia lasiocalyx</i> (P2)	750659	6438931
<i>Eutaxia lasiocalyx</i> (P2)	750921	6439165
<i>Eutaxia lasiocalyx</i> (P2)	751098	6439031
<i>Eutaxia lasiocalyx</i> (P2)	750940	6439396
<i>Eutaxia lasiocalyx</i> (P2)	750842	6439402
<i>Eutaxia lasiocalyx</i> (P2)	750901	6439563

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750384	6439513
<i>Eutaxia lasiocalyx</i> (P2)	750882	6439172
<i>Eutaxia lasiocalyx</i> (P2)	751115	6438990
<i>Eutaxia lasiocalyx</i> (P2)	750677	6439245
<i>Eutaxia lasiocalyx</i> (P2)	750921	6439533
<i>Eutaxia lasiocalyx</i> (P2)	750862	6439432
<i>Eutaxia lasiocalyx</i> (P2)	751083	6439395
<i>Eutaxia lasiocalyx</i> (P2)	751203	6438374
<i>Eutaxia lasiocalyx</i> (P2)	751104	6438982
<i>Eutaxia lasiocalyx</i> (P2)	750717	6438688
<i>Eutaxia lasiocalyx</i> (P2)	749793	6439242
<i>Eutaxia lasiocalyx</i> (P2)	751059	6439614
<i>Eutaxia lasiocalyx</i> (P2)	751462	6438530
<i>Eutaxia lasiocalyx</i> (P2)	751080	6439025
<i>Eutaxia lasiocalyx</i> (P2)	750981	6438967
<i>Eutaxia lasiocalyx</i> (P2)	750877	6438925
<i>Eutaxia lasiocalyx</i> (P2)	750666	6439279
<i>Eutaxia lasiocalyx</i> (P2)	749997	6439384
<i>Eutaxia lasiocalyx</i> (P2)	750842	6439432
<i>Eutaxia lasiocalyx</i> (P2)	750739	6438558
<i>Eutaxia lasiocalyx</i> (P2)	750817	6438476
<i>Eutaxia lasiocalyx</i> (P2)	751019	6439007
<i>Eutaxia lasiocalyx</i> (P2)	750773	6439120
<i>Eutaxia lasiocalyx</i> (P2)	751016	6438315
<i>Eutaxia lasiocalyx</i> (P2)	750446	6439252
<i>Eutaxia lasiocalyx</i> (P2)	751115	6439466
<i>Eutaxia lasiocalyx</i> (P2)	750856	6438404
<i>Eutaxia lasiocalyx</i> (P2)	750937	6439544
<i>Eutaxia lasiocalyx</i> (P2)	751020	6438368
<i>Eutaxia lasiocalyx</i> (P2)	750580	6438430
<i>Eutaxia lasiocalyx</i> (P2)	750818	6439087
<i>Eutaxia lasiocalyx</i> (P2)	750879	6439352
<i>Eutaxia lasiocalyx</i> (P2)	750707	6438870
<i>Eutaxia lasiocalyx</i> (P2)	751434	6438666
<i>Eutaxia lasiocalyx</i> (P2)	750737	6438837
<i>Eutaxia lasiocalyx</i> (P2)	750960	6439592
<i>Eutaxia lasiocalyx</i> (P2)	750836	6438705
<i>Eutaxia lasiocalyx</i> (P2)	749826	6439344
<i>Eutaxia lasiocalyx</i> (P2)	751001	6438729
<i>Eutaxia lasiocalyx</i> (P2)	750844	6439455
<i>Eutaxia lasiocalyx</i> (P2)	751110	6438355
<i>Eutaxia lasiocalyx</i> (P2)	750943	6439194
<i>Eutaxia lasiocalyx</i> (P2)	750896	6439417
<i>Eutaxia lasiocalyx</i> (P2)	751138	6439413
<i>Eutaxia lasiocalyx</i> (P2)	750879	6439516
<i>Eutaxia lasiocalyx</i> (P2)	750906	6439386
<i>Eutaxia lasiocalyx</i> (P2)	750850	6438413
<i>Eutaxia lasiocalyx</i> (P2)	750740	6439353
<i>Eutaxia lasiocalyx</i> (P2)	751381	6438657
<i>Eutaxia lasiocalyx</i> (P2)	750733	6438756
<i>Eutaxia lasiocalyx</i> (P2)	750898	6439472
<i>Eutaxia lasiocalyx</i> (P2)	751205	6438189
<i>Eutaxia lasiocalyx</i> (P2)	750883	6439184
<i>Eutaxia lasiocalyx</i> (P2)	750823	6439132
<i>Eutaxia lasiocalyx</i> (P2)	750628	6439231
<i>Eutaxia lasiocalyx</i> (P2)	750860	6438948
<i>Eutaxia lasiocalyx</i> (P2)	750697	6439255
<i>Eutaxia lasiocalyx</i> (P2)	750939	6439549

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751155	6438887
<i>Eutaxia lasiocalyx</i> (P2)	750941	6439006
<i>Eutaxia lasiocalyx</i> (P2)	750844	6439530
<i>Eutaxia lasiocalyx</i> (P2)	751380	6438642
<i>Eutaxia lasiocalyx</i> (P2)	751062	6438344
<i>Eutaxia lasiocalyx</i> (P2)	750887	6439496
<i>Eutaxia lasiocalyx</i> (P2)	750830	6438943
<i>Eutaxia lasiocalyx</i> (P2)	751168	6438629
<i>Eutaxia lasiocalyx</i> (P2)	750382	6439496
<i>Eutaxia lasiocalyx</i> (P2)	751098	6439603
<i>Eutaxia lasiocalyx</i> (P2)	750887	6438984
<i>Eutaxia lasiocalyx</i> (P2)	749843	6439331
<i>Eutaxia lasiocalyx</i> (P2)	750565	6438946
<i>Eutaxia lasiocalyx</i> (P2)	750981	6438528
<i>Eutaxia lasiocalyx</i> (P2)	751066	6438978
<i>Eutaxia lasiocalyx</i> (P2)	751146	6438884
<i>Eutaxia lasiocalyx</i> (P2)	750939	6438978
<i>Eutaxia lasiocalyx</i> (P2)	751438	6438710
<i>Eutaxia lasiocalyx</i> (P2)	750749	6438486
<i>Eutaxia lasiocalyx</i> (P2)	751330	6438188
<i>Eutaxia lasiocalyx</i> (P2)	751479	6438472
<i>Eutaxia lasiocalyx</i> (P2)	751085	6439675
<i>Eutaxia lasiocalyx</i> (P2)	751487	6438490
<i>Eutaxia lasiocalyx</i> (P2)	750876	6438270
<i>Eutaxia lasiocalyx</i> (P2)	750439	6439289
<i>Eutaxia lasiocalyx</i> (P2)	749811	6439329
<i>Eutaxia lasiocalyx</i> (P2)	750809	6439514
<i>Eutaxia lasiocalyx</i> (P2)	750561	6439171
<i>Eutaxia lasiocalyx</i> (P2)	750904	6439334
<i>Eutaxia lasiocalyx</i> (P2)	750418	6439489
<i>Eutaxia lasiocalyx</i> (P2)	751068	6438586
<i>Eutaxia lasiocalyx</i> (P2)	750948	6439567
<i>Eutaxia lasiocalyx</i> (P2)	751316	6438266
<i>Eutaxia lasiocalyx</i> (P2)	751089	6439491
<i>Eutaxia lasiocalyx</i> (P2)	750754	6438473
<i>Eutaxia lasiocalyx</i> (P2)	750886	6439339
<i>Eutaxia lasiocalyx</i> (P2)	750973	6438506
<i>Eutaxia lasiocalyx</i> (P2)	751051	6439636
<i>Eutaxia lasiocalyx</i> (P2)	750829	6438426
<i>Eutaxia lasiocalyx</i> (P2)	751017	6439605
<i>Eutaxia lasiocalyx</i> (P2)	750817	6439116
<i>Eutaxia lasiocalyx</i> (P2)	751034	6439633
<i>Eutaxia lasiocalyx</i> (P2)	750995	6438954
<i>Eutaxia lasiocalyx</i> (P2)	750857	6438488
<i>Eutaxia lasiocalyx</i> (P2)	750818	6438932
<i>Eutaxia lasiocalyx</i> (P2)	750928	6439568
<i>Eutaxia lasiocalyx</i> (P2)	750674	6438473
<i>Eutaxia lasiocalyx</i> (P2)	750725	6439107
<i>Eutaxia lasiocalyx</i> (P2)	750690	6438585
<i>Eutaxia lasiocalyx</i> (P2)	750725	6439076
<i>Eutaxia lasiocalyx</i> (P2)	750910	6439144
<i>Eutaxia lasiocalyx</i> (P2)	751423	6438223
<i>Eutaxia lasiocalyx</i> (P2)	751065	6439644
<i>Eutaxia lasiocalyx</i> (P2)	750797	6439097
<i>Eutaxia lasiocalyx</i> (P2)	751040	6438969
<i>Eutaxia lasiocalyx</i> (P2)	751391	6438669
<i>Eutaxia lasiocalyx</i> (P2)	751106	6439470
<i>Eutaxia lasiocalyx</i> (P2)	751115	6439495

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750934	6439210
<i>Eutaxia lasiocalyx</i> (P2)	750900	6439171
<i>Eutaxia lasiocalyx</i> (P2)	750857	6439606
<i>Eutaxia lasiocalyx</i> (P2)	750858	6439516
<i>Eutaxia lasiocalyx</i> (P2)	751087	6439445
<i>Eutaxia lasiocalyx</i> (P2)	749766	6439230
<i>Eutaxia lasiocalyx</i> (P2)	750764	6439153
<i>Eutaxia lasiocalyx</i> (P2)	751485	6438492
<i>Eutaxia lasiocalyx</i> (P2)	749814	6439330
<i>Eutaxia lasiocalyx</i> (P2)	750733	6438890
<i>Eutaxia lasiocalyx</i> (P2)	751243	6438654
<i>Eutaxia lasiocalyx</i> (P2)	750820	6438291
<i>Eutaxia lasiocalyx</i> (P2)	751031	6438833
<i>Eutaxia lasiocalyx</i> (P2)	750947	6439232
<i>Eutaxia lasiocalyx</i> (P2)	750860	6438686
<i>Eutaxia lasiocalyx</i> (P2)	750843	6439605
<i>Eutaxia lasiocalyx</i> (P2)	751140	6439434
<i>Eutaxia lasiocalyx</i> (P2)	750702	6439097
<i>Eutaxia lasiocalyx</i> (P2)	751122	6439458
<i>Eutaxia lasiocalyx</i> (P2)	749888	6439298
<i>Eutaxia lasiocalyx</i> (P2)	751037	6439411
<i>Eutaxia lasiocalyx</i> (P2)	750633	6439104
<i>Eutaxia lasiocalyx</i> (P2)	751097	6438396
<i>Eutaxia lasiocalyx</i> (P2)	750948	6439605
<i>Eutaxia lasiocalyx</i> (P2)	751073	6439050
<i>Eutaxia lasiocalyx</i> (P2)	751021	6438822
<i>Eutaxia lasiocalyx</i> (P2)	750841	6439558
<i>Eutaxia lasiocalyx</i> (P2)	751053	6439028
<i>Eutaxia lasiocalyx</i> (P2)	750817	6439594
<i>Eutaxia lasiocalyx</i> (P2)	750871	6438914
<i>Eutaxia lasiocalyx</i> (P2)	751075	6439451
<i>Eutaxia lasiocalyx</i> (P2)	750938	6438271
<i>Eutaxia lasiocalyx</i> (P2)	751122	6438341
<i>Eutaxia lasiocalyx</i> (P2)	750764	6438874
<i>Eutaxia lasiocalyx</i> (P2)	751180	6438415
<i>Eutaxia lasiocalyx</i> (P2)	750908	6438915
<i>Eutaxia lasiocalyx</i> (P2)	751144	6439450
<i>Eutaxia lasiocalyx</i> (P2)	751018	6438952
<i>Eutaxia lasiocalyx</i> (P2)	751197	6438411
<i>Eutaxia lasiocalyx</i> (P2)	749781	6439329
<i>Eutaxia lasiocalyx</i> (P2)	750747	6438572
<i>Eutaxia lasiocalyx</i> (P2)	751093	6438350
<i>Eutaxia lasiocalyx</i> (P2)	751050	6438974
<i>Eutaxia lasiocalyx</i> (P2)	750881	6438945
<i>Eutaxia lasiocalyx</i> (P2)	750982	6438389
<i>Eutaxia lasiocalyx</i> (P2)	751356	6438750
<i>Eutaxia lasiocalyx</i> (P2)	750410	6439491
<i>Eutaxia lasiocalyx</i> (P2)	750675	6439271
<i>Eutaxia lasiocalyx</i> (P2)	750752	6439114
<i>Eutaxia lasiocalyx</i> (P2)	750839	6439091
<i>Eutaxia lasiocalyx</i> (P2)	751424	6438666
<i>Eutaxia lasiocalyx</i> (P2)	750927	6439473
<i>Eutaxia lasiocalyx</i> (P2)	749807	6439242
<i>Eutaxia lasiocalyx</i> (P2)	751176	6439434
<i>Eutaxia lasiocalyx</i> (P2)	750800	6438888
<i>Eutaxia lasiocalyx</i> (P2)	751156	6438369
<i>Eutaxia lasiocalyx</i> (P2)	750902	6439353
<i>Eutaxia lasiocalyx</i> (P2)	750675	6438752

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751037	6438958
<i>Eutaxia lasiocalyx</i> (P2)	750690	6438487
<i>Eutaxia lasiocalyx</i> (P2)	750531	6439206
<i>Eutaxia lasiocalyx</i> (P2)	751107	6439493
<i>Eutaxia lasiocalyx</i> (P2)	750963	6438733
<i>Eutaxia lasiocalyx</i> (P2)	751281	6438711
<i>Eutaxia lasiocalyx</i> (P2)	750681	6439232
<i>Eutaxia lasiocalyx</i> (P2)	751059	6438823
<i>Eutaxia lasiocalyx</i> (P2)	750787	6439145
<i>Eutaxia lasiocalyx</i> (P2)	751114	6438391
<i>Eutaxia lasiocalyx</i> (P2)	750804	6439108
<i>Eutaxia lasiocalyx</i> (P2)	751154	6438189
<i>Eutaxia lasiocalyx</i> (P2)	751022	6438753
<i>Eutaxia lasiocalyx</i> (P2)	751141	6438354
<i>Eutaxia lasiocalyx</i> (P2)	751026	6439651
<i>Eutaxia lasiocalyx</i> (P2)	751383	6438712
<i>Eutaxia lasiocalyx</i> (P2)	750917	6439571
<i>Eutaxia lasiocalyx</i> (P2)	749779	6439266
<i>Eutaxia lasiocalyx</i> (P2)	751015	6438791
<i>Eutaxia lasiocalyx</i> (P2)	750780	6438470
<i>Eutaxia lasiocalyx</i> (P2)	750565	6438946
<i>Eutaxia lasiocalyx</i> (P2)	751178	6438168
<i>Eutaxia lasiocalyx</i> (P2)	750597	6439084
<i>Eutaxia lasiocalyx</i> (P2)	749844	6439274
<i>Eutaxia lasiocalyx</i> (P2)	751298	6438433
<i>Eutaxia lasiocalyx</i> (P2)	750906	6439545
<i>Eutaxia lasiocalyx</i> (P2)	751416	6438758
<i>Eutaxia lasiocalyx</i> (P2)	749790	6439306
<i>Eutaxia lasiocalyx</i> (P2)	750870	6438339
<i>Eutaxia lasiocalyx</i> (P2)	750719	6438583
<i>Eutaxia lasiocalyx</i> (P2)	750987	6438340
<i>Eutaxia lasiocalyx</i> (P2)	751116	6438864
<i>Eutaxia lasiocalyx</i> (P2)	751418	6438287
<i>Eutaxia lasiocalyx</i> (P2)	751380	6438512
<i>Eutaxia lasiocalyx</i> (P2)	751017	6438752
<i>Eutaxia lasiocalyx</i> (P2)	750411	6439333
<i>Eutaxia lasiocalyx</i> (P2)	750077	6439393
<i>Eutaxia lasiocalyx</i> (P2)	749989	6439342
<i>Eutaxia lasiocalyx</i> (P2)	749619	6439375
<i>Eutaxia lasiocalyx</i> (P2)	751035	6439467
<i>Eutaxia lasiocalyx</i> (P2)	751018	6439567
<i>Eutaxia lasiocalyx</i> (P2)	750843	6438888
<i>Eutaxia lasiocalyx</i> (P2)	751002	6438535
<i>Eutaxia lasiocalyx</i> (P2)	749775	6439235
<i>Eutaxia lasiocalyx</i> (P2)	750448	6439209
<i>Eutaxia lasiocalyx</i> (P2)	751016	6438149
<i>Eutaxia lasiocalyx</i> (P2)	750803	6438738
<i>Eutaxia lasiocalyx</i> (P2)	750851	6438953
<i>Eutaxia lasiocalyx</i> (P2)	751087	6439468
<i>Eutaxia lasiocalyx</i> (P2)	751326	6438186
<i>Eutaxia lasiocalyx</i> (P2)	750919	6439338
<i>Eutaxia lasiocalyx</i> (P2)	750773	6439108
<i>Eutaxia lasiocalyx</i> (P2)	750759	6438486
<i>Eutaxia lasiocalyx</i> (P2)	750837	6439512
<i>Eutaxia lasiocalyx</i> (P2)	750803	6438911
<i>Eutaxia lasiocalyx</i> (P2)	750950	6439614
<i>Eutaxia lasiocalyx</i> (P2)	750586	6438429
<i>Eutaxia lasiocalyx</i> (P2)	750961	6439431

**APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH
AREA OF TENEMENT M77/478**

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	750815	6439535
<i>Eutaxia lasiocalyx</i> (P2)	750898	6438767
<i>Eutaxia lasiocalyx</i> (P2)	750863	6439397
<i>Eutaxia lasiocalyx</i> (P2)	751010	6438383
<i>Eutaxia lasiocalyx</i> (P2)	751122	6438370
<i>Eutaxia lasiocalyx</i> (P2)	750838	6438419
<i>Eutaxia lasiocalyx</i> (P2)	751038	6439033
<i>Eutaxia lasiocalyx</i> (P2)	751028	6439030
<i>Eutaxia lasiocalyx</i> (P2)	750854	6439569
<i>Eutaxia lasiocalyx</i> (P2)	750869	6438972
<i>Eutaxia lasiocalyx</i> (P2)	750847	6439137
<i>Eutaxia lasiocalyx</i> (P2)	751065	6438394
<i>Eutaxia lasiocalyx</i> (P2)	750986	6438983
<i>Eutaxia lasiocalyx</i> (P2)	750980	6438768
<i>Eutaxia lasiocalyx</i> (P2)	750712	6438867
<i>Eutaxia lasiocalyx</i> (P2)	750889	6438946
<i>Eutaxia lasiocalyx</i> (P2)	750940	6439410
<i>Eutaxia lasiocalyx</i> (P2)	750961	6439635
<i>Eutaxia lasiocalyx</i> (P2)	750797	6439385
<i>Eutaxia lasiocalyx</i> (P2)	751213	6438172
<i>Eutaxia lasiocalyx</i> (P2)	750836	6439495
<i>Eutaxia lasiocalyx</i> (P2)	749863	6439330
<i>Eutaxia lasiocalyx</i> (P2)	751384	6438693
<i>Eutaxia lasiocalyx</i> (P2)	750693	6439115
<i>Eutaxia lasiocalyx</i> (P2)	751005	6439171
<i>Eutaxia lasiocalyx</i> (P2)	750275	6439610
<i>Eutaxia lasiocalyx</i> (P2)	751254	6438268
<i>Eutaxia lasiocalyx</i> (P2)	749851	6439287
<i>Eutaxia lasiocalyx</i> (P2)	750741	6439093
<i>Eutaxia lasiocalyx</i> (P2)	750879	6439188
<i>Eutaxia lasiocalyx</i> (P2)	750941	6439353
<i>Eutaxia lasiocalyx</i> (P2)	751186	6438150
<i>Eutaxia lasiocalyx</i> (P2)	750950	6438750
<i>Eutaxia lasiocalyx</i> (P2)	750717	6439146
<i>Eutaxia lasiocalyx</i> (P2)	750740	6438494
<i>Eutaxia lasiocalyx</i> (P2)	750921	6439395
<i>Eutaxia lasiocalyx</i> (P2)	750797	6438503
<i>Eutaxia lasiocalyx</i> (P2)	750831	6438757
<i>Eutaxia lasiocalyx</i> (P2)	750841	6439288
<i>Eutaxia lasiocalyx</i> (P2)	751026	6438797
<i>Eutaxia lasiocalyx</i> (P2)	750919	6439631
<i>Eutaxia lasiocalyx</i> (P2)	750837	6438915
<i>Eutaxia lasiocalyx</i> (P2)	751058	6439375
<i>Eutaxia lasiocalyx</i> (P2)	750926	6438751
<i>Eutaxia lasiocalyx</i> (P2)	750973	6439365
<i>Eutaxia lasiocalyx</i> (P2)	751386	6438736
<i>Eutaxia lasiocalyx</i> (P2)	751026	6439668
<i>Eutaxia lasiocalyx</i> (P2)	750719	6439085
<i>Eutaxia lasiocalyx</i> (P2)	750372	6439472
<i>Eutaxia lasiocalyx</i> (P2)	750912	6439406
<i>Eutaxia lasiocalyx</i> (P2)	751441	6438721
<i>Eutaxia lasiocalyx</i> (P2)	750993	6438317
<i>Eutaxia lasiocalyx</i> (P2)	750025	6439348
<i>Eutaxia lasiocalyx</i> (P2)	751004	6439002
<i>Eutaxia lasiocalyx</i> (P2)	751070	6438390
<i>Eutaxia lasiocalyx</i> (P2)	749628	6439372
<i>Eutaxia lasiocalyx</i> (P2)	750738	6439153
<i>Eutaxia lasiocalyx</i> (P2)	751046	6439476

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	749861	6439321
<i>Eutaxia lasiocalyx</i> (P2)	750731	6438556
<i>Eutaxia lasiocalyx</i> (P2)	751057	6438337
<i>Eutaxia lasiocalyx</i> (P2)	751354	6438670
<i>Eutaxia lasiocalyx</i> (P2)	750625	6439065
<i>Eutaxia lasiocalyx</i> (P2)	750071	6439392
<i>Eutaxia lasiocalyx</i> (P2)	751265	6438712
<i>Eutaxia lasiocalyx</i> (P2)	750841	6439144
<i>Eutaxia lasiocalyx</i> (P2)	750924	6438790
<i>Eutaxia lasiocalyx</i> (P2)	751050	6438407
<i>Eutaxia lasiocalyx</i> (P2)	751328	6438667
<i>Eutaxia lasiocalyx</i> (P2)	750713	6439115
<i>Eutaxia lasiocalyx</i> (P2)	750540	6439175
<i>Eutaxia lasiocalyx</i> (P2)	750801	6439352
<i>Eutaxia lasiocalyx</i> (P2)	751406	6438467
<i>Eutaxia lasiocalyx</i> (P2)	751160	6439467
<i>Eutaxia lasiocalyx</i> (P2)	751027	6439622
<i>Eutaxia lasiocalyx</i> (P2)	751105	6438360
<i>Eutaxia lasiocalyx</i> (P2)	750819	6438874
<i>Eutaxia lasiocalyx</i> (P2)	750626	6439046
<i>Eutaxia lasiocalyx</i> (P2)	751001	6439569
<i>Eutaxia lasiocalyx</i> (P2)	750822	6439396
<i>Eutaxia lasiocalyx</i> (P2)	750889	6439364
<i>Eutaxia lasiocalyx</i> (P2)	750950	6438755
<i>Eutaxia lasiocalyx</i> (P2)	751050	6439604
<i>Eutaxia lasiocalyx</i> (P2)	750941	6438273
<i>Eutaxia lasiocalyx</i> (P2)	750065	6439380
<i>Eutaxia lasiocalyx</i> (P2)	750754	6439146
<i>Eutaxia lasiocalyx</i> (P2)	751071	6439377
<i>Eutaxia lasiocalyx</i> (P2)	751077	6439608
<i>Eutaxia lasiocalyx</i> (P2)	750596	6439075
<i>Eutaxia lasiocalyx</i> (P2)	750923	6439450
<i>Eutaxia lasiocalyx</i> (P2)	750980	6439167
<i>Eutaxia lasiocalyx</i> (P2)	750833	6438956
<i>Eutaxia lasiocalyx</i> (P2)	750584	6439164
<i>Eutaxia lasiocalyx</i> (P2)	750049	6439365
<i>Eutaxia lasiocalyx</i> (P2)	750839	6438470
<i>Eutaxia lasiocalyx</i> (P2)	751415	6438670
<i>Eutaxia lasiocalyx</i> (P2)	751018	6439589
<i>Eutaxia lasiocalyx</i> (P2)	749781	6439297
<i>Eutaxia lasiocalyx</i> (P2)	750653	6438731
<i>Eutaxia lasiocalyx</i> (P2)	750724	6439115
<i>Eutaxia lasiocalyx</i> (P2)	750836	6439309
<i>Eutaxia lasiocalyx</i> (P2)	750923	6439153
<i>Eutaxia lasiocalyx</i> (P2)	750902	6438965
<i>Eutaxia lasiocalyx</i> (P2)	750760	6439136
<i>Eutaxia lasiocalyx</i> (P2)	749826	6439248
<i>Eutaxia lasiocalyx</i> (P2)	751408	6438543
<i>Eutaxia lasiocalyx</i> (P2)	751459	6438562
<i>Eutaxia lasiocalyx</i> (P2)	751360	6438296
<i>Eutaxia lasiocalyx</i> (P2)	749801	6439271
<i>Eutaxia lasiocalyx</i> (P2)	751110	6439394
<i>Eutaxia lasiocalyx</i> (P2)	751096	6438357
<i>Eutaxia lasiocalyx</i> (P2)	750695	6438558
<i>Eutaxia lasiocalyx</i> (P2)	750801	6439171
<i>Eutaxia lasiocalyx</i> (P2)	751266	6438429
<i>Eutaxia lasiocalyx</i> (P2)	750979	6439554
<i>Eutaxia lasiocalyx</i> (P2)	751451	6438270

APPENDIX C: LOCATIONS OF *EUTAXIA LASIOCALYX* (P2) RECORDED WITHIN THE SEARCH AREA OF TENEMENT M77/478

TAXON	LOCATION (GDA94 ZONE 50J)	
	EASTING (mE)	NORTHING (mN)
<i>Eutaxia lasiocalyx</i> (P2)	751102	6439646
<i>Eutaxia lasiocalyx</i> (P2)	751405	6438546
<i>Eutaxia lasiocalyx</i> (P2)	751007	6439572
<i>Eutaxia lasiocalyx</i> (P2)	751278	6438670
<i>Eutaxia lasiocalyx</i> (P2)	750921	6439367
<i>Eutaxia lasiocalyx</i> (P2)	750821	6439353
<i>Eutaxia lasiocalyx</i> (P2)	751075	6439629
<i>Eutaxia lasiocalyx</i> (P2)	750970	6439420
<i>Eutaxia lasiocalyx</i> (P2)	751063	6439593
<i>Eutaxia lasiocalyx</i> (P2)	750759	6439091
<i>Eutaxia lasiocalyx</i> (P2)	750929	6439610
<i>Eutaxia lasiocalyx</i> (P2)	750869	6438988
<i>Eutaxia lasiocalyx</i> (P2)	751115	6438413
<i>Eutaxia lasiocalyx</i> (P2)	750618	6439089
<i>Eutaxia lasiocalyx</i> (P2)	750838	6438429
<i>Eutaxia lasiocalyx</i> (P2)	750581	6439089
<i>Eutaxia lasiocalyx</i> (P2)	751307	6438662
<i>Eutaxia lasiocalyx</i> (P2)	750699	6438618
<i>Eutaxia lasiocalyx</i> (P2)	750792	6439564
<i>Eutaxia lasiocalyx</i> (P2)	750466	6439196
<i>Eutaxia lasiocalyx</i> (P2)	750433	6439338
<i>Eutaxia lasiocalyx</i> (P2)	751155	6438346
<i>Eutaxia lasiocalyx</i> (P2)	750697	6438506
<i>Eutaxia lasiocalyx</i> (P2)	751007	6438985
<i>Eutaxia lasiocalyx</i> (P2)	750753	6438247
<i>Eutaxia lasiocalyx</i> (P2)	751218	6438258
<i>Eutaxia lasiocalyx</i> (P2)	751310	6438246
<i>Eutaxia lasiocalyx</i> (P2)	751321	6438247
<i>Eutaxia lasiocalyx</i> (P2)	751240	6438258
<i>Eutaxia lasiocalyx</i> (P2)	751329	6438260
<i>Eutaxia lasiocalyx</i> (P2)	751403	6438255
<i>Eutaxia lasiocalyx</i> (P2)	751299	6438256
<i>Eutaxia lasiocalyx</i> (P2)	751246	6438257
<i>Eutaxia lasiocalyx</i> (P2)	751325	6438249
<i>Eutaxia lasiocalyx</i> (P2)	751333	6438243
<i>Eutaxia lasiocalyx</i> (P2)	750940	6438339
<i>Eutaxia lasiocalyx</i> (P2)	751100	6438329
<i>Eutaxia lasiocalyx</i> (P2)	751002	6438324
<i>Eutaxia lasiocalyx</i> (P2)	751024	6438330
<i>Eutaxia lasiocalyx</i> (P2)	751115	6438337
<i>Eutaxia lasiocalyx</i> (P2)	751066	6438336
<i>Eutaxia lasiocalyx</i> (P2)	750974	6438329
<i>Eutaxia lasiocalyx</i> (P2)	750898	6438332
<i>Eutaxia lasiocalyx</i> (P2)	750892	6438327
<i>Eutaxia lasiocalyx</i> (P2)	750949	6438330
<i>Eutaxia lasiocalyx</i> (P2)	750764	6438873
<i>Eutaxia lasiocalyx</i> (P2)	750790	6438480