ASSESSMENT OF FLORA AND VEGETATION

SURVEYS CONDUCTED FOR THE

MULGA ROCK URANIUM PROJECT,

GREAT VICTORIA DESERT, WA

Prepared For
VIMY RESOURCES LIMITED

October 2015

VRL1401/062/14

Prepared By

Mattiske Consulting Pty Ltd

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ABBREVIATIONS

BAM Act:	*Biosecurity and Agriculture Management Act 2007*
BOM:	Bureau of Meteorology
DE:	Development envelope
DF:	Disturbance footprint
DotE:	Department of the Environment (formerly Department of Sustainability, Environment, Water, Population and Communities – DSEWPC)
DPaW:	Department of Parks and Wildlife (formerly Department of Environment and Conservation – DEC, formerly Department of Conservation and Land Management – CALM)
EP Act:	*Environmental Protection Act 1986* (WA)
EPA:	Environmental Protection Authority
EPBC Act:	*Environment Protection and Biodiversity Conservation Act 1999* (Cth)
IBRA:	Interim Biogeographical Regionalisation for Australia
MCPL:	Mattiske Consulting Pty Ltd
MRUP:	Mulga Rock Uranium Project
PEC:	Priority ecological community
PRIMER:	Plymouth Routines in Multivariate Ecological Research
SAH:	South Australian Herbarium (AD)
TEC:	Threatened ecological community
TSSC:	Threatened Species Scientific Community
VMY:	Vimy Resources Ltd
WAH:	Western Australian Herbarium (PERTH)
WAOL:	Western Australian Organism List
WC Act:	*Wildlife Conservation Act 1950* (WA)

1. SUMMARY

Mattiske Consulting Pty Ltd (MCPL) was commissioned by Vimy Resources Ltd (VMY), formerly known as Energy and Minerals Australia Ltd (EAMA), to combine vegetation mapping and threatened and priority flora species information from all flora and vegetation surveys conducted by MCPL in the south-west corner of the Great Victoria Desert, for the Mulga Rock Uranium Project (MRUP) between 2007 and 2015. The MRUP is located approximately 250 km north-east of Kalgoorlie, Western Australia.

This report provides an overview and impact assessment of previously mapped vegetation communities and threatened, priority and other flora species of interest recorded and described by MCPL to date within VMY's disturbance footprint and development envelope. This data was collated from MCPL (2008a; 2008b; 2009a; 2010a; 2010b; 2013; 2014; and 2015) reports.

Numerous Level 1 and Level 2 surveys have been conducted by MCPL from 2007-2015. A total of 239 permanent plots have been established, 622 relevé mapping sites documented and 326 vascular plant taxa, including fourteen priority flora species have been recorded. One of the Priority 1 species, *Hibbertia crispula*, is currently listed as Vulnerable under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999*. In addition to this, potential new species, range extensions (many of which are now accepted by the WAH due to vouchered specimens) and undescribed species have been recorded during surveys of the MRUP. The priority (and other) flora recorded in and around the MRUP include:

- *Hibbertia crispula* (P1 & Vulnerable)
- *Dampiera eriantha* (P1)
- *Neurachne lanigera* (P1)
- *Isotropis canescens* (P2)
- *Malleostemon* sp. Officer Basin (D. Pearson 350) (P2)
- *Styphelia* sp. Great Victoria Desert (N. Murdock 44) (P2)
- *Baeckea* ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (P3)
- *Labichea eremaea* (P3)
- *Ptilotus blackii* (P3)
- *Comesperma viscidulum* (P4)
- *Conospermum toddii* (P4)
- *Dicrastylis cundeeleensis* (P4)
- *Grevillea secunda* (P4)
- *Olearia arida* (P4)
- *Hakea* sp. (LAC 139 13/04/14), *Hakea* sp. (LAC140 13/04/14), *Leucopogon aff. planifolius* (Other)
- *Brunonia ?australis* var. A. Kimberley Flora (K.F. Kenneally 5452) formerly (*Brunonia*?*suffruticosa* ms), *Euphorbia drummondii*, *Ophioglossum polyphyllum*, *Schoenus* sp. A1 Boorabbin (K.L. Wilson 2581) (Other - range extensions)

The highest **flora impacts** are associated with the priority 4 species, *Conospermum toddii* (8.62% of regional numbers within the disturbance footprint) and *Grevillea secunda* (7.40% of regional numbers within the disturbance footprint), which are both well distributed in the south-west corner of the Great Victoria Desert. The MRUP is also likely to impact upon 4.25% of estimated regional numbers of the recently recorded *Isotropis canescens* (P2) and 1.84% of the undescribed, *Styphelia* sp. Great Victoria Desert (N. Murdock 44) (P2). Only 0.27% of regional *Hibbertia crispula* (Priority 1 and Vulnerable) individuals occur within the disturbance footprint and impacts to other priority species range from 0.00-3.32% of estimated regional numbers.

Undescribed species have the potential to become priority or threatened flora if not adequately surveyed, described and understood. It is recommended that flowering specimens of the undescribed *Hakea* specimens be collected in future surveys to resolve their taxonomic placement.

Twenty-six vegetation communities (based mostly on 2008-2010 surveys and data analysis), comprising mostly of mallee woodlands and mixed shrublands have been described in the project area. Topography and soil colour played an important role in these vegetation community definitions (especially slopes of dunes, swales, dune crests).

The highest **vegetation impacts** are associated with communities E5, E6, E7, and C1 (25.09%, 36.76%, 38.36% and 18.28%, respectively, of the mapped extent within the disturbance footprint). The extent of vegetation communities, E14 and S1 appear to be restricted to the MRUP development envelope, however, the impact is reduced when considering just the disturbance footprint.

Vegetation community S6 has affinities with the broadly defined "Yellow sandplain communities of the Great Victoria Desert" **Priority 3 (ii) ecological community**. Approximately 7.36% (70.98 ha) of the mapped extent of the S6 community occurs within the MRUP disturbance footprint. However, this community extends well beyond the boundary of any currently proposed developments, with an estimated 12,936 ha of dune crest areas deemed similar to the S6 community based on satellite imagery and topography, within the yellow sandplain polygon identified by Tropicana Joint Venture.

Fire plays an important role in the Great Victoria Desert landscape, and in November 2014, approximately 73% of the MRUP development envelope was affected by a wildfire. More specifically, the fire affected 77% of the proposed disturbance footprint. This event presents an opportunity to research the impact of fire on the known vegetation communities and conservation significant flora species recorded in the MRUP area. The 239 permanent plots established in 2008-2010 will provide useful baseline data for any future flora and vegetation surveys in the area.

With no introduced (weed) species recorded in the project area, and limited human disturbances, the MRUP is situated in an excellent-pristine area of the Great Victoria Desert. Whilst MCPL botanists have recorded numerous priority flora species, potentially undescribed flora species, affinities between the S6 vegetation community with the poorly described PEC, all of these flora and vegetation values appear to be adequately represented outside the MRUP disturbance footprint and the development envelope.

2. INTRODUCTION

Mattiske Consulting Pty Ltd (MCPL) was commissioned by Vimy Resources Ltd (VMY), formerly known as Energy and Minerals Australia Ltd (EAMA), in December 2014 to combine vegetation mapping and threatened and priority flora species information from all flora and vegetation surveys conducted by MCPL in the south-west corner of the Great Victoria Desert, for the Mulga Rock Uranium Project (MRUP) with the provision of an updated report and maps.

2.1. Location, Project Description and Scope

The MRUP lies approximately 240 kilometres east-north-east of Kalgoorlie-Boulder in the Shire of Menzies (Figure 1). The area is remote, located on the western flank of the Great Victoria Desert, comprising series of large, generally parallel sand dunes, with inter-dunal swales and broad flat plains.

Access to the Project area is limited and is only possible using four-wheel-drive vehicles. The nearest residential town to the Project is Laverton which lies approximately 200 kilometres to the north-west. Other regional residential communities include Pinjin Station homestead located approximately 100 kilometres to the west, Coonana Aboriginal community situated approximately 130 kilometres to the south-south-west, Kanandah Station homestead positioned approximately 150 kilometres to the south-east and the Tropicana Gold Mine lying approximately 110 kilometres to the north-east of the Project (Figure 1).

The MRUP covers approximately 102,000 hectares on granted mining tenure (primarily M39/1080 and M39/1081) within Unallocated Crown Land. It includes two distinct mining centres, Mulga Rock East (MRE) comprising the Princess and Ambassador resources and Mulga Rock West (MRW) comprising the Emperor and Shogun resources, which are approximately 20 kilometres apart. MRE contains over 65% of the total recoverable uranium and is of a higher grade than MRW. Mining will commence at MRE which will include the location of the processing plant. Up to 4.5 million tonnes per annum (Mtpa) of ore will be mined using traditional open cut techniques, crushed, beneficiated and then processed at an acid leach and precipitation treatment plant to produce, on average, 1,360 tonnes of uranium oxide concentrate (UOC) per year over the life of the Project. The anticipated Life-of-Mine (LOM) is up to 16 years, based on the currently identified resource.

Other metal concentrates will be extracted using sulphide precipitation after the uranium has been removed and sold separately. These metal concentrates will not be classified as radioactive. The UOC product will be sealed in drums and transported by road from the mine site in sealed sea-containers to a suitable port (expected to be Port Adelaide) which is approved to receive and ship Class 7 materials for export.

The MRUP will require the clearing of vegetation, borefield abstraction, mine dewatering and reinjection, the creation of above-ground and in-pit overburden (non-mineralised) and tailings landforms and the construction of on-site processing facilities and associated infrastructure. Key Project infrastructure will include mine administration and workshop facilities, fuel and chemical storage depots, a diesel-fired power plant of up to 20 megawatt (MW) capacity and distribution network, a saline abstraction borefield and a saline mine water reinjection borefield with associated pipelines and power supply units, an accommodation village servicing a fly-in / fly-out workforce, an airstrip, laydown areas and other supporting ancillary infrastructure including communications systems, roads, a waste water treatment plant and solid waste landfill facilities. Transport to site for consumables, bulk materials and general supply items will be via existing public road systems linked to dedicated Project site roads, branching off the Tropicana Gold Mine access road. At the completion of operations, the Project site will be decommissioned and rehabilitated in accordance with an approved Mine Closure Plan.

MCPL has conducted flora and vegetation surveys and threatened and priority flora surveys, within and around the Project area (previously referred to in MCPL reports as the Narnoo Project) (MCPL 2008a; 2008b; 2009a; 2010a; 2010b; 2013; 2014; 2015). This flora and vegetation report provides an overview and impact assessment of previously mapped vegetation communities and threatened, priority and other conservation significant flora species recorded and described by MCPL to date for the Project. The Project area referred to in this report (for impact purposes) is defined by two areas: the development envelope (9998.17 ha), being the wider Project area; which includes the disturbance footprint (3786.80 ha) and encompasses all mining, infrastructure, transportation corridors and administration areas.

2.2. Western Australia's flora – a Legislative Perspective

The legislative protection of flora and vegetation within Western Australia is principally governed by three Acts. These are:

- The *Wildlife Conservation Act 1950* (WA) (WC Act);
- The *Environmental Protection Act 1986* (WA) (EP Act); and
- The *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act).

These three acts provide for the protection of threatened flora, fauna (and fauna habitats) and ecological communities, while also addressing specific threats such as the clearing of native vegetation (see Appendix A.1 for an overview). Appendix A sets out definitions of conservation and control categories, as well as additional information on environmental protection legislation and how it is applied in Western Australia.

Where flora has been gazetted as threatened flora under the WC Act, it is an offence "to take" such flora without the written consent of the Minister. The WC Act states that "to take" flora includes to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means. Under the EPBC Act, a person must not take an action that has or will have a significant impact on a listed threatened species without approval from the Federal Minister for the Environment, unless those actions are not prohibited under the Act. Flora within Western Australia that is considered to be under threat may be classed as either threatened (federal/state level) or priority flora (state level) (see Appendix A.2).

The Department of Parks and Wildlife (DPaW) categorises priority flora using five categories, P1 to P5, to denote the conservation priority status of such species, with P1 listed species being the most threatened, and P5 the least. A similar listing is applied to priority ecological communities. Both threatened and priority listings are regularly reviewed by the relevant agencies, and may have their status changed when more information on the species or community becomes available. Appendix A.2 sets out additional information and definitions of both threatened and priority flora.

As well as providing protection for Western Australia's flora and vegetation, other legislation lists pest organisms and management actions to minimise spread and risk to native flora, vegetation, fauna and agricultural practices. Section 22 of the *Biosecurity and Agriculture Management Act 2007* (WA) (BAM Act) makes provision for a plant taxon to be listed as a declared pest organism in respect to parts of, or the entire State. According to the BAM Act, a declared pest is defined as a prohibited organism (section 12), or an organism for which a declaration under section 22 (2) of the Act is in force. As of 31st May 2013, this Act replaces the *Agriculture and Related Resources Protection Act 1976* (WA). Appendix A.3 sets out additional information and definitions of categories and control measures for declared pests.

At the State level, ecological communities may be considered as threatened under the EP Act once they have been identified as such by the Western Australian Threatened Ecological Communities Scientific Advisory Committee. At the Commonwealth level, some Western Australian threatened ecological communities (TECs) are also listed as threatened, under the EPBC Act. According to the EPBC Act, a person must not take an action that has or will have a significant impact on a listed threatened ecological community without approval from the Federal Minister for the Environment, unless those actions are not prohibited under the Act. Ecological communities identified as threatened, but not listed as threatened ecological communities, can be classified as priority ecological communities (PECs) at the state level. Appendix A.4 sets out the categories and definitions of both federal and state listed threatened and priority ecological communities.

Under the EP Act, the clearing of native vegetation requires a permit to do so, from the DPaW or the Department of Mines and Petroleum (DMP), unless that clearing is exempted under specific provisions listed in Schedule 6 of the Act, or are prescribed in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*. Appendix A.5 sets out additional information on the clearing of native vegetation as described under the EP Act.

Flora or vegetation may be locally or regionally significant in addition to statutory listings by the State or Federal government. While not legislatively protected, these factors are taken into consideration during the assessment of mining proposals, clearing proposals and other proposed development. Appendix A.6 describes what factors may lead to a species or community to be considered locally or regionally significant.

400000mE 500000mE 600000mE 700000mE

6800000mN

6700000mN

6600000mN

LEONORA

LAVERTON

PINJIN

KALGOORLIE-BOULDER

TROPICANA GOLD MINE

MULGA ROCK URANIUM PROJECT AREA

COSMO NEWBERRY ALT RESERVE

CUNDEELEE MISSION ALT RESERVE

R 34720 Nature Reserve Neale Junction NR

R 34605 Nature Reserve Plumridge Lakes Nature Reserve

R 30491 Nature Reserve Queen Victoria Spring Nature Reserve

R 35637 National Park Goongarrie National Park

R 19825 5(1)(g) Reserve Bullock Holes Timber Reserve

R 19764 5(1)(g) Reserve Wallaby Rocks Timber Reserve

R 19645 5(1)(g) Reserve Emu Rocks Timber Reserve

R 19640 5(1)(g) Reserve Coonana Timber Reserve

Notes:
Development Envelope - Vimy Resources (07/10/2015)
DPaW Estate - DPaW (27/11/2013)
ALT Estate - DAA (19/06/2014)
Tenements - DMP (17/02/2015)
Image - Geoscience Australia

Legend:
Development Envelope
DMP Tenements
DPaW Estate
WA Aboriginal Land Trust Estate

Client: VIMY RESOURCES

0 20km
Scale 1:1,200,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_01.dgn
Date: Oct 2015 | Rev: B | A3

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Mulga Rock Uranium Project

Locality

Showing DPaW and ALT Estates

Figure: 1

3. OBJECTIVES

The aim of this report is to combine and assess the botanical values of the disturbance footprint and the further refined impact areas for the MRUP. Specifically, the objectives include:

- Provide vegetation mapping boundaries completed to date over the wider MRUP area and including the current disturbance footprint provided by VMY;
- Map and provide lists of MCPL permanent monitoring plot and mapping site locations in the wider MRUP area;
- Define the conservation status of flora species recorded in previous surveys, by reference to current literature and listings by the DPaW under the WC Act 1950 and collections held at the Western Australian State Herbarium (WAH), and listed by the DotE under the EPBC Act;
- Map and provide lists of numbers and locations of threatened, priority and other flora species of interest both within and outside the disturbance footprint, for potential impact assessment;
- Summarise information pertaining to the local and regional significance of the vegetation communities and species populations;
- Provide an impact assessment of:
    - Flora values – the number of plants and populations to be impacted by the MRUP compared to regional numbers; and
    - Vegetation values – the area of each vegetation community to be impacted by the MRUP compared to regional vegetation, especially similarities to any PECs or TECs within the Great Victoria Desert region.
- Review potential gaps in the flora and vegetation information collected to date; and
- Prepare a report summarising this information (based on information reported in MCPL (2013), MCPL (2014) and MCPL (2015).

4. METHODS

Numerous Level 1 and Level 2 field assessments of the flora and vegetation of the MRUP area have been undertaken by MCPL botanists over 13 trips from 2007-2014 (Table 1). All field surveys were conducted in accordance with methods outlined in *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004). All botanists held valid collection licences to collect flora for scientific purposes, issued under the WC Act.

Plant specimens collected during the field surveys were dried and processed in accordance with the requirements of the Western Australian State Herbarium (WAH). The plant species were identified based on taxonomic literature and through comparison with pressed specimens housed at the WAH. Where appropriate, plant taxonomists with specialist skills were consulted. Nomenclature of the species recorded is in accordance with the DPaW (2015b).

Geographic co-ordinates defining each survey boundary and location were supplied by VMY. Satellite imagery for field surveys and vegetation maps (originally at 1:10,000 scale) were obtained and supplied by CAD Resources (Carine, Western Australia).

Table 1: Timing of surveys and number of personnel per field trip conducted by MCPL

DATE	YEAR	NO. MCPL PERSONNEL	SURVEY TYPE – LEVEL 1 (1) OR LEVEL 2 (2)	REPORT REFERENCE
20 – 24 August	2007	2	Reconnaissance (1)	MCPL (2008a)
18 – 24 February	2008	4	Mapping (1)	MCPL (2008b)
8 – 12 December	2008	2	Mapping & targeted surveys (2)	MCPL (2009a); MCPL (2010b)
17 – 23 August	2009	4	Mapping & targeted surveys (2)	MCPL (2009a); MCPL (2010b)
14 – 18 September	2009	4	Mapping & targeted surveys (2)	MCPL (2009a); MCPL (2010b)
9 – 13 November	2009	1	Targeted survey (2)	MCPL (2010a)
18 – 23 March	2010	4	Mapping & targeted surveys (2)	MCPL (2010a); MCPL (2010b)
22 – 28 May	2010	4	Mapping & update on survey work completed (2)	MCPL (2010b)
15 – 23 July	2010	4	Mapping & update on survey work completed (2)	MCPL (2010b)
2 – 5 November	2010	4	Mapping & update on survey work completed (2)	MCPL (2010b)
N/A	2013	N/A	Update on survey work completed to date	MCPL (2013)
7 – 14 April	2014	3	Mapping (2)	MCPL (2014)
8 – 15 August	2014	3	Targeted Survey (2)	MCPL (2015)
2 – 9 September	2015	4	Mapping update (1)	Current report

4.1. Desktop Assessments

Desktop assessments were conducted prior to each field trip using the Florabase (DPaW 2015b) and NatureMap (DPaW 2007-) databases. From 2007-2010 surveys, the NatureMap search parameters used were a 40 km radius 'by circle' at 29º 57' 50" S, 123º 40' 24" E (MCPL 2013). For the 2014 proposed extraction borefield survey, the search parameters used were a 40 km radius 'by circle' at 29º 50' 39" S, 124º 03' 58" E (MCPL 2014) as the survey area was located further north-east than any previous work. The EPBC Act Protected Matters Search Tool (DotE 2013) was also centred on the aforementioned co-ordinates.

In addition, historical documentation and vegetation mapping of the region, principally that of Beard (1990), Northcote *et al.* (1968), Shephard (1995), Barton & Cowan (2001) and relevant MCPL (2008a; 2008b; 2009a; 2009b; 2010a; 2010b; 2013; 2014; 2015) survey work was reviewed.

Tropicana Joint Venture operate a mine site located to the north-east of the MRUP (approximately 330 km east-north-east of Kalgoorlie). Threatened and priority flora species records have been referred to in this report to provide regional context for the priority species recorded for the MRUP (data obtained from publicly available PER reports and permission obtained by VMY staff from D. Gibbs of AngloGold Ashanti Australia Ltd, 03/02/2015).

Rainfall data was obtained from the Bureau of Meteorology (BOM 2015) for all years in which surveys were conducted. Kalgoorlie-Boulder Airport and Rawlinna Homestead are two of the nearest active BOM weather stations to the project area. Temperature data from Kalgoorlie-Boulder was used as there is limited data available from Rawlinna Homestead. Local weather data gathered from three weather stations located at VMY's Emperor, Shogun and Ambassador resource areas was also used to determine rainfall patterns prior to surveys. Data was used to determine above/below average rainfall preceding field surveys, and therefore, potentially affecting life forms present and quality of flowering or fruiting specimens available for identification at the time of survey.

4.2. Targeted Flora Surveys

Whilst conducting any survey in the area, if suspected priority flora was encountered, counts were made in an appropriate area (e.g. along the sand dune crest, along a survey line, within a given boundary or impact area) and anecdotal field notes made in relation to soil, topography and associated species. Any unidentifiable species in the field were collected for comparison with WAH reference material by MCPL and DPaW (WAH) taxonomists.

Initially, due to limited taxonomic information available on the Great Victoria Desert region, large-scale survey areas, and common occurrence in high numbers of priority species (some of which have since had their conservation status downgraded), population ranges were recorded. In more recent survey years it has been standard to count numbers or at least estimate a number in an area.

Targeted flora surveys for the MRUP have included recording priority flora species along drill lines and at proposed drill holes, helicopter surveys for *Conospermum toddii* (regarded as declared rare flora at the time of surveying), and targeted yellow sand dune traverses for *Hibbertia crispula* (P1 and Vulnerable).

4.2.1. Drill Hole Clearance

During 2008 and 2009, 543 proposed drill holes (co-ordinates supplied by VMY) were surveyed by recording numbers of threatened flora (*Conospermum toddii* –listed as declared rare flora at the time) within a 50 m radius, and priority and other unknown flora within a 20 m radius of the given GPS points (MCPL 2009a). Existing drill tracks were surveyed prior to drilling programs commencing, with threatened and priority flora species recorded within at least a 25 m width either side of the track.

4.2.2. *Conospermum toddii*

Targeted helicopter surveys were conducted in November 2009 and March 2010 on yellow sand dunes in the south-west corner of the Great Victoria Desert (MCPL 2010a). At the time, *Conospermum toddii* was listed as declared rare flora under WA legislation, and as Endangered under federal legislation. Fifty-five suitable dune systems were initially identified with satellite imagery and 1:250,000 topographical maps by C. Woolard (Woolard Consulting Pty Ltd). Potential sites for this species was based on a predictive model

as determined by Colin Woolard and assisted in targeting specific areas on specific types of yellow sandy dunes. This model was tested during the ground work and helicopter work in 2010 (MCPL 2010a). The populations of *Conospermum toddii* were recorded at 38 sites up to 70 km from the MRUP area (MCPL 2010a).

If large populations of *Conospermum toddii* were identified in the helicopter at approximately 20 m above the dune ridge, the helicopter landed, and two botanists/ecologists traversed the ridge, upper slope and mid slope in 5 m wide transects on either side of the dune ridge. The number of *Conospermum toddii* plants were recorded within each transect, as well as other priority flora species.

4.2.3. *Hibbertia crispula*

In 2014 a targeted survey was conducted for *Hibbertia crispula*, within and around the MRUP area. *Hibbertia crispula* is currently listed as Priority 1 under WA legislation, and as Vulnerable under both SA legislation (*National Parks and Wildlife Act 1972*) and federal legislation (EPBC Act; DotE 2015a).

Initially, VMY personnel traversed 89 pre-selected yellow sand dune crests (based largely on dune morphology, elevation and fire history – namely long-unburnt dunes for more than 15 years) around the MRUP area, mostly to the south and east of the development envelope. *Hibbertia crispula* was observed on 26 of the 89 dunes and detailed photographic records collected, with these localities providing the focus for MCPL site selection.

Field observations regarding *Hibbertia crispula* habit, phenology, basic root structure and population size and distribution were summarised. Voucher specimens and leaf samples were collected with the intention of carrying out morphological and molecular analyses to resolve the phylogeny and taxonomic placement of the WA and SA populations.

Detailed information on the methodology is provided in the MCPL (2015) report.

4.3. Vegetation Mapping

A total of 239 permanent monitoring plots (50 x 50 m) have been set up across the MRUP area between 2008-2010 (see Appendix B for locations), with an additional 622 relevé mapping sites (also 50 x 50 m; see Appendix C for locations) during the 2007-2015 field surveys, all of which are presented in Figure 2 (referred to as "vegetation plots"). At all plots and sites, the flora and vegetation was described and sampled systematically, with the following floristic and environmental parameters being noted:

- GPS location (based on GDA94 datum, zone 51);
- Topography;
- Soil type and colour;
- Outcropping rocks and their type;
- Percentage litter cover and percentage bare ground;
- Habitat condition (based on Keighery 1994); and
- Approximate time since fire.

For each vascular plant species, the average height and percentage cover (both alive and dead material) was also recorded.

Surface soil samples (approximately 200 g of the top 5-10 cm of soil, stored in labelled zip lock bags, collected from the centre of the plot or mapping site) have been collected at some permanent monitoring plots (in 2009) and relevé mapping and *Hibbertia crispula* sites (in 2014), with the sample locations and general notes on soil colour and topography presented in Appendix D. Samples have been provided to VMY at the conclusion of each survey. No soil analysis results are presented or discussed in this report.

The number of sites located inside and outside the development envelope and footprint are presented in Table 2.

Table 2: Number of sites located inside and outside the MRUP development envelope and disturbance footprint

AREA	NO. OF PERMANENT PLOTS (2008-2010)	NO. OF RELEVÉ MAPPING SITES (2007-2015)
Inside development envelope	39	249
Inside disturbance footprint	17	128
Outside development envelope	200	373
Total	**239**	**622**

In addition to the updated mapping presented in MCPL (2013) and the proposed extraction borefield survey area mapping (MCPL 2014), small areas were extrapolated and mapped (some of which had previously been traversed by MCPL personnel and some of which have been based on only satellite imagery and adjacent mapping where available) through interpreting detailed satellite imagery to cover the current MRUP disturbance footprint boundaries supplied in October 2015 by VMY.

In the absence of an outline of the "Yellow sandplain communities of the Great Victoria Desert" PEC endorsed by DPaW, an outline presented in the *2010 Tropicana Joint Venture Exploration Referral* to the Department of the Environment, Water, Heritage and the Arts (now DotE), totalling 1,692,000 ha was used in determining the proportion of sand dunes impacted by the MRUP compared to regional extent. The linear length of yellow sand dunes occurring within this envelope was extracted from 1:250,000 vector topographic data resulting in a total length of 8,625 km. Dune crest areas were calculated using an average crest width of 15 m (defined as the high albedo material in satellite imagery), which was based on approximately 100 readings of dune crests across the yellow sandplain dune field. The total minimum area of MCPL's S6 vegetation community was calculated by assigning an 80 m width to the dune flanks and adding this to the dune crest area. No allowance was made for dune toes. The estimated dune crest area was calculated for sand dunes identified within the Tropicana Joint Venture outline to demonstrate the potential extent of the S6 community with affinities to the broadly defined "Yellow sandplain communities of the Great Victoria Desert" PEC (pers. comm. X. Moreau, General Manager – Geology and Exploration, VMY).

550000mE 560000mE 570000mE 580000mE 590000mE 600000mE

6710000mN 6700000mN 6690000mN 6680000mN 6670000mN

Tropicana Haul Road

LANDING STRIP

ACCOMMODATION VILLAGE

EMPEROR

SHOGUN

AMBASSADOR

EXTRACTION BORES

REINJECTION BORES

PNC

Baseline Road

Nippon Highway

Notes:
Development Envelope - Vimy Resources (07/10/2015)
Development Footprint - Vimy Resources (06/10/2015)
Plot and Releve Sites - MCPL (06/10/2015)
Tenements - DMP (17/02/2015)
Image - Earth Land Surface 2000

Legend:
Development Envelope
Disturbance Footprint
Vegetation Plot
Releve Sites
Tenements

Client: VIMY RESOURCES

0 3km
Scale 1:180,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_02.dgn
Date: Oct 2015 | Rev: D | A3

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Mulga Rock Uranium Project

Vegetation Plot & Releve Sites

as at 06/10/2015

Figure: **2**

4.3.1. Analysis of Site Data

This report summarises information collected and reported on for a seven year period. Species accumulation curves, based on accumulated species versus sites surveyed, were prepared for the MCPL (2013) update and MCPL (2014), to indicate the level of adequacy of the survey efforts (Estimate S - Colwell 2006). As the number of survey sites increases and correspondingly the size of the area surveyed increases, there should be a diminishing number of new species recorded. At some point, the number of new species recorded becomes essentially asymptotic. The asymptotic value was determined using Michaelis-Menten modeling and provides an incidence based coverage estimator of species richness (ICE - Chao 2005). When the number of new species being recorded for survey effort expended approaches this asymptotic value, the survey effort can be considered to be adequate.

Prior to 2010, vegetation community delineation relied less on statistical analyses and more on topographical and botanical interpretation and aerial photography. From 2010 onwards, PRIMER v6 (Plymouth Routines in Multivariate Ecological Research) statistical analysis software was used to analyse species-by-site data and discriminate sites on the basis of their species composition and structure (Clarke and Gorley 2006), separately for the updated MCPL (2010b and 2013) and the MCPL (2014) data.

Based on the methodology presented in MCPL (2010b and 2013), percentage alive data was transformed from a range of 0-100 to a range of 0-1 for permanent plot data only. Singletons (species occurring at a single site) were removed from the dataset if they did not form a dominant component of the vegetation cover (i.e. < 1% cover). Further analyses were run on the data, including using a presence/absence transformation. All *Triodia* species, *Acacia* species and *Eucalyptus* (mallee) species were treated as single groups due to identification difficulties when fertile material is lacking during surveys. Computation of similarity matrices was based on the Bray-Curtis similarity measure. Data were analysed using the Hierarchical Clustering (CLUSTER) multivariate analysis routine. Results were used to support interpretation of satellite imagery and previous descriptions of individual vegetation communities prior to 2013.

Based on the methodology presented in MCPL (2014), to down-weight the relative contribution of quantitatively dominant species, a fourth root transformation was applied to the 2014 dataset. Singletons were removed from this dataset prior to analysis. Taxa unable to be accurately identified past family or genus in 2014 were also removed as it is uncertain as to whether they represented unique taxa, or taxa that were recorded based on other specimens and already existed within the data. All *Triodia* specimens were treated as a single "*Triodia* group" due to lack of defining flora characteristics. Computation of similarity matrices was based on the Bray-Curtis similarity measure. Data were analysed using a series of multivariate analysis routines including Similarity Profile (SIMPROF), Hierarchical Clustering (CLUSTER), Analysis of Similarity (ANOSIM) and Similarity Percentages (SIMPER). Results were used to inform and support interpretation of satellite imagery and delineation of individual plant communities, which were aligned to those described in MCPL (2013) where deemed similar.

4.3.2. Vegetation Descriptions and Condition

Vegetation descriptions in MCPL (2010b and 2013) and MCPL (2014) were based on the structural forms of Australian vegetation as outlined in Beard (1990; see Appendix E.1). Vegetation condition of the permanent monitoring plots and mapping sites was assessed as per the criteria developed by Keighery (1994; see Appendix E.2).

5. RESULTS

5.1. Regional Context

The MRUP lies within the Helms Botanical District (Beard 1990). More recently, the vegetation of Western Australia has been assigned to bioregions and subregions under the Interim Biogeographical Regionalisation for Australia (IBRA), with the survey area falling within the Shield subregion (GVD1) of the Great Victoria Desert bioregion (Barton & Cowan 2001; DotE 2015d). Geologically, the survey area lies within the Officer Basin (Beard 1990; Blewett 2012).

5.1.1. Climate

Beard (1990) described the climate of the Helms Botanical District as arid with rain during summer and winter, receiving approximately 200 mm of rainfall annually. Rainfall data from Rawlinna Homestead and Kalgoorlie-Boulder Airport and temperature data from Kalgoorlie-Boulder Airport (BOM 2015) is illustrated in Figures 3.1 and 3.2. Unpredictable and highly variable rainfall from year to year is characteristic of the Great Victoria Desert region (Beard 1990; Shephard 1995), and is evident by differences in rainfall events experienced at the two weather stations (Figures 3.1 & 3.2).

According to *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004), flora and vegetation surveys should be conducted after significant rainfall events in the Eremaean Province. Kalgoorlie-Boulder Airport and Rawlinna Homestead received above average rainfall approximately six weeks before the December 2008 survey (Figures 3.1 & 3.2). Above average (Kalgoorlie-Boulder Airport) and average (Rawlinna Homestead) rainfall was also experienced in June 2009 and average (Kalgoorlie-Boulder Airport) and above average (Rawlinna Homestead) rainfall was experienced in July 2009, preceding the August and September 2009 surveys. Above average rainfall was experienced approximately six weeks (during September 2010) preceding the November 2010 survey at both Kalgoorlie-Boulder Airport and Rawlinna Homestead (Figures 3.1 & 3.2).

More recently, Rawlinna Homestead and Kalgoorlie-Boulder Airport received approximately seven times the average rainfall in January 2014. Rawlinna Homestead received over three times the average rainfall in February 2014 whilst Kalgoorlie-Boulder Airport received average rainfall in February 2014, prior to the April 2014 survey (Figures 3.1 & 3.2). However, for the two months prior to the August 2014 survey, Kalgoorlie-Boulder Airport and Rawlinna Homestead both received below average rainfall (Figures 3.1 & 3.2).

Even across the MRUP area, local rainfall variation is evident (Figure 3.3). Local weather station rainfall amounts generally correspond to the peak rainfall events recorded at the BOM weather stations.

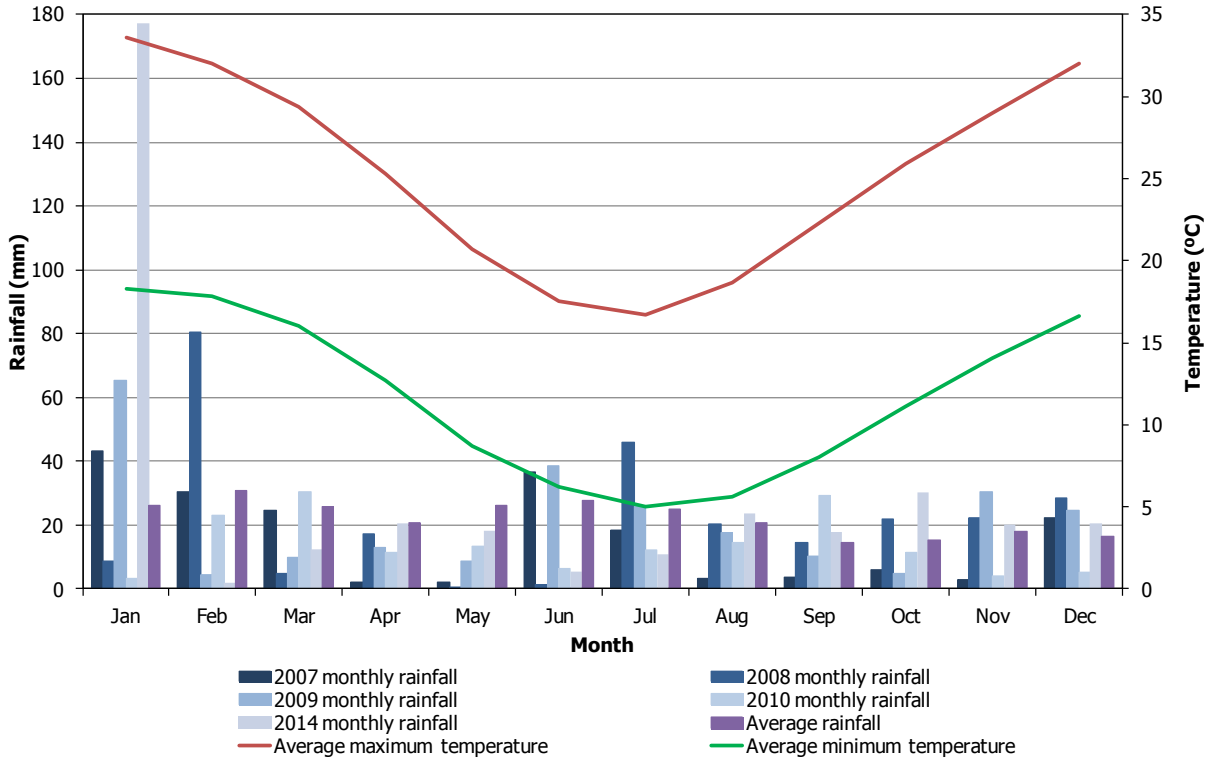


Figure 3.1: Rainfall and temperature data for Kalgoorlie-Boulder Airport

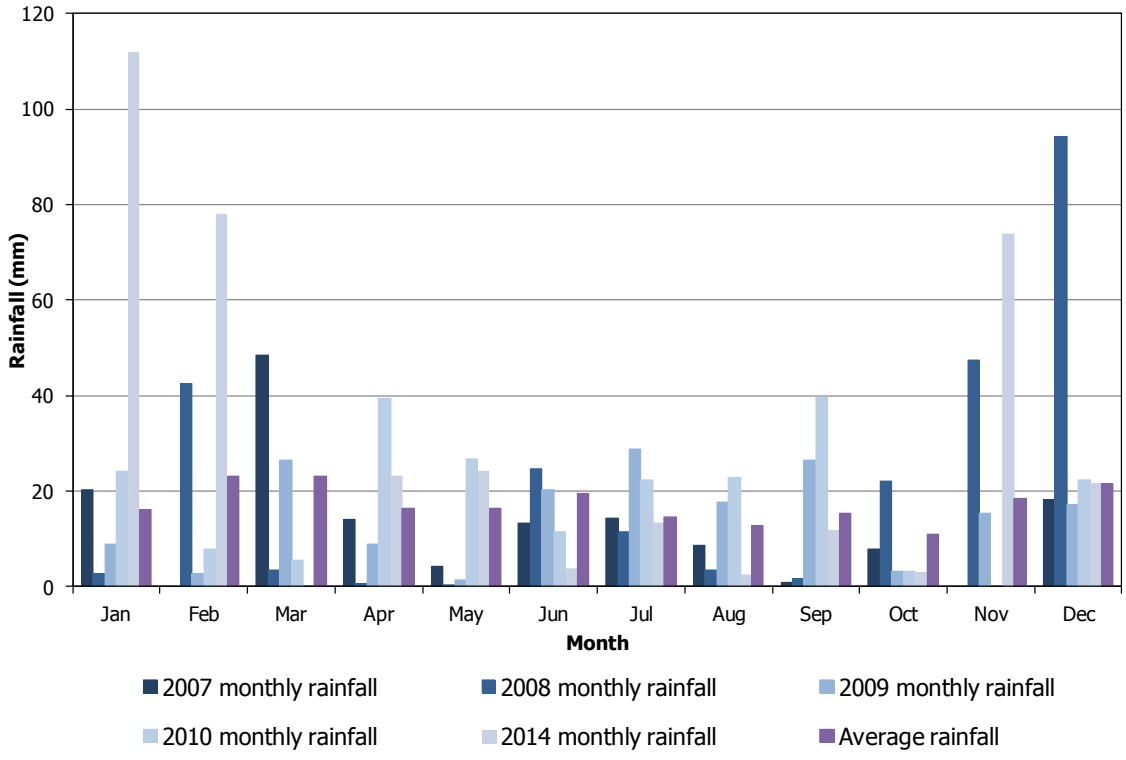


Figure 3.2: Rainfall data for Rawlinna Homestead

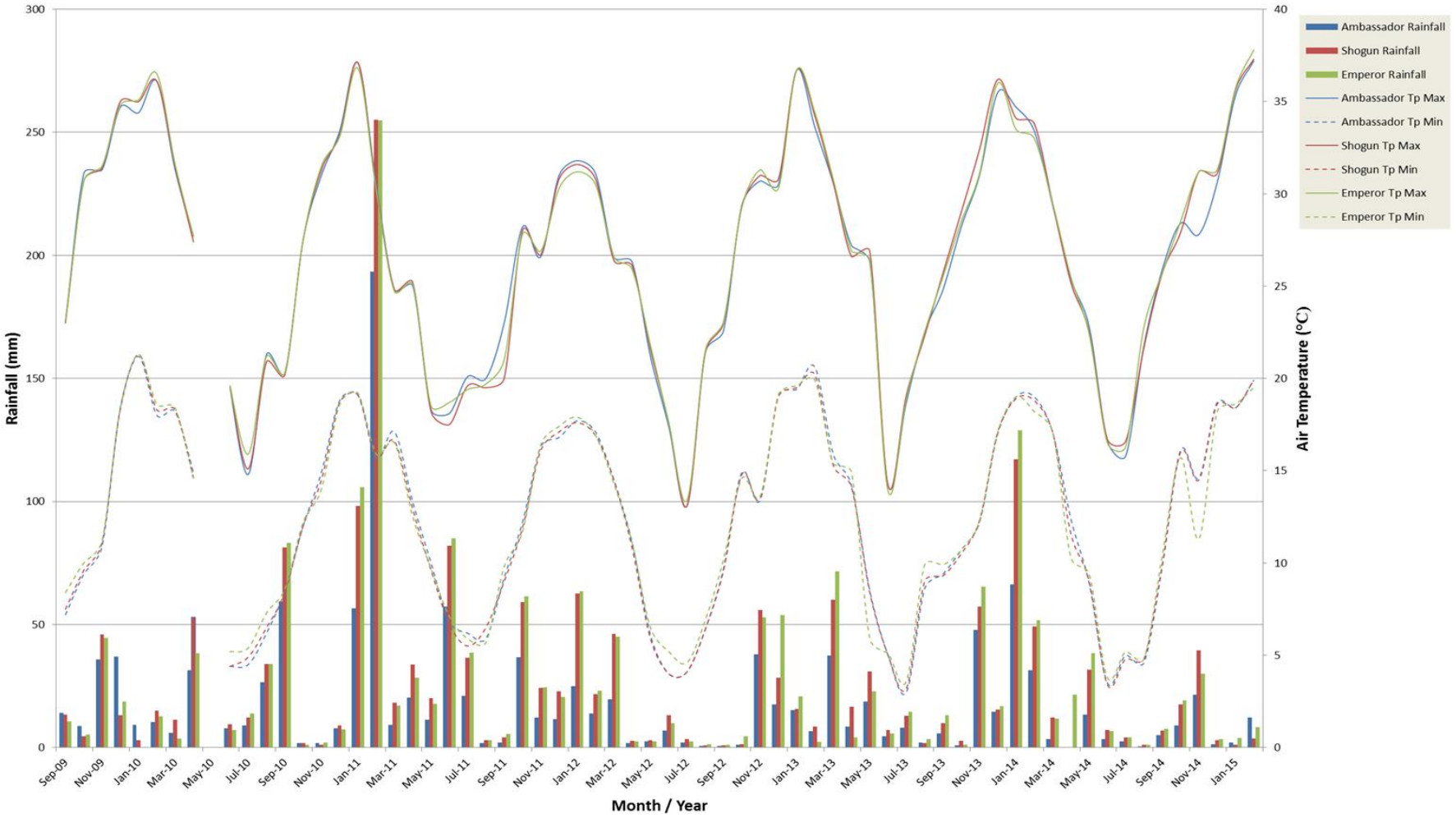


Figure 3.3: Rainfall and temperature data for the Ambassador, Shogun and Emperor weather stations (Mulga Rock Uranium Project)

Note: Rainfall and temperature data from VMY between 2009 and 2015; weather station coordinates as follows: Ambassador – 574715 mE, 6684600 mN; Shogun – 563569 mE, 6687909 mN; and Emperor – 557391 mE, 6691424 mN.

5.1.2. Geology, Soils and Topography

The Helms Botanical District is characterised by undulating topography with longitudinal dunes (Beard 1990). Soils between the dunes are characterised by shallow earthy soils overlying red brown hardpan, and other soils are red earthy sands or red brown sands of the dunes (Beard 1990). The geology is characterised by quaternary sand plain over Cenozoic, Mesozoic and Permian rocks (Beard 1990).

The Western end of the Great Victoria Desert is underlain by the Yilgarn Craton, however the majority of this region is comprised of an active sand-ridge desert of deep Quaternary Aeolian sands overlying Cenozoic, Mesozoic and Permian strata of the Officer Basin (Beard 1990; Barton & Cowan 2001). Sand plains with patches of seif (longitudinal) dunes running east-west are characteristic of this region (Barton & Cowan 2001). Parts of the region have a duricrust surface comprised of silicon oxide (Shephard 1995). Silcrete outcropping occurs in some areas within the north-eastern proposed extraction borefield survey area (pers. comm. X. Moreau, General Manager – Geology and Exploration, VMY).

Two soil units, based on Northcote *et al.* (1968) occur in the MRUP area. The dominant soil unit is AB47, described as plains and dunes with longitudinal and ring dunes with interdune corridors and plains, and the occasional salt pan (comprises 95.91% of the MRUP development envelope; Figure 4). Soil unit My99 also occurs in the MRUP area (comprises 4.1% of the MRUP development envelope; Figure 4) and is described as plains with extensive gravel pavements and small tracts of longitudinal dunes (Northcote *et al.* 1968).

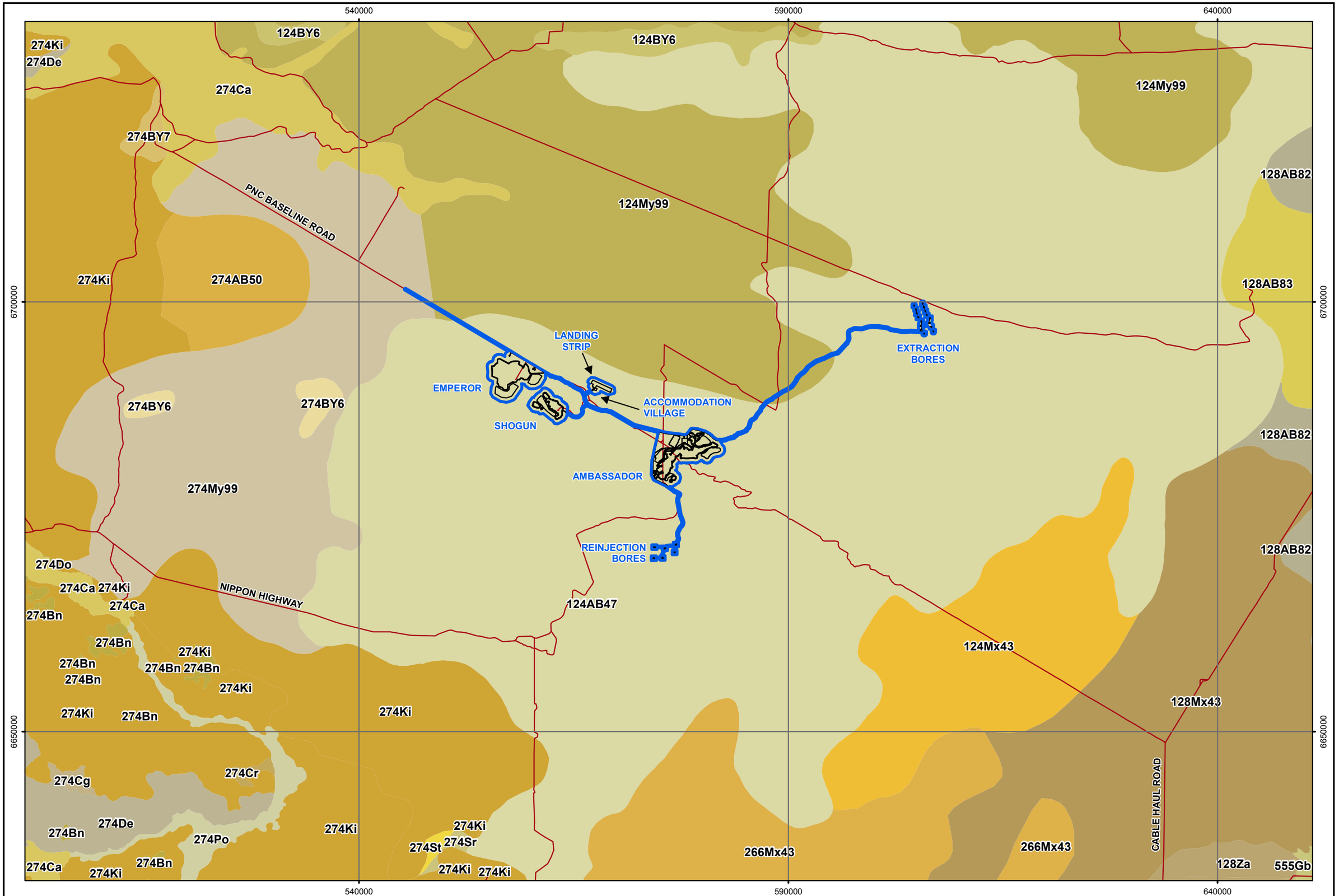
5.1.3. Regional Vegetation

The vegetation of the Helms Botanical District is consistently characterised by tree steppe of *Eucalyptus gongylocarpa* and *Triodia basedowii* (Beard 1974). The sandy areas are a mosaic of tree and shrub communities, however *Eucalyptus gongylocarpa* is dominant on sand dunes only where it occurs locally between them (Beard 1990). Patches of low mulga (*Acacia aneura* complex) woodland also occur in the Great Victoria Desert region (Beard 1974; 1990). Beard (1974) mapped the following dominant vegetation complex across the MRUP area (Figure 5):

- Tree steppe of *Eucalyptus gongylocarpa* over *Eucalyptus youngiana* mallee over *Triodia basedowii* hummock grassland (e_{19}Lr.e_{20}Sr.t_2Hi; corresponding to Pre-European vegetation association 84 – Figure 5).

Under the IBRA characterisation, vegetation of the Shield subregion (GVD1) is described as Aeolian sandplains dominated by spinifex with mainly mallees over hummock grassland (*Triodia basedowii*). Scattered marble gum (*Eucalyptus gongylocarpa*) and *Callitris* occur on the deeper sands, whilst mulga (*Acacia aneura* complex) woodlands occur mainly on colluvial and residual soils (Barton & Cowan 2001). Also noted in the subregion is the occurrence of halophytes and samphires on salt lake margins and saline drainage areas (Barton & Cowan 2001). These salt lakes typically do not occur in the MRUP area.

Approximately 876295.94 ha of the pre-European vegetation association 84 currently occurs within the GVD1 Shield IBRA subregion (Government of Western Australia 2013). The Department of Agriculture and Food's (2015) Landsystem units only comprise descriptions for soil and geology units (based on Northcote *et al.* 1968 - vegetation systems are not available for the Great Victoria Desert region), which are described in section 5.1.2 above.



Notes
Development Envelope - Vimy Resources (07/10/2015)
Disturbance Footprint - Vimy Resources (06/10/2015)
Land Systems - DoAF (31/10/2013)

Legend
VMY_Development_Envelope_20151007
VMY_Disturbance_Footprint_20151006

Client: VIMY RESOURCES

N

0 5 10 km
Scale: 1:400,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_04
Date: Oct 2015 | Rev: B | A3

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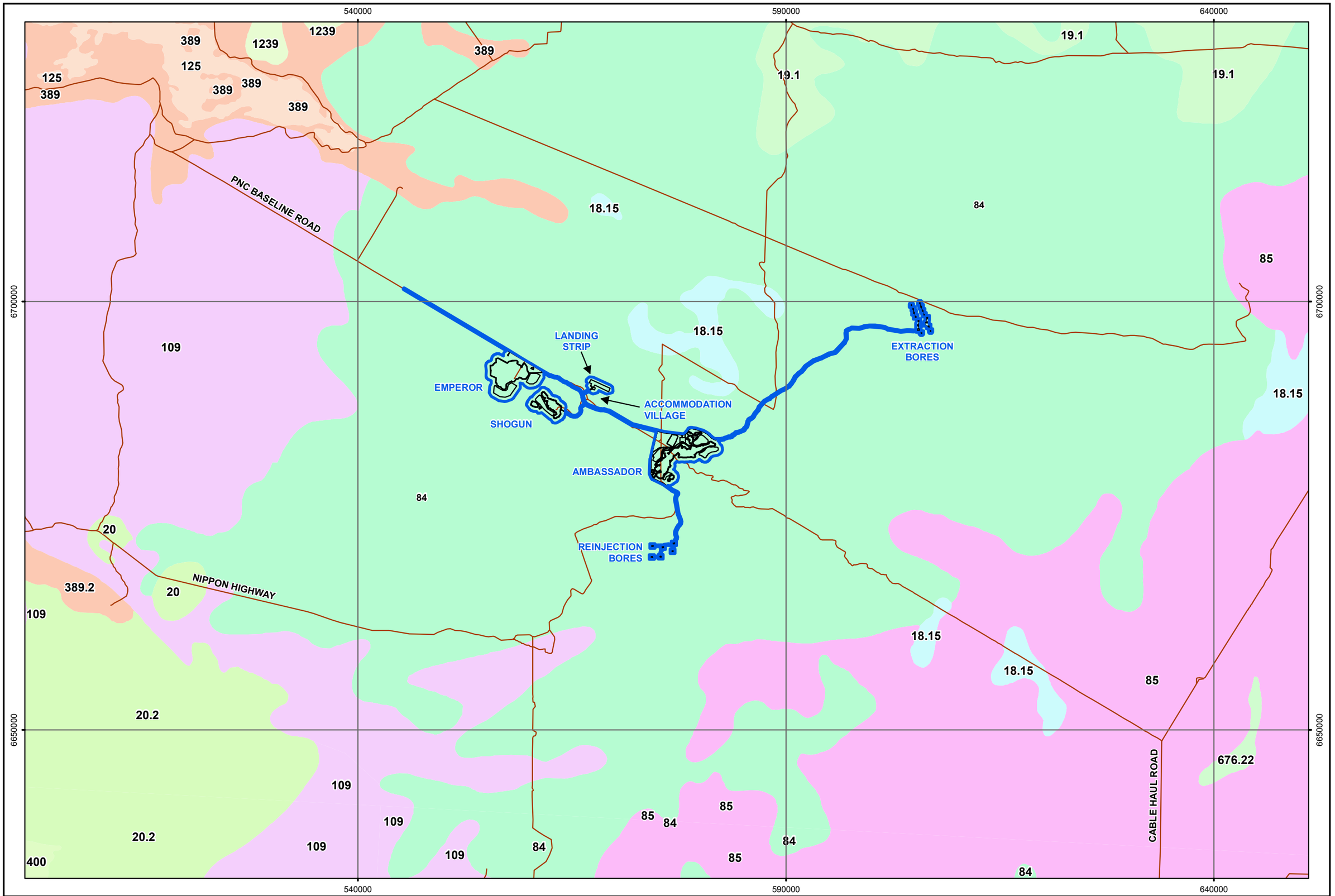
Mulga Rock Uranium Project
Land Systems

Figure: 4



Notes
Development Envelope - Vimy Resources (07/10/2015)
Disturbance Footprint - Vimy Resources (06/10/2015)
Pre European Vegetation - DoAF (05/06/2013)

Legend
VMY_Development_Envelope_20151007
VMY_Disturbance_Footprint_20151006

Client: VIMY RESOURCES

N

0 5 10 km
Scale: 1:400,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_05
Date: Oct 2015 | Rev: B | A3

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Mulga Rock Uranium Project
Pre European Vegetation

Figure: 5

5.1.4. Threatened and Priority Ecological Communities

No TECs as defined by the EPBC Act or by the EP Act (DotE 2015b; DPaW 2014d) are known to occur in or nearby the MRUP area.

One Priority 3 (ii) ecological community (see Appendix A.4 for conservation code definitions) as defined by the DPaW (2014c) is likely to occur within the survey area. This PEC is described as the 'yellow sandplain communities of the Great Victoria Desert', containing very diverse mammalian and reptile fauna, with distinctive plant communities. Threats to this PEC include mining activities, however it is not well understood and to date, little information is available.

5.1.5. Regional Flora

The combined desktop survey results (from NatureMap – DPaW 2007-) list 192 vascular plant taxa, representative of 98 genera and 39 families in the wider area. These records are listed in Appendix F. Based on the NatureMap results, no threatened flora species are known to occur within the immediate vicinity of the MRUP. A total of 16 priority flora, based on NatureMap records (plus two additional priority species only recorded during MCPL surveys), have the potential to occur within the MRUP area (Table 3).

Only one weed species (based on NatureMap search results), **Schinus molle* var. *areira*, has been recorded from the wider area (Appendix F). This species is permitted under section 11 of the BAM Act.

A total of six annual or biennial species are known from the wider MRUP area based on NatureMap search results (Appendix F).

In addition to the NatureMap search results, records from Tropicana Joint Venture reports (as per their Public Environmental Review appendices – AngloGold Ashanti 2009a; Botanica Consulting 2009; Ecologia Environment 2009a; Ecologia Environment 2009b; and Ecologia Environment 2009c; MCPL 2009b) indicate that the additional priority species: *Caesia talingka* ms (P2), *Eremophila undulata* (P2), *Physopsis chrysotricha* (P2), *Acacia eremophila* numerous nerved variant (A.S. George 11924) (P3), *Acacia eremophila* var. *variabilis* (P3) and *Baeckea* sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (P3) have been recorded in the wider area (Figure 6).

Of particular note were two surveys conducted by AngloGold Ashanti (2009a) in the nearby Queen Victoria Spring Nature Reserve and Plumridge Lakes Nature Reserve. These surveys were mostly confined to existing tracks, with results included in Figure 6. Over 3,000 plants of *Conospermum toddii* (P4) and over 100 plants of *Grevillea secunda* (P4) were recorded in Queen Victoria Spring Nature Reserve, as well as 52 plants of *Grevillea secunda* (P4), 71 plants of *Dicrastylis cundeeleensis* (P4) and one plant of *Olearia arida* (P4) recorded in Plumridge Lakes Nature Reserve (AngloGold Ashanti 2009a).

Table 3: Threatened and priority flora with the potential to occur in or around the MRUP

Note: [1]Preferred habitat is based on FloraBase (DPaW 2015b) descriptions and MCPL field observations and site information. [2]From MCPL surveys for the MRUP (MCPL 2008a; 2008b; 2009a; 2010a; 2010b; 2013; 2014; 2015).

SPECIES	FAMILY	CONSERVATION STATUS	PREFERRED HABITAT[1]	NATUREMAP RECORD	MCPL SURVEY RECORD[2]
Hibbertia crispula	DILLENIACEAE	P1 & Vulnerable	Yellow sand dune crests.	X	X
Caesia rigidifolia	HEMEROCALLIDACEAE	P1	Yellow-orange sand.	X	
Dampiera eriantha	GOODENIACEAE	P1	Yellow sand dune crests.	X	X
Neurachne lanigera	POACEAE	P1	Red sandplains and lateritic outcrops.		X
Isotropis canescens	FABACEAE	P2	Yellow clayey sandplains.	X	X
Malleostemon sp. Officer Basin (D. Pearson 350)	MYRTACEAE	P2	Yellow sand dune crests.	X	X
Physopsis chrysotricha	LAMIACEAE	P2	Red-yellow sandplains.	X	
Styphelia sp. Great Victoria Desert (N. Murdock 44)	ERICACEAE	P2	Yellow-orange sandy slopes.	X	X
Thryptomene eremaea	MYRTACEAE	P2	Red-yellow sandplains.	X	
Trachymene pyrophila	ARALIACEAE	P2	Yellow-orange sandplains. Disturbance specialist.	X	
Eucalyptus pimpiniana	MYRTACEAE	P3	Red sand dunes and sandplains	X	
Labichea eremaea	FABACEAE	P3	Orange-red sandplains.		X
Ptilotus blackii	AMARANTHACEAE	P3	Orange-red sand.	X	X
Comesperma viscidulum	POLYGALACEAE	P4	Orange-red sandplains.	X	X
Conospermum toddii	PROTEACEAE	P4	Yellow sand dune crests and slopes.	X	X
Dicrastylis cundeeleensis	LAMIACEAE	P4	Yellow-orange undulating sandplains.	X	X
Grevillea secunda	PROTEACEAE	P4	Yellow-orange undulating sandplains.	X	X
Olearia arida	ASTERACEAE	P4	Yellow-orange-red, flat to undulating sandplains.	X	X

400000mE 500000mE 600000mE 700000mE

6900000mN

6800000mN

6700000mN

6600000mN

LEONORA

LAVERTON

PINJIN

KALGOORLIE-BOULDER

GREAT VICTORIA DESERT

MULGA ROCK
URANIUM PROJECT AREA

R 36271
Nature Reserve
Yeo Lake Nature Reserve

R 34720
Nature Reserve
Neale Junction NR

R 34605
Nature Reserve
Plumridge Lakes Nature Reserve

R 30491
Nature Reserve
Queen Victoria Spring Nature Reserve

R 19825
5(1)(g) Reserve
Bullock Holes Timber Reserve

Goongarrie National Park
ex Goongarrie

Laverton Leonora Road
Goldfields Highway
Nippon Highway
Pinjin Road
Rason Lake Road
Haul Road
Tropicana
PNC Baseline Road
Cable Hwy Road

Notes:
Development Envelope - Vimy Resources (06/10/2015)
DPaW Priority Species - Mattiske Consulting Pty Ltd (05/10/2015)
AGA Priority Species - Mattiske Consulting Pty Ltd (05/10/2015)
Image - Geoscience Australia

Legend:
- Development Envelope
- DPaW Priority Species (P4)
- AGA Priority Species (P1)
- AGA Priority Species (P2)
- AGA Priority Species (P3)
- AGA Priority Species (P4)
- AGA Priority Species (Other)

Client: VIMY RESOURCES

0 20km
Scale 1:1,250,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_06.dgn
Date: Oct 2015 | Rev: A | A3

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Mulga Rock Uranium Project
Regional Flora
Showing AGA and DPaW sites

Figure: 6

5.2. Flora Recorded in the Project Area

A total of 335 vascular plant taxa, representative of 140 genera and 43 families, have been recorded across all MCPL surveys associated with the MRUP. The majority of taxa recorded were representative of the Fabaceae (52 taxa), Myrtaceae (40 taxa), Goodeniaceae (25 taxa) and Proteaceae (23 taxa) families (see Appendix F for a species list based on current nomenclature).

A total of nine annual and/or biennial species have been recorded in the MRUP area by MCPL, equating to 2.7% of the total number of taxa recorded.

A species accumulation curve was used to evaluate the sampling adequacy of surveys from 2007-2010 and is presented in Figure 7.1. The incidence based coverage estimator (ICE) of species richness was 324.8. Based on this value, and the total of 283 species recorded (in MCPL (2010b) and also presented in MCPL (2013) permanent plots and relevé mapping sites), approximately 87% of the flora species potentially present within the MRUP were recorded.

A species accumulation curve was used to evaluate the sampling adequacy of the 2014 proposed extraction borefield and pipeline route survey areas and is presented in Figure 7.2. The incidence based coverage estimator (ICE) of species richness was 213.8. Based on this value, and the total of 175 species recorded (in MCPL (2014) relevé mapping sites *only*), approximately 82% of the flora species potentially present within the proposed extraction borefield and pipeline route survey area were recorded.

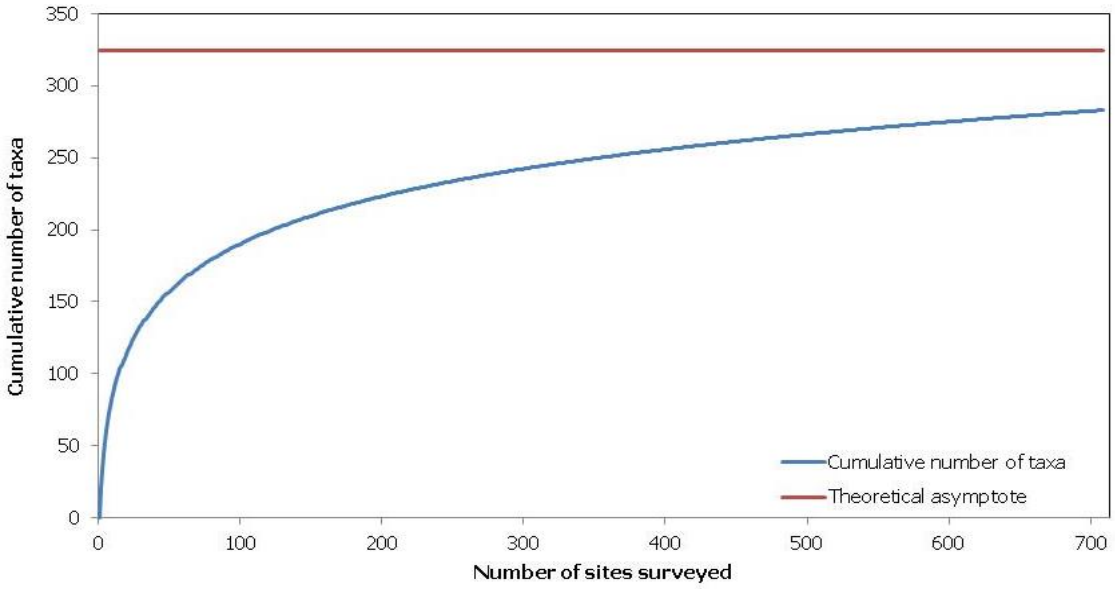


Figure 7.1: Average randomised species accumulation curve for data presented in MCPL (2013)

Note: Field survey data (relevé mapping sites from 2007-2010 and permanent plots established in 2008-2010) were used to calculate both a species accumulation curve and a theoretical maximum number of species (asymptotic value) within the MRUP area.

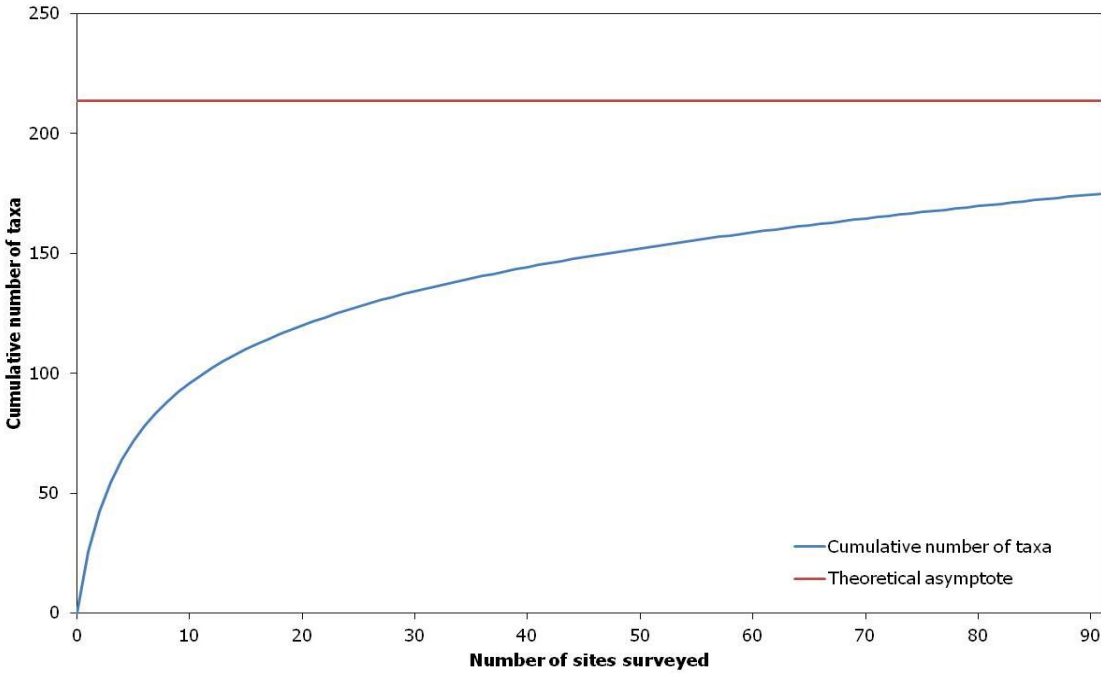


Figure 7.2: Average randomised species accumulation curve for data presented in MCPL (2014)

Note: Field survey data (relevé mapping sites from 2014 only) were used to calculate both a species accumulation curve and a theoretical maximum number of species (asymptotic value) within the proposed extraction borefield and pipeline route survey area.

5.2.1. Threatened and Priority Flora

No threatened flora pursuant to subsection (2) of section 23F of the WC Act and as listed by the DPaW (2014b) have been recorded in the MRUP area. One state listed Priority 1 species, *Hibbertia crispula*, however, is pursuant to section 179 of the EPBC Act, being listed as Vulnerable by the DotE (2015a), was recorded within the MRUP area, and was targeted by surveys in 2014 to record detailed population distribution and numbers in the wider region (results presented in MCPL 2014b). The *Hibbertia crispula* targeted surveys resulted in an estimated 14,269 plants recorded on dunes in and surrounding the MRUP (MCPL 2015). This estimate includes traverses by VMY staff (some of which have only been confirmed through photos by MCPL botanists, not from specimen collection), therefore is much higher than the MCPL number of individuals presented in Table 4 below. It is estimated that of the 89 dunes traversed by VMY staff, only five occur within the MRUP development envelope, representing approximately 225 plants (Table 4; and MCPL 2015). A more detailed analysis of impacts to the Vulnerable *Hibbertia crispula* is presented and discussed in MCPL (2015).

A total of 13 other priority flora species have been recorded in the MRUP area from 2007-2015 surveys. One additional specimen was unable to be positively identified as the Priority 3 species, *Baeckea* sp. Sandstone (C.A. Gardner s.n. Oct. 1963), due to a lack of flowering material (MCPL 2014). A brief description of these priority flora species, based on DPaW (2015b) and combined MCPL survey information is provided in Appendix G. The geographic locations of these records are listed in Appendix H and presented in Figure 8.

Three records of *Ptilotus blackii* were not positively identified as the Priority 3 species due to lack of flowering material at the time of survey. In July 2010, however, one specimen collected by MCPL botanists was confirmed by WAH specialist, R. Davis as *Ptilotus blackii*, therefore for impact purposes they have been treated as a single taxon. No records of the priority species *Ptilotus blackii* (or *Labichea eremaea*) lie within the MRUP development envelope, and are therefore unlikely to be directly impacted by the development.

Based on MCPL records, *Isotropis canescens*, *Styphelia* sp. Great Victoria Desert (N. Murdock 44) and *Grevillea secunda* have more than 30% of their estimated regional numbers within the MRUP development envelope and are therefore likely to be impacted (both directly and indirectly). When compared to the number recorded in the disturbance footprint, however, only 4.25% of *Isotropis canescens*, 1.84% of *Styphelia* sp. Great Victoria Desert (N. Murdock 44) and 7.40% of *Grevillea secunda* regional numbers occur within the disturbance footprint (Table 4). Whilst only 13.71% of known regional *Conospermum toddii* records occur within the development envelope, 8.26% (the largest proportion of priority species to be potentially impacted) of the known regional records occur within the disturbance footprint (Table 4). For more detailed information regarding regional distribution and habitat preferences of these species, please refer to Appendix G.

Table 4: Potential impacts to priority flora species recorded by MCPL in the MRUP surveys, 2007-2015

Note: [1]Based on MCPL records associated with the MRUP (2007-2015); "No. individuals" was calculated from the median (if recorded as a range), and the error associated with that range; the **bolded** records indicate that at least one individual occurs at each of the known locations (population numbers were not recorded for all locations of this species); **^** includes '?' specimens in MCPL numbers; regional numbers include records from MCPL, VMY dune traverses, Tropicana Joint Venture and DPaW in the south-west corner of the Great Victoria Desert (GVD) bioregion; **DE** refers to the wider 'development envelope'; **DF** refers to 'disturbance footprint', or the direct impact areas; **Orange** highlighted cells indicate species with the highest impact.

SPECIES	CONSERVATION STATUS	NO. MCPL INDIVIDUALS ± ERROR[1] (NO. LOCALITIES)	REGIONAL (GVD) NO. INDIVIDUALS (NO. LOCALITIES)	NO. MCPL INDIVIDUALS ± ERROR WITHIN DE (NO. LOCALITIES)	NO. INDIVIDUALS ± ERROR WITHIN DF (NO. LOCALITIES)	% OF REGIONAL NO. WITHIN DE	% OF REGIONAL NO. WITHIN DF
Hibbertia crispula	P1 & Vulnerable	2691 ± 98 (38)	14269 ± 25	182 ± 13 (4)	38 ± 13 (1)	1.28	0.27
Dampiera eriantha	P1	1415± 132 (114)	1877 ± 137 (189)	51 ± 2 (4)	8 ± 2 (1)	2.72	0.43
Neurachne lanigera	P1	**25 ± 0 (6)**	**25 ± 0 (6)**	**1 ± 0 (1)**	0 ± 0 (0)	**4.00**	0.00
Isotropis canescens	P2	3011 ± 0 (49)	3012 ± 0 (50)	986 ± 0 (16)	128 ± 0 (3)	32.74	4.25
Malleostemon sp. Officer Basin (D. Pearson 350)	P2	1231 ± 132 (50)	2137 ± 174 (106)	0 ± 0 (0)	0 ± 0 (0)	0.00	0.00
Styphelia sp. Great Victoria Desert (N. Murdock 44)	P2	104 ± 0 (59)	109 ± 2 (61)	49 ± 0 (21)	2 ± 0 (2)	45.16	1.84
Baeckea sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963)^	P3	**1^ ± 0 (1^)**	452^ ± 30 (19^)	**1^ ± 0 (1^)**	0 ± 0 (0)	**0.22^**	0.00
Labichea eremaea	P3	284 ± 92 (8)	284 ± 92 (8)	0 ± 0 (0)	0 ± 0 (0)	0.00	0.00
Ptilotus blackii^	P3	39^ ± 15 (4^)	39^ ± 15 (4^)	0 ± 0 (0)	0 ± 0 (0)	0.00	0.00
Comesperma viscidulum	P4	563 ± 24 (126)	1898 ± 29 (132)	123 ± 21 (50)	63 ± 19 (18)	6.48	3.32
Conospermum toddii	P4	37147 ± 3502 (402)	45699 ± 3723 (533)	6267 ± 2078 (218)	3941 ± 1282 (164)	13.71	8.62
Dicrastylis cundeeleensis	P4	748 ± 252 (40)	7172 ± 267 (149)	48 ± 19 (4)	22 ± 9 (2)	0.67	0.31
Grevillea secunda^	P4	10107^ ± 674 (574^)	12839^ ± 699 (654^)	5939^ ± 219 (304^)	945^ ± 117 (128^)	46.26^	7.40^
Olearia arida	P4	595 ± 81 (69)	3063 ± 171 (241)	196 ± 24 (38)	56 ± 13.5 (20)	6.40	1.83

5.2.2. Other Species of Interest

Four flora species, including *Leucopogon aff. planifolius*, *Ophioglossum polyphyllum*, *Grevillea* ?*striata* and *Euphorbia drummondii* were recorded outside of their currently known distributions. Two species, *Brunonia ?australis* var. A. Kimberley Flora (K.F. Kenneally 5452) (formerly *Brunonia suffruticosa*) and *Schoenus* sp. A1 Boorabbin (K.L. Wilson 2581) have been identified as occurring in the south-west corner of the Great Victoria Desert since the MCPL (2010b; 2013; and 2014) survey and therefore, represent a smaller range extension than previously described. Localities of these records are included in Appendix H. A brief description of these taxa is presented below.

Leucopogon planifolius **(ERICACEAE)** is a (morphologically variable) shrub to 2 m that often occurs on grey or yellow sand over laterite in the Avon Wheatbelt, Esperance Plains, Geraldton Sandplains, Jarrah Forest, Mallee and Swan Coastal Plain regions (DPaW 2015b; Plates 1a and 1b). The specimens NM114, NM126, NM135, NM137 and NM147 from August 2014 (MCPL (2015); as well as specimen NM044 from the April 2014 survey – MCPL (2014)) resemble this taxon, however, they represent an approximate 600 km extension to the currently known range. *Leucopogon aff. planifolius* was identified by M. Hislop of the WAH as having similarities with *L. planifolius*, but not being identical to specimens currently held at the WAH. Approximately 68 individuals have been recorded from 16 locations from the combined MCPL surveys, with 14 individuals occurring in the development envelope and none occurring in the disturbance footprint (Figure 8; Appendix H).

Plate 1: ***Leucopogon*** **aff.** ***planifolius***
a) habit and **b)** fruit, August (Photographs by S. Ruoss).

Ophioglossum polyphyllum **(OPHIOGLOSSACEAE)** is a rhizomatous, perennial herb to 10 cm tall that occurs in the Carnarvon, Coolgardie, Murchison and Northern Kimberley regions with only six WAH records (DPaW 2015b). This species was identified in a MCPL 2010 survey (see MCPL 2013 – site VP130) which to date, has not been included in any vegetation mapping analysis. *Ophioglossum polyphyllum* was also recorded at site MURD019, on highly leached, clayey soils (MCPL 2014). These collections represent a new population record approximately 300 km from the nearest WAH specimen.

Euphorbia drummondii **(EUPHORBIACEAE)** is a prostrate, annual or short-lived perennial herb that is widespread across Western Australia (DPaW 2015b). It is considered native in part of its range (tropical and arid regions) and naturalised elsewhere (Perth and the south-west) (Hussey *et al.* 2007). The specimen collected in the April 2014 (MCPL 2014) survey represents a new population record for the Great Victoria Desert (approximately 250 km from nearest WAH specimen record), however still falls within the known range for this taxa.

Grevillea striata **(PROTEACEAE)** is a shrub to 12 m tall that occurs on red sand, loam or clay, near watercourses or on plains in the Carnarvon, Central Kimberley, Central Ranges, Dampierland, Gascoyne, Great Sandy Desert, Murchison, Ord Victoria Plain, Pilbara Tanami and Victoria Bonaparte regions (DPaW 2015b). One specimen collected in the 2015 survey has been tentatively named *Grevillea* ?*striata* based on a fruiting specimen (specimen CR038 03/09/15). This collection has been submitted to the WAH for confirmation (09/10/15), especially considering that the collection potentially represents an approximate

600 km range extension. The specimen was collected from the relevé mapping site, STAR039, which does not lie within the development envelope and is therefore unlikely to be directly impacted by the proposed development.

***Schoenus* sp. A1 Boorabbin (K.L. Wilson 2581) (CYPERACEAE)** is a perennial sedge to 30 cm tall that occurs on well-drained sand in the Avon Wheatbelt, Coolgardie, Esperance Plains and Mallee regions (DPaW 2015b). Four localities with approximately 33 individuals were recorded in the April 2014 survey (MCPL 2014). Since this survey, a previous collection held at the WAH (unrelated to the MRUP) has been determined as this taxon. As such, the MCPL specimens now represent an approximate 90 km range extension to the north of the nearest WAH record in the Queen Victoria Springs Nature Reserve. Twenty-two individuals fall within the development envelope, however none occur within the disturbance footprint (Figure 8).

***Brunonia ?australis* var. A. Kimberley Flora (K.F. Kenneally 5452) (formerly *Brunonia suffruticosa* ms) (GOODENIACEAE)** is more commonly found in the Little Sandy Desert to Pilbara regions. Due to WAH specimens being collected and vouchered from the region (unrelated to the MRUP), these MCPL specimens represent a 250 km range extension to the south west with the nearest WAH specimen found in Neal Junction Nature Reserve (reduced from 400 km in the MCPL (2013) report). The identity of the specimen (representing 25-50 individuals) collected during MCPL surveys could not be confirmed however, as the specimen was of poor quality and lacking flowering material.

Two proteaceous collections were identified as ***Hakea* sp. (LAC139 13/04/14)** and ***Hakea* sp. (LAC140 13/04/14)** and were recorded from six nearby locations in the April 2014 and September 2015 survey (MCPL 2014). Whilst these collections differ in leaf morphology, they likely represent the same species (pers. comm. M. Hislop – taxonomist, WAH). These *Hakea* specimens appear most similar in morphology to the *Ulicina* Group (*sensu* Barker, Haegi and Barker 1999) and were fruiting, not flowering, at the time of both surveys. The locations were within community S9 and the specimens were described as up to 140 cm tall, with a total of at least 35 individuals, all of which occur within the development envelope (MCPL 2014). At least one of the 25 *Hakea* sp. (LAC139 13/04/14) individuals and three of the *Hakea* sp. (LAC140 13/04/14) individuals occur within the disturbance footprint and are likely to be directly impacted.

Other species mentioned as range extensions in previous reports (MCPL 2010b and MCPL 2013) are no longer considered to be range extensions as they have since been accepted and/or vouchered at the WAH. This includes *Dampiera ramosa*, *Labichea eremaea* (P3) and *Gastrolobium brevipes* (MCPL 2010b and MCPL 2013).

5.2.3. Introduced (Weed) Species and Declared Plant (Pest) Organisms

No introduced (weed) species or declared plant organisms have been recorded in surveys for the MRUP.

520000mE 540000mE 560000mE 580000mE 600000mE 620000mE 640000mE 660000mE

6700000mN 6680000mN 6660000mN 6640000mN 6620000mN

MULGA ROCK
URANIUM PROJECT AREA

WH
XH
WG

PERMITS MAY BE REQUIRED FOR ENTRY INTO OR TRAVELLING THROUGH ABORIGINAL LANDS & COMMUNITIES

Haul Road

Tropicana

Nippon Highway

PNC Baseline Road

Cable Haul Road

GREAT VICTORIA DESERT

QUEEN VICTORIA SPRING NATURE RESERVE

R 30491
Nature Reserve
Queen Victoria Spring Nature Reserve

Moonyoora

30° 30'

123° 30'

124° 00'

Notes:
Development Envelope - Vimy Resources (06/10/2015)
Priority Species - MCPL (05/10/2015)
Image - Geoscience Australia

Legend:
- Development Envelope
- MCPL Priority Species (P1 & Vulnerable)
- MCPL Priority Species (P1)
- MCPL Priority Species (P2)
- MCPL Priority Species (P3)
- MCPL Priority Species (P4)
- MCPL Priority Species (Other)

Client: VIMY RESOURCES

0 6km
Scale 1:400,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_08.dgn
Date: Oct 2015 | Rev: B | A3

Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
Author: E M Mattiske | MCPL Ref: VRL1401/062/14
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax: (08) 9246 3202

Mulga Rock Uranium Project

MCPL Priority Flora

as at 06/10/2015

Figure: **8**

5.3. Vegetation in the Project Area

5.3.1. Statistical Analyses

Statistical analyses were conducted (separately) for the 2008-2010 permanent plot data and the 2014 relevé proposed extraction borefield mapping sites. Dendrograms relating to each survey analysis are presented (as they were presented in the MCPL 2010b, 2013 and 2014 reports) in Figures 9.1 and 9.2.

2010 analysis (updated in MCPL 2013)

The final CLUSTER analysis of permanent plot data from 2008-2010 was based on presence/absence data. The dendrogram in Figure 9.1 was used to make four broad groupings based on vegetation structure. The majority of woodlands and shrublands were split at approximately 35% similarity (Figure 9.1). Anomalies (i.e. plots falling out in the woodland grouping but mapped as a shrubland) are due to decisions of community structure being based more on topography, field observations, data from relevé mapping sites, aerial photography, previous (pre-2010) mapping boundaries and percentage cover data (as many of the shrublands have emergent eucalypts present, but they are not necessarily the dominant structural form).

2014 analysis (based on MCPL 2014)

SIMPROF analysis identified 17 significantly associated groups of mapping sites ($Pi = 4.25$; $p < 0.001$) based on the 2014 proposed extraction borefield survey data. Where appropriate, outliers and small groupings were assigned to broader comparative vegetation units based on factors including species composition and site descriptions. For the purposes of vegetation mapping (i.e. extrapolating quadrat data to generalise vegetation communities over broad areas), an inclusive rather than exclusive approach was adopted, incorporating community descriptions from previous mapping where possible.

Six significantly dissimilar vegetation communities were delineated within the proposed extraction borefield and pipeline route survey area, based on the 2014 site data (Global $R = 0.65$; $p < 0.001$; Figure 9.2). All communities were represented by three or more relevé mapping sites. Three communities were described as woodlands and the other three were described as shrublands. Unique landforms, such as the yellow sand dune ridges and orange-red swales and depressions aided delineation of three of the communities. Vegetation of the survey area is otherwise comprised of undulating sandplains and flats, typically with a mosaic of *Eucalyptus gongylocarpa* and mallee woodlands and shrublands. The proposed extraction borefield survey area is largely influenced by fire (majority of the survey area was burnt in 2005), with burns being both extensive and patchy.

Vegetation of the yellow sand dune ridges and slopes is comprised of a mixed shrubland and the sites generally clustered within the same grouping (Figure 9.2). Sites STAR011 and BARR013 were included as S6 as they were located on small dune ridges. STAR011 was located on the edge of a 2013 burn, therefore having a slightly different dominant species assemblage to other sites included as S6. Whilst the sites within community S6 were analysed based on the 2014 data, dominant species such as *Thryptomene biseriata*, *Jacksonia arida*, *Allocasuarina spinosissima*, and *Conospermum toddii* (P4) indicated a high similarity with the previously described S6 vegetation community and were therefore assigned to the previously defined S6 community.

Vegetation of the orange-red flats and swales was typically comprised of a *Melaleuca hamata* and *Acacia* spp. shrubland (S9) (Figure 9.2). Sites within E14 represented a more confined, depression or drainage area with highly leached red-brown-white soils. MURD019 was an outlier in the cluster analysis (Figure 9.2) due to presence of otherwise unrecorded short-lived perennial and annual species, however had similar landform and (highly leached, red-white) soil features to MURD027 and STAR020.

Two of the SIMPROF groups were combined to form community E3, which was deemed similar to the MCPL (2013) description of vegetation structure and species structure. Sites BARR022 and STAR005 were also included as part of E3 even though they did not fall in either of the two main cluster groups (Figure 9.2). Both sites fell amongst sites grouped as S9, however lacked the characteristic *Melaleuca hamata* and denser mallee component and were therefore assigned to a woodland rather than shrubland community.

Community S10 was classified as a shrubland (although emergent mallees occur throughout the landscape) comprised mostly of *Banksia elderiana*, *Calothamnus gilesii* and *Grevillea* spp. and was widespread across the undulating sandplains. Sites MURD001, BARR006 and BARR002 were included in this community based on satellite imagery, and the presence of *Banksia elderiana* and *Grevillea secunda*, with fewer numbers (and lower percentage cover) of mallees, hence the shrubland classification rather than

woodland. Some sites within S10 were noted to have occasional dense patches of the Fabaceae shrub, *Aotus tietkensii*.

Two sites were regarded as ecotones but were each assigned to one of the vegetation communities. MURD004 had characteristics of both S10 and E3, also having a high percentage cover of *Aotus tietkensii* and was assigned to S10. STAR007 resembled S6, E3 and S9 and was located on the upper-slope of a dune, assigned to E3 based on satellite imagery.

A summary of species present in each site and vegetation community (only including 2007-2010 permanent plot data and 2014 relevé mapping sites) is detailed in Appendix I. A representative photograph of each vegetation community described within the MRUP is presented in Appendix J.

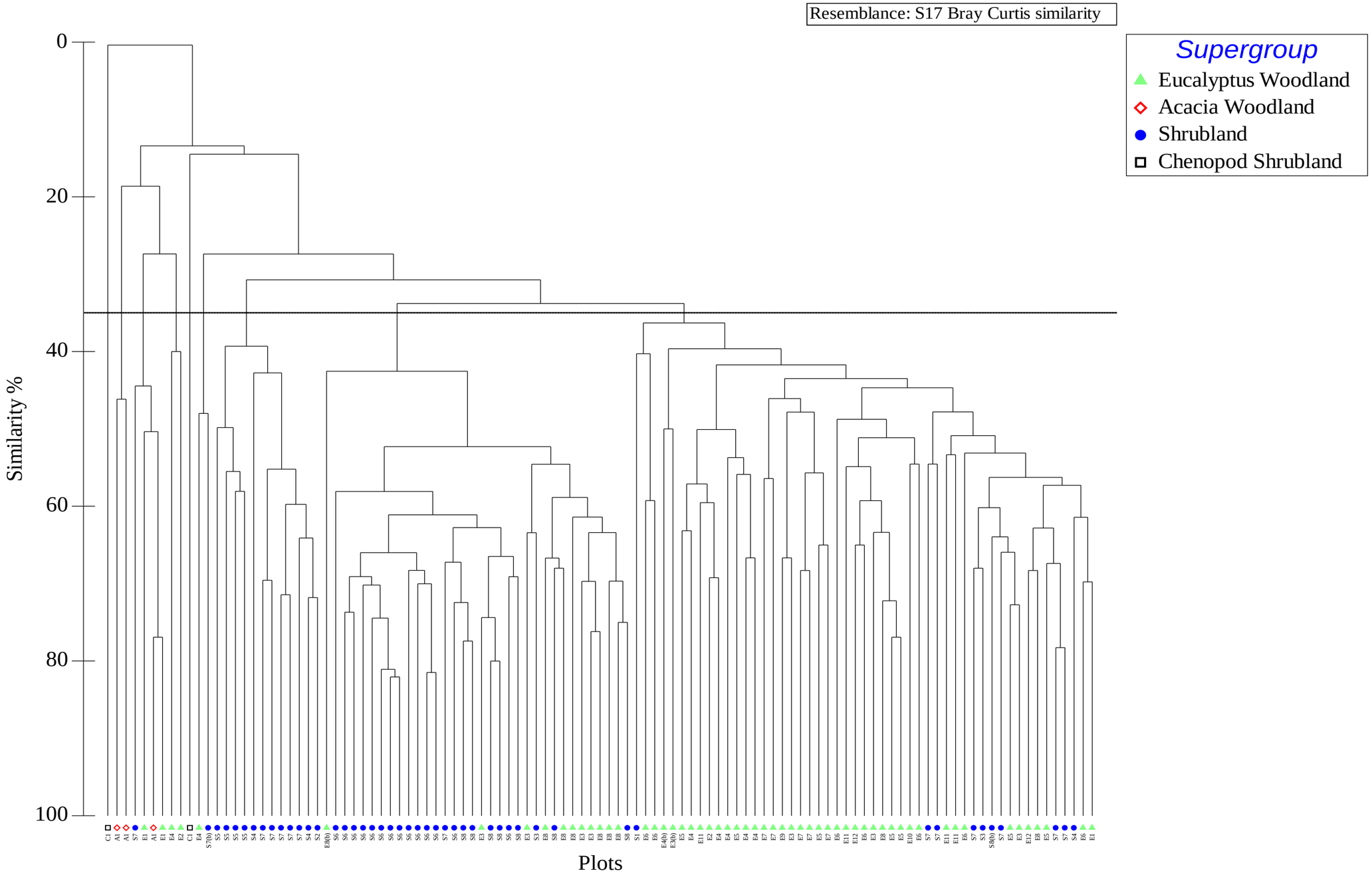


Figure 9.1: Cluster dendrogram of permanent monitoring plots within the Mulga Rock Uranium Project from MCPL (2013)

Note: Analysis was based on presence/absence data from permanent monitoring plots within the MRUP area (established 2008-2010). Plots are labelled as per the final mapped vegetation community.

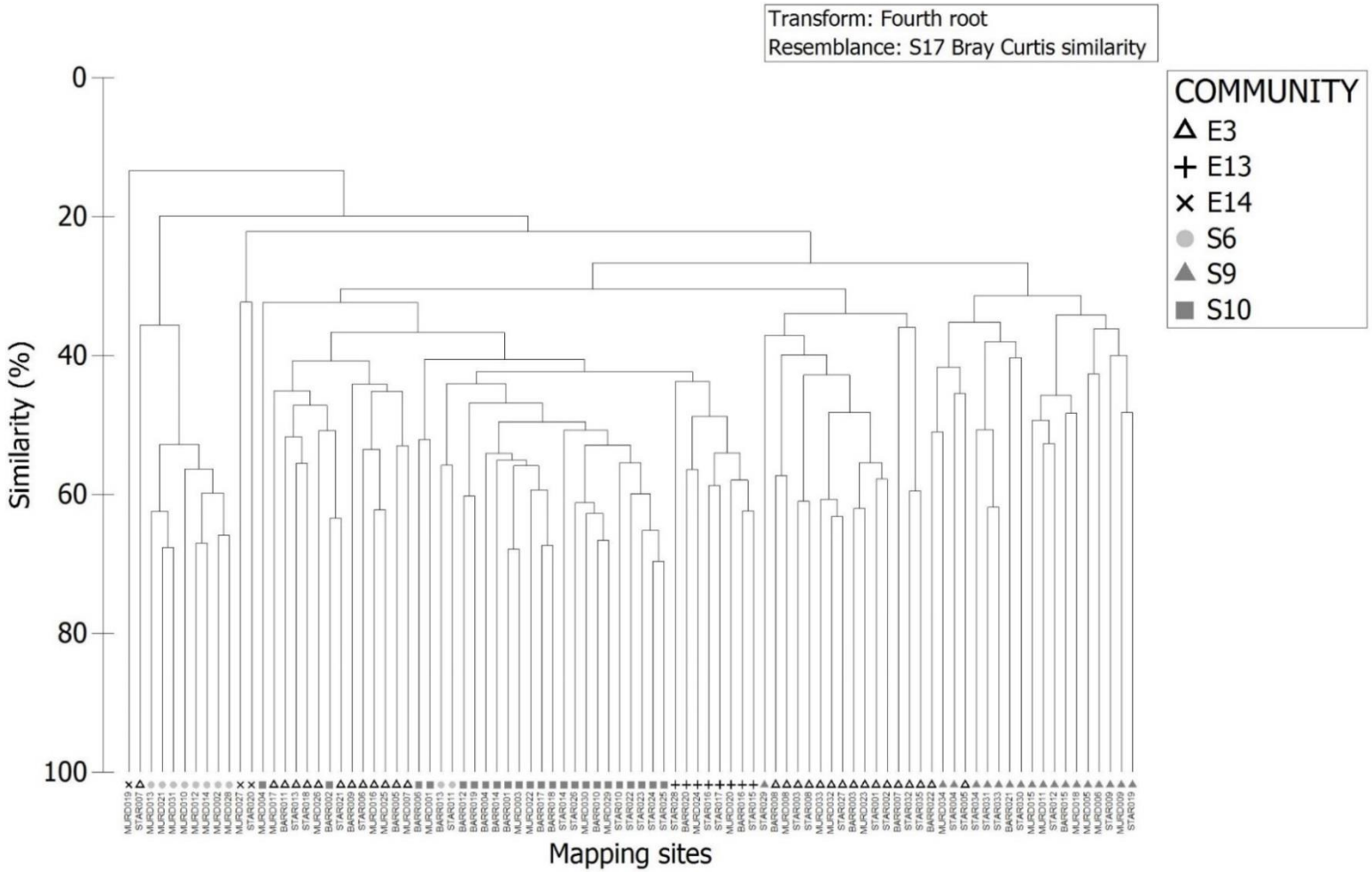


Figure 9.2: Cluster dendrogram of relevé mapping sites within the proposed extraction borefield and pipeline route survey area from MCPL (2014)

Note: Analysis was based on fourth root transformed percentage cover data (2014 data only). Mapping sites are labelled as per the final mapped vegetation community.

5.3.2. Vegetation Communities

Twenty-six vegetation communities have been defined within the MRUP area and their boundaries are presented in Figures 10.1-10.23. These results are based on those presented in MCPL (2013 – defined 22 vegetation communities) and MCPL (2014 – defined four additional vegetation communities) and including the more recently extrapolated boundaries to cover the disturbance footprint area.

The following communities have been defined from MCPL (2013) and MCPL (2014) within the MRUP area:

EUCALYPT WOODLANDS

E1: Low woodland to low open woodland of *Eucalyptus concinna* with *Callitris preissii* over *Westringia cephalantha, Melaleuca hamata, Acacia colletioides, Acacia hemiteles* and *Scaevola spinescens* over *Triodia desertorum.* This community occurs on red-orange sandy loams on flats.

E2: Low woodland to open scrub mallee of *Eucalyptus trivalva* and *Eucalyptus platycorys* with *Callitris preissii* and *Hakea francisiana* over *Acacia colletioides, Acacia hemiteles, Melaleuca hamata, Westringia cephalantha, Bertya dimerostigma* and mixed shrubs over *Triodia desertorum* with occasional emergent *Eucalyptus gongylocarpa.* This community occurs on red-orange sandy loams on flats.

E3: Low open woodland of *Eucalyptus gongylocarpa* over *Eucalyptus youngiana, Eucalyptus ceratocorys, Grevillea juncifolia, Hakea francisiana* and *Callitris preissii* over *Acacia helmsiana, Cryptandra distigma* and mixed low shrubs over *Triodia desertorum, Chrysitrix distigmatosa* and *Lepidobolus deserti.* This community occurs on yellow and yellow-orange sands on flats, slopes and between dunes.

E4: Low open woodland of *Eucalyptus gongylocarpa* over *Callitris preissii* with *Hakea francisiana* and *Grevillea juncifolia* over *Bertya dimerostigma, Westringia cephalantha* and mixed shrubs over *Triodia rigidissima* and *Triodia desertorum.* This community occurs on orange sands on flats and slopes.

E5: Low open woodland of *Eucalyptus gongylocarpa* over *Eucalyptus rigidula* and *Eucalyptus* sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668) with *Hakea francisiana* and *Grevillea juncifolia* over *Westringia cephalantha, Acacia helmsiana, Acacia rigens, Eremophila platythamnos* subsp. *platythamnos, Cryptandra distigma* and mixed low shrubs over *Triodia desertorum, Triodia rigidissima* and *Chrysitrix distigmatosa*. This community occurs on yellow and orange sands on flats and slopes.

E6: Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus rigidula* and/or *Eucalyptus* sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668) over *Acacia hemiteles*, *Hakea francisiana*, *Westringia rigida*, *Cryptandra distigma*, *Grevillea acuaria* and mixed low shrubs over *Triodia rigidissima* with *Halgania cyanea*. This community occurs on red-orange sandy loams on flats and low lying swales.

E7: Open scrub mallee to very open scrub mallee of varying *Eucalyptus* spp. over *Grevillea acuaria*, *Acacia hemiteles*, *Cryptandra distigma*, *Westringia cephalantha* and mixed shrubs over *Triodia desertorum*. This community occurs on red-orange sandy loams in low lying swales.

E8: Open scrub mallee to very open scrub mallee of *Eucalyptus ceratocorys* and *Eucalyptus mannensis* subsp. *mannensis* with *Eucalyptus youngiana, Hakea francisiana* and *Grevillea juncifolia* over *Acacia fragilis, Acacia helmsiana* and mixed low shrubs over *Triodia desertorum, Chrysitrix distigmatosa* and *Lepidobolus deserti* with emergent *Eucalyptus gongylocarpa*. This community occurs on yellow sands on flats and slopes.

E9: Very open scrub mallee of *Eucalyptus mannensis* subsp. *mannensis* with *Grevillea juncifolia* and *Hakea francisiana* over *Cryptandra distigma, Acacia ligulata* and mixed low shrubs over *Triodia desertorum* with emergent *Eucalyptus gongylocarpa.* This community occurs on yellow sand on slopes and flats.

E10: Open scrub mallee to very open scrub mallee of *Eucalyptus concinna* with *Eucalyptus platycorys* over *Hakea francisiana, Cryptandra distigma, Acacia rigens* and mixed shrubs over *Triodia rigidissima* and *Chrysitrix distigmatosa* with *Leptosema chambersii.* This community occurs on orange-red sandy loams on slopes and flats.

E11: Open scrub mallee to very open scrub mallee of *Eucalyptus platycorys* with *Eucalyptus concinna* over *Acacia helmsiana, Grevillea juncifolia, Hakea francisiana* and mixed shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa*. This community occurs on orange-yellow sandy loams on slopes and flats.

E12: Open scrub mallee to very open scrub mallee of *Eucalyptus trivalva* with *Eucalyptus rigidula* over *Hakea francisiana, Bertya dimerostigma, Acacia helmsiana, Cryptandra distigma* and *Grevillea juncifolia* over *Triodia rigidissima, Triodia desertorum, Chrysitrix distigmatosa* and *Halgania cyanea.* This community occurs on orange and red-orange sandy loams on flats and swales.

E13: Low open mallee woodland of *Eucalyptus youngiana* over low shrubland of *Grevillea didymobotrya* subsp. *didymobotrya*, *Cryptandra distigma*, *Banksia elderiana*, *Calothamnus gilesii*, *Acacia desertorum* var. *desertorum* and other *Acacia* spp. over open *Triodia* spp. hummock grassland with *Chrysitrix distigmatosa* and some low myrtaceous shrubs (and occasional emergent *Eucalyptus gongylocarpa*). This community occurs on orange-yellow sandy loams on lower slopes and flats.

E14: Low open mallee woodland of *Eucalyptus leptophylla* or *Eucalyptus horistes* over open low shrubland of *Daviesia ulicifolia* subsp. *aridicola*, *Callitris verrucosa* and mixed *Acacia* spp., over *Triodia* spp., *Androcalva melanopetala*, *Dysphania kalpari* and other short-lived perennial or annual herbs. This community occurs on highly leached red-brown-white sandy-clayey soils in swales and drainage areas.

ACACIA WOODLAND

A1: Low woodland to tall shrubland of *Acacia aneura* over *Aluta maisonneuvei* subsp. *auriculata*, *Eremophila latrobei*, *Phebalium canaliculatum*, *Prostanthera* spp. and mixed shrubs. This community occurs on orange sandy loams or clay loams with some laterite pebbles on flats.

SHRUBLANDS

S1: Shrubland of *Melaleuca hamata* with *Hakea francisiana* and mixed shrubs over *Triodia desertorum* with emergent *Eucalyptus* spp.. This community occurs on yellow and orange sand on slopes and flats.

S2: Shrubland of *Acacia sibina* with *Grevillea juncifolia* and *Eucalyptus youngiana* over *Phebalium canaliculatum*, *Grevillea acuaria* and mixed shrubs over *Triodia desertorum*. This community occurs on red clay loams in seasonally wet areas.

S3: Shrubland of *Allocasuarina spinosissima* and *Allocasuarina acutivalvis* subsp. *acutivalvis* with *Grevillea juncifolia* and *Hakea francisiana* over *Triodia desertorum* with emergent *Eucalyptus youngiana* and *Eucalyptus gongylocarpa.* This community occurs on yellow sand on slopes.

S4: Shrubland to open shrubland of *Acacia desertorum* var. *desertorum* and mixed low shrubs over *Triodia desertorum* with occasional emergent mallee *Eucalyptus* spp.. This community occurs on yellow or orange sands on mid-slopes.

S5: Shrubland to open shrubland of *Acacia sibina* with *Phebalium tuberculosum* over *Enekbatus eremaeus*, *Bertya dimerostigma*, *Homalocalyx thryptomenoides*, *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813), *Melaleuca hamata* and mixed low shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa* with occasional emergent *Eucalyptus gongylocarpa* and *Eucalyptus youngiana*. This community occurs on yellow-orange sands on flats and lower slopes.

S6: Low shrubland of *Thryptomene biseriata, Allocasuarina spinosissima, Allocasuarina acutivalvis* subsp. *acutivalvis, Jacksonia arida, Calothamnus gilesii, Acacia fragilis, Conospermum toddii* (P4), *Pityrodia lepidota, Lomandra leucocephala, Anthotroche pannosa* and mixed low shrubs over *Triodia desertorum* with *Lepidobolus deserti* with emergent *Eucalyptus gongylocarpa, Eucalyptus youngiana, Eucalyptus ceratocorys* and *Eucalyptus mannensis* subsp. *mannensis.* This community occurs on yellow sand dunes.

S7: Low shrubland to low open shrubland of *Enekbatus eremaeus, Acacia desertorum* var. *desertorum, Verticordia helmsii, Homalocalyx thryptomenoides, Leptospermum fastigiatum, Allocasuarina spinosissima, Baeckea* sp. Great Victoria Desert (A.S. Weston 14813), *Leptosema chambersii* and mixed low shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa* with occasional emergent mallee *Eucalyptus* species, *Grevillea juncifolia* and *Hakea francisiana.* This community occurs on yellow and orange sands on lower slopes, undulating plains and swales.

S8: Low open shrubland of *Calothamnus gilesii, Persoonia pertinax, Thryptomene biseriata* and *Leptospermum fastigiatum* with *Anthotroche pannosa, Acacia helmsiana, Microcorys macredieana, Micromyrtus stenocalyx* and mixed low shrubs over *Triodia desertorum* with *Lepidobolus deserti, Chrysitrix distigmatosa* and *Caustis dioica* with emergent *Eucalyptus youngiana, Eucalyptus gongylocarpa* and *Eucalyptus ceratocorys*. This community occurs on yellow sands flats adjacent to yellow sand dunes and undulating sandplains.

S9: Low open shrubland of *Melaleuca hamata* and mixed *Acacia* spp. (including *Acacia fragilis*, *Acacia ligulata* and *Acacia sibina*) with *Hannafordia bissillii* subsp. *bissillii*, *Grevillea didymobotrya* subsp. *didymobotrya*, *Mirbelia seorsifolia* over *Triodia* spp. hummock grassland with *Leptosema chambersii*, *Chrysitrix distigmatosa*, *Aristida contorta* and *Goodenia xanthosperma*, with emergent eucalypt mallees. This community occurs on orange-red sandy-clay loam, in swales and on flats.

S10: Low open shrubland of *Banksia elderiana*, *Calothamnus gilesii*, *Grevillea didymobotrya* subsp. *didymobotrya*, *Acacia desertorum* var. *desertorum* and *Grevillea secunda* (P4) with *Leptospermum fastigiatum* and emergent *Eucalyptus youngiana* (and *Eucalyptus rosacea*) over *Triodia* spp. hummock grassland with *Chrysitrix distigmatosa*. This community occurs on orange-yellow undulating sandplains and flats.

CHENOPOD SHRUBLAND

C1: Low shrubland of *Atriplex* ?*vesicaria* with *Eremophila decipiens* subsp. *decipiens* and *Acacia colletioides*. This community occurs on red-brown clay loams on clay pans. *Callitris preissii* with *Eucalyptus* spp. over mixed shrubs are found in adjacent pockets.

OTHER

D: Disturbed area

The extent of the vegetation communities defined within VMY's development envelope, disturbance footprint and in the wider area are summarised in Table 5. Vegetation communities A1 and S2 do not fall within the MRUP development envelope (Table 5), therefore are unlikely to be directly impacted by the proposal.

Vegetation community E9 has 88.58% of the mapped distribution within the development envelope, however, only 13.53% of the mapped distribution of E9 lies within the disturbance footprint (Table 5). This community is therefore, highly restricted to the MRUP area.

Vegetation communities E5, E6, E7, E14 and S1 have between 60-75% of their mapped distributions within the development envelope (Table 5). Of these, E5, E6 and E7 also have a relatively high proportion of their mapped distributions (25-38%) within the disturbance footprint (Table 5). Vegetation communities S1 and E14 also cover less than 19 ha of the development envelope area, being highly restricted to MRUP area but having a high proportion of the mapped area within the development envelope (Table 5).

Vegetation community C1 also has a high proportion (18.28%) of the mapped community within the disturbance footprint, and is restricted to areas between the Emperor and Shogun pits. Vegetation communities E3, E4, E5, E6, E8, S8 and S10 occupy the largest areas of the development envelope (between 500 ha to 3,316 ha).

Vegetation community S6 (of the yellow sand dunes) has 7.36% of the mapped distribution within the disturbance footprint and is largely restricted by topography and landform type (Table 5).

Based on the current extent of the pre-European vegetation association 84 in the GVD01 Shield IBRA subregion, approximately 0.56% of this vegetation association occurs within the MRUP development envelope, and only 0.21% is likely to be directly impacted by the MRUP as it occurs within the disturbance footprint.

Priority flora species were recorded in seventeen vegetation communities, plus un-mapped and disturbed areas (Table 6). *Hibbertia crispula*, *Dampiera eriantha* and *Malleostemon* sp. Officer Basin (D. Pearson 350) were restricted to the S6 and S8 shrubland communities (suspected borderline S8 or issues with mapping boundaries, as these species are more likely restricted to S6). *Conospermum toddii* was also consistently recorded in the S6 community and adjacent slopes and undulating dunefields (Table 6; Figures 10.3-10.23). *Comesperma viscidulum*, *Conospermum toddii*, *Grevillea secunda* and *Olearia arida* were recorded across numerous vegetation communities. Whilst *Isotropis canescens* was recorded across numerous vegetation communities, it was only recorded within burnt areas (less than a year after the fire event; Table 6).

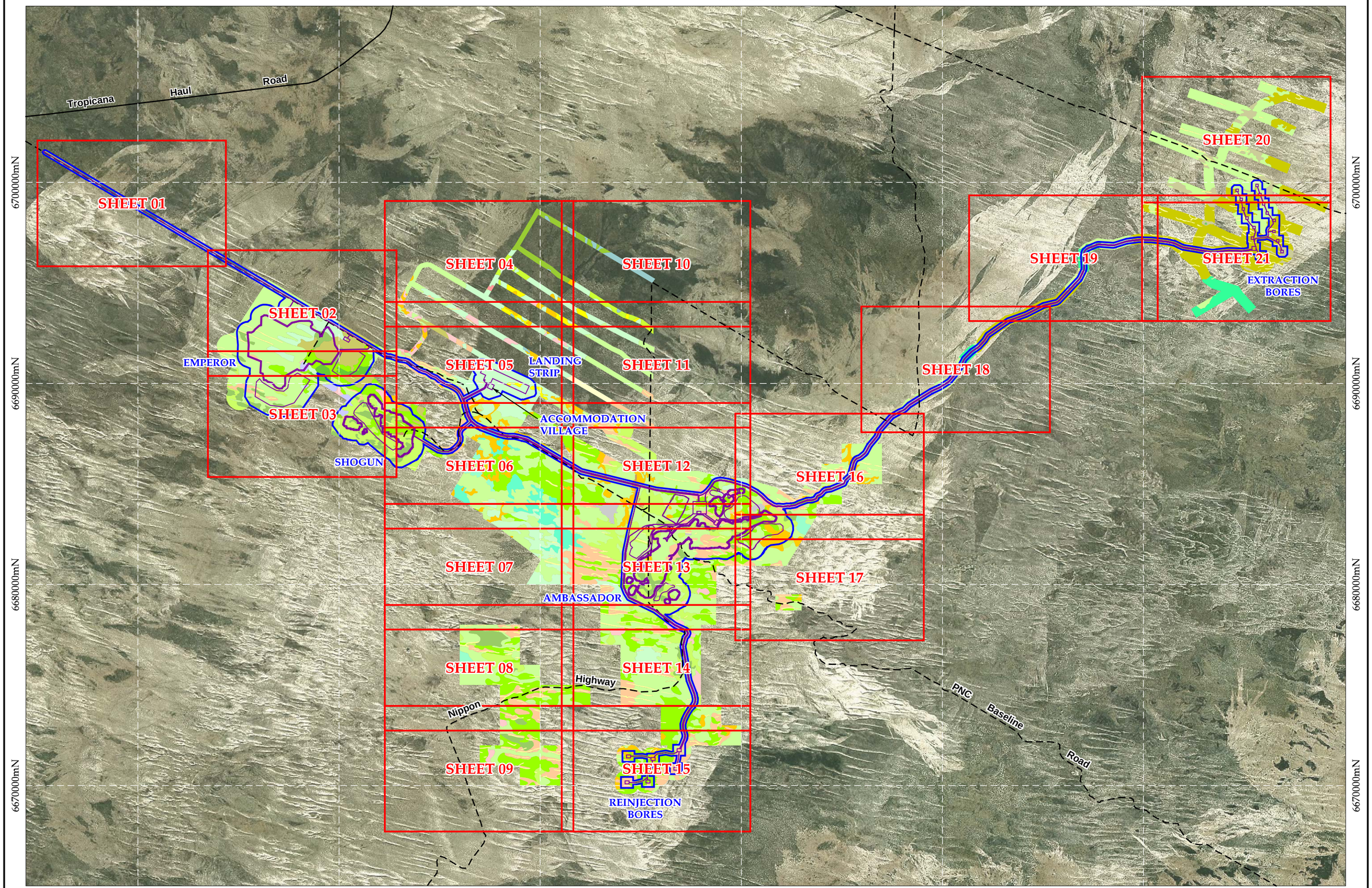
Vegetation community E3 was most common across the MRUP (comprising 34.7% of the total mapped area by MCPL) and eleven priority species have records falling within this community's boundaries (Table 6). *Labichea eremaea* and *Dicrastylis cundeeleensis* were recorded commonly in burnt areas (Table 6).

Other species of interest, such as *Hakea* sp. (LAC139 13/04/14) was recorded in the 2014 proposed extraction borefield survey in vegetation communities E3 and S9, whilst *Hakea* sp. (LAC140 13/04/14) was recorded nearby, in vegetation community S9 (Figure 10.19). *Leucopogon aff. planifolius* was more commonly recorded in vegetation community S6, as well as S8 and in un-mapped areas around the MRUP (Figures 10.3-10.23).

Table 5: Summary of the extent of each vegetation community potentially impacted by the Mulga Rock Uranium Project

Note: **DE** refers to the wider 'development envelope'; **DF** refers to 'disturbance footprint'; **Orange** highlighted cells indicate vegetation communities with the highest impact within each area.

VEGETATION COMMUNITY		TOTAL MAPPED AREA (ha)	DE AREA (ha)	PROPORTION OF MAPPED VEGETATION COMMUNITY WITHIN DE (%)	DF AREA (ha)	PROPORTION OF MAPPED VEGETATION COMMUNITY WITHIN DF (%)
WOODLANDS	E1	203.38	25.19	10.93	4.61	2.00
	E2	161.85	36.39	22.49	3.06	1.89
	E3	10407.01	3315.72	31.86	1395.93	13.41
	E4	2373.06	775.87	32.69	281.82	11.88
	E5	2513.61	1588.65	63.20	630.78	25.09
	E6	899.72	603.47	67.07	330.77	36.76
	E7	555.61	417.67	75.17	213.14	38.36
	E8	4117.56	1115.48	27.09	504.62	12.26
	E9	188.96	167.38	88.58	25.56	13.53
	E10	170.37	3.33	1.96	0.11	0.07
	E11	441.00	17.83	4.04	1.67	0.38
	E12	96.91	32.60	33.64	13.03	13.45
	E13	329.67	53.89	16.35	1.30	0.39
	E14	18.10	11.37	62.82	0.30	1.68
	A1	114.30	0.00	0.00	0.00	0.00
SHRUBLANDS	S1	14.66	11.01	75.16	1.08	7.40
	S2	14.23	0.00	0.00	0.00	0.00
	S3	66.09	5.43	8.21	0.54	0.82
	S4	325.00	57.72	17.76	6.03	1.86
	S5	120.06	14.78	12.31	10.10	8.41
	S6	964.92	199.49	20.67	70.98	7.36
	S7	1199.36	320.61	26.73	83.40	6.95
	S8	2099.03	519.01	24.73	159.88	7.62
	S9	509.34	143.78	28.23	4.01	0.79
	S10	1934.71	500.07	25.85	22.78	1.18
	C1	67.70	36.19	53.46	12.38	18.28
OTHER	Disturbed	28.57	20.56	N/A	8.88	N/A
TOTAL		**29961.90**	**9993.48**		**3786.80**	



Notes:
Development Envelope - Vimy Resources (07/10/2015)
Disturbance Footprint - Vimy Resources (06/10/2015)
Vegetation Mapping - MCPL (06/10/2015)
Refer figure 10.2 for vegetation mapping legend

Legend:
Development Envelope
Disturbance Footprint
Vegetation Sheet

Client: VIMY RESOURCES

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Scale 1:175,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_10_01.dgn
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation Mapping

Sheet Layout

Figure: **10.1**

Legend

Eucalypt Woodlands

E1 Low Woodland to Low Open Woodland *of Eucalyptus concinna* with *Callitris preissii* over *Westringia cephalantha*, *Melaleuca hamata*, *Acacia colletioides*, *Acacia hemiteles* and *Scaevola spinescens* over *Triodia desertorum*. This community occurs on red-orange sandy loams on flats.

E2 Low Woodland to Open Scrub Mallee of *Eucalyptus trivalva* and *Eucalyptus platycorys* with *Callitris preissii* and *Hakea francisiana* over *Acacia colletioides*, *Acacia hemiteles*, *Melaleuca hamata*, *Westringia cephalantha*, *Bertya dimerostigma* and mixed shrubs over *Triodia desertorum* with occasional emergent *Eucalyptus gongylocarpa*. This community occurs on red-orange sandy loams on flats.

E3 Low Open Woodland of *Eucalyptus gongylocarpa* over *Eucalyptus youngiana*, *Eucalyptus ceratocorys*, *Grevillea juncifolia*, *Hakea francisiana* and *Callitris preissii* over *Acacia helmsiana*, *Cryptandra distigma* and mixed low shrubs over *Triodia desertorum*, *Chrysitrix distigmatosa* and *Lepidobolus deserti*. This community occurs on yellow and yellow-orange sands on flats, slopes and between dunes.

E4 Low Open Woodland of *Eucalyptus gongylocarpa* over *Callitris preissii* with *Hakea francisiana* and *Grevillea juncifolia* over *Bertya dimerostigma*, *Westringia cephalantha* and mixed shrubs over *Triodia rigidissima* and *Triodia desertorum*. This community occurs on orange sands on flats and slopes.

E5 Low Open Woodland of *Eucalyptus gongylocarpa* over *Eucalyptus rigidula* and *Eucalyptus* sp. Mulga Rock with *Hakea francisiana* and *Grevillea juncifolia* over *Westringia cephalantha*, *Acacia helmsiana*, *Acacia rigens*, *Eremophila platythamnos* subsp. *platythamnos*, *Cryptandra distigma* and mixed low shrubs over *Triodia desertorum*, *Triodia rigidissima* and *Chrysitrix distigmatosa*. This community occurs on yellow and orange sands on flats and slopes.

E6 Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus rigidula* and/or *Eucalyptus* sp. Mulga Rock over *Acacia hemiteles, Hakea francisiana*, *Westringia rigida*, *Cryptandra distigma*, *Grevillea acuaria* and mixed low shrubs over *Triodia rigidissima* with *Halgania cyanea*. This community occurs on red-orange sandy loams on flats and low lying swales.

E7 Open Scrub Mallee to Very Open Scrub Mallee of varying *Eucalyptus* spp. over *Grevillea acuaria*, *Acacia hemiteles*, *Cryptandra distigma*, *Westringia cephalantha* and mixed shrubs over *Triodia desertorum.* This community occurs on red-orange sandy loams in low lying swales.

E8 Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus ceratocorys* and *Eucalyptus mannensis* subsp. *mannensis* with *Eucalyptus youngiana, Hakea francisiana* and *Grevillea juncifolia* over *Acacia fragilis*, *Acacia helmsiana* and mixed low shrubs over *Triodia desertorum, Chrysitrix distigmatosa* and *Lepidobolus deserti* with emergent *Eucalyptus gongylocarpa*. This community occurs on yellow sands on flats and slopes.

E9 Very Open Scrub Mallee of *Eucalyptus mannensis* subsp. *mannensis* with *Grevillea juncifolia* and *Hakea francisiana* over *Cryptandra distigma*, *Acacia ligulata* and mixed low shrubs over *Triodia desertorum* with emergent *Eucalyptus gongylocarpa*. This community occurs on yellow sand on slopes and flats.

E10 Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus concinna* with *Eucalyptus platycorys* over *Hakea francisiana*, *Cryptandra distigma*, *Acacia rigens* and mixed shrubs over *Triodia rigidissima* and *Chrysitrix distigmatosa* with *Leptosema chambersii*. This community occurs on orange-red sandy loams on slopes and flats.

E11 Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus platycorys* with *Eucalyptus concinna* over *Acacia helmsiana*, *Grevillea juncifolia*, *Hakea francisiana* and mixed shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa*. This community occurs on orange-yellow sandy loams on slopes and flats.

E12 Open Scrub Mallee to Very Open Scrub Mallee of *Eucalyptus trivalva* with *Eucalyptus rigidula* over *Hakea francisiana*, *Bertya dimerostigma*, *Acacia helmsiana*, *Cryptandra distigma* and *Grevillea juncifolia* over *Triodia rigidissima*, *Triodia desertorum*, *Chrysitrix distigmatosa* and *Halgania cyanea*. This community occurs on orange and red-orange sandy loams on flats and swales.

E13: Low open mallee woodland of *Eucalyptus youngiana* over low shrubland of *Grevillea didymobotrya* subsp. *didymobotrya*, *Cryptandra distigma*, *Banksia elderiana, Calothamnus gilesii*, *Acacia desertorum* var. *desertorum* and other *Acacia* spp. over open *Triodia* spp. hummock grassland with *Chrysitrix distigmatosa* and some low myrtaceous shrubs (and occasional emergent *Eucalyptus gongylocarpa*). This community occurs on orange-yellow sandy loams on lower slopes and flats.

E14: Low open mallee woodland of *Eucalyptus leptophylla* or *Eucalyptus horistes* over open low shrubland of *Daviesia ulicifolia* subsp. *aridicola*, *Callitris verrucosa* and mixed *Acacia* spp., over *Triodia* spp., *Androcalva melanopetala*, *Dysphania kalpari* and other short-lived perennial or annual herbs. This community occurs on highly leached red-brown-white sandy-clayey soils in swales and drainage areas.

Acacia Woodland

A1 Low Woodland to Tall Shrubland of *Acacia aneura* over *Aluta maisonneuvei* subsp. *auriculata, Eremophila latrobei*, *Phebalium canaliculatum, Prostanthera* spp. and mixed shrubs. This community occurs on orange sandy loams or clay loams with some laterite pebbles on flats.

Mixed Shrublands

S1 Shrubland of *Melaleuca hamata* with *Hakea francisiana* and mixed shrubs over *Triodia desertorum* with emergent *Eucalyptus* spp. This community occurs on yellow and orange sand on slopes and flats.

S2 Shrubland of *Acacia sibina* with *Grevillea juncifolia* and *Eucalyptus youngiana* over *Phebalium canaliculatum*, *Grevillea acuaria* and mixed shrubs over *Triodia desertorum*. This community occurs on red clay loams in seasonally wet areas.

S3 Shrubland of *Allocasuarina spinosissima* and *Allocasuarina acutivalvis* subsp. *acutivalvis* with *Grevillea juncifolia* and *Hakea francisiana* over *Triodia desertorum* with emergent *Eucalyptus youngiana* and *Eucalyptus gongylocarpa*. This community occurs on yellow sand on slopes.

S4 Shrubland to Open Shrubland of *Acacia desertorum* var. *desertorum* and mixed low shrubs over *Triodia desertorum* with occasional emergent mallee *Eucalyptus* species. This community occurs on yellow or orange sands on mid-slopes.

S5 Shrubland to Open Shrubland of *Acacia sibina* with *Phebalium tuberculosum* over *Enekbatus eremaeus*, *Bertya dimerostigma*, *Homalocalyx thryptomenoides, Baeckea* sp. Great Victoria Desert (A.S. Weston 14813), *Melaleuca hamata* and mixed low shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa* with occasional emergent *Eucalyptus gongylocarpa* and *Eucalyptus youngiana*. This community occurs on yellow-orange sands on flats and lower slopes.

S6 Low Shrubland of *Thryptomene biseriata*, *Allocasuarina spinosissima*, *Allocasuarina acutivalvis* subsp. *acutivalvis*, *Jacksonia arida*, *Calothamnus gilesii*, *Acacia fragilis*, *Conospermum toddii* (P4), *Pityrodia lepidota*, *Lomandra leucocephala*, *Anthotroche pannosa* and mixed low shrubs over *Triodia desertorum* with *Lepidobolus deserti* with emergent *Eucalyptus gongylocarpa*, *Eucalyptus youngiana*, *Eucalyptus ceratocorys* and *Eucalyptus mannensis* subsp. *mannensis*. This community occurs on yellow sand dunes.

S7 Low Shrubland to Low Open Shrubland of *Enekbatus eremaeus*, *Acacia desertorum* var. *desertorum*, *Verticordia helmsii*, *Homalocalyx thryptomenoides*, *Leptospermum fastigiatum*, *Allocasuarina spinosissima, Baeckea* sp. Great Victoria Desert (A.S. Weston 14813), *Leptosema chambersii* and mixed low shrubs over *Triodia desertorum* and *Chrysitrix distigmatosa* with occasional emergent mallee *Eucalyptus* species, *Grevillea juncifolia* and *Hakea francisiana*. This community occurs on yellow and orange sands on lower slopes, undulating plains and swales.

S8 Low Open Shrubland of *Calothamnus gilesii*, *Persoonia pertinax*, *Thryptomene biseriata*, and *Leptospermum fastigiatum* with *Anthotroche pannosa, Acacia helmsiana*, *Microcorys macredieana*, *Micromyrtus stenocalyx* and mixed low shrubs over *Triodia desertorum* with *Lepidobolus deserti*, *Chrysitrix distigmatosa* and *Caustis dioica* with emergent *Eucalyptus youngiana*, *Eucalyptus gongylocarpa* and *Eucalyptus ceratocorys*. This community occurs on yellow sands flats adjacent to yellow sand dunes and undulating sandplains.

S9: Low open shrubland of *Melaleuca hamata* and mixed *Acacia* species (including *Acacia fragilis, Acacia ligulata* and *Acacia sibina*) with *Hannafordia bissillii* subsp. *bissillii*, *Grevillea didymobotrya* subsp. *didymobotrya*, *Mirbelia seorsifolia* over *Triodia* spp. hummock grassland with *Leptosema chambersii*, *Chrysitrix distigmatosa*, *Aristida contorta* and *Goodenia xanthosperma*, with emergent eucalypt mallees. This community occurs on orange-red sandy-clay loam, in swales and on flats.

S10: Low open shrubland of *Banksia elderiana*, *Calothamnus gilesii*, *Grevillea didymobotrya* subsp. *didymobotrya*, *Acacia desertorum* var. *desertorum* and *Grevillea secunda* (P4) with *Leptospermum fastigiatum* and emergent *Eucalyptus youngiana* (and *Eucalyptus rosacea*) over *Triodia* spp. hummock grassland with *Chrysitrix distigmatosa*. This community occurs on orange-yellow undulating sandplains and flats.

Chenopod Shrublands

C1 Low Chenopod Shrubland of *Atriplex ?vesicaria* with *Eremophila decipiens* subsp. *decipiens* and *Acacia colletioides*. This community occurs on red-brown clay loams on clay pans. *Callitris preissii* with *Eucalyptus* spp. over mixed shrubs are found in adjacent pockets.

D Disturbed

Priority Species

Code	Species	Status
Aen	Acacia eremophila numerous-nerved variant (A.S. George 11924)	P3
Aev	Acacia eremophila var. variabilis	P3
As	Acacia aff. sorophylla	Other
Bs	Baeckea ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963)	P3
Ct	Conospermum toddii	P4
Cta	Caesia talingka ms	P2
Cv	Comesperma viscidulum	P4
Dc	Dicrastylis cundeeleensis	P4
De	Dampiera eriantha	P1
E?u	Eremophila ?undulata	P2
Gs	Grevillea secunda	P4
Hc	Hibbertia crispula	P1 & Vulnerable
Hs139	Hakea sp. (LAC 139 13/04/14)	Other
Hs140	Hakea sp. (LAC 140 13/04/14)	Other
Ic	Isotropis canescens	P2
Le	Labichea eremaea	P3
Lp	Leucopogon aff. planifolius	Other
Mo	Malleostemon sp. Officer Basin (D. Pearson 350)	P2
Nl	Neurachne lanigera	P1
Oa	Olearia arida	P4
Pb	Ptilotus ?blackii	P3
Pc	Physopsis chrysotricha	P2
Sb	Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)	Other
Sg	Styphelia sp. Great Victoria Desert (N. Murdock 44)	P2

Notes:
Vegetation Mapping - MCPL (06/10/2015)

Client: VIMY RESOURCES

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Author: E M Mattiske | MCPL Ref: VRL1401/062/14
Drawn: CAD Resources ~ www.cadresources.com.au
Tel: (08) 9246 3242 ~ Fax: (08) 9246 3202

CAD Ref: g1756_f07_10_02.dgn
Date: Oct 2015 | Rev: C | A3

Mulga Rock Uranium Project

Vegetation Legend

Figure: **10.2**

546000 548000 550000 552000 554000

6702000 6700000 6698000 6696000

E2 Dc E1 S7 E9 E3 E9 S7 E4 E9 E3 E9 S7 E3 Dc E12 S3 E3 S6 E9 E3

Ct Gs

Gs Dc

546000 548000 550000 552000 554000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

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Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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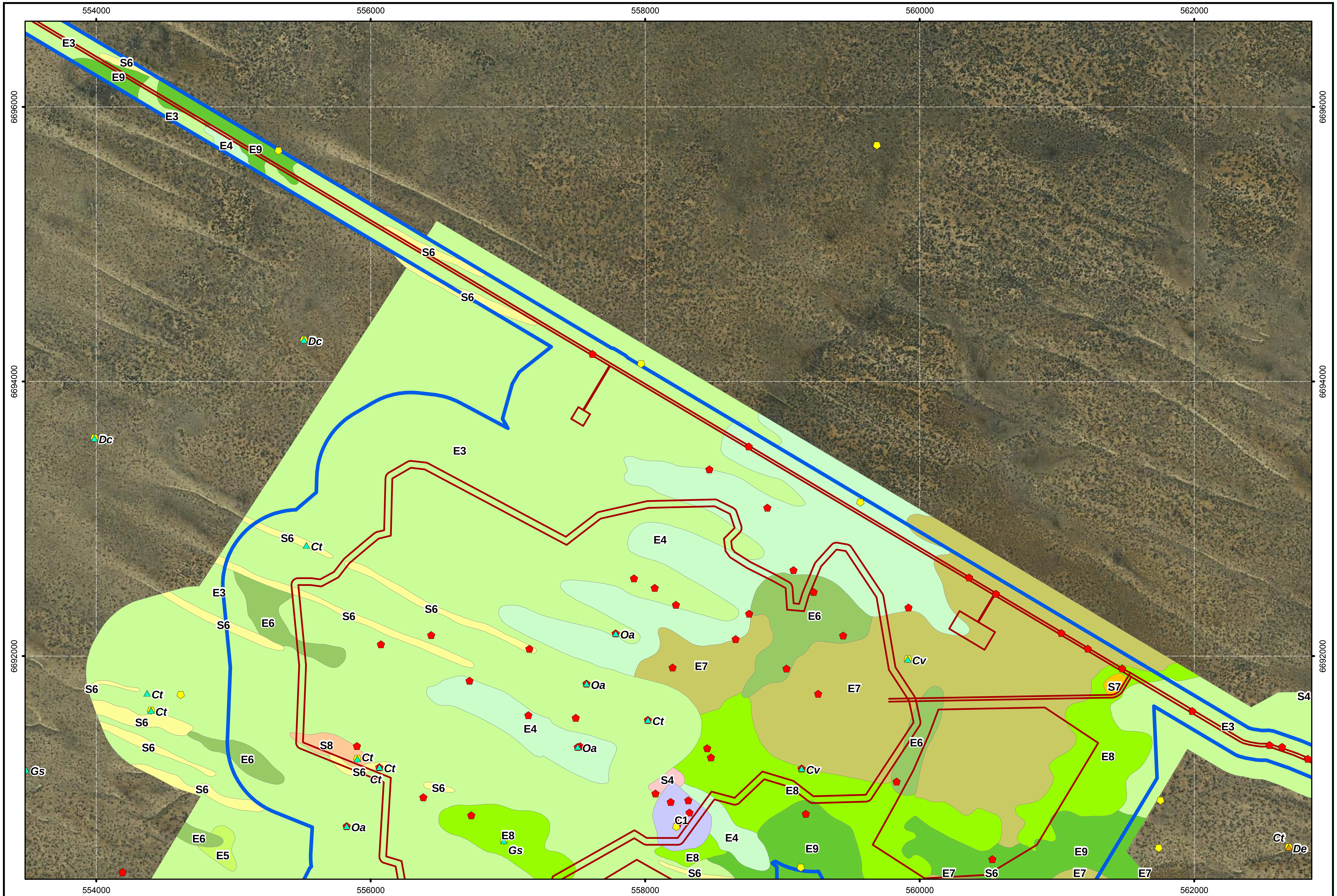
Mulga Rock Uranium Project

Vegetation

Sheet 1 of 21

Figure: **10.3**



Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client:
VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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Mulga Rock Uranium Project
Vegetation
Sheet 2 of 21

Figure:
10.4

554000 556000 558000 560000 562000

6690000 6688000 6686000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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Mulga Rock Uranium Project

Vegetation

Sheet 3 of 21

Figure: **10.5**

564000 566000 568000 570000

6698000 6696000 6694000

A1 E1 E2 E3 E4 S2 S4 S5 S6 S7 S8 Gs Oa Ct

564000 566000 568000 570000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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Mulga Rock Uranium Project
Vegetation
Sheet 4 of 21

Figure: **10.6**

564000 566000 568000 570000

6694000 6692000 6690000 6688000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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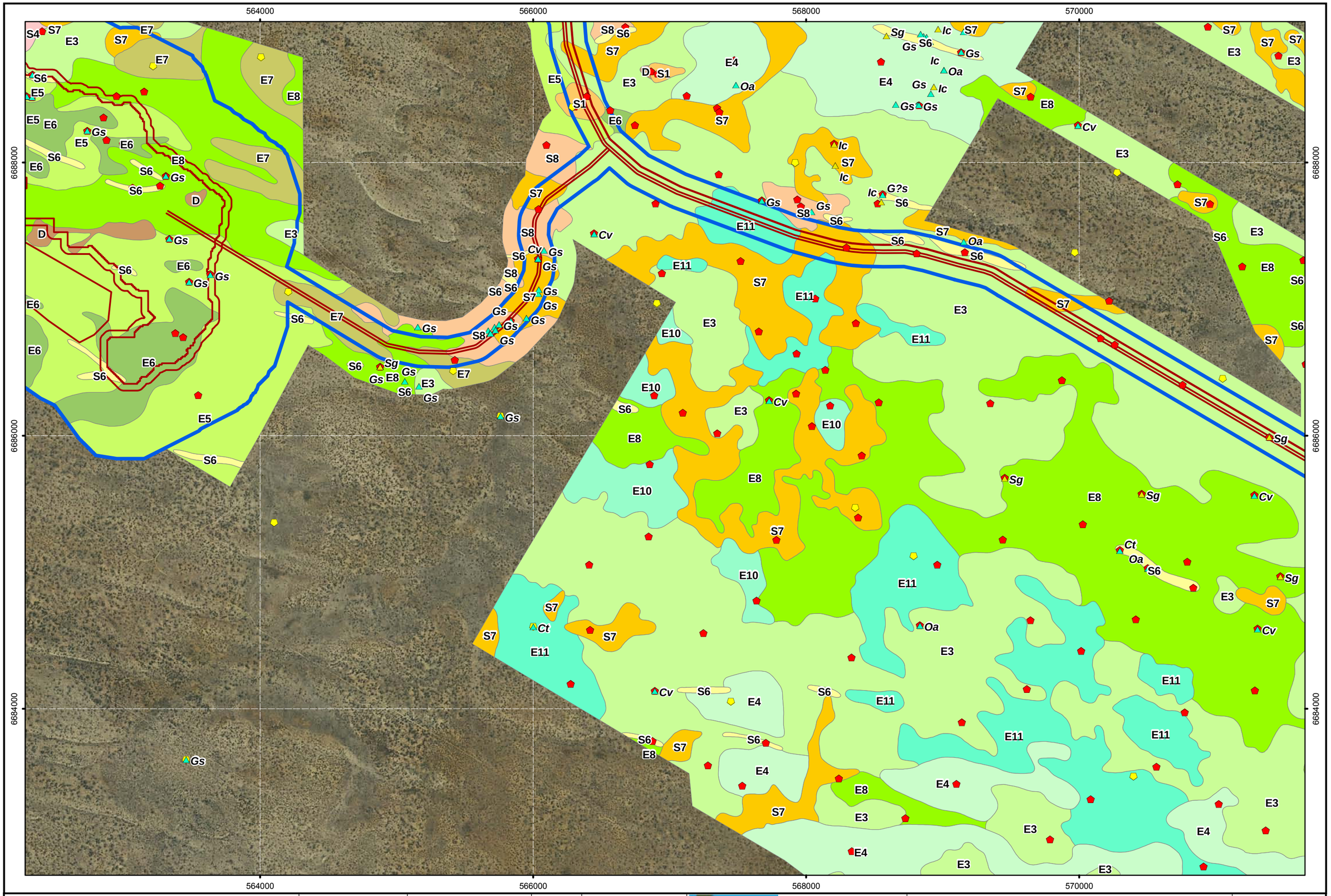
Mulga Rock Uranium Project
Vegetation
Sheet 5 of 21

Figure: 10.7



Legend
Refer to Figure 10.2 for complete legend

- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species

- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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Mulga Rock Uranium Project

Vegetation

Sheet 6 of 21

Figure: **10.8**

564000 566000 568000 570000

6684000 6682000 6680000 6678000

Gs Sg Pb Ct Gs Oa Hc Mo

E11 E4 E3 E8 S6 S7 S8 E6 E5

Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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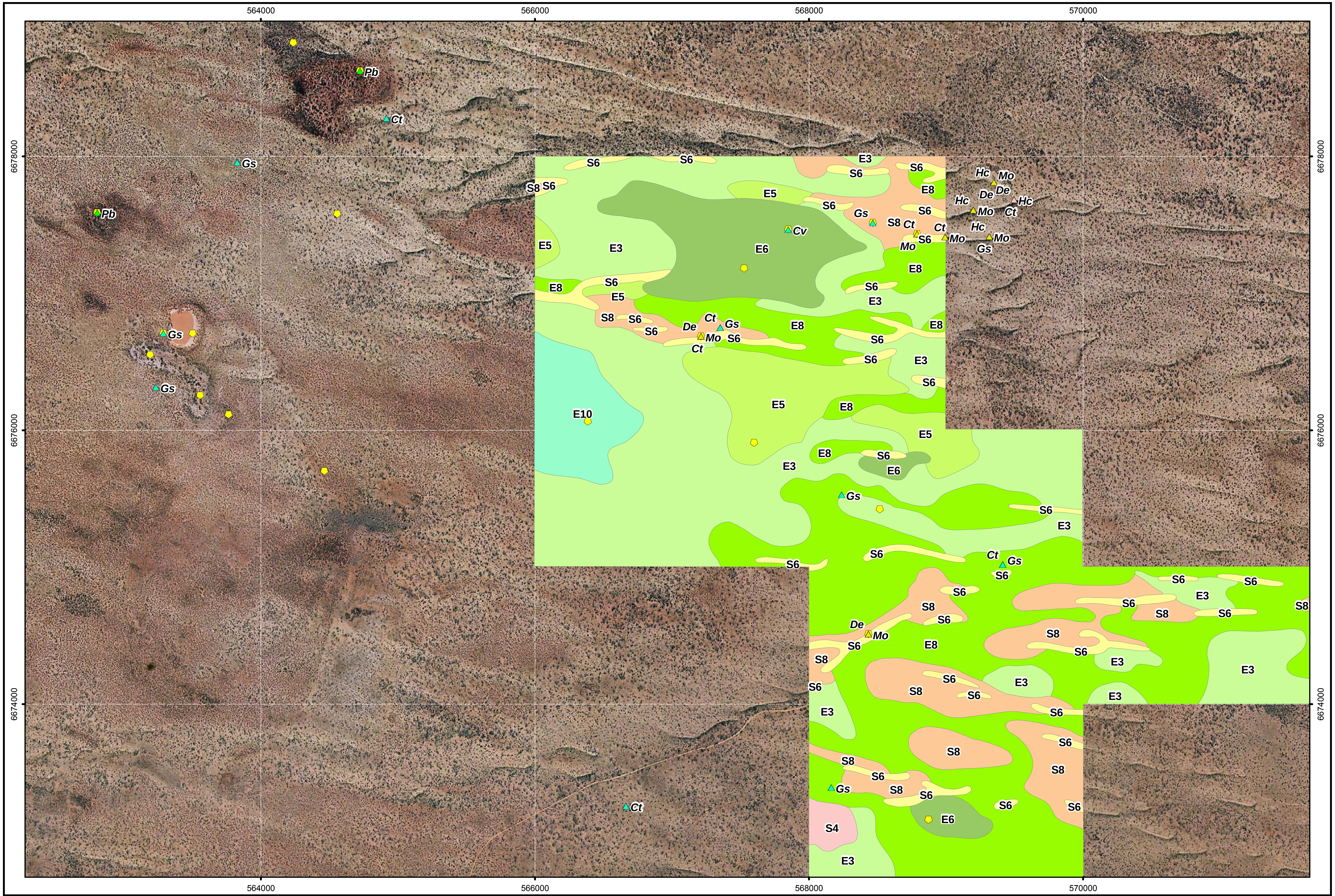
Mulga Rock Uranium Project

Vegetation

Sheet 7 of 21

Figure: 10.9



Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client:
VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

Mattiske Consulting Pty Ltd
28 Central Road, Kalamunda WA 6076 ~ Tel: 9257 1625 ~ Fax: 9257 1640
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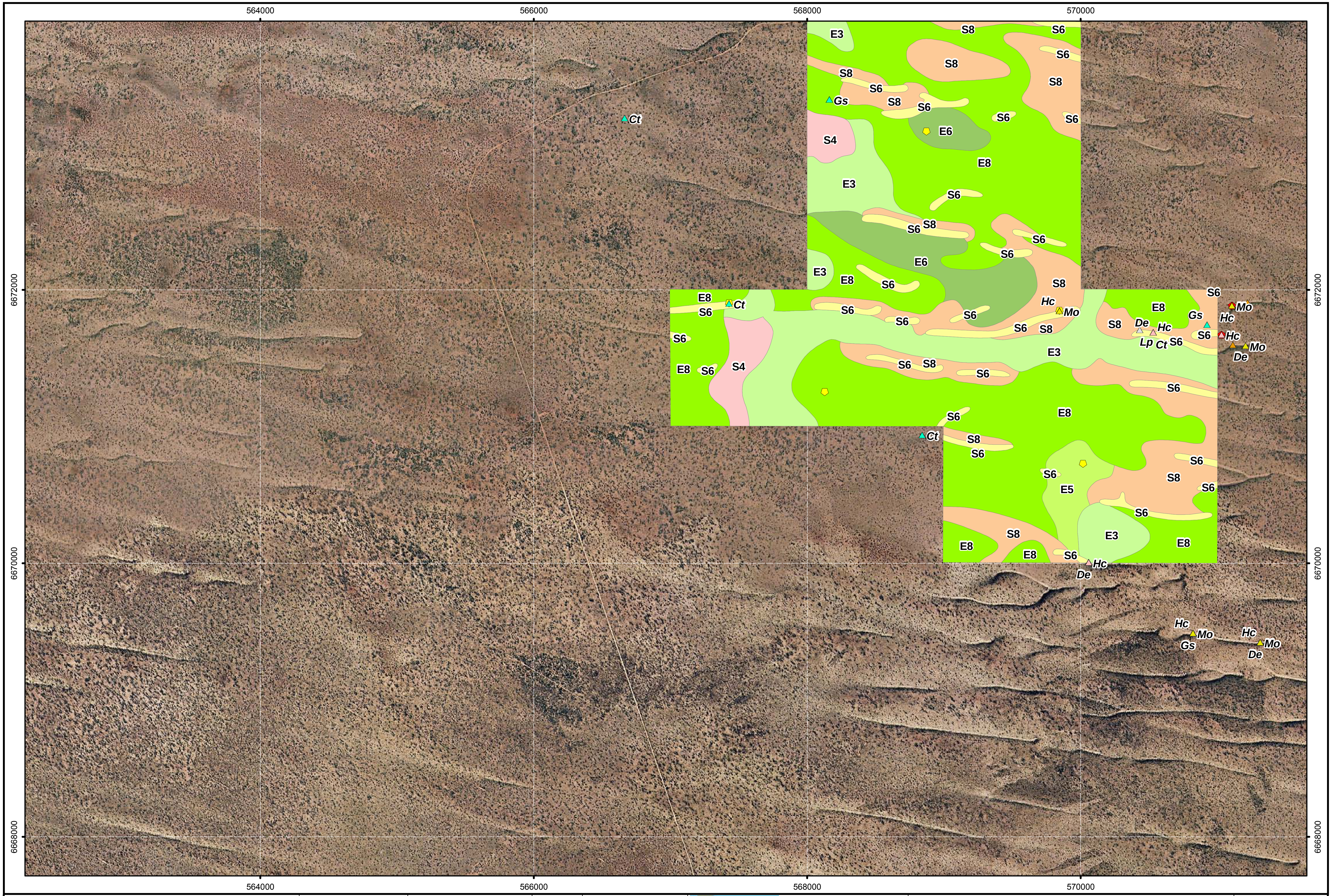
Mulga Rock Uranium Project
Vegetation
Sheet 8 of 21

Figure:
10.10



Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3

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Mulga Rock Uranium Project
Vegetation
Sheet 9 of 21

Figure: **10.11**

572000 574000 576000 578000 580000

6698000

6696000

6694000

A1 E1 A1 E1 A1 E1 A1 E1 A1 E1 A1

E1 S7 E4 E4 E2 E4 A1 S5 E2 S5 E4 E2

E4 S5 E4 E4 E3

E4 Ct S5 E4

572000 574000 576000 578000 580000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)
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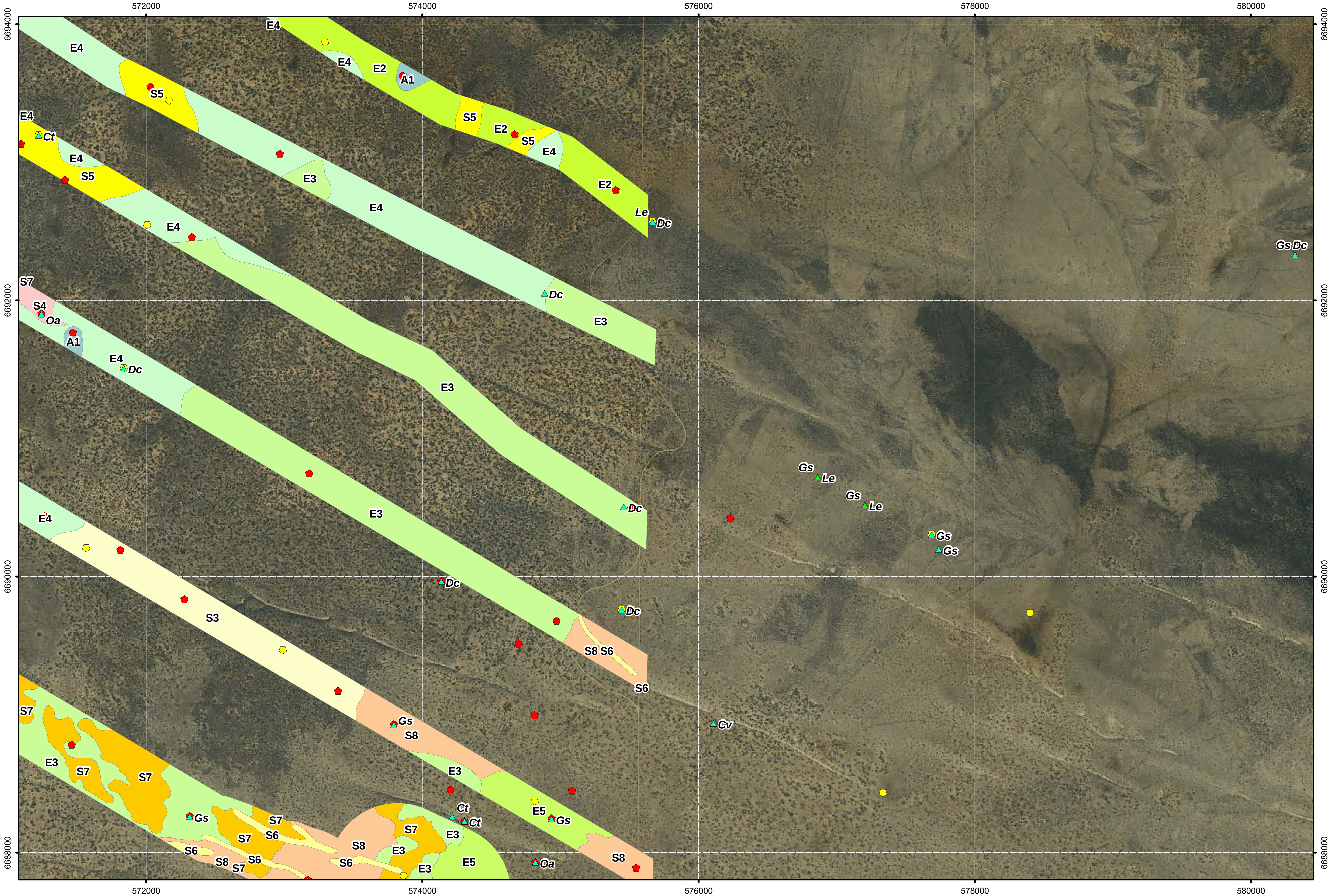
Mulga Rock Uranium Project

Vegetation

Sheet 10 of 21

Figure: **10.12**



Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client:
VIMY RESOURCES

N

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Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project
Vegetation
Sheet 11 of 21

Figure:
10.13

572000 574000 576000 578000 580000

6688000 6686000 6684000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project
Vegetation
Sheet 12 of 21

Figure: 10.14

572000 574000 576000 578000 580000

6684000 6682000 6680000 6678000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 13 of 21

Figure: 10.15

572000 574000 576000 578000 580000

6678000 6676000 6674000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
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Mulga Rock Uranium Project
Vegetation
Sheet 14 of 21

Figure: 10.16

572000 574000 576000 578000 580000

6672000 6670000 6668000

Mo Sg Hc Mo Sg Hc Gs Ic Ic Gs Mo De Mo Hc Mo De Hc Mo De Hc Mo De Gs Ct Cv Gs

S6 S7 S8 E3 E8

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3

Date: Oct 2015 | Rev: C | A3

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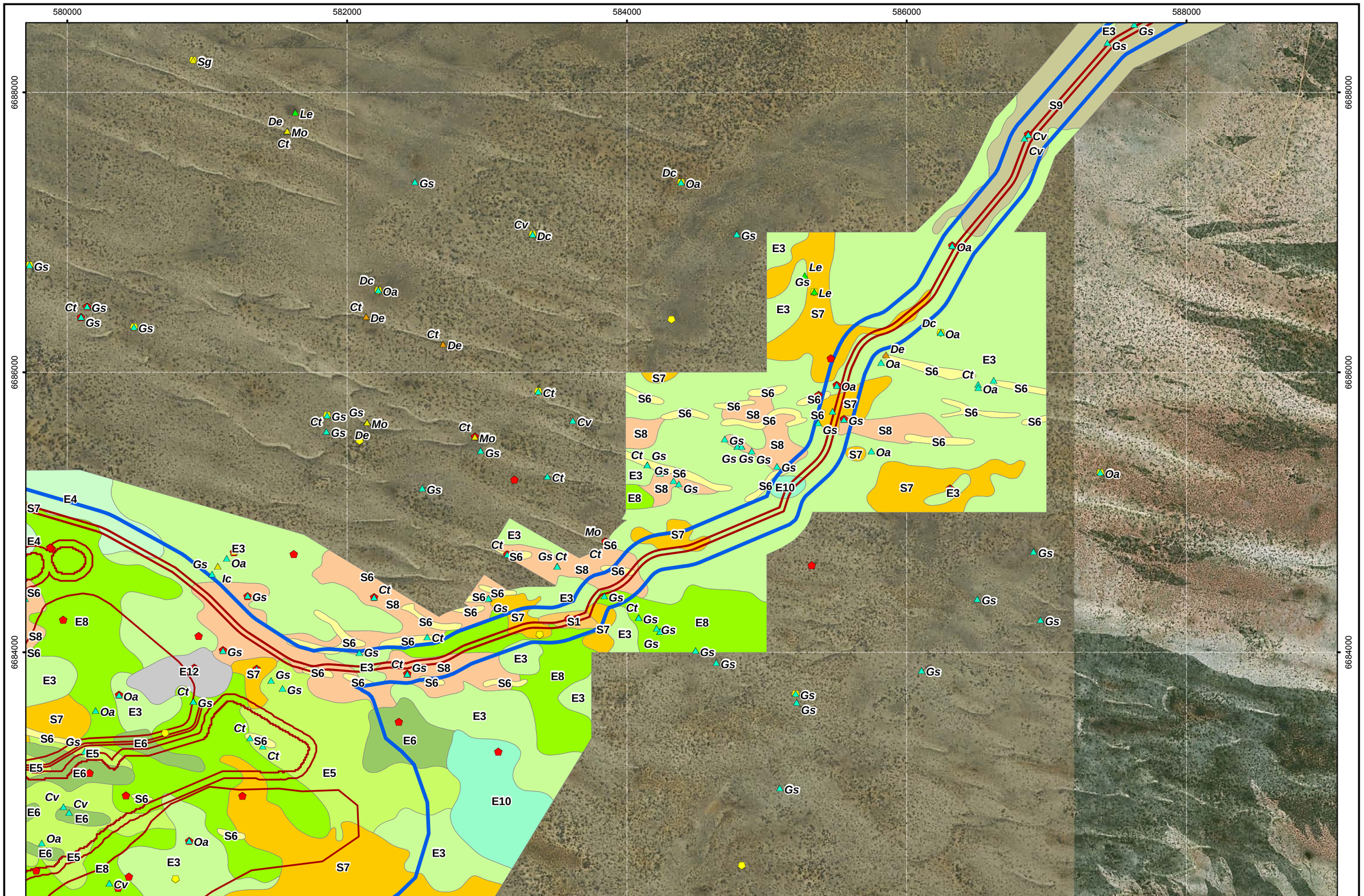
Mulga Rock Uranium Project

Vegetation

Sheet 15 of 21

Figure: **10.17**



Legend
Refer to Figure 10.2 for complete legend

- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species

- P1 & Vulnerable
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 16 of 21

Figure: 10.18

580000 582000 584000 586000 588000

6682000 6680000 6678000

E6 S6 S7 E5 Gs E6 E5 E8 Cv Cv E6 S6 E6 Oa E6 E5 Oa S6 Cv E8 S7 Gs E3 E5 E8 E10 E3 Gs S8 S8 S6 E6 S6 E8 E3 S6 S8 S8 S6 S8 E8 S6 S8 Gs Ct Ct Gs Ct Hc De Mo Ct Sg Ct Gs Mo Sg Ct Gs Mo Mo Ct Gs Ct Oa E8 S7 E3 S8 E8 S7 Gs Mo Mo Gs Gs S6 Ct Gs S8 E8 S6 E3 E8 Ct Gs Gs Gs Ct Hc Hc Mo De Hc Mo Mo Mo Hc Gs Hc Sg Ct

Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 17 of 21

Figure: 10.19

586000 588000 590000 592000 594000

6692000 6690000 6688000

Gs Sg S10 E3 E13 S9 Hs139 Cv Nl Oa

Legend
Refer to Figure 10.2 for complete legend

MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 18 of 21

Figure: 10.20

592000 594000 596000 598000 600000

6698000 6696000 6694000

Legend
Refer to Figure 10.2 for complete legend
- MCPL Plot 10/01/2011
- MCPL Releve Site 20/05/2014
- MRUP Layout 06/10/2015
- Development Envelope 07/10/2015

Threatened & Priority Species
- P1 & Vulnerable
- P1
- P2
- P3
- P4
- Other

Sheet Layout

Client: VIMY RESOURCES

N

0 200 400 600m
Scale: 1:25,000
MGA94 (Zone 51)

CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

Mattiske Consulting Pty Ltd
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Mulga Rock Uranium Project

Vegetation

Sheet 19 of 21

Figure: 10.21

600000 602000 604000 606000 608000

6704000 6702000 6700000

Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client: VIMY RESOURCES

N

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Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 20 of 21

Figure: 10.22

600000 602000 604000 606000 608000

6998000 6996000 6994000

Legend
Refer to Figure 10.2 for complete legend
MCPL Plot 10/01/2011
MCPL Releve Site 20/05/2014
MRUP Layout 06/10/2015
Development Envelope 07/10/2015

Threatened & Priority Species
P1 & Vulnerable
P1
P2
P3
P4
Other

Sheet Layout

Client: VIMY RESOURCES

N

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Scale: 1:25,000
MGA94 (Zone 51)
CAD Ref: a1756_f07_10_3
Date: Oct 2015 | Rev: C | A3

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Mulga Rock Uranium Project

Vegetation

Sheet 21 of 21

Figure: 10.23

5.3.3. Yellow Sandplain Priority Ecological Community

MCPL vegetation community S6 has affinities with the "Yellow sandplain communities of the Great Victoria Desert" Priority 3 (ii) ecological community. Approximately 7.36% of the MCPL mapped extent of the S6 community occurs within the disturbance footprint, with the largest proportion of this community located in the "mine pit" areas. The following species occur in more than 90% of the total number of S6 sites based on combined MCPL survey data: *Lomandra leucocephala*, *Caustis dioica*, *Jacksonia arida*, *Thryptomene biseriata*, *Conospermum toddii* (P4), *Lepidobolus deserti* and *Anthotroche pannosa* (Appendix G presented in MCPL 2015). Overall, there have been eight priority species recorded in the S6 community.

Based on the polygon (supplied by Tropicana Joint Venture), the broader yellow sandplains are estimated to represent 1,692,000 ha (Figure 11). In comparison, the MCPL mapping extent for the MRUP covers over 29,000 ha within the boundaries of this polygon. Calculations supplied by X. Moreau (General Manager – Geology and Exploration, VMY), indicate that the cumulative yellow sand dune crest area is approximately 12,936 ha (approximately 0.76% of the total polygon area) with approximately 965 ha mapped by MCPL (assumed to be similar to the S6 vegetation community).

5.3.4. Vegetation Condition

Besides current and historic drill line activity and small areas of VMY current infrastructure, the majority of the vegetation within and surrounding the MRUP has not been affected by human activities. These unaffected areas were regarded as being Excellent – Pristine in condition, based on the criteria developed by Keighery (1994). Wildfires of various ages and intensities have burnt large sections of land around the MRUP area. A fire in late 2007 burnt part of the Emperor pit and sections north-east of the Ambassador pit. A large section of the 2014 proposed extraction borefield and pipeline route survey area was burnt in 2009 and a further section (approximately 57 ha) on two of the eastern survey lines was burnt in 2013.

In November 2014, a large (but of low to moderate intensity – pers. comm. X. Moreau, General Manager – Geology and Exploration, VMY) wildfire affected approximately 73% of the MRUP development envelope (Plate 2; Figure 12). The fire directly impacted approximately 77% of the disturbance footprint. Figure 12 displays the fire scar based on Landgate (2015; and Landsat 8) satellite imagery. The fire scar represents approximately 79,203 ha, with VMY field staff and X. Moreau identifying a number of "refuge" areas (approximately 1806 ha) within the fire scar that remain intact and unaffected to a certain extent (Figure 12).

Plate 2: MRUP approximately two months post fire event in November 2014 (Photograph by X. Moreau)

In previous MCPL mapping reports, if an area at the time of surveying was deemed to be "recently burnt" (burnt less than five years prior to the survey), they were indicated in the vegetation mapping by a '(b)' and noted as being in Good – Very Good condition. Based on the previous MCPL vegetation mapping, approximately 8% of the mapped area (adapted from information in MCPL (2013) and MCPL (2014)) was deemed to be recently burnt at the time of field surveys. Due to the large scale of the November 2014 fire affecting majority of the Project area, the previously burnt areas are not indicated in the current vegetation maps (Figures 10.1-10.23).

Table 6: Occurrence of priority flora species in each vegetation community, as recorded by MCPL

Note: X indicates the species was recorded in the unburnt community only; **X** indicates the species was recorded in the burnt community only; and **X** indicates the species was recorded in both the unburnt and burnt community.

SPECIES	VEGETATION COMMUNITY																											
	E1	E2	E3	E4	E5	E6	E7	E8	E9	E10	E11	E12	E13	E14	A1	S1	S2	S3	S4	S5	S6	S7	S8	S9	S10	C1	D	UN-MAPPED
Hibbertia crispula (P1 & Vulnerable)																					X		X					X
Dampiera eriantha (P1)			X																		**X**		X					X
Neurachne lanigera (P1)			X																					X	X			
Isotropis canescens (P2)			**X**	**X**	**X**	**X**		**X**														**X**	**X**					
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																					**X**		X					X
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)			X					X					X	X							X			X	X			X
Baeckea ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (P3)			X																									
Labichea eremaea (P3)			**X**																			**X**						X
Ptilotus blackii (P3)																												X
Comesperma viscidulum (P4)			X		X	X	X	X				X	X	X							X	X	X	X	X			X
Conospermum toddii (P4)			**X**	X	X			X			X	X								X	**X**	X	**X**		X			X
Dicrastylis cundeeleensis (P4)			**X**	**X**	**X**																				X		X	X
Grevillea secunda (P4)			**X**		**X**	X		**X**					X	X					X		**X**	**X**	**X**	X	X			X
Olearia arida (P4)			**X**	X	X	X		X				X							X		X	X			X		X	X

500000mE 550000mE 600000mE 650000mE 700000mE

6750000mN

6700000mN

6650000mN

6600000mN

Tropicana Haul Road

Road

R 34605
Nature Reserve
Plumridge Lakes Nature Reserve

MULGA ROCK
URANIUM PROJECT AREA

Nippon Highway

PNC Baseline Road

Haul Road

Cable

R 30491
Nature Reserve
Queen Victoria Spring Nature Reserve

CUNDEELEE MISSION
ALT RESERVE

Notes:
Development Envelope - Vimy Resources (06/10/2015)
Yellow Sandplain PEC - Vimy Resources (12/02/2015)
Tenements - DMP (18/09/2015)
Image - Earth Land Surface 2000

Legend:
Development Envelope
Yellow Sandplain
Tenements

Client: VIMY RESOURCES

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Scale 1:700,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_11.dgn
Date: Oct 2015 | Rev: C | A3

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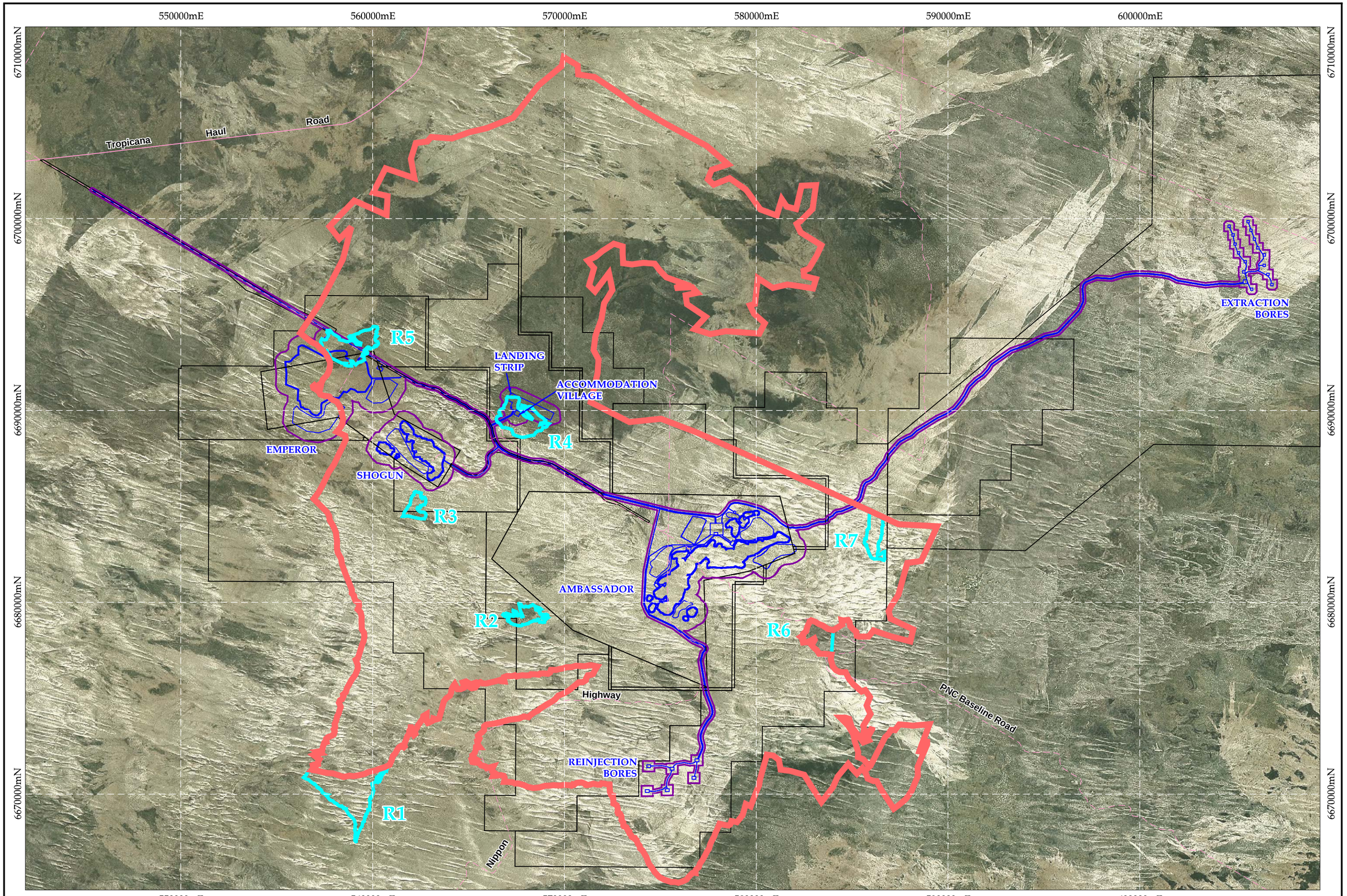
Mulga Rock Uranium Project

Yellow Sandplain

outline provided by Tropicana Joint Venture

Figure: **11**



Notes:
Development Envelope - Vimy Resources (06/10/2015)
Disturbance Footprint - Vimy Resources (06/10/2015)
November 2014 Fire ScarVimy Resources (12/02/2015)
Bushfire Refuges - Vimy Resources (12/02/2015)
Tenements - DMP (18/09/2015)
Image - Earth Land Surface 2000

Legend:
- Development Envelope
- Disturbance Footprint
- Fire Scar
- Bushfire Refuge
- Tenements

Client: VIMY RESOURCES

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Scale 1:180,000
MGA94 (Zone 51)
CAD Ref: g1756_f07_12.dgn
Date: Oct 2015 | Rev: C | A3

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Tel: (08) 9246 3242 ~ Fax: (08) 9246 3202

Mulga Rock Uranium Project

November 2014 Fire Scar

Showing Bushfire Refuges

Figure: **12**

6. DISCUSSION

6.1. Report Constraints and Limitations

A general assessment was made of the 2007-2015 surveys against a range of factors that may have had an impact on the outcomes of this report (Table 7). Detailed information on potential survey limitations specific to each survey are described in previous reports.

Table 7: Potential limitations affecting the conclusions made in this report

Note: Adapted from section 3.3.1 of *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004).

POTENTIAL SURVEY LIMITATION	IMPACT ON CURRENT REPORT
Sources of information and availability of contextual information (i.e. pre-existing background versus new material)	**Not a constraint:** Although the Great Victoria Desert region is largely under-surveyed (floristically and otherwise), flora and vegetation surveys have been conducted by MCPL botanists in the MRUP area since 2007, and large areas have been mapped (MCPL 2008a; 2008b; 2009a; 2010a; 2010b; 2013; 2014a). Historical contextual information is also available for the Great Victoria Desert region.
Scope (i.e. what life forms were sampled)	**Not a constraint:** Approximately 2.7% of the revised and updated taxa recorded during 2007 - 2014 surveys are considered to be short-lived perennial or annual species. However, only 3.0% of taxa known from the area based on combined NatureMap search results are considered to be annuals, so this low percentage is not regarded to be a constraint on the survey. Field surveys have been conducted across all seasons (summer, autumn, winter and spring), capturing a range of life forms and annual/biennial species inhabiting the MRUP area. However, some species within the *Triodia*, *Eucalyptus* and *Acacia* genera are difficult to positively identify without fertile (flowering and/or fruiting) material. Most of the priority species known from the area are able to be identified without fertile material as their foliage is distinctive.
Proportion of flora collected and identified (based on sampling, timing and intensity)	**Not a constraint:** Twenty-seven specimens were unable to be identified past family or genus level; and 21 were uncertain genus or species ("?") identifications based on lack of flowering or fruiting material required for species delineation. Field surveys have been conducted across all seasons (summer, autumn, winter and spring). High rainfall events preceding field surveys are discussed in section 5.1.1. A total of 239 permanent plots and 622 relevé mapping sites, numerous targeted priority flora surveys and opportunistic collections have been used to inform the vegetation community descriptions and their boundaries.

Table 7 (continued): Potential limitations affecting the conclusions made in this report

Note: Adapted from section 3.3.1 of *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004).

POTENTIAL SURVEY LIMITATION	IMPACT ON CURRENT REPORT
Completeness and further work which might be needed (i.e. was the relevant survey area fully surveyed?)	**Potential constraint:** Targeted surveys for high priority species were conducted for various project stages when potential issues arose (*Conospermum toddii* and *Hibbertia crispula* in particular), and also as ongoing searches in and around the MRUP over the seven years of MCPL surveys. Morphological and molecular research have not been finalized for *Hibbertia crispula*, and species such as *Styphelia* sp. Great Victoria Desert (N. Murdock 44) and the two potentially new *Hakea* spp. still require further survey (and essentially, taxonomic) work. An adequate number of relevé mapping sites and permanent plots have been set up/recorded in and around the MRUP. There is a potential to undertake further analyses of the vegetation (particularly in a wider regional context) and this may possibly lead to a reduction in the number of vegetation communities or vegetation mapping units.
Mapping reliability	**Constraint:** The original mapping in 2007-2009 was based on lower resolution satellite imagery (especially compared to that available in 2014 for the proposed extraction borefield survey area). Fire scars, intervals since fire and varied survey timing have also created mapping difficulties. Differing mapping scales (i.e. long linear corridors < 500 m width compared to large, kilometre long and wide survey areas) has influenced the merged vegetation map and community descriptions. For the 2014 proposed extraction borefield area mapping, several reliability issues in terms of merging interpretations arose as surveys were conducted at different intervals after the main fire event in 2005. Initially the communities were assigned to the closest resembling, existing community description. This constraint did not occur in other sections of the 2014 proposed extraction borefield and pipeline route survey area. Large portions of the vegetation mapping have been conducted within 3 years of fire events. Difficulties arise when dominant species such as *Triodia* spp. and *Eucalyptus* spp. cannot be identified to species level due to lack of flowering and fruiting material immediately following fire events. Some areas of vegetation mapping have been extrapolated (with limited quantitative site data) based on adjacent mapping boundaries and satellite imagery. The extended western section of the access road has a low level of confidence in the communities as no adjacent mapping was available for extrapolation, and very few sites have been surveyed in this section. Environmental constraints from the November 2014 fire and time constraints have meant that the 2015 additional mapping data was not statistically analysed in PRIMER with previous mapping sites, however were matched as best as possible to existing community descriptions based on MCPL knowledge of the local area, satellite imagery and adjacent mapping boundaries (where possible). These areas were therefore not surveyed for threatened and priority species and may mean that impacted species numbers are slightly underestimated within the project area.
Timing of survey (weather and season)	**Not a constraint:** Field surveys have been conducted across all seasons (summer, autumn, winter and spring). High rainfall events preceding field surveys are discussed in section 5.1.1.

Table 7 (continued): Potential limitations affecting the conclusions made in this report

Note: Adapted from section 3.3.1 of *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004).

POTENTIAL SURVEY LIMITATION	IMPACT ON CURRENT REPORT
Disturbances (fire, flood, human intervention, etc.)	**Potential constraint:** Vegetation mapping in recently burnt areas can be problematic as the dominant species are usually influenced by factors such as regeneration/reproduction strategies, primary succession effects and re-colonisation. However, it can also mean that previously unrecorded species from the area may be discovered (including priority flora and range extensions/new populations). Fire scars from satellite imagery (and recent known fire events) indicate that seasonal lightning strikes are a relatively common natural event in the Great Victoria Desert region.
Intensity (in retrospect, was the intensity adequate?)	**Not a constraint:** An adequate number and coverage of mapping sites were used to satisfy requirements of a Level 2 survey of the MRUP area (see Figure 2 for spatial locations; Appendices B and C for a list of site co-ordinates). A total of 239 permanent plots and 587 relevé mapping sites, numerous targeted priority flora surveys and opportunistic collections have been used to inform the vegetation community descriptions and their boundaries.
Resources (i.e. were there adequate resources to complete the survey to the required standard?)	**Not a constraint:** Adequate resources were available to complete the Level 1 and Level 2 surveys to standards set out in the *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (EPA 2004).
Access problems (i.e. the ability to access the survey area)	**Not a constraint:** The northern section of the 2014 proposed extraction borefield survey area was accessible by 4WD vehicle on existing tracks. Historical drill lines throughout the survey area allowed access to most other areas by 4WD vehicle. Where necessary, foot traverses were conducted to count priority flora numbers (especially along dune crests).
Experience levels (i.e. the degree of expertise in plant identification and field surveys)	**Not a constraint:** All field team members were familiarised with the threatened and priority flora known from the south-west corner of the Great Victoria Desert, and in particular around the MRUP area.

6.2. Priority Flora

Extensive, targeted surveys have been carried out to quantify the impact to priority species within the MRUP disturbance footprint. These surveys have been on-going since 2007 and have assisted in providing information on population numbers, habitat preferences, distribution, and phenology patterns for fourteen (currently listed) priority flora species. It is noted that as a result of the November 2014 fire, and different species' response and coping mechanisms to fire, the numbers of priority species within the MRUP may be considerably different in coming months to what has been previously recorded and presented in this report.

Whilst no threatened flora species are currently known from the MRUP, prior to August 2010, *Conospermum toddii* was listed as threatened (previously 'declared rare flora'; Endangered). It is now listed as Priority 4 under state legislation (WC Act) and as of June 2011 was delisted from the Commonwealth EPBC Act. Additionally, *Grevillea secunda* and *Olearia arida* which were listed as Priority 2 under state legislation, were relisted as Priority 4 and *Dicrastylis cundeeleensis* which was listed as Priority 3, is currently listed as Priority 4. Field surveys have also increased the known population numbers of other flora in the Great Victoria Desert region, including *Lepidobolus deserti*, *Microcorys macredieana*, *Micromyrtus stenocalyx, Dicrastylis nicholasii* and *Baeckea* sp. Great Victoria Desert (A.S. Weston 14813). These species were all removed from Western Australia's priority flora listings in early 2010.

Based on targeted MCPL surveys, over 35,000 *Conospermum toddii* (P4) individuals have been recorded on both recently burnt (at the time of survey) and unburnt S6 yellow sand dune vegetation community (and adjacent slopes and vegetation communities) (MCPL 2014). Approximately 8.6% of the estimated MCPL regional number of *Conospermum toddii* individuals occur within the disturbance footprint.

Neurachne lanigera (P1) was recorded at five sites in 2014 and was noted as being a 450 km range extension (MCPL 2014). This specimen (collection LAC087: PERTH 08597863) is now vouchered with the WAH and the locality is now accepted as part of its distribution. Only 4% of MCPL records occur within the development envelope and none are known to occur within the disturbance footprint. This species should, however, be avoided where possible, and population counts be made to determine the actual impact. *Neurachne lanigera* has a wide regional distribution but only a few records are held by the WAH (DPaW 2015b). There is potential for more occurrences of this Priority 1 species to be recorded within the MRUP and in the wider region.

Localities and numbers of the Priority 2 species, *Styphelia* sp. Great Victoria Desert (N. Murdock 44) have increased greatly in recent surveys (from 54 individuals recorded in all previous MCPL surveys across 38 sites, to 104 total after the August 2014 survey across 59 sites; Table 3). This highlights the rather under-surveyed nature of the Great Victoria Desert region, with many of the priority species recorded from the MRUP area not necessarily having a restricted geographic distribution, but appearing restricted based on limited understanding of the flora and vegetation in the area. Given that over 45% of the known regional numbers of this priority species occurs within the development envelope, further survey work should be conducted to determine the extent of this species within the wider region.

The S6 vegetation community supports a high number of priority flora species (MCPL 2013). With the exception of *Malleostemon* sp. Officer Basin (D. Pearson 350), these priority species often occur on the sand dune crests, slopes and smaller undulating dunes. *Dampiera eriantha* (P1) and *Conospermum toddii* (P4) occur in high numbers on the yellow sand dune slopes and crests, and along with *Grevillea secunda* (P4), seem to respond well to fire, germinating and producing mass-flowers on dunes burnt five to ten years prior. *Malleostemon* sp. Officer Basin (D. Pearson 350), however, was often recorded in conjunction with the *Hibbertia crispula* on the unburnt dunes and does not appear to respond well to fire (MCPL 2015). On-going survey work will provide more information on the survival and regeneration strategies of these seemingly restricted species.

High densities of *Grevillea secunda* (P4) and *Comesperma viscidulum* (P4) were recorded in areas burnt in 2005 as part of the 2014 proposed extraction borefield survey area (MCPL 2014). It is unknown whether these high densities are a response to the fire in 2005 (with a combination of high rainfall events), or whether these two taxa were a dominant component of the understorey prior to this disturbance.

Olearia arida (P4) has a regionally wide distribution, with WAH records from south of Wiluna and up to 200 km north east of the MRUP area (DPaW 2015b). Only 1.83% of the estimated regional numbers of *Olearia arida* individuals occur within the disturbance footprint, being a relatively low regional impact.

Isotropis canescens (P2) was until 2015, unrecorded from the MRUP area. It occurs commonly across the 2015 survey areas and based on WAH specimen records, appears to germinate, flower, fruit and set seed (and probably die off) within a year of fire events. As the MRUP has not been surveyed within a year of a large fire event, this would account for why this species has not been recorded in the area until recently. Given that 32.74% of regional numbers of *Isotropis canescens* occur within the development envelope, this number may be significantly reduced if further, more regional survey work is conducted less than a year after fire events. At the time of the 2015 survey, only areas requiring additional mapping (i.e. within and within close proximity to, the development envelope) were surveyed, biasing the numbers towards a higher potential impact as wider survey areas were not conducted at the time.

A cautious approach is advised for the treatment of the *Baeckea* ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) specimen recorded in the north eastern proposed extraction borefield survey area (MCPL 2014). Tropicana Joint Venture records indicate this species' occurrence in the south west corner of the Great Victoria Desert, therefore it is likely that future surveys of the MRUP area may confirm identification of this specimen. Assuming it is the priority 3 species, a minimal 0.22% is likely to be affected by the MRUP development envelope.

The priority species recorded in Queen Victoria Spring Nature Reserve and Plumridge Lakes Nature Reserve (AngloGold Ashanti 2009) demonstrate that the abundance of species such as *Grevillea secunda* (P4), *Dicrastylis cundeeleensis* (P4), *Conospermum toddii* (P4) and *Olearia arida* (P4) extends beyond the immediate MRUP, and local impacts to these species are likely to be low. More recent records from

Botanica (2014) along a proposed pipeline route north of the MRUP also highlight the extent of such priority species in the southwest corner of the Great Victoria Desert.

The various targeted surveys and mapping surveys may have created bias both for and against sampling on the yellow sand dune crests. These dune types are the preferred habitat for two species of conservation interest (past and present) to the MRUP, namely *Conospermum toddii* and *Hibbertia crispula*. The yellow sand dunes, have therefore, formed part of numerous targeted surveys and counts. However, not all sand dunes have been traversed within the MRUP and its immediate surrounds by MCPL botanists, especially during vegetation mapping surveys, or in areas interpreted by desktop mapping in December 2014-January 2015 and October 2015. Due to the consistency of species, easily identifiable characteristics of the S6 community, and greater variation and coverage of mallee woodland communities, less survey effort may have been focused on the sand dunes during these wide scale surveys. Other priority species with fewer regional numbers and habitat preferences for the orange-red sandplains and flats are more difficult to target and may have been under-represented in population counts within the MRUP.

Indirect impacts to priority flora within the development envelope, but not necessarily affected by the clearing, infrastructure or transportation within the disturbance footprint, may include (but are not limited to) changed water regimes, wind erosion, changed fire regimes, and dust. Monitoring of conservation significant vegetation and flora species through permanent plots (and/or transects) should be planned for and conducted during mine site operations to determine the influence of any of these indirect impacts.

Natural events such as high rainfall and fires play a role in facilitating growth and inflorescence production, therefore the timing of surveys in this area can often be critical to a certain species being present or absent at the time of survey. The vast records of priority flora recorded by MCPL (and others in the region) in recent years, highlights the largely under-surveyed nature of the Great Victoria Desert.
Surveys have assisted with providing regional knowledge and flora specimens for taxonomic resolution and placement, as well as discovering potentially new species that require further work.

6.2.1. *Hibbertia crispula*

Based on the supplied development envelope, only 1.28% of known *Hibbertia crispula* records are likely to be impacted by the MRUP, with a lesser 0.27% occurring within the disturbance footprint boundaries (Table 4).

The following results and observations are derived from MCPL (2015). As a result of the targeted survey, 130 voucher specimens (mostly all with representative leaf samples) have been collected by MCPL botanists and stored until morphological and molecular analyses are conducted. Major observations from the collaboration of VMY and MCPL survey (MCPL 2015) work on *Hibbertia crispula* indicate that:

- At least 14,000 *Hibbertia crispula* plants (assuming they are not connected by suckering roots) are present in an approximate 20 x 25 km area around the MRUP (with most locations to the south and east of the main project area).
- It is more likely that *Hibbertia crispula* reproduces via seeds, rather than vegetative suckering roots;
- *Hibbertia crispula* has variable, year-round phenology patterns;
- *Hibbertia crispula* is restricted to yellow sand dune crests in the south-west corner of the Great Victoria Desert that have not been burnt for at least 15 years, but more likely over 20-30 years; and
- Fire may be the largest threat to the survival of *Hibbertia crispula*; however, recent VMY and MCPL field observations post-November 2014 fire indicate that some plants are able to maintain foliage and "regenerate" to some extent (which may possibly be due to their position on the dune crest, providing some "refuge" from the fire).

Refer to MCPL (2015) for further discussion about *Hibbertia crispula* recorded for the MRUP and impacts relating to the November 2014 fire.

6.3. Other Species of Interest

Range extensions and new populations of less common species have been recorded in the MCPL surveys of the MRUP (including *Euphorbia drummondii* and *Ophioglossum polyphyllum* recorded in MCPL (2014)).

This is not necessarily because species distributions are restricted, but rather due to the under-surveyed nature of the region (hindered by the few tracks and remoteness/inaccessibility to vehicles). Species such as *Gastrolobium brevipes*, *Dampiera ramosa*, *Brunonia ?australis* var. A. Kimbreley Flora (K.F. Kenneally 5452) (formerly *Brunonia suffruticosa* ms) (MCPL 2013) and *Schoenus* sp. A1 Boorabbin (K.L. Wilson 2581) (MCPL 2014) were unknown from the area but are now accepted as occurring in the Great Victoria Desert region, as voucher specimens (from MCPL survey efforts and/or other collections and surveys in the region) have now been confirmed and processed by the WAH (MCPL 2014; DPaW 2015b). Natural events such as high rainfall and fires play a role in facilitating growth and inflorescence production, therefore the timing of surveys in this area can often be critical to a certain species being present or absent at the time of survey.

Specimens resembling *Leucopogon planifolius* (known only from the South West Botanical Province – DPaW 2015b) were recorded on the crest and slopes of yellow sand dunes in the MRUP area. Whilst this taxa is not afforded any conservation status, morphological examination on a range of specimens from the survey area is required to examine whether they are consistently separable from *Leucopogon planifolius s. lat.*. This will aid confirmation of whether or not these specimens represent a new taxa (pers. comm. M. Hislop – taxonomist, WAH).

The *Hakea* sp. (LAC139 13/04/14) and *Hakea* sp. (LAC140 13/04/14) specimens collected in the April 2014 survey have potential local and regional significance (MCPL 2014). These specimens do not resemble other known *Hakea* species from the Great Victoria Desert region, and the closest described species (in leaf morphology), *Hakea meisneriana*, occurs over 700 km to the west of the MRUP (pers. comm. M. Hislop – taxonomist, WAH). These collections identified in MCPL (2014) therefore potentially represent unrecognised taxa (or taxon) and targeted work should be conducted to collect flowering *Hakea* specimens. Both localities of these *Hakea* collections were revisited in September 2015 however were not flowering. Records like these highlight the largely under-surveyed nature of the wider Great Victoria Desert region and the importance of extensive, regional surveys to provide context for the flora and vegetation values of the MRUP.

6.4. Vegetation Communities and Mapping

This report consists of data collated over seven years of survey work. Separate multivariate statistical analyses were conducted on the 2008-2010 permanent plot data (MCPL 2010b and 2013) and the proposed extraction borefield survey data in MCPL (2014) largely due to differing survey times since fire. The additional desktop mapping in December 2014 and January 2015 (presented in Figures 10.1-10.23), to align vegetation mapping boundaries with the MRUP updated development envelope, could not have been undertaken via field survey due to the fire over the MRUP in November 2014.

The majority of the vegetation mapping was conducted in 2008 and 2009, with the original community delineation largely dependent upon field observations, low quality satellite imagery, topography, data from relevé mapping sites, and less robust species knowledge in the region due to the lack of botanical studies in the area. This is compounded by the effects of frequent, extensive and patchy fires in the area, survey timing, and the size of the survey area being mapped (narrow, linear lengths, i.e. tracks and pipeline routes, versus large areas).

The most recent 2015 survey work was not combined with previous statistical analyses due to time constraints and because the time since fire (less than one year) meant many herbaceous species not normally present in the communities in high numbers and lack of usually dominant species such as woody shrubs and *Triodia* spp. hummocks would have masked any true site similarities. However, given the knowledge gathered over the MRUP since 2008, sites were assigned to existing community descriptions based on adjacent mapping boundaries, topographical information and satellite imagery.

Less confidence is placed on vegetation community boundaries and assigned codes along the mapping extension to the PNC Baseline Road in Figures 10.3 and 10.4 and in other areas where infill mapping was required (around the Shogun and Emperor pits in Figure 10.5, the reinjection bores in Figure 10.17 and the extraction bores in Figures 10.22 and 10.23) where few to no sites were available to inform decisions.

Large polygons of the C1 community were assigned this community code based on satellite imagery only, and given that this community is very restricted in occurrence (less than 68 ha mapped by MCPL in the wider area), it is recommended that in future, site data be collected to confirm mapping boundaries, and to provide priority species counts and records from these and other areas lacking site data with the potential to be impacted.

The identification of some *Eucalyptus* mallees in all MCPL surveys was often restricted by the lack of fruit or buds. In addition, the identification of some *Eucalyptus* species was also restricted due to the impact of recent fires at the time of surveying. However, *Eucalyptus* species such as *E. gongylocarpa*, *E. youngiana*, *E. ceratocorys*, *E. platycorys* and *E. trivalva* were treated as individual species in the PRIMER analyses as they have characteristic leaves and habits. The multivariate statistical analysis presented in MCPL (2010b; 2013) resulted in a broad structural classification of woodlands and shrublands. Delineation of the vegetation communities was largely influenced by topographical position, landforms (especially sand dunes), and general soil colour and type.

Vegetative material of the *Triodia* species found in the MRUP and surrounds are very similar and therefore, difficult to distinguish without flowering material. Issues were encountered in MCPL (2013), as *Triodia desertorum* and *Triodia rigidissima* are both characterised by the presence of an awn on the lemma, whereas the awn is absent in *Triodia scariosa* (Lazarides 1997). Initial treatment of *Triodia* species as separate entities in the PRIMER analysis resulted in little success in defining communities. Due to the potential problems with identifying sterile material, all *Triodia* species were grouped as a single entity for the 2010/2013 analysis. Only one specimen collected in the 2014 survey (with flowering material) was able to be identified to species level, therefore all *Triodia* specimens (with flowering and sterile material) were also treated as a single entity in the 2014 PRIMER analyses.

As a result of undergoing revisions of the *Acacia aneura* complex at the time of surveying, all *Acacia aneura* identifications were treated as a single taxon in MCPL (2013). This species complex has since been reviewed and published as a variety of different species and subspecies, causing changes to the previously known species ranges and descriptions (Maslin & Reid 2012). *Acacia desertorum* var. *desertorum* identified in the initial surveys has similar characteristics to the more recently identified specimens as *Acacia heteroneura* var. *jutsonii* (Cowan & Maslin 1995), therefore these species were also treated as a single taxon in the MCPL (2010b; 2013) PRIMER analyses.

The statistical analysis of site data from the 2014 proposed extraction borefield and pipeline route survey was based on percentage cover data. This was due to the presence of eucalypt mallees in all sites, however it was their percentage cover that delineates a shrubland or woodland structure (more distinct in this northern section with more prevalent shrublands than in the areas surrounding the Officer Basin Airstrip). However, observations suggest the vegetation is lower in height structure and is dominated more by shrublands rather than woodlands (especially with *Eucalyptus gongylocarpa*) due to shallower soil profiles (indicated by silcrete outcropping), unlike the vegetation around the Officer Basin Airstrip. Silcrete outcropping was observed within the shrubland communities S9 and S10.

Descriptions of the initial SIMPROF groupings arising from the 2014 data analysis were compared to existing vegetation community descriptions for the MRUP area (MCPL 2013). Where necessary, the cluster groups deemed similar to existing community descriptions were assigned to the existing codes (e.g. communities S6 and E3). Species dominance differences were noted for community E3 between the sites of the 2014 data and the 2013/2010 description, namely, less presence and cover of *Hakea francisiana*, and more common occurrence of *Grevillea didymobotrya* (instead of *Grevillea juncifolia* in 2013 descriptions) in the 2014 sites. It is uncertain whether or not this is an effect of the variable fire history in the MRUP area, and a consistent burn in 2005 over the majority of the 2014 proposed extraction borefield and pipeline route survey area.

An opportunity exists to refine the vegetation communities through expanding the analyses to include other wider datasets. However, vegetation community S6 of the yellow sand dunes consistently contained a similar suite of species across the survey areas (MCPL 2015) and is likely to be of greatest local and regional conservation significance to the MRUP (this is discussed in section 6.4.2. below).

6.4.1. Vegetation Community Impacts

The dominant pre-European vegetation association 84, based on the broad description and key overstorey species, resembles the MCPL community E3. Vegetation community E3 occupies 34.7% of the total mapped area by MCPL. Due to the large regional scale of this community, with 100% remaining intact within the GVD1 Shield IBRA subregion, according to the Government of Western Australia (2013) statistics, the MRUP is likely to have a low impact on this vegetation association.

Whilst the locally restricted vegetation communities E9, E14 and S1 have a small proportion of their boundaries located within the disturbance footprint, over 60% of these communities lie within the wider development envelope, and could therefore be indirectly impacted.

Given that the MRUP lies in a remote area of the Great Victoria Desert, it is a relatively restricted development and impact (given the 4,741,827 ha of the GVD1 Shield IBRA subregion, of which all of the pre-European vegetation is considered to remain intact). Based on MCPL mapping of the surrounding area, less than 40% of each mapped extent of all MCPL vegetation communities occurs within the disturbance footprint. This suggests that most communities (with less than 20% occurring within the disturbance footprint) are adequately represented in the wider region, and overall impacts are low within the context of the surrounding area.

6.4.2. Conservation Significance of Vegetation

One PEC, "Yellow sandplain communities of the Great Victoria Desert", occurs in the Great Victoria Desert region. This PEC is not well understood, and to date, little information is available. Vegetation community S6 of the yellow sand dunes contains a high number of priority flora species, including *Hibbertia crispula*, *Dampiera eriantha*, *Malleostemon* sp. Officer Basin (D. Pearson 350) and *Conospermum toddii*, which appear to be restricted to (or commonly present on) the S6 vegetation community (Table 6). It is possible that this community may have conservation significance in relation to the broadly defined PEC. Approximately 200 ha of community S6 (21% of the total mapped community) occurs in the development envelope (Table 5).

The yellow sandplains are estimated to cover 1,692,000 ha in the south-west corner of the Great Victoria Desert (Figure 11). Approximately 0.76% of this area is likely to be yellow sand dune crests, deemed similar to the MCPL vegetation community S6, which is potentially associated with the PEC. These calculations show that the yellow sand dune crests are extensive in the region. Approximately 965 ha of community S6 has been mapped over the entire MRUP area, also suggesting that this community extends well beyond any immediate impact areas. The association of priority species such as *Conospermum toddii* and *Hibbertia crispula* with this yellow sand dune community based on MCPL (2010a; 2015) regional surveys also suggests that this community extends well beyond the MRUP. Due to the associated topography with this community (occurring on sand dune ridges), infrastructure is likely (and recommended) to avoid or detour around or between sand dune ridges, therefore reducing the overall direct impacts. In a regional context, the cumulative impacts from nearby mine site, Tropicana Gold Project are also minimal, as indicated in the *Tropicana Gold Project Public Environmental Review* (AngloGold Ashanti Australia Ltd 2009b), the yellow sandplains PEC does not occur within their footprint.

Vegetation community E14 (with highly leached red-white soils) appears restricted to small pockets in the northeast and west survey areas and may have local significance (MCPL 2014). *Ophioglossum polyphyllum*, a new population record for the Great Victoria Desert (and range extension) was recorded at MURD019 within community E14 (MCPL 2014). Data from MCPL 2010 surveys indicate that this species was also recorded at the permanent plot, VP130 (MCPL 2013). Satellite imagery also confirms the resemblance of this un-mapped, permanent plot location to the E14 community mapped within the bounds of the 2014 survey. There is a potential for more unrecorded (possibly annual or short-lived perennial) species to be recorded from this community following high rainfall events, due to the lower topography and drainage nature of these particular areas.

6.4.3 Vegetation Condition

The November 2014 fire was extensive, impacting approximately 79,348 ha total, which included 73% of the MRUP development envelope (Figure 12). Based on anecdotal field observations by MCPL botanists, recovery of the dominant vegetation post fire can take more than five years with above average rainfall events in the 1-3 years following fire. Priority species such as *Hibbertia crispula* and *Malleostemon* sp. Officer Basin (D. Pearson 350) may exhibit limited regeneration after fire events (depending on the intensity) and until recently, have only been recorded on the long-unburnt yellow sand dune crests.

Vegetation condition, as described in previous MCPL (2010b; 2013; 2014) reports, varied mostly due to effects of fire, with few human disturbances (tracks, drill pads, camp infrastructure inside the MRUP disturbance footprint, and some historic drill lines surrounding the MRUP). Difficulties arise with merging vegetation mapping from different survey periods; for example, surveying at different intervals post-fire can result in different species dominance due to succession/re-colonisation/regrowth effects, lack of identifiable material and post-fire reproductive strategies. Whilst the proposed extraction borefield and pipeline route (MCPL 2014) was surveyed 9 years since fire; the area adjoining the survey boundary in the south was mapped less than five years following fire (MCPL 2010b; 2013), and many eucalypt mallees and dominant shrubs were lacking fruit and/or flowers which can be critical for species identification.

The baseline data gathered in these various MCPL surveys, however, provides an opportunity to assess post-fire changes to vegetation composition and structure, record data for comparison to future rehabilitation efforts and study the effects of fire on priority species densities and extent around the MRUP.

7. CONCLUSIONS

Based on MCPL surveys from 2007-2015 and available regional information, a range of floristic and vegetative values have been identified within the MRUP. As a result of numerous targeted surveys and opportunistic collections, priority flora species within the MRUP have resulted in (some) conservation status being downgraded and increased regional knowledge about population numbers and distributions. Targeted dune crest surveys have largely increased the population distribution and plant numbers of the P1 and Vulnerable, *Hibbertia crispula* known from the south-west corner of the Great Victoria Desert, resulting in a relatively low impact to plants located within the MRUP disturbance footprint. Of higher concern to this species is the effect of fire, as based on limited field observations, these plants do not appear to respond well to fire.

An opportunity exists to refine the vegetation communities through expanding the analyses to include other wider datasets. Woodland and shrubland communities occur outside the disturbance footprint, although only three (E9, E14 and S1) are likely to be restricted to the development envelope (with potential direct and indirect impacts). Whilst the S6 vegetation community has affinities to the broadly defined "Yellow sandplain communities of the Great Victoria Desert" PEC, targeted surveys for *Hibbertia crispula* and *Conospermum toddii* (as well as information provided by Tropicana Joint Venture) indicate that this community extends beyond the boundary of any currently proposed developments.

Fire plays an important role in the Great Victoria Desert landscape as indicated by the extensive November 2014 fire affecting a large proportion of the MRUP area. This event presents an opportunity to research the impact of fire on the known vegetation communities and conservation significant flora species recorded in the MRUP area.

With no introduced (weed) species recorded in the project area, and limited human disturbances, the MRUP is situated in an excellent-pristine area of the Great Victoria Desert. Whilst MCPL botanists have recorded numerous priority flora species, potentially undescribed flora species and affinities between the S6 vegetation community with the poorly described PEC, all of these flora and vegetation values appear to be adequately represented outside the MRUP development envelope.

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thank taxonomists from the Western Australian Herbarium for their plant identification support in this project.

9. PERSONNEL

The following MCPL personnel were involved in the MRUP surveys and reporting (* indicates the person has also been involved prior to 2014):

NAME	POSITION	PROJECT INVOLVEMENT	FLORA COLLECTION PERMIT
2014 – CURRENT			
Dr E Mattiske*	Managing Director & Principal Ecologist	Planning, field work managing, data interpretation, mapping, report preparation	SL008897 & 118-0910
Ms N Murdock*	Senior Botanist & Project Leader	Planning, field work, plant identifications, data interpretation, mapping, report preparation	SL010848 & 10-1314
Ms L Cockram *	Experienced Botanist	Field work, assisting with data collation, report preparation	SL008895
Ms C Reynolds	Botanist	Appendices and report preparation	N/A
Dr S Ruoss	Ecologist	Field work, assisting with data collation, report preparation	SL010852
Mr A Barrett	Botanist	Fieldwork, data interpretation	SL010860
Ms E Joyce	Botanist	Field work, assisting with data collation, report preparation	SL011063
Mrs B Koch*	Senior Taxonomist	Plant identifications	N/A
Ms K Tippur*	Taxonomist	Plant identifications	N/A
Ms J Ellery	Taxonomist	Plant identifications	N/A
Mr B Ellery	Taxonomist	Plant identifications	N/A
PRE-2014			
Mr S Reiffer	Experienced Botanist	Planning, field work, plant identifications, data interpretation, mapping, report preparation	SL008465
Mr T Sleigh	Experienced Botanist	Field work, data, mapping	SL008904
Mr M Boardman	Experienced Botanist	Field work	SL008902
Mr T Phillips	Experienced Botanist	Field work	SL008898
Ms R Chesney	Experienced Botanist	Field work	SL008907
Ms F de Wit	Experienced Botanist	Field work	SL008909
Mr M Gannaway	Experienced Botanist	Field work	SL008893
Ms J Jones	Botanist	Field work	SL008905
Mr A MacGillivray	Botanist	Field work, plant identifications	SL008914
Ms M Hocking	Botanist	Field work	SL008911
Ms F Riviera	Botanist	Field work	N/A
Ms S Chandran	Taxonomist	Plant identifications	N/A

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APPENDIX A: LEGISLATIVE PROTECTION FOR WESTERN AUSTRALIA'S ENVIRONMENT

A.1. Overview of Western Australia's Flora

Western Australia has a unique and diverse flora, and is recognised as one of the world's 34 biodiversity hotspots (Myers *et al*. 2000). In this context, Western Australia possesses a high degree of species richness and endemism. This is particularly pronounced in the south-west region of the state. There are currently over 12,000 plant species known to occur within Western Australia (DPaW 2014a), and scientific knowledge of many of these species is limited.

The unique flora of Western Australia is potentially under threat due to historical clearing practices associated with agricultural, mining and human habitation activities. As a consequence of these historical clearing practices a number of flora species have become threatened or have the potential to become threatened as their habitat is impacted by human activity. In addition, some areas of the State have been affected by past clearing practices such that entire ecological communities are under threat.

At the Commonwealth level, under the EPBC Act, a nomination process exists to list a threatened species or ecological community. Additions or deletions to the lists of threatened species and communities are made by the Minister for Sustainability, Environment, Water, Populations and Communities, on advice from the Federal Threatened Species Scientific Committee. The EPBC Act lists of threatened flora and ecological communities are published on the Department of the Environment (DotE) website (DotE 2015a; 2015b).

Ecological communities that are deemed to be threatened are also afforded protection under the EPBC Act. Listings of threatened species and communities are reviewed annually by the Western Australian Threatened Species Scientific Committee (TSSC), which is a body appointed by the Minister for the Environment and supported by the DPaW. The TSSC reviews threatened and specially protected flora (and fauna) listings on an annual basis. Recommendation for additions or deletions to the listings of specially protected flora (and fauna) is made to the Minister for the Environment by the TSSC, via the Director General of the DPaW and the WA Conservation Commission. Under Schedule 1 of the WC Act, the Minister for the Environment may declare that a class or description of flora to be threatened flora throughout the State, as published in the *Wildlife conservation (rare flora) notice December 2014* (DPaW 2014b). The following sections describe these threatened and priority flora and ecological communities, and outline the legislative protection afforded to them.

A.2. Threatened and Priority Flora

Flora within Western Australia that is considered to be under threat may be classed as either threatened or priority flora. At the Commonwealth level, under the EPBC Act, threatened species can be listed as extinct, extinct in the wild, critically endangered, endangered, vulnerable, or conservation dependent, by the Minister for the Environment. Under the EPBC Act, a person must not take an action that has, or will have, a significant impact on a listed threatened species without approval from the Minister for the Environment, unless those actions are not prohibited under the Act. Table I sets out definitions of threatened flora under federal legislation. The current EPBC Act list of threatened flora may be found on the DotE (2015a) website.

At the State level, the WC Act provides for taxa of native flora (and fauna) to be specially protected because they are subject to identifiable threats. Protection of these taxa has been identified as being warranted because they may become extinct, are threatened, or are otherwise in need of special protection. Where flora has been gazetted as threatened flora under the WC Act, it is an offence "to take" such flora without the written consent of the Minister. The WC Act states that "to take" flora includes to gather, pluck, cut, pull up, destroy, dig up, remove or injure the flora or to cause or permit the same to be done by any means.

Priority flora constitute species which are considered to be under threat, but for which there is insufficient information available concerning their distribution and/or populations to make a proper evaluation of their conservation status. Such species are considered to potentially be under threat, but do not have legislative protection afforded under the WC Act. The DPaW categorises priority flora according to their conservation priority, using five categories, P1 to P5, to denote the status of such species, with P1 listed species being the most threatened and P5 the least. Priority flora species are regularly reviewed, and may have their status changed when more information on the species becomes available. Table II sets out state definitions of both threatened and priority flora.

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Table I: Federal Definition of Threatened Flora Species

Note: Threatened flora (and fauna) may be listed in six categories as defined in section 179 of the EPBC Act. Adapted from DotE (2015c).

CATEGORY	DEFINITION
Ex - Extinct	Taxa 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	Taxa 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	Taxa 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	Taxa 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	Taxa 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	Taxa 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.

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Table II: State Definition of Threatened and Priority Flora Species

Note: Adapted from DPaW (2015a).

CATEGORY	DEFINITION
T – Threatened flora (Declared Rare Flora – Extant)	Taxa that have been adequately searched for and are deemed to be in the wild either rare, in danger of extinction, or otherwise in need of special protection, and have been gazetted as such (Schedule 1 of the *Wildlife Conservation (Rare Flora) Notice* under the WC Act). Threatened flora (Schedule 1) are further ranked by the DEC according to their level of threat using IUCN Red List criteria: • **CR:** Critically Endangered – considered to be facing an extremely high risk of extinction in the wild; • **EN:** Endangered – considered to be facing a very high risk of extinction in the wild; or • **VU:** Vulnerable – considered to be facing a high risk of extinction in the wild.
X – Presumed Extinct Flora (Declared Rare Flora – Extinct)	Taxa that have been adequately searched for and there is no reasonable doubt that the last individual has died, and have been gazetted as such (Schedule 2 of the *Wildlife Conservation (Rare Flora) Notice* under the WC Act).
P1 – Priority 1 (Poorly known taxa)	Taxa that are known from one or a few collections or sight records (generally less than five), all on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, Shire, Westrail and Main Roads WA road, gravel and soil reserves, and active mineral leases and under threat of habitat destruction or degradation. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes.
P2 – Priority 2 (Poorly known taxa)	Taxa that are known from one or a few collections or sight records, some of which are on lands not under imminent threat of habitat destruction or degradation, e.g. national parks, conservation parks, nature reserves, State forest, vacant Crown land, water reserves, etc. Taxa may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes.
P3 – Priority 3 (Poorly known taxa)	Taxa that are known from collections or sight records from several localities not under imminent threat, or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Taxa may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and known threatening processes exist that could affect them.
P4 – Priority 4 (Rare, Near Threatened and other taxa in need of monitoring)	**1. Rare** - Taxa 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. **2. Near Threatened** - Taxa that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for Vulnerable. **3.** Taxa that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.
P5 – Priority 5 (Conservation Dependent taxa)	Taxa that are not threatened but are subject to a specific conservation program, the cessation of which would result in the species becoming threatened within five years.

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A.3. Declared (plant) Pests

Under section 26 (1) of the BAM Act, a person who finds a declared pest plant must report, in accordance with subsection (2), the presence or suspected presence of the declared pest to the Director General or an inspector of the Department of Agriculture and Food (DAF) Western Australia. The Western Australian Organism list (WAOL) summarises the status of pest organisms that have been classified as part of the BAM Act (DAF 2015). Organisms are grouped into four main classifications: declared pests (under section 22); prohibited (under section 12); permitted (under section 11); or permitted requiring a permit (under section 73).

Under the *Biosecurity and Agriculture Management Regulations 2013* (WA), plants classified as declared pests are placed in one of three control categories, C1 (exclusion), C2 (eradication) or C3 (management), which determines the measures of control which apply to the declared pest (Table III). According to section 30 (3) of the BAM Act, the owner or occupier of land, or a person who is conducting an activity on the land, must take the prescribed control measures to control the declared pest if it is present on the land.

The current listing of declared pest organisms and their control category is available on the WAOL, at the Biosecurity and Agriculture Management website of the DAF Western Australia (DAF 2015).

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Table III: Categories and Control of Declared (Plant) Pests in Western Australia

Note: Adapted from *Biosecurity and Agriculture Management Regulations 2013*.

CATEGORY	CONTROL MEASURES
C1 (Exclusion) '(a) Category 1 (C1) — Exclusion: if in the opinion of the Minister introduction of the declared pest into an area or part of an area for which it is declared should be prevented' Pests will be assigned to this category if they are not established in Western Australia and control measures are to be taken, including border checks, in order to prevent them entering and establishing in the State.	In relation to a category 1 declared pest, the owner or occupier of land in an area for which an organism is a declared pest or a person who is conducting an activity on the land must take such of the control measures specified in subregulation (1) as are reasonable and necessary to destroy, prevent or eradicate the declared pest.
C2 (Eradication) '(b) Category 2 (C2) — Eradication: if in the opinion of the Minister eradication of the declared pest from an area or part of an area for which it is declared is feasible' Pests will be assigned to this category if they are present in Western Australia in low enough numbers or in sufficiently limited areas that their eradication is still a possibility.	In relation to a category 2 declared pest, the owner or occupier of land in an area for which an organism is a declared pest or a person who is conducting an activity on the land must take such of the control measures specified in subregulation (1) as are reasonable and necessary to destroy, prevent or eradicate the declared pest.
C3 (Management) '(c) Category 3 (C3) — Management: if in the opinion of the Minister eradication of the declared pest from an area or part of an area for which it is declared is not feasible but that it is necessary to — (i) alleviate the harmful impact of the declared pest in the area; or (ii) reduce the number or distribution of the declared pest in the area; or (iii) prevent or contain the spread of the declared pest in the area.' Pests will be assigned to this category if they are established in Western Australia but it is feasible, or desirable, to manage them in order to limit their damage. Control measures can prevent a C3 pest from increasing in population size or density or moving from an area in which it is established into an area which currently is free of that pest.	In relation to a category 3 declared pest, the owner or occupier of land in an area for which an organism is a declared pest or a person who is conducting an activity on the land must take such of the control measures specified in subregulation (1) as are reasonable and necessary to — (a) alleviate the harmful impact of the declared pest in the area for which it is declared; or (b) reduce the number or distribution of the declared pest in the area for which it is declared; or (c) prevent or contain the spread of the declared pest in the area for which it is declared.

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A.4. Threatened and Priority Ecological Communities

An ecological community is defined as a naturally occurring biological assemblage that occurs in a particular type of habitat composed of specific abiotic and biotic factors. At the State level, ecological communities may be considered as threatened once they have been identified as such by the Western Australian Threatened Ecological Communities Scientific Advisory Committee. A threatened ecological community (TEC) is defined, under the EP Act, as an ecological community listed, designated or declared under a written law or a law of the Commonwealth as threatened, endangered or vulnerable. There are four State categories of TECs: presumed totally destroyed (PD); critically endangered (CR); endangered (EN); and vulnerable (VU) (Table V; DEC 2010). Threatened ecological communities are gazetted as such (DPaW 2014c).

At the Commonwealth level, some Western Australian TECs are listed as threatened, under the EPBC Act. Under the EPBC Act, a person must not take an action that has or will have a significant impact on a listed threatened ecological community without approval from the Federal Minister for the Environment, unless those actions are not prohibited under the Act. A description of each of these Federal categories of TECs is presented in Table IV. The current EPBC Act list of threatened ecological communities can be located on the DotE (2015b) website.

Ecological communities identified as threatened, but not listed as threatened ecological communities, can be classified as priority ecological communities (PECs). These communities are under threat, but there is insufficient information available concerning their distribution to make a proper evaluation of their conservation status. The DPaW categorises PECs according to their conservation priority, using five categories, P1 to P5, to denote the conservation priority status of such ecological communities; these categories are defined in Table VI. A list of current PECs can be viewed at the DPaW (2014d) website.

Table IV: Federal Definition of Threatened Ecological Communities

Note: Three categories exist for listing TECs under the EPBC Act. Adapted from DotE (2015b).

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.

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Table V: State Definition of Threatened Ecological Communities

Note: Adapted from DEC (2010).

CATEGORY	DEFINITION
PD – Presumed Totally Destroyed	An ecological community will be listed as PD if there are no recent records of the community being extant **and either** of the following applies: **1.** Records within the last 50 years have not been confirmed despite thorough searches or known likely habitats; or **2.** All occurrences recorded within the last 50 years have since been destroyed.
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.

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Table VI: State Definition of Priority Ecological Communities

Note: Adapted from DEC (2010).

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 A: LEGISLATIVE PROTECTION FOR WESTERN AUSTRALIA'S ENVIRONMENT

A.5. Clearing of Native Vegetation

Under the EP Act, the clearing of native vegetation requires a permit to do so, from the Department of Environmental Regulation or the Department of Mines and Petroleum, unless that clearing is exempted under specific provisions listed in Schedule 6 of the Act, or are prescribed in the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*.

Under the EP Act, "native vegetation" means indigenous aquatic or terrestrial vegetation, and includes dead vegetation unless that dead vegetation is of a class declared by regulation to be excluded from this definition but does not include vegetation in a plantation.

Under Section 51A of the EP Act, "clearing" means the killing or destruction of, the removal of, the severing or ringbarking of trunks or stems of, or the doing of any other substantial damage to, some or all of the native vegetation in an area, and includes the draining or flooding of land, the burning of vegetation, the grazing of stock, or any other act or activity, that causes any of the aforementioned consequences or results.

Under the EP Act, ten principles are set out, under which native vegetation should not be cleared. These principles state that native vegetation should not be cleared, if:

a. it comprises a high level of biological diversity;

b. it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna indigenous to Western Australia;

c. it includes, or is necessary for the continued existence of, threatened flora;

d. it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community;

e. it is significant as a remnant of native vegetation in an area that has been extensively cleared;

f. it is growing in, or in association with, an environment associated with a watercourse or wetland;

g. the clearing of the vegetation is likely to cause appreciable land degradation;

h. the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area;

i. the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water; or

j. the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.

The *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, under Regulation 5, sets out prescribed clearing actions that do not require a clearing permit, as defined in Section 51C of the EP Act.

Under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004*, under Regulation 6 –"environmentally sensitive areas" are defined as "the area covered by vegetation within 50 m of threatened flora, to the extent to which the vegetation is continuous with the vegetation in which the threatened flora is located".

Under the *Environmental Protection (Clearing of Native Vegetation) Regulations 2004* - Regulation 6 (environmentally sensitive areas), the area covered by a threatened ecological community, is similarly considered an environmentally sensitive area and therefore non-permitted, unless Ministerial approval is granted.

APPENDIX A: LEGISLATIVE PROTECTION FOR WESTERN AUSTRALIA'S ENVIRONMENT

A.6. Local and Regional Significance

Flora or vegetation may be locally or regionally significant in addition to statutory listings by the State or Federal Government. Whilst not legislatively protected, these factors are taken into consideration during the assessment of mining proposals, clearing proposals and other proposed development; *Guidance for the assessment of environmental factors – terrestrial flora and vegetation surveys for environmental impact assessment in Western Australia, No. 51* (Environmental Protection Authority – EPA 2004) specifically states:

> *"A broad consideration of the ecological processes that influence sites and their ecological functions is required; statutory lists of declared rare and priority flora are only a small subset of biodiversity. Proponents should ensure that flora and vegetation surveys provide sufficient information to address both biodiversity conservation and ecological function values within the context of the type of proposal being considered and the relevant EPA objectives for protection of the environment"* (Note – declared rare flora are now referred to as threatened flora).

In regards to flora; species, subspecies, varieties, hybrids and ecotypes may be significant other than as threatened flora or priority flora, for a variety of reasons, including:

- a keystone role in a particular habitat for threatened species, or supporting large populations representing a significant proportion of the local regional population of a species;
- relic status;
- anomalous features that indicate a potential new discovery;
- being representative of the range of a species (particularly, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range);
- the presence of restricted subspecies, varieties, or naturally occurring hybrids;
- local endemism/a restricted distribution; and
- being poorly reserved (EPA 2004).

Vegetation may be significant because the extent is below a threshold level and a range of other reasons, including:

- scarcity;
- unusual species;
- novel combinations of species;
- a role as a refuge;
- a role as a key habitat for threatened species or large populations representing a significant proportion of the local to regional total population of a species;
- being representative of the range of a unit (particularly, a good local and/or regional example of a unit in "prime" habitat, at the extremes of range, recently discovered range extensions, or isolated outliers of the main range); and
- a restricted distribution (EPA 2004).

Vegetation communities are locally significant if they contain priority flora species or contain a range extension of a particular taxon outside of the normal distribution. They may also be locally significant if they are very restricted to one or two locations or occur as small isolated communities. In addition, vegetation communities that exhibit unusually high structural and species diversity are also locally significant. Vegetation communities are regionally significant where they are limited to specific landform types, are uncommon or restricted plant community types within the regional context, or support populations of threatened flora. Determining the significance of flora and vegetation may be applied at various scales, for example, a vegetation community may be nationally significant and governed by statutory protection as well as being locally and regionally significant.

APPENDIX B: LOCATION OF PERMANENT PLOTS WITHIN THE MULGA ROCK URANIUM PROJECT AREA, ESTABLISHED 2008 - 2010

OLD SITE REFERENCE (From MCPL 2010b)	PLOT	MGA94 - ZONE 51	
		NORTH WEST CORNER EASTING (mE)	NORTH WEST CORNER NORTHING (mN)
PLS1	VP001	567848	6677465
PLS2	VP002	568516	6675422
PLS3	VP003	567598	6675907
PLS4	VP004	566385	6676063
PLS5	VP005	567211	6676685
PLS6	VP006	567525	6677181
PLS8	VP007	568788	6677433
PNL1	VP008	568433	6674511
PNL2	VP009	568872	6673156
PNL3	VP010	569844	6671846
PNL4	VP011	570017	6670726
PNL5	VP012	568127	6671251
PNL6	VP013	567428	6671900
PNS1	VP014	577246	6675764
PNS2	VP015	576046	6675508
PNS3	VP016	575985	6675608
PNS4	VP017	577079	6675124
PNS5	VP018	577194	6676605
PNS6	VP019	577434	6682502
PNT1	VP020	573837	6677642
PNT2	VP021	574505	6677207
PNT3	VP022	574550	6677660
PNT4	VP023	574414	6677859
PNT5	VP024	573452	6678530
PNT6	VP025	573409	6677290
PNT7	VP026	575086	6676351
PNT8	VP027	576418	6675743
PLS7	VP028	568465	6677514
PTS1	VP029	576613	6674801
PTS2	VP030	578334	6673759
PTS3	VP031	578600	6673472
PTS4	VP032	579452	6672999
PTS5	VP033	577897	6672088
PTS6	VP034	577249	6672512
PTS7	VP035	576160	6673382
PTS8	VP036	572109	6674744
VMP1	VP037	578257	6681724
VMP10	VP038	576587	6682358
VMP11	VP039	576684	6681911
VMP12	VP040	577277	6683107
VMP13	VP041	579467	6683275
VMP14	VP042	579471	6683807
VMP2	VP043	578943	6681918
VMP3	VP044	576994	6681732
VMP4	VP045	575563	6680135
VMP5	VP046	576715	6680925
VMP6	VP047	575789	6680511
VMP7	VP048	576178	6680283
VMP8	VP049	576995	6683577
VMP9	VP050	578060	6683438
VMP-C1	VP051	582189	6679087
VMP-C2	VP052	582178	6678994
MAR01	VP053	562688	6690605
MAR02	VP054	563946	6691804

APPENDIX B: LOCATION OF PERMANENT PLOTS WITHIN THE MULGA ROCK URANIUM PROJECT AREA, ESTABLISHED 2008 - 2010

OLD SITE REFERENCE (From MCPL 2010b)	PLOT	MGA94 - ZONE 51	
		NORTH WEST CORNER EASTING (mE)	NORTH WEST CORNER NORTHING (mN)
MAR03	VP055	557970	6694126
MAR04	VP056	573437	6684485
-	VP057	558226	6690752
-	VP058	562922	6691778
-	VP059	559913	6691976
-	VP060	564007	6688768
-	VP061	572989	6689465
-	VP062	566288	6688402
-	VP063	559562	6689785
-	VP064	562151	6688872
-	VP065	554615	6691715
-	VP065A	568318	6696054
-	VP066	567345	6692677
-	VP067	568207	6693779
-	VP068	567403	6694791
-	VP069	568359	6685471
-	VP070	569010	6697006
-	VP071	568424	6695385
-	VP072	559133	6690456
-	VP073	561741	6690598
-	VP074	566001	6684599
-	VP075	568787	6685117
-	VP076	567448	6684051
-	VP077	569997	6682519
-	VP078	557006	6687507
-	VP079	554986	6686986
-	VP080	556115	6688192
-	VP081	556970	6690653
-	VP082	555902	6691250
-	VP083	574812	6688370
-	VP084	570976	6690696
-	VP084A	559567	6693117
-	VP085	569353	6692963
-	VP085A	561754	6690944
-	VP086	571837	6691508
-	VP087	561742	6680544
-	VP088	561187	6681637
-	VP089	564742	6681712
-	VP090	563458	6683627
-	VP091	571569	6682061
-	VP092	569560	6680550
-	VP093	583181	6678518
-	VP094	584006	6679248
-	VP095	580664	6677420
-	VP096	584322	6675446
-	VP097	552195	6697551
-	VP098	555327	6695678
-	VP099	555319	6698475
-	VP100	552479	6699120
-	VP101	543393	6702399
-	VP102	546968	6700657
-	VP103	559875	6686922
-	VP104	559095	6686174
-	VP105	564102	6685362

APPENDIX B: LOCATION OF PERMANENT PLOTS WITHIN THE MULGA ROCK URANIUM PROJECT AREA, ESTABLISHED 2008 - 2010

OLD SITE REFERENCE (From MCPL 2010b)	PLOT	MGA94 - ZONE 51	
		NORTH WEST CORNER EASTING (mE)	NORTH WEST CORNER NORTHING (mN)
-	VP106	568491	6681992
-	VP107	570398	6683504
-	VP108	571565	6690204
-	VP109	559688	6695718
-	VP110	558356	6696668
-	VP111	563472	6695124
-	VP112	561077	6697883
-	VP113	558842	6699204
-	VP114	567888	6696039
-	VP115	571555	6697484
-	VP116	570795	6698114
-	VP117	571007	6695408
-	VP118	573902	6696271
-	VP119	575102	6695392
-	VP120	552033	6692300
-	VP121	553405	6692440
-	VP122	568637	6694721
-	VP123	571220	6693195
-	VP124	572008	6692544
-	VP125	570272	6694699
-	VP126	570995	6694395
-	VP127	572166	6693444
-	VP128	573294	6693867
-	VP129	575666	6692568
-	VP130	554913	6688213
-	VP131	551305	6689590
-	VP132	561206	6689856
-	VP133	563217	6688703
-	VP134	564206	6687050
-	VP135	578399	6689734
-	VP136	574098	6683060
-	VP137	577688	6690303
-	VP138	573580	6682122
-	VP139	575443	6689759
-	VP140	573153	6680457
-	VP141	575129	6686498
-	VP142	556302	6681922
-	VP143	574304	6683751
-	VP144	575281	6680896
-	VP144	575279	6680899
-	VP145	577336	6688431
-	VP146	577156	6685299
-	VP147	579729	6686763
-	VP148	555512	6694302
-	VP149	551290	6690337
-	VP150	553986	6693586
-	VP151	550636	6692247
-	VP152	559404	6689352
-	VP153	554399	6691602
-	VP154	558791	6688262
-	VP155	551391	6685631
-	VP156	561169	6687448
-	VP157	552182	6686503
-	VP158	558563	6687350

APPENDIX B: LOCATION OF PERMANENT PLOTS WITHIN THE MULGA ROCK URANIUM PROJECT AREA, ESTABLISHED 2008 - 2010

OLD SITE REFERENCE (From MCPL 2010b)	PLOT	MGA94 - ZONE 51	
		NORTH WEST CORNER EASTING (mE)	NORTH WEST CORNER NORTHING (mN)
-	VP159	553753	6685338
-	VP160	561765	6685429
-	VP161	554838	6685593
-	VP162	558187	6686239
-	VP163	552002	6687452
-	VP164	559687	6684898
-	VP165	553383	6686738
-	VP166	561292	6683958
-	VP167	565415	6686471
-	VP168	559607	6681461
-	VP169	565761	6686141
-	VP170	558523	6683219
-	VP171	566906	6686967
-	VP172	557699	6681707
-	VP173	571051	6686417
-	VP174	557132	6680337
-	VP175	563263	6679963
-	VP176	555457	6680612
-	VP177	564236	6678829
-	VP178	556173	6683557
-	VP179	564723	6678623
-	VP180	553386	6684314
-	VP181	564557	6677579
-	VP182	563191	6676550
-	VP183	562805	6677588
-	VP184	563556	6676253
-	VP185	574204	6685929
-	VP186	563501	6676705
-	VP187	570277	6687925
-	VP188	563288	6676708
-	VP189	567839	6689655
-	VP190	563764	6676114
-	VP191	574400	6684123
-	VP192	564463	6675701
-	VP193	584387	6687355
-	VP194	580298	6678870
-	VP195	585339	6686573
-	VP196	578898	6678798
-	VP197	586243	6686281
-	VP198	579867	6677717
-	VP199	587384	6685282
-	VP200	578274	6679696
-	VP201	580899	6688228
-	VP202	577454	6678115
-	VP203	583326	6686983
-	VP204	578355	6677352
-	VP205	584319	6686376
-	VP206	580774	6682376
-	VP207	583366	6685862
-	VP208	581105	6682061
-	VP209	582223	6686584
-	VP210	580699	6683419
-	VP211	580477	6686322
-	VP212	583377	6684125

APPENDIX B: LOCATION OF PERMANENT PLOTS WITHIN THE MULGA ROCK URANIUM PROJECT AREA, ESTABLISHED 2008 - 2010

OLD SITE REFERENCE (From MCPL 2010b)	PLOT	MGA94 - ZONE 51	
		NORTH WEST CORNER EASTING (mE)	NORTH WEST CORNER NORTHING (mN)
-	VP213	581857	6685690
-	VP214	585206	6683701
-	VP215	582090	6685509
-	VP216	584822	6682475
-	VP217	575024	6685355
-	VP218	584940	6681154
-	VP219	571973	6684223
-	VP220	583822	6680591
-	VP221	572338	6682065
-	VP222	579299	6680423
-	VP223	572941	6681746
-	VP224	580363	6680056
-	VP225	573864	6687830
-	VP226	584041	6677451
-	VP227	569968	6687339
-	VP228	583555	6676804
-	VP230	586553	6675838
-	VP232	572201	6682873
-	VP234	572945	6682892
-	VP236	573063	6681281
-	VP238	571647	6680056
-	VP240	572998	6686254
-	VP242	567919	6687997

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0701	A01	577482	6682490
EMA0701	A02	576871	6682417
EMA0701	A03	576275	6682500
EMA0701	A04	576505	6682114
EMA0701	A05	576241	6681408
EMA0701	A06	575573	6680280
EMA0701	A07	576146	6680491
EMA0701	A08	575759	6680732
EMA0701	A09	577970	6683044
EMA0701	E10	557918	6692566
EMA0701	E11	558224	6692373
EMA0701	E12	558659	6692123
EMA0701	E13	555900	6691345
EMA0701	E14	556063	6691190
EMA0701	E15	555825	6690760
EMA0701	E16	556384	6690971
EMA0701	E17	556733	6690840
EMA0701	E18	557525	6691342
EMA0701	E19	557149	6691569
EMA0701	E20	556720	6691820
EMA0701	E21	556075	6692085
EMA0701	E22	557156	6692052
EMA0701	E23	557572	6691798
EMA0701	E24	558020	6691534
EMA0701	E25	558200	6691916
EMA0701	E26	557785	6692165
EMA0701	E37	559260	6691724
EMA0701	E38	559140	6691180
EMA0701	S27	562330	6688477
EMA0701	S28	562734	6688232
EMA0701	S29	562948	6688486
EMA0701	S30	562854	6688329
EMA0701	S31	561935	6688895
EMA0701	S32	562995	6688135
EMA0701	S33	563310	6687900
EMA0701	S34	563335	6687440
EMA0701	S35	563480	6687125
EMA0701	S36	563380	6686750
EMA0701	Track 01	557615	6694200
EMA0701	Track 02	558754	6693526
EMA0701	Track 03a	560360	6692571
EMA0701	Track 03b	560556	6692453
EMA0701	Track 04a	561032	6692167
EMA0701	Track 04b	561224	6692053
EMA0701	Track 05a	561986	6691599
EMA0701	Track 05b	562828	6691250
EMA0701	Track 05c	562549	6691351

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0701	Track 06a	563438	6691096
EMA0701	Track 06b	562904	6691217
EMA0701	Track 07	563525	6691024
EMA0701	Track 08	564470	6690652
EMA0701	Track 09a	565340	6690303
EMA0701	Track 09b	566242	6689932
EMA0701	Track 10	566242	6689932
EMA0701	Track 11a	566741	6689092
EMA0701	Track 11b	566864	6688666
EMA0701	Track 11c	567125	6688486
EMA0701	Track 12	567349	6688398
EMA0701	Track 13a	567962	6687676
EMA0701	Track 13b	568295	6687376
EMA0701	Track 14	568810	6687333
EMA0701	Track 15a	570261	6686665
EMA0701	Track 15b	570758	6686370
EMA0701	Track 16	571393	6685988
EMA0701	Track 17	572451	6685319
EMA0701	Track 18a	573515	6684725
EMA0701	Track 18b	574569	6684096
EMA0701	Track 19a	574692	6684023
EMA0701	Track 19b	575538	6683521
EMA0701	Track 19c	575179	6683732
EMA0701	Track 20	575692	6683428
EMA0801	Camp	575021	6684242
EMA0801	MT01	577776	6682176
EMA0801	MT13	576020	6683226
EMA0801	MT14	575722	6683903
EMA0801	MT15	576033	6683707
EMA0801	MT16	576300	6683400
EMA0801	MT17	577296	6683028
EMA0801	MT18	577187	6682865
EMA0801	MT20	577767	6682546
EMA0801	MT21	579005	6682961
EMA0801	MT22	579778	6682438
EMA0801	MT23	578744	6682327
EMA0801	MT24	561335	6690108
EMA0801	MT25	561041	6689874
EMA0801	MT26	560732	6690259
EMA0801	MT27	560529	6690518
EMA0801	MT28	559832	6691083
EMA0801	MT29	559029	6691906
EMA0801	MT30	559227	6692464
EMA0801	MT31	559919	6692351
EMA0801	MT32	558479	6691259
EMA0801	MT33	559170	6690848
EMA0801	MT34	559442	6692147

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0801	MT35	561067	6689412
EMA0801	MT36	559842	6689787
EMA0801	MT37	559727	6689799
EMA0801	MT38	560962	6689292
EMA0801	MT39	561139	6689256
EMA0801	MT40	563267	6687828
EMA0801	MT41	562876	6688162
EMA0801	MT42	562333	6688641
EMA0801	MT43	562291	6688483
EMA0801	MT44	561836	6688776
EMA0801	MT45	561263	6689118
EMA0801	MT46	561207	6688850
EMA0801	MT47	561717	6688635
EMA0801	MT48	563151	6688516
EMA0801	MT49	562404	6688959
EMA0801	MT50	574971	6689677
EMA0801	MT51	573180	6690745
EMA0801	MT52	571469	6691765
EMA0801	MT53	571241	6691901
EMA0801	MT54	570447	6692375
EMA0801	MT55	570065	6692602
EMA0801	MT56	569518	6692929
EMA0801	MT57	569153	6693147
EMA0801	MT59	575400	6692796
EMA0801	MT60	574667	6693200
EMA0801	MT61	574359	6693328
EMA0801	MT62	573857	6693625
EMA0801	MT63	572961	6694182
EMA0801	MT64	571942	6694771
EMA0801	MT65	571585	6695006
EMA0801	MT66	571966	6695359
EMA0801	MT67	569435	6696350
EMA0801	MT69	569975	6698500
EMA0801	MT70	570371	6698247
EMA0801	MT71	571087	6697082
EMA0801	MT73	572933	6696733
EMA0801	MT75	568024	6695631
EMA0801	MT76	567449	6694705
EMA0801	MT77	567211	6694310
EMA0801	MT78	565910	6695084
EMA0801	MT79	564034	6695777
EMA0801	MT80	563501	6694823
EMA0801	SR01	577571	6682179
EMA0801	SR03	577100	6681500
EMA0801	SR04	577540	6681872
EMA0801	SR05	577608	6681683
EMA0801	SR06	577557	6681563

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0801	SR07	577478	6681604
EMA0801	SR08	577028	6682398
EMA0801	SR09	576760	6682545
EMA0801	SR10	576651	6682355
EMA0801	SR100	574850	6685400
EMA0801	SR101	574545	6684148
EMA0801	SR103	561475	6691905
EMA0801	SR104	562641	6691334
EMA0801	SR105	563976	6690921
EMA0801	SR11	576994	6681644
EMA0801	SR12	577278	6681247
EMA0801	SR13	577000	6680721
EMA0801	SR14	576725	6680919
EMA0801	SR15	575746	6681469
EMA0801	SR16	576229	6690419
EMA0801	SR17	576113	6680266
EMA0801	SR18	575541	6680079
EMA0801	SR19	575789	6682392
EMA0801	SR2	577313	6682076
EMA0801	SR20	576654	6681875
EMA0801	SR21	578006	6681655
EMA0801	SR22	578274	6681706
EMA0801	SR23	578294	6681871
EMA0801	SR24	579041	6681987
EMA0801	SR25	578311	6684252
EMA0801	SR26A	577731	6684581
EMA0801	SR26B	563547	6686292
EMA0801	SR27	563437	6686716
EMA0801	SR28	563636	6687176
EMA0801	SR29	563066	6687810
EMA0801	SR30	564670	6692823
EMA0801	SR31	565504	6692326
EMA0801	SR32	565918	6692075
EMA0801	SR33	566269	6691865
EMA0801	SR34	567298	6691248
EMA0801	SR35	568954	6690265
EMA0801	SR36	569778	6689776
EMA0801	SR37	570999	6689056
EMA0801	SR38	570944	6688988
EMA0801	SR39	571460	6688777
EMA0801	SR40	572315	6688261
EMA0801	SR41	573170	6687800
EMA0801	SR42	573368	6687750
EMA0801	SR43	574338	6687063
EMA0801	SR44	575382	6686440
EMA0801	SR45	575547	6687886
EMA0801	SR46	574935	6688244

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0801	SR47	573793	6688925
EMA0801	SR48	573389	6689167
EMA0801	SR49	572276	6689831
EMA0801	SR50	571813	6690188
EMA0801	SR51	571264	6690433
EMA0801	SR52	570401	6690948
EMA0801	SR53	569800	6691306
EMA0801	SR54	569340	6691640
EMA0801	SR55	568669	6691979
EMA0801	SR56	567320	6692793
EMA0801	SR57	566631	6693193
EMA0801	SR58	564852	6694255
EMA0801	SR60	575512	6690495
EMA0801	SR61	572330	6692459
EMA0801	SR62	571413	6692873
EMA0801	SR63	571093	6693134
EMA0801	SR64	570350	6693586
EMA0801	SR65	569439	6694102
EMA0801	SR66	568355	6695969
EMA0801	SR67	569286	6695319
EMA0801	SR68	570634	6694376
EMA0801	SR69	572031	6693548
EMA0801	SR70	572968	6693062
EMA0801	SR71	579416	6686840
EMA0801	SR72	580098	6686394
EMA0801	SR73	580141	6686470
EMA0801	TA-01	580364	6682316
EMA0801	TA-02	580441	6682398
EMA0801	TA-03	579481	6682890
EMA0801	TA-04	580159	6683137
EMA0801	TA-05	580420	6682978
EMA0801	TA-06	580872	6682653
EMA0801	TA-07	576421	6679083
EMA0801	TA-08	575695	6679039
EMA0801	TA-09	575837	6679902
EMA0801	TA-10	575356	6679243
EMA0801	TJ11	557509	6691337
EMA0801	TJ22	575330	6683614
EMA0801	TJQ9	558070	6692496
EMA0801	TM010	576482	6683840
EMA0801	TM011	576895	6683700
EMA0801	TM012	578379	6682796
EMA0801	TM02	578432	6682522
EMA0801	TM03	578738	6682699
EMA0801	TM04	578797	6683006
EMA0801	TM05	578410	6683268
EMA0801	TM06	578124	6683437

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0801	TM07	577706	6683676
EMA0801	TM08	577357	6683885
EMA0801	TM09	575943	6684246
EMA0801	TM72	571719	6697445
EMA0801	TR10	557494	6691549
EMA0801	TR12	558075	6690997
EMA0801	TR13	558186	6690936
EMA0801	TR14	558314	6690948
EMA0801	TR15	558323	6690859
EMA0801	TR16	558239	6690779
EMA0801	TR17	558452	6691328
EMA0801	TR18	575561	6695161
EMA0801	TR19	574923	6695565
EMA0801	TR20	574286	6695921
EMA0801	TR21	573207	6696566
EMA0801	TR23	574470	6684149
EMA0801	TR24	573745	6684612
EMA0801	TR25	572468	6685383
EMA0801	TR26	571965	6685531
EMA0801	TR27	570156	6686711
EMA0801	TR28	569163	6687342
EMA0801	TR29	567936	6687728
EMA0801	TR30	567364	6688368
EMA0801	TR31	566911	6688650
EMA0801	TR32	566675	6688992
EMA0801	TR33	566633	6689272
EMA0801	TR34	566310	6689926
EMA0801	TR35	566304	6688408
EMA0801	TR36	566098	6688126
EMA0801	TR37	566039	6687656
EMA0801	TR38	566036	6687294
EMA0801	TR39	565837	6686839
EMA0801	TR4	556441	6692151
EMA0801	TR40	565427	6686553
EMA0801	TR41	564879	6686502
EMA0801	TR5	558467	6693359
EMA0801	TR6	558890	6693079
EMA0801	TR7	559080	6692624
EMA0801	TR8	558757	6692306
EMA0801	TS01	563091	6693726
EMA0801	TS02	564270	6692575
EMA0801	TS03	574600	6685382
EMA0801	TS04	574653	6683710
EMA0802	500	583184	6684698
EMA0802	502	585321	6684620
EMA0802	503	583847	6684790
EMA0802	504	583204	6684835

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0802	505	583145	6684697
EMA0802	506	583583	6684238
EMA0802	507	582194	6684392
EMA0802	508	581619	6684698
EMA0802	509	583081	6683288
EMA0802	510	582370	6683500
EMA0802	511	582014	6684064
EMA0802	512	581353	6683878
EMA0802	513	580370	6683693
EMA0802	514	578737	6685291
EMA0802	515	579444	6685002
EMA0802	516	579890	6684737
EMA0802	517	579346	6684573
EMA0802	518	577108	6679142
EMA0802	519	577073	6678703
EMA0802	520	576965	6678886
EMA0802	521	574150	6680100
EMA0802	522	576141	6678518
EMA0802	523	573742	6683964
EMA0802	524	582913	6685538
EMA0802	525	583197	6685231
EMA0802	526	582431	6683844
EMA0802	527	580908	6683887
EMA0802	528	581252	6682971
EMA0901	NS1	571287	6684132
EMA0901	NS1	579315	6684132
EMA0901	NS10	568381	6685398
EMA0901	NS11	568960	6685052
EMA0901	NS12	569643	6684645
EMA0901	NS13	570015	6684420
EMA0901	NS14	570773	6683971
EMA0901	NS15	571022	6683300
EMA0901	NS16	570566	6683573
EMA0901	NS17	569617	6684141
EMA0901	NS18	568833	6684609
EMA0901	NS19	567782	6685233
EMA0901	NS2	570415	6684652
EMA0901	NS20	566854	6685787
EMA0901	NS21	570039	6681935
EMA0901	NS22	569695	6682142
EMA0901	NS23	569128	6682482
EMA0901	NS24	568335	6682954
EMA0901	NS25	567532	6683433
EMA0901	NS26	567281	6683581
EMA0901	NS27	566875	6683761
EMA0901	NS28	566275	6684179
EMA0901	NS29	565682	6684534

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0901	NS3	569441	6685234
EMA0901	NS4	568407	6685851
EMA0901	NS5	568043	6686066
EMA0901	NS6	567728	6686256
EMA0901	NS7	566887	6686291
EMA0901	NS8	567097	6686165
EMA0901	NS9	567350	6686013
EMA0901	SM1	585458	6686095
EMA0901	SM10	581113	6684011
EMA0901	SM11	579315	6684578
EMA0901	SM12	579971	6684228
EMA0901	SM13	568067	6687000
EMA0901	SM14	567520	6687274
EMA0901	SM15	566897	6687696
EMA0901	SM2	585371	6685835
EMA0901	SM3	585500	6685905
EMA0901	SM4	585552	6685661
EMA0901	SM5	579244	6685123
EMA0901	SM6	579406	6685027
EMA0901	SM7	579640	6684889
EMA0901	SM8	579878	6684745
EMA0901	SM9	580939	6684112
EMA0901	TM1	569644	6688477
EMA0901	TM10	573076	6686661
EMA0901	TM11	573083	6686429
EMA0901	TM12	573491	6686183
EMA0901	TM13	574273	6685716
EMA0901	TM14	566394	6688480
EMA0901	TM15	566565	6688379
EMA0901	TM16	566746	6688270
EMA0901	TM17	567360	6687908
EMA0901	TM18	567675	6687718
EMA0901	TM19	569874	6686402
EMA0901	TM2	569991	6688270
EMA0901	TM20	571284	6685561
EMA0901	TM21	571932	6685176
EMA0901	TM22	571930	6684692
EMA0901	TM23	571474	6684967
EMA0901	TM24	570458	6685570
EMA0901	TM25	569349	6686231
EMA0901	TM26	568364	6686819
EMA0901	TM27	566447	6687477
EMA0901	TM28	566943	6687184
EMA0901	TM29	567653	6686758
EMA0901	TM3	570720	6687836
EMA0901	TM30	567931	6686595
EMA0901	TM31	568141	6686477

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA0901	TM32	568176	6686216
EMA0901	TM33	567927	6686303
EMA0901	TM34	568532	6686238
EMA0901	TM35	569455	6685686
EMA0901	TM36	570837	6684882
EMA0901	TM37	570502	6685026
EMA0901	TM38	570298	6685157
EMA0901	TM39	570027	6685346
EMA0901	TM4	570959	6687692
EMA0901	TM40	570792	6685071
EMA0901	TM41	571307	6684582
EMA0901	TM42	572435	6683908
EMA0901	TM43	572476	6683844
EMA0901	TM44	570911	6682840
EMA0901	TM45	570084	6683333
EMA0901	TM46	569140	6683896
EMA0901	TM47	568333	6684377
EMA0901	TM48	567636	6684792
EMA0901	TM49	566847	6685263
EMA0901	TM5	571643	6687285
EMA0901	TM50	566411	6685056
EMA0901	TM51	567248	6684555
EMA0901	TM52	568112	6684130
EMA0901	TM53	569101	6683450
EMA0901	TM54	569787	6683043
EMA0901	TM55	570485	6682626
EMA0901	TM56	570629	6682124
EMA0901	TM57	569820	6682548
EMA0901	TM58	568728	6683199
EMA0901	TM59	568240	6683489
EMA0901	TM6	571959	6687041
EMA0901	TM60	567705	6683752
EMA0901	TM61	567245	6684131
EMA0901	TM62	566891	6684131
EMA0901	TM63	566417	6684578
EMA0901	TM64	566146	6684740
EMA0901	TM7	571195	6687238
EMA0901	TM8	571659	6686524
EMA0901	TM9	571967	6686607
EMA1002	JELLO01	560881	6689515
EMA1002	JELLO02	560467	6688821
EMA1002	JELLO03	560355	6688193
EMA1002	JELLO04	584218	6679303
EMA1002	JELLO05	580010	6680053
EMA1002	JELLO06	571106	6671885
EMA1002	JELLO07	571029	6671672
EMA1002	Veg01	554192	6690426

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA1002	Veg02	553864	6689470
EMA1002	Veg03	554780	6688910
EMA1002	Veg04	555735	6688335
EMA1002	Veg05	555700	6688778
EMA1002	Veg06a	553870	6688290
EMA1002	Veg06b	555241	6687393
EMA1002	Veg07	555463	6686759
EMA1002	Veg08	553231	6686346
EMA1002	Veg09	552725	6687227
EMA1002	Veg10	554367	6686247
EMA1002	Veg11	561928	6687256
EMA1002	Veg12	561351	6687605
EMA1002	Veg13	559975	6688420
EMA1002	Veg14	557792	6689243
EMA1002	Veg15	560566	6687588
EMA1002	Veg16	561676	6686927
EMA1002	GANN01	571366	6683109
EMA1002	GANN02	572228	6682603
EMA1002	GANN03	571908	6682779
EMA1002	GANN04	573714	6681483
EMA1002	GANN05	570790	6681500
EMA1002	GANN06	571175	6681341
EMA1002	GANN07	571494	6681076
EMA1002	GANN08	567077	6682728
EMA1002	GANN09	567419	6682539
EMA1002	GANN10	567662	6682425
EMA1002	GANN11	569891	6681044
EMA1002	GANN12	568558	6680696
EMA1002	GANN13	568908	6680489
EMA1002	GANN14	573200	6686869
EMA1002	GANN15	573605	6686855
EMA1002	GANN16	573690	6686536
EMA1002	GANN17	574219	6686106
EMA1002	GANN18	574695	6689517
EMA1002	GANN19	575083	6688448
EMA1002	GANN20	574812	6688995
EMA1002	GANN21	576361	6685965
EMA1002	GANN22	577332	6685612
EMA1002	GANN23	576394	6684646
EMA1002	GANN24	573263	6685184
EMA1002	GANN25	570220	6686985
EMA1002	JONE001	573266	6686300
EMA1002	JONE002	573676	6682366
EMA1002	JONE003	571693	6681908
EMA1002	JONE004	572084	6681673
EMA1002	JONE005	573576	6680917
EMA1002	JONE006	570810	6681956

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA1002	JONE007	571171	6681742
EMA1002	JONE008	571781	6681245
EMA1002	JONE009	572179	6680300
EMA1002	JONE010	570087	6680950
EMA1002	JONE011	571121	6680328
EMA1002	JONE012	573110	6685713
EMA1002	JONE013	573521	6685733
EMA1002	JONE014	574137	6689963
EMA1002	JONE015	574204	6688455
EMA1002	JONE016	574304	6688227
EMA1002	JONE017	574818	6687928
EMA1002	JONE018	573756	6687330
EMA1002	JONE019	574196	6687548
EMA1002	JONE020	576361	6685805
EMA1002	JONE021	577097	6685487
EMA1002	JONE022	576638	6684398
EMA1002	JONE023	568523	6687697
EMA1002	JONE024	572747	6685377
EMA1401	BARR001	606637	6704151
EMA1401	BARR002	607076	6702828
EMA1401	BARR003	603570	6704201
EMA1401	BARR004	604473	6702646
EMA1401	BARR005	602692	6702292
EMA1401	BARR006	606590	6700827
EMA1401	BARR007	605520	6701303
EMA1401	BARR008	601351	6701801
EMA1401	BARR009	602280	6701408
EMA1401	BARR010	607501	6699256
EMA1401	BARR011	606598	6699679
EMA1401	BARR012	605249	6698675
EMA1401	BARR013	604387	6698822
EMA1401	BARR014	603286	6698392
EMA1401	BARR015	603275	6697981
EMA1401	BARR016	604795	6694310
EMA1401	BARR017	602709	6696165
EMA1401	BARR018	602760	6697173
EMA1401	BARR019	600162	6697217
EMA1401	BARR020	597220	6696516
EMA1401	BARR021	596878	6695560
EMA1401	BARR022	596416	6694929
EMA1401	MURD001	608817	6703715
EMA1401	MURD002	607920	6704167
EMA1401	MURD003	607149	6704277
EMA1401	MURD004	606229	6704012
EMA1401	MURD005	605094	6703378
EMA1401	MURD006	605096	6703421
EMA1401	MURD007	603135	6704230

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA1401	MURD008	604431	6703782
EMA1401	MURD009	604774	6702994
EMA1401	MURD010	602606	6702451
EMA1401	MURD011	605573	6701419
EMA1401	MURD012	601854	6701929
EMA1401	MURD013	602358	6701724
EMA1401	MURD014	605562	6700077
EMA1401	MURD015	605658	6700293
EMA1401	MURD016	604495	6700697
EMA1401	MURD017	606137	6698271
EMA1401	MURD018	603400	6699426
EMA1401	MURD019	603128	6697974
EMA1401	MURD020	601208	6698465
EMA1401	MURD021	600910	6698635
EMA1401	MURD022	604985	6696523
EMA1401	MURD023	603247	6693971
EMA1401	MURD024	603330	6695145
EMA1401	MURD025	603187	6700582
EMA1401	MURD026	598564	6696909
EMA1401	MURD027	597641	6697020
EMA1401	MURD028	596846	6695401
EMA1401	MURD029	596038	6694385
EMA1401	MURD030	592350	6692486
EMA1401	MURD031	602663	6697296
EMA1401	MURD032	590685	6690595
EMA1401	MURD033	589886	6689881
EMA1401	MURD034	589132	6689423
EMA1401	STAR001	606280	6704601
EMA1401	STAR002	606800	6702653
EMA1401	STAR003	604102	6702206
EMA1401	STAR004	603829	6702053
EMA1401	STAR005	603214	6702442
EMA1401	STAR006	604355	6701675
EMA1401	STAR007	604828	6701667
EMA1401	STAR008	600749	6702108
EMA1401	STAR009	602850	6701105
EMA1401	STAR010	608702	6698985
EMA1401	STAR011	607225	6697832
EMA1401	STAR012	601751	6699814
EMA1401	STAR013	601898	6698239
EMA1401	STAR014	603687	6697432
EMA1401	STAR015	605741	6696430
EMA1401	STAR016	603452	6694321
EMA1401	STAR017	603859	6694101
EMA1401	STAR018	602097	6696400
EMA1401	STAR019	599404	6697257
EMA1401	STAR020	597442	6696841

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MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
EMA1401	STAR021	596779	6695149
EMA1401	STAR022	596215	6694581
EMA1401	STAR023	594988	6693874
EMA1401	STAR024	594025	6693408
EMA1401	STAR025	593050	6693078
EMA1401	STAR026	603119	6696536
EMA1401	STAR027	591787	6691818
EMA1401	STAR028	591230	6691481
EMA1401	STAR029	590390	6690249
EMA1401	STAR030	589041	6689528
EMA1401	STAR031	588571	6689231
EMA1401	STAR032	588021	6688655
EMA1401	STAR033	587668	6688588
EMA1401	STAR034	586868	6687696
EMA1401	STAR035	586326	6686901
VRL1503	STAR036	566165	6689590
VRL1503	STAR037	565805	6689671
VRL1503	STAR038	565297	6689831
VRL1503	STAR039	565295	6689732
VRL1503	STAR040	564886	6690041
VRL1503	STAR041	567473	6688744
VRL1503	STAR042	568560	6687762
VRL1503	STAR043	568205	6688132
VRL1503	STAR044	566450	6690549
VRL1503	STAR045	566492	6690233
VRL1503	STAR046	567499	6689133
VRL1503	STAR047	567691	6689329
VRL1503	STAR048	567577	6689583
VRL1503	STAR049	567665	6690021
VRL1503	STAR050	567458	6690413
VRL1503	STAR051	568488	6690013
VRL1503	STAR052	568908	6689473
VRL1503	STAR053	569451	6689379
VRL1503	STAR054	569238	6689117
VRL1503	STAR055	569135	6688807
VRL1503	STAR056	568826	6688418
VRL1503	STAR057	568549	6688738
VRL1503	STAR058	571764	6686196
VRL1503	STAR059	574146	6685250
VRL1503	STAR060	575504	6685263
VRL1503	STAR061	576772	6684665
VRL1503	STAR062	576613	6685435
VRL1503	STAR063	576757	6685186
VRL1503	STAR064	577325	6684888
VRL1503	STAR065	576900	6685472
VRL1503	STAR066	577568	6685221
VRL1503	STAR067	577383	6685379

APPENDIX C: LOCATION OF RELEVÉ MAPPING SITES WITHIN THE MULGA ROCK URANIUM PROJECT AREA, 2007-2015

MCPL JOB CODE	RELEVÉ SITE	MGA94 - ZONE 51	
		EASTING (mE)	NORTHING (mN)
VRL1503	STAR068	579557	6685135
VRL1503	STAR069	581191	6684715
VRL1503	STAR070	581289	6684401

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Sep-09	PLS1	VP001	567848	6677465	Red-orange	Flat	E6
Sep-09	PLS2	VP002	568516	6675422	Yellow-orange	Mid-slope	E3
Sep-09	PLS3	VP003	567598	6675907	Orange	Flat	E5
Sep-09	PLS4	VP004	566385	6676063	Red-orange	Flat	E10
Sep-09	PLS5	VP005	567211	6676685	Yellow	Dune	S8
Sep-09	PLS6	VP006	567525	6677181	Orange-red	Flat	E6
Sep-09	PLS8	VP007	568788	6677433	Yellow	Dune	S8
Sep-09	PNL1	VP008	568433	6674511	Yellow	Sand dune ridge	S6
Sep-09	PNL2	VP009	568872	6673156	Orange	Swale - between dunes	E6
Sep-09	PNL3	VP010	569844	6671846	Yellow	Dune ridge	S6
Sep-09	PNL4	VP011	570017	6670726	Yellow-orange	Flat	E5
Sep-09	PNL5	VP012	568127	6671251	Yellow	Mid-slope - Undulating	E8
Sep-09	PNL6	VP013	567428	6671900	Yellow	Sand dune ridge	S6
Sep-09	PNS1	VP014	577246	6675764	Orange	Flat	E6
Sep-09	PNS2	VP015	576046	6675508	Yellow	Sand dune ridge	S8
Sep-09	PNS3	VP016	575985	6675608	Yellow-orange	Lower-slope/Flat - adjacent to dune	S8
Sep-09	PNS4	VP017	577079	6675124	Yellow-orange	Mid-slope	E3
Sep-09	PNS5	VP018	577194	6676605	Red-orange	Flat/Swale	E12
Sep-09	PNS6	VP019	577434	6682502	Orange	Swale - base of dune	E12
Sep-09	PNT1	VP020	573837	6677642	Yellow-orange	Lower-slope/Flat	S4
Sep-09	PNT2	VP021	574505	6677207	Yellow-orange	Mid-slope	E8
Sep-09	PNT3	VP022	574550	6677660	Yellow	Mid-slope - Undulating	E8
Sep-09	PNT4	VP023	574414	6677859	Yellow	Sand dune ridge	S6
Sep-09	PNT5	VP024	573452	6678530	Yellow	Sand dune ridge	S6
Sep-09	PNT6	VP025	573409	6677290	Orange	Flat	E5
Sep-09	PNT7	VP026	575086	6676351	Orange	Flat	E4
Sep-09	PNT8	VP027	576418	6675743	Yellow-orange	Mid-slope	S8
Sep-09	PSL7	VP028	568465	6677514	Yellow	Undulating	S8
Sep-09	PTS1	VP029	576613	6674801	Yellow-orange	Flat	E8
Sep-09	PTS2	VP030	578334	6673759	Yellow-orange	Flat/Lower-slope	E3
Sep-09	PTS3	VP031	578600	6673472	Yellow-orange	Undulating	S8
Sep-09	PTS4	VP032	579452	6672999	Orange-yellow	Lower-slope/Flat	S7
Sep-09	PTS5	VP033	577897	6672088	Yellow	Dune	S6

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Sep-09	PTS6	VP034	577249	6672512	Yellow-orange	Swale/Lower-slope/Flat	S7
Sep-09	PTS7	VP035	576160	6673382	Yellow	Undulating mid-slope/lower-slope	E8
Sep-09	PTS8	VP036	572158	6674694	Yellow	Dune	S8
Aug-09	VMP1	VP037	578257	6681724	Yellow	Dune	S6
Aug-09	VMP10	VP038	576587	6682358	Yellow	Undulating	E3
Aug-09	VMP11	VP039	576684	6681911	Yellow	Mid-slope	S8
Aug-09	VMP12	VP040	577277	6683107	Yellow	Mid-slope of low dune	S8
Aug-09	VMP13	VP041	579467	6683275	Orange-yellow	Flat/Swale	S7
Aug-09	VMP14	VP042	579471	6683807	Orange-yellow	Flat/Swale	S7
Aug-09	VMP2	VP043	578943	6681918	Yellow	Dune	S6
Aug-09	VMP3	VP044	576994	6681732	Red	Flat/Swale	E6
Aug-09	VMP4	VP045	575563	6680135	Orange-red	Flat/Swale	E6
Aug-09	VMP5	VP046	576715	6680925	Orange-yellow	Flat	E5
Aug-09	VMP6	VP047	575789	6680511	Orange-yellow	Flat	E5
Aug-09	VMP7	VP048	576178	6680283	Yellow-orange	Flat	E8
Aug-09	VMP8	VP049	576995	6683577	Yellow-orange	Flat	E8
Aug-09	VMP9	VP050	578060	6683438	Yellow	Mid-slope	E3
Aug-09	VMP-C1	VP051	582189	6679087	Yellow	Dune	S6
Aug-09	VMP-C2	VP052	582178	6678994	Yellow	Undulating	S8
Mar-10	MAR01	VP053	562688	6690605	Yellow	Dune	NOT MAPPED
Mar-10	MAR02	VP054	563946	6691804	Orange-red	Flat/Swale	S7
Mar-10	MAR03	VP055	557970	6694126	Yellow	Flat	NOT MAPPED
Mar-10	MAR04	VP056	573437	6684485	Yellow-orange	Mid-slope	S7
Nov-10	-	VP083	574812	6688370	Yellow-orange	Undulating plain	E5
Nov-10	-	VP092	569560	6680550	Yellow	Flat	NOT MAPPED
Nov-10	-	VP097	552195	6697551	Yellow	Undulating plain	NOT MAPPED
Nov-10	-	VP098	555327	6695678	Yellow	Slope	NOT MAPPED
Nov-10	-	VP106	568491	6681992	Yellow	Slope	NOT MAPPED
Nov-10	-	VP141	575129	6686498	Orange-red	Flat	E5
Nov-10	-	VP173	571051	6686417	Yellow-orange	Undulating Plain	NOT MAPPED
Nov-10	-	VP191	574400	6684123	Orange	Flat	S7
Nov-10	-	VP217	575024	6685355	Yellow	Flat	NOT MAPPED
Nov-10	-	VP219	571973	6684223	Yellow	Lower Slope/Dune	E3

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Nov-10	-	VP221	572338	6682065	Yellow-orange	Undulating Plain	E3
Nov-10	-	VP223	572941	6681746	Yellow	Ridge/Dune	S8
Nov-10	-	VP225	573864	6687830	Orange	Undulating Plain	NOT MAPPED
Nov-10	-	VP227	569968	6687339	Yellow-orange	Undulating Plain	NOT MAPPED
Nov-10	-	VP232	572201	6682873	Yellow	Mid-slope	E3
Nov-10	-	VP234	572945	6682892	Orange-red	Flat	E5
Nov-10	-	VP236	573063	6681281	Yellow	Undulating Plain	S8
Nov-10	-	VP238	571647	6680056	Yellow-orange	Undulating Plain	S8
Nov-10	-	VP240	572998	6686254	Yellow	Flat	NOT MAPPED
Nov-10	-	VP242	567919	6687997	Yellow-orange	Flat	NOT MAPPED
Apr-14	-	STAR035	586326	6686901	Orange	Upper Slope	E3
Apr-14	-	STAR034	586868	6687696	Yellow	Flat	S9
Apr-14	-	STAR033	587668	6688588	Orange	Flat	S9
Apr-14	-	STAR032	588021	6688655	Pale orange over brown	Upper Slope	E3
Apr-14	-	STAR031	588571	6689231	Red-orange	Flat	S9
Apr-14	-	STAR030	589041	6689528	Red	Flat	S9
Apr-14	-	MURD034	589132	6689423	Orange	Flat	S9
Apr-14	-	MURD033	589886	6689881	Orange	Flat	E3
Apr-14	-	STAR029	590390	6690249	Orange	Flat	S9
Apr-14	-	MURD032	590685	6690595	Orange	Flat	E3
Apr-14	-	STAR028	591230	6691481	Orange	Flat	E13
Apr-14	-	STAR027	591787	6691818	Orange	Flat	E3
Apr-14	-	MURD030	592350	6692486	Yellow-orange	Upper Slope	S10
Apr-14	-	STAR025	593050	6693078	Orange-yellow	Flat	S10
Apr-14	-	STAR024	594025	6693408	Orange-yellow	Flat	S10
Apr-14	-	STAR023	594988	6693874	Orange-yellow	Mid-slope	S10
Apr-14	-	MURD029	596038	6694385	Yellow-orange	Flat	S10
Apr-14	-	STAR022	596215	6694581	Orange-yellow	Flat	S10
Apr-14	-	BARR022	596416	6694929	Pale yellow-orange	Flat	E3
Apr-14	-	STAR021	596779	6695149	Orange	Flat	E3
Apr-14	-	MURD028	596846	6695401	Yellow	Ridge	S6
Apr-14	-	BARR021	596878	6695560	Orange-red	Valley Floor	S9
Apr-14	-	BARR020	597220	6696516	Yellow-orange	Lower Slope	E13

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Apr-14	-	STAR020	597442	6696841	Red over white, powdery	Flat	E14
Apr-14	-	MURD027	597641	6697020	Orange-pale brown-white	Lower Slope/Valley Floor	E14
Apr-14	-	MURD026	598564	6696909	Orange	Mid-slope	E3
Apr-14	-	STAR019	599404	6697257	Red	Flat	S9
Apr-14	-	BARR019	600162	6697217	Orange	Flat	S10
Apr-14	-	STAR008	600749	6702108	Orange	Flat	E3
Apr-14	-	MURD021	600910	6698635	Yellow	Ridge	S6
Apr-14	-	MURD020	601208	6698465	Yellow-orange	Mid-slope	E13
Apr-14	-	BARR008	601351	6701801	Orange over brown	Flat	E3
Apr-14	-	STAR012	601751	6699814	Red	Flat	S9
Apr-14	-	MURD012	601854	6701929	Yellow	Ridge	S6
Apr-14	-	STAR013	601898	6698239	Orange-yellow	Flat	E3
Apr-14	-	STAR018	602097	6696400	Orange-yellow	Flat	E3
Apr-14	-	BARR009	602280	6701408	Orange over brown	Mid-slope	E3
Apr-14	-	MURD013	602358	6701724	Yellow	Ridge	S6
Apr-14	-	MURD010	602606	6702451	Yellow	Ridge	S6
Apr-14	-	MURD031	602663	6697296	Yellow	Ridge	S6
Apr-14	-	BARR005	602692	6702292	Orange over brown	Flat/Lower Slope	E3
Apr-14	-	BARR017	602709	6696165	Pale yellow	Lower Slope	S10
Apr-14	-	BARR018	602760	6697173	Pale yellow	Lower Slope	S10
Apr-14	-	STAR009	602850	6701105	Red	Flat	S9
Apr-14	-	STAR026	603119	6696536	Orange-yellow	Mid-slope	S10
Apr-14	-	MURD019	603128	6697974	Pale brown-pink-white	Flat	E14
Apr-14	-	MURD007	603135	6704230	Orange-yellow	Mid-slope	E3
Apr-14	-	MURD025	603187	6700582	Orange-pale brown	Flat	E3
Apr-14	-	STAR005	603214	6702442	Orange	Flat	E3
Apr-14	-	MURD023	603247	6693971	Orange	Mid-slope	E3
Apr-14	-	BARR015	603275	6697981	Orange-red	Flat	S9
Apr-14	-	BARR014	603286	6698392	Yellow	Flat	S10
Apr-14	-	MURD024	603330	6695145	Orange	Lower Slope/Valley Floor	E13
Apr-14	-	MURD018	603400	6699426	Red	Valley Floor	S9
Apr-14	-	STAR016	603452	6694321	Red	Flat	E13
Apr-14	-	BARR003	603570	6704201	Orange over brown	Flat	E3

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Apr-14	-	STAR014	603687	6697432	Orange	Flat	S10
Apr-14	-	STAR004	603829	6702053	Red	Flat	S9
Apr-14	-	STAR017	603859	6694101	Orange	Flat	E13
Apr-14	-	STAR003	604102	6702206	Yellow-orange	Lower Slope	E3
Apr-14	-	STAR006	604355	6701675	Orange	Flat	E3
Apr-14	-	BARR013	604387	6698822	Yellow	Ridge	S6
Apr-14	-	MURD008	604431	6703782	Orange over brown	Flat	E3
Apr-14	-	BARR004	604473	6702646	Orange over brown	Lower Slope	S10
Apr-14	-	MURD016	604495	6700697	Yellow-orange	Mid-slope	E3
Apr-14	-	MURD009	604774	6702994	Red	Valley Floor	S9
Apr-14	-	BARR016	604795	6694310	Yellow-orange	Flat	E13
Apr-14	-	STAR007	604828	6701667	Yellow-orange	Upper Slope	E3
Apr-14	-	MURD022	604985	6696523	Yellow-orange	Mid-slope	S10
Apr-14	-	MURD005	605094	6703378	red-brown	Lower Slope	S9
Apr-14	-	MURD006	605096	6703421	red-brown	Valley Floor	S9
Apr-14	-	BARR012	605249	6698675	Orange	Flat	S10
Apr-14	-	BARR007	605520	6701303	Orange-pale red	Flat	E3
Apr-14	-	MURD014	605562	6700077	Yellow	Ridge	S6
Apr-14	-	MURD011	605573	6701419	Red-orange	Flat	S9
Apr-14	-	MURD015	605658	6700293	Orange	Valley Floor	S9
Apr-14	-	STAR015	605741	6696430	Orange-yellow	Upper Slope	E13
Apr-14	-	MURD017	606137	6698271	light yellow-orange-brown	Mid-slope	E3
Apr-14	-	MURD004	606229	6704012	Orange	Lower Slope	S10
Apr-14	-	STAR001	606280	6704601	Yellow-orange	Flat	E3
Apr-14	-	BARR006	606590	6700827	Orange over brown	Flat	S10
Apr-14	-	BARR011	606598	6699679	Orange over brown	Flat	E3
Apr-14	-	BARR001	606637	6704151	Yellow	Flat	S10
Apr-14	-	STAR002	606800	6702653	Orange-yellow	Upper Slope	E3
Apr-14	-	BARR002	607076	6702828	Orange over brown	Flat	S10
Apr-14	-	MURD003	607149	6704277	Orange-yellow	Mid to Lower Slope	S10
Apr-14	-	STAR011	607225	6697832	Yellow-orange	Ridge/Upper Slope	S6
Apr-14	-	BARR010	607501	6699256	Orange over brown	Flat	S10
Apr-14	-	MURD002	607920	6704167	Yellow	Ridge	S6

APPENDIX D: SURFACE SOIL SAMPLES COLLECTED IN THE MULGA ROCK URANIUM PROJECT AREA, 2009 - 2014

SURVEY MONTH	OLD SITE REF (from MCPL 2010b)	SITE NAME	GDA94, Z51J		Soil Colour	Topography	MAPPED VEGETATION COMMUNITY
			Easting (mE)	Northing (mN)			
Apr-14	-	STAR010	608702	6698985	Orange	Flat	S10
Apr-14	-	MURD001	608817	6703715	Orange	Flat	S10
Aug-14	-	HIBB001	578831	6681459	Yellow	Dune	S6
Aug-14	-	HIBB001	578970	6681498	Yellow	Dune	S6
Aug-14	-	HIBB002	585443	6677770	Yellow	Dune	S6
Aug-14	-	HIBB002	584537	6678078	Yellow	Dune	S6
Aug-14	-	HIBB003	574073	6674454	Yellow	Dune	S6
Aug-14	-	HIBB003	572241	6674671	Yellow	Dune	S6
Aug-14	-	HIBB003	572567	6674644	Yellow	Dune	S6
Aug-14	-	HIBB005	569192	6677596	Yellow	Dune	S6
Aug-14	-	HIBB005	569501	6677683	Yellow	Dune	S6
Aug-14	-	HIBB006	569461	6677428	Yellow	Dune	S6
Aug-14	-	HIBB006	568991	6677412	Yellow	Dune	S6
Aug-14	-	HIBB007	573426	6673990	Yellow	Dune	S6
Aug-14	-	HIBB007	573855	6674038	Yellow	Dune	S6
Aug-14	-	HIBB007	574153	6674021	Yellow	Dune	S6
Aug-14	-	HIBB008	575081	6673469	Yellow	Dune	S6
Aug-14	-	HIBB008	573343	6673696	Yellow	Dune	S6
Aug-14	-	HIBB008	573133	6673743	Yellow	Dune	S6
Aug-14	-	HIBB009	574999	6674336	Yellow	Dune	S6
Aug-14	-	HIBB009	574437	6674410	Yellow	Dune	S6
Aug-14	-	HIBB010	570054	6670005	Yellow	Dune	S6
Aug-14	-	HIBB011	572318	6668780	Yellow	Dune	S6
Aug-14	-	HIBB012	571316	6669421	Yellow	Dune	S6
Aug-14	-	HIBB012	570822	6669480	Yellow	Dune	S6
Aug-14	-	HIBB013	570527	6671685	Yellow	Dune	S6
Aug-14	-	HIBB014	579478	6681695	Yellow	Dune	S6
Aug-14	-	HIBB015	584703	6677060	Yellow	Dune	S6
Aug-14	-	HIBB016	584694	6677470	Yellow	Dune	S6

APPENDIX E: VEGETATION CONDITION AND STRUCTURAL FORM DEFINITIONS

E.1. Definition of Structural Forms of Australian Vegetation

Note: Adapted from Beard (1990).

GROWTH-FORM OF TALLEST STRATUM	FOLIAGE COVER OF TALLEST STRATUM		
	30 – 70 %	10 – 30 %	LESS THAN 10 %
Tall Trees (greater than 30 m)	Tall Forest	Tall Woodland	Open Tall Forest
Medium Trees (10 – 30 m)	Forest	Woodland	Open Woodland
Low Trees (less than 10 m)	Low Forest	Low Woodland	Open Low Woodland
Tall Shrubs (greater than 2 m)	Thicket	Scrub	Open Scrub
Low Shrubs (less than 2 m)	Heath	Low Shrubland	Open Low Shrubland
Grassland (less than 1 m)	Closed Bunch Grassland	Open Bunch Grassland	Hummock Grassland

E.2. Definition of Vegetation Condition Scale

Note: Adapted from Keighery (1994).

CATEGORY	DEFINITION
P - Pristine	Pristine or nearly so, no obvious sign of disturbance.
EX - Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species.
VG - Very Good	Vegetation structure altered obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
G - Good	Vegetation structure significantly altered by obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback, grazing.
D - Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
CD - Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees or shrubs.

APPENDIX F: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN THE MULGA ROCK PROJECT AREA, 2007 - 2015

Note: * denotes introduced species; T denotes threatened flora and P1-P5 denote priority flora species (DPaW 2015b); V denotes vulnerable flora as listed under the EPBC Act (DotE 2015c); ^ denotes all specimens previously identified as *Acacia aneura* variants have been referred to in the appendix as *Acacia aneura* complex since they have been revised recently and will require identification of fresh material.

FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
OPHIOGLOSSACEAE	*Ophioglossum polyphyllum*	x		
PTERIDACEAE	*Cheilanthes sieberi* subsp. *sieberi*		x	
CUPRESSACEAE	*Callitris preissii*	x		
	Callitris verrucosa	x		
	Callitris sp.	x		
POACEAE	*Amphipogon caricinus* var. *caricinus*	x		
	Aristida contorta	x		x
	Aristida holathera	x		x
	Aristida holathera var. *holathera*	x		x
	Aristida sp.	x		
	Austrostipa platychaeta	x		
	Austrostipa sp.	x		
	Eragrostis eriopoda	x		
	Eriachne helmsii	x		
	Eriachne mucronata	x		
	Neurachne alopecuroidea	x		
	Neurachne lanigera (P1)	x		
	Paspalidium basicladum	x		x
	Triodia basedowii	x		
	Triodia desertorum	x	x	
	Triodia rigidissima	x		
	Triodia scariosa	x	x	
	Triodia sp.	x		
	Poaceae sp.	x		
CYPERACEAE	*Caustis dioica*	x	x	
	Chrysitrix distigmatosa	x	x	
	Lepidosperma sanguinolentum	x	x	
	Schoenus hexandrus	x	x	
	Schoenus subaphyllus	x	x	
	Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)	x		
RESTIONACEAE	*Lepidobolus deserti*	x	x	
ASPARAGACEAE	*Chamaexeros fimbriata*	x	x	
	Laxmannia arida	x		
	Lomandra leucocephala	x		
	Lomandra leucocephala subsp. *robusta*	x		
	Thysanotus manglesianus	x	x	
	Thysanotus patersonii		x	
	Thysanotus ?sp. Eremaean (S. van Leeuwen 1067)	x		
XANTHORRHOEACEAE	*Xanthorrhoea thorntonii*	x		

APPENDIX F: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN THE MULGA ROCK PROJECT AREA, 2007 - 2015

Note: * denotes introduced species; T denotes threatened flora and P1-P5 denote priority flora species (DPaW 2015b); V denotes vulnerable flora as listed under the EPBC Act (DotE 2015c); ^ denotes all specimens previously identified as *Acacia aneura* variants have been referred to in the appendix as *Acacia aneura* complex since they have been revised recently and will require identification of fresh material.

FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
HEMEROCALLIDACEAE	*Caesia rigidifolia* (P1)		x	
	Dianella revoluta var. *divaricata*	x	x	
	Tricoryne sp. Great Victoria Desert western dunes (C. Slee 645-211)		x	
	Tricoryne sp. Mullewa (G.J. Keighery 12080)	x	x	
ORCHIDACEAE	*Thelymitra sargentii*		x	
CASUARINACEAE	*Allocasuarina acutivalvis* subsp. *acutivalvis*	x	x	
	Allocasuarina helmsii	x		
	Allocasuarina spinosissima	x	x	
	Allocasuarina spinosissima subsp. Short spine (D.L. Serventy & A.R. Main s.n. 25/08/1960)	x	x	
	Allocasuarina sp.	x		
	Casuarina pauper	x		
	Casuarinaceae sp.	x		
PROTEACEAE	*Banksia elderiana*	x	x	
	Conospermum toddii (P4)	x	x	
	Grevillea acacioides	x		
	Grevillea acuaria	x	x	
	Grevillea didymobotrya	x	x	
	Grevillea didymobotrya subsp. *didymobotrya*	x		
	Grevillea juncifolia	x		
	Grevillea juncifolia subsp. *juncifolia*	x	x	
	Grevillea juncifolia subsp. *temulenta*	x	x	
	Grevillea nematophylla	x		
	Grevillea nematophylla subsp. *planicosta*	x		
	Grevillea pterosperma	x	x	
	Grevillea sarissa	x		
	Grevillea sarissa subsp. *rectitepala*	x	x	
	Grevillea sarissa subsp. *sarissa*	x		
	Grevillea secunda (P4)	x	x	
	Grevillea ?*stenobotrya*	x		
	Grevillea ?*striata*	x		
	Grevillea sp.	x		
	Hakea francisiana	x	x	
	Hakea sp. (LAC139 13/04/14)	x		
	Hakea sp. (LAC140 13/04/14)	x		
	Persoonia coriacea	x		
	Persoonia pertinax	x	x	
SANTALACEAE	*Choretrum chrysanthum*	x	x	
	Exocarpos aphyllus	x		
	Exocarpos sparteus	x		
	Leptomeria ?*preissiana*	x		
	Santalum acuminatum	x	x	
	Santalum murrayanum	x		
	Santalum sp.	x		
	?Santalaceae sp.	x		

APPENDIX F: SUMMARY OF VASCULAR PLANT SPECIES RECORDED IN THE MULGA ROCK PROJECT AREA, 2007 - 2015

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
CHENOPODIACEAE	*Atriplex vesicaria*	x		
	Dysphania kalpari	x		x
	Maireana turbinata		x	
	Maireana sp.	x		
	Rhagodia ?drummondii	x		
	Salsola australis	x		
	Sclerolaena diacantha	x		
	Sclerolaena parviflora	x		
AMARANTHACEAE	*Ptilotus blackii* (P3)	x		
	Ptilotus drummondii	x		
	Ptilotus drummondii var. *minor*	x		
	Ptilotus nobilis	x		
	Ptilotus obovatus var. *obovatus*	x	x	
GYROSTEMONACEAE	*Codonocarpus cotinifolius*	x		
	Gyrostemon brownii	x	x	
	Gyrostemon racemiger	x	x	
	Gyrostemon ramulosus	x		
LAURACEAE	*Cassytha melantha*	x	x	
	Cassytha sp.	x		
PITTOSPORACEAE	*Marianthus bicolor*	x		
	Marianthus sp.	x		
FABACEAE	*Acacia abrupta*		x	
	Acacia acanthoclada subsp. *acanthoclada*	x	x	
	Acacia aneura complex^	x	x	
	Acacia burkittii	x	x	
	Acacia colletioides	x	x	
	Acacia desertorum var. *desertorum*	x	x	
	Acacia duriuscula	x	x	
	Acacia effusifolia	x	x	
	Acacia fragilis	x	x	
	Acacia grasbyi		x	
	Acacia helmsiana	x	x	
	Acacia hemiteles	x	x	
	Acacia heteroneura var. *jutsonii*	x	x	
	Acacia inaequiloba	x	x	
	Acacia incurvaneura		x	
	Acacia ?incurvaneura	x		
	Acacia jennerae	x		
	Acacia kempeana	x	x	
	Acacia ligulata	x	x	
	Acacia longispinea	x		
	Acacia murrayana	x		
	Acacia ?prainii	x		

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
FABACEAE (cont.)	*Acacia ramulosa* var. *ramulosa*	x		
	Acacia rigens	x	x	
	Acacia sibina	x	x	
	Acacia sibirica	x	x	
	Acacia tetragonophylla	x	x	
	Acacia xerophila		x	
	Acacia sp.	x		
	Aotus tietkensii	x	x	
	Aotus sp. Tortile (G.J. Keighery 3767)	x		
	Daviesia benthamii subsp. *acanthoclona*	x		
	Daviesia grahamii	x		
	Daviesia pachyloma	x	x	
	Daviesia pachyloma (atypical)	x		
	Daviesia purpurascens		x	
	Daviesia ulicifolia subsp. *aridicola*	x	x	
	Daviesia sp.	x		
	Gastrolobium aculeatum	x	x	
	Gastrolobium brevipes	x	x	
	Gompholobium gompholobioides	x	x	
	Isotropis canescens (P2)	x	x	
	Jacksonia arida	x	x	
	Jacksonia nematoclada	x		
	Kennedia prorepens	x		
	Labichea eremaea (P3)	x	x	
	Leptosema aculeatum	x		
	Leptosema chambersii	x		
	Mirbelia depressa	x	x	
	Mirbelia ramulosa	x		
	Mirbelia seorsifolia	x	x	
	Phyllota humilis	x	x	
	Phyllota luehmannii	x	x	
	Senna artemisioides subsp. *filifolia*	x		
	Senna artemisioides subsp. *petiolaris*	x		
	Senna artemisioides subsp. x *artemisioides*	x		
	Senna pleurocarpa var. *pleurocarpa*	x		
	Swainsona oliveri		x	
	Swainsona sp.	x		
	?Fabaceae sp.	x		
ZYGOPHYLLACEAE	*Zygophyllum apiculatum*	x		
	Zygophyllum ?*iodocarpum*	x		x
RUTACEAE	*Boronia coerulescens*	x		
	Phebalium brevifolium	x	x	
	Phebalium canaliculatum	x		
	Phebalium laevigatum	x	x	
	Phebalium microphyllum		x	
	Phebalium tuberculosum	x	x	

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
RUTACEAE (cont.)	*Phebalium* sp.	x		
	Philotheca tomentella	x	x	
POLYGALACEAE	*Comesperma scoparium*	x	x	
	Comesperma viscidulum (P4)	x	x	
EUPHORBIACEAE	*Bertya dimerostigma*	x	x	
	Beyeria brevifolia	x	x	
	Beyeria ?*sulcata*	x		
	Beyeria sulcata var. s*ulcata*	x	x	
	Euphorbia drummondii	x		x
	Monotaxis luteiflora	x	x	
PHYLLANTHACEAE	*Phyllanthus erwinii*	x		
	Poranthera microphylla		x	x
ANACARDIACEAE	* *Schinus molle* var. *areira*		x	
CELASTRACEAE	*Stackhousia megaloptera*	x	x	
	?*Stackhousia* sp.	x		
SAPINDACEAE	*Dodonaea lobulata*	x		
	Dodonaea microzyga var. *acrolobata*	x		
	Dodonaea stenozyga	x		
RHAMNACEAE	*Cryptandra aridicola*	x		
	Cryptandra connata	x		
	Cryptandra distigma	x	x	
MALVACEAE	*Abutilon otocarpum*	x		
	Alyogyne pinoniana	x	x	
	Alyogyne sp. Shark Bay (D.J. Edinger 6212)	x	x	
	Alyogyne sp.	x		
	Androcalva melanopetala	x	x	
	Hannafordia bissillii subsp. *bissillii*	x		
	Keraudrenia velutina	x		
	Keraudrenia velutina subsp. *velutina* ms	x		
	Lawrencia squamata		x	
	Sida ?*cardiophylla*	x		
	Sida intricata		x	
	Sida ?sp. Rabbit Flat (B.J. Carter 626)	x	x	
	Sida sp.	x		
DILLENIACEAE	*Hibbertia crispula* (P1 & V)	x	x	
	Hibbertia pungens	x	x	
VIOLACEAE	*Hybanthus floribundus* subsp. *floribundus*	x	x	

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
THYMELAEACEAE	*Pimelea angustifolia*	x		
	Pimelea subvillifera	x	x	
	Pimelea trichostachya	x		
MYRTACEAE	*Aluta maisonneuvei* subsp. *auriculata*	x		
	Baeckea sp. Great Victoria Desert (A.S. Weston 14813)	x	x	
	Baeckea ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (P3)	x		
	Calothamnus gilesii	x	x	
	Enekbatus eremaeus	x	x	
	Eucalyptus ?balladoniensis subsp. *sedens*	x		
	Eucalyptus brachycorys		x	
	Eucalyptus celastroides subsp. virella	x		
	Eucalyptus ceratocorys	x	x	
	Eucalyptus comitae-vallis	x	x	
	Eucalyptus concinna	x	x	
	Eucalyptus cylindrocarpa	x		
	Eucalyptus effusa	x		
	Eucalyptus eremicola	x		
	Eucalyptus eremicola subsp. *eremicola*		x	
	Eucalyptus ewartiana	x		
	Eucalyptus gongylocarpa	x	x	
	Eucalyptus gracilis	x		
	Eucalyptus ?gypsophila	x		
	Eucalyptus horistes	x	x	
	Eucalyptus hypolaena	x		
	Eucalyptus leptophylla	x	x	
	Eucalyptus lesouefii		x	
	Eucalyptus mannensis subsp. *mannensis*	x	x	
	Eucalyptus oleosa subsp. *oleosa*	x		
	Eucalyptus pimpiniana (P3)		x	
	Eucalyptus platycorys	x	x	
	Eucalyptus rigidula	x		
	Eucalyptus rosacea	x	x	
	Eucalyptus salicola		x	
	Eucalyptus striaticalyx		x	
	Eucalyptus trivalva	x	x	
	Eucalyptus youngiana	x		
	Eucalyptus sp. Great Victoria Desert (D. Nicolle & M. French DN 3877)		x	
	Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)	x	x	
	Eucalyptus sp. Queen Victoria Spring (D. Nicolle 524)		x	
	Eucalyptus sp.	x		
	Homalocalyx thryptomenoides	x	x	
	Leptospermum fastigiatum	x		
	Malleostemon sp. Officer Basin (D. Pearson 350) (P2)	x	x	
	Melaleuca eleuterostachya	x		
	Melaleuca exuvia		x	
	Melaleuca hamata	x		
	Melaleuca leiocarpa	x		
	Melaleuca zeteticorum	x		

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
MYRTACEAE (cont.)	*Micromyrtus hymenonema*		x	
	Micromyrtus stenocalyx	x	x	
	Thryptomene biseriata	x	x	
	Thryptomene eremaea (P2)		x	
	Verticordia helmsii	x	x	
	Myrtaceae sp.	x		
HALORAGACEAE	*Glischrocaryon aureum*	x	x	
	Glischrocaryon flavescens	x	x	
	Glischrocaryon sp.	x		
	Gonocarpus confertifolius var. confertifolius	x		
	Gonocarpus confertifolius var. *helmsii*	x	x	x
ARALIACEAE	*Trachymene pyrophila* (P2)		x	x
APIACEAE	*Platysace trachymenioides*	x	x	
ERICACEAE	*Leucopogon cuneifolius*	x	x	
	Leucopogon aff. planifolius	x		
	Styphelia sp. Great Victoria Desert (N. Murdoch 44) (P2)	x	x	
LOGANIACEAE	*Logania nuda*	x	x	
APOCYNACEAE	*Alyxia buxifolia*	x		
	Marsdenia australis	x		
	Marsdenia sp.	x		
CONVOLVULACEAE	*Bonamia erecta*	x		
	Convolvulus angustissimus	x		
BORAGINACEAE	*Halgania cyanea*	x		
	Halgania cyanea var. Allambi Stn (B.W. Strong 676)	x	x	
	Halgania cyanea var. Charleville (R.W. Purdie +111)	x	x	
	Halgania erecta	x	x	
	Halgania ?*integerrima*	x		
LAMIACEAE	*Dicrastylis brunnea*	x		
	Dicrastylis cundeeleensis (P4)	x	x	
	Dicrastylis nicholasii	x		
	Dicrastylis sp.	x		
	Hemiphora elderi	x	x	
	Microcorys macredieana	x	x	
	Newcastelia bracteosa	x	x	
	Newcastelia hexarrhena	x	x	
	Physopsis viscida	x		
	Pityrodia lepidota	x	x	
	Pityrodia loricata	x	x	
	Prostanthera althoferi subsp. *althoferi*	x	x	
	Prostanthera laricoides	x		

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LAMIACEAE (cont.)	*Westringia cephalantha*	x	x	
	Westringia rigida	x		
SOLANACEAE	*Anthotroche pannosa*	x	x	
	Duboisia hopwoodii	x		
	Solanum lasiophyllum		x	
	Solanum plicatile	x	x	
SCROPHULARIACEAE	*Eremophila caperata*	x		
	Eremophila clarkei		x	
	Eremophila decipiens subsp. *decipiens*	x	x	
	Eremophila dempsteri	x		
	Eremophila forrestii subsp. *forrestii*	x		
	Eremophila ?georgei	x	x	
	Eremophila glabra	x		
	Eremophila latrobei subsp. *latrobei*	x		
	Eremophila ?longifolia	x		
	Eremophila oppositifolia subsp. *angustifolia*	x		
	Eremophila ?paisleyi subsp. *paisleyi*	x		
	Eremophila platythamnos	x	x	
	Eremophila platythamnos subsp. *platythamnos*	x	x	
	Eremophila platythamnos subsp. *platythamnos* (white flower form)	x		
	Eremophila scoparia	x	x	
	Eremophila ?serrulata	x		
	Eremophila subfloccosa	x		
	Eremophila sp.	x		
RUBIACEAE	*Opercularia spermacocea*	x	x	
	Pomax sp. desert (A.S. George 11968)	x	x	
	Psydrax suaveolens	x		
GOODENIACEAE	*Brunonia australis*	x	x	
	Brunonia ?australis var. A. Kimberley (K.F. Kenneally 5452)	x		
	Coopernookia strophiolata	x	x	
	Dampiera eriantha (P1)	x	x	
	Dampiera lavandulacea	x	x	
	Dampiera ramosa	x	x	
	Dampiera stenophylla	x	x	
	Dampiera tomentosa	x	x	
	Dampiera aff. tomentosa	x		
	Goodenia elderi	x	x	
	Goodenia glandulosa	x	x	
	Goodenia gypsicola	x		
	Goodenia quasilibera	x		
	Goodenia ramelii	x	x	
	Goodenia triodiophila	x		
	Goodenia xanthosperma	x	x	
	Goodenia sp.	x		

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FAMILY	SPECIES	MCPL RECORD	NATUREMAP RECORD	ANNUAL OR SHORT-LIVED PERENNIAL SPECIES
GOODENIACEAE (cont.)	*Lechenaultia brevifolia*	x	x	
	Lechenaultia striata	x	x	
	Scaevola basedowii	x	x	
	Scaevola parvifolia	x		
	Scaevola parvifolia subsp. *acuminata*		x	
	Scaevola parvifolia subsp. *parvifolia*	x		
	Scaevola restiacea subsp. *divaricata*	x		
	Scaevola spinescens	x		
	Velleia sp.	x		
	Goodeniaceae sp.	x		
STYLIDIACEAE	*Stylidium induratum*	x	x	
	Stylidium limbatum	x	x	
ASTERACEAE	*Brachyscome ciliaris*	x		x
	Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)	x	x	
	Cassinia arcuata (P2)	x		
	Chrysocephalum apiculatum	x	x	
	Chrysocephalum eremaeum		x	
	Chrysocephalum puteale	x		
	Leiocarpa semicalva subsp. *semicalva*		x	
	Minuria leptophylla	x		
	Olearia arida (P4)	x	x	
	Olearia exiguifolia	x	x	
	Olearia incana	x	x	
	Olearia lanuginosa	x	x	
	Olearia muelleri	x		
	Olearia subspicata	x	x	
	Pluchea dentex	x		
	Podolepis canescens		x	x
	Podolepis capillaris		x	x
	Senecio sp.	x		
	Waitzia acuminata var. *acuminata*		x	x

APPENDIX G: BRIEF DESCRIPTIONS OF PRIORITY FLORA SPECIES RECORDED BY MCPL FOR THE MULGA ROCK URANIUM PROJECT, 2007-2015

- **PRIORITY 1 & VULNERABLE**

***Hibbertia crispula* – DILLENIACEAE –** a small, wiry shrub to 50 cm tall that produces yellow flowers (Jessop & Toelken 1986; Plate 1). This species is usually glabrous, except for a minute curly tomentum on the inner side of the leaf base (Jessop & Toelken 1986). Stamens, numbering from (12-) 14-30 (-35), are arranged in five groups around the ovary (H. Toelken, unpublished notes). The few available Western Australian specimens examined by Toelken were noted as having 15-17 stamens.

This *Hibbertia* often grows in clusters, apparently suckering, in deep sandy soil usually on top of dunes (H. Toelken, unpublished notes). This species has been recorded on long-unburnt yellow sand dune ridges in the Officer Basin area but also has two disjunct populations in South Australia (from where it was originally known and described) (DotE 2014).

The Vulnerable conservation status (DotE 2015c) under the EPBC Act was based on the current (at the time), narrow delineation of the species based on plants recorded near Ooldea, South Australia.

Refer to MCPL (2015) for further information on *Hibbertia crispula*.

- **PRIORITY 1:**

***Dampiera eriantha* – GOODENIACEAE –** an erect, perennial herb to 60 cm tall with purple flowers (DPaW 2015b; Plate 2). This species is restricted to the Great Victoria Desert region, occurring on yellow sand dune ridges (DPaW 2015b). It has been recorded on unburnt, yellow sand dunes (MCPL 2013). The WAH houses 14 specimens of *Dampiera eriantha* from the Great Victoria Desert region, mostly concentrated around the MRUP area (DPaW 2015b).

***Neurachne lanigera* – POACEAE –** a tufted, perennial grass to 30 cm tall which produces flowers from July to August, or October (DPaW 2015b). This species has been recorded on red sandplains and lateritic outcrops (DPaW 2015b). The WAH houses nine specimens of *Neurachne lanigera* from the Central Ranges, Gibson Desert and Murchison regions (DPaW 2015b).

- **PRIORITY 2:**

***Isotropis canescens* – FABACEAE –** a prostrate perennial herb to 30 cm tall, producing yellow and red flowers in August (DPaW 2015b; Plate 3). This species occurs on yellow clayey sand and sandplains in the Great Victoria Desert region (DPaW 2015b). The WAH houses five specimens of *Isotropis canescens* from the north-east of the Mulga Rock Uranium Project area and from Queen Victoria Springs and Plumridge Lakes Nature Reserves, noted as appearing within a year of fire (DPaW 2015b).

***Malleostemon* sp. Officer Basin (D. Pearson 350) – MYRTACEAE –** a shrub to 3 m tall, producing white flowers in December (DPaW 2015b). This species occurs on unburnt yellow sand dune ridges (DPaW 2015b; MCPL 2013). The WAH houses 13 specimens of *Malleostemon* sp. Officer Basin (D. Pearson 350) from the Great Victoria Desert region, mostly concentrated around the MRUP area (DPaW 2015b).

***Styphelia* sp. Great Victoria Desert (N. Murdock 44) – ERICACEAE –** a shrub to 50 cm tall, usually growing in low numbers on recently burnt and unburnt orange-yellow sandy slopes (Plate 4; MCPL 2013). The WAH houses nine specimens of *Styphelia* sp. Great Victoria Desert (N. Murdock 44), mostly from the MRUP area in the Officer Basin (DPaW 2015b).

- **PRIORITY 3**

***Baeckea* sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) – MYRTACEAE –** an upright shrub to 100 cm tall, producing white flowers in October. This species has been recorded on orange sand flats (MCPL 2013). The specimens were mostly from the Murchison region, south west and south east of Wiluna, with one location from the Great Victoria Desert, north east of

APPENDIX G: BRIEF DESCRIPTIONS OF PRIORITY FLORA SPECIES RECORDED BY MCPL FOR THE MULGA ROCK URANIUM PROJECT, 2007-2015

the MRUP area (DPaW 2015b). The WAH houses eight specimens of *Baeckea* sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963) (DPaW 2015b).

Labichea eremaea **– FABACEAE –** a compact, rigid shrub from 30-80 cm tall that produces yellow flowers in August and September (DPaW 2015b). This species has been recorded on red sand (MCPL 2013). The WA State Herbarium has 20 records in its collections (DPaW 2015b). This species had not been recorded in the Great Victoria Desert bioregion until specimens collected by MCPL botanists were lodged with the WA State Herbarium.

Ptilotus blackii **– AMARANTHACEAE –** an erect perennial herb to 35 cm tall that produces pink flowers between May and September (DPaW 2015b). It has been recorded on orange-brown sand plains. The WA State Herbarium has seven records in its collections (DPaW 2015b).

- **PRIORITY 4:**

Conospermum toddii **– PROTEACEAE –** a spreading shrub to 2 m tall, producing white or yellow flowers from July to October (Plate 5, DPaW 2015b). This species occurs on the slopes and crests of yellow sand dunes mostly in the Great Victoria Desert region (and also the eastern Coolgardie region and northern Murchison region) (DPaW 2015b). The WAH houses 52 specimens of *Conospermum toddii* from areas within and surrounding the MRUP (DPaW 2015b).

Comesperma viscidulum **– POLYGALACEAE –** a shrub to 70 cm tall that produces cream to purple flowers (Plate 6, DPaW 2015b). This species has been recorded on red or orange sandy flats and undulating sandplains (MCPL 2013). The WAH houses 15 specimens of *Comesperma viscidulum* from six scattered localities in the Central Ranges, Great Victoria Desert, Little Sandy Desert and Murchison regions (DPaW 2015b).

Dicrastylis cundeeleensis **– LAMIACEAE –** a woolly shrub to 50 cm tall, producing white flowers in April and from October to December (DPaW 2015b). This species has been recorded on yellow, red or reddish-yellow sandplains (MCPL 2013). The WAH houses 27 specimens of *Dicrastylis cundeeleensis* mostly from the south west corner of the Great Victoria Desert and extending west into Coolgardie and east into the Nullarbor regions (DPaW 2015b).

Grevillea secunda **– PROTEACEAE –** a low, spreading shrub to 80 cm tall, producing red flowers from September to October (DPaW 2015b; Plate 7). This species occurs on yellow or red sand dunes and sandplains in the Coolgardie, Great Victoria Desert and Murchison regions (DPaW 2015b). The WAH houses 24 specimens of *Grevillea secunda* from areas to the west, north and east, as well as immediately surrounding the MRUP (DPaW 2015b).

Olearia arida **– ASTERACEAE -** an erect shrub to 40 cm tall that produces white flowers from July to September (DPaW 2015b; Plate 8). This species occurs on red or yellow undulating sandplains and low rises (DPaW 2015b). The WA State Herbarium has 20 records in its collections, mostly from the Great Victoria Desert region, but also one location in the Murchison region (DPaW 2015b). *Olearia arida* has been recorded around disturbed areas and appears to be a disturbance specialist (MCPL 2013).

APPENDIX G: BRIEF DESCRIPTIONS OF PRIORITY FLORA SPECIES RECORDED BY MCPL FOR THE MULGA ROCK URANIUM PROJECT, 2007-2015


Plate 1: ***Hibbertia crispula*** **(P1 & Vulnerable) habit** (photograph by N. Murdock) **and inflorescence** (Photograph by E. Joyce)


Plate 2: ***Dampiera eriantha*** **(P1) habit and inflorescence** (photographs by N. Murdock)

Plate 3: ***Isotropis canescens*** **(P2) habit and inflorescence** (photograph by N. Murdock)

APPENDIX G: BRIEF DESCRIPTIONS OF PRIORITY FLORA SPECIES RECORDED BY MCPL FOR THE MULGA ROCK URANIUM PROJECT, 2007-2015

Plate 4: ***Styphelia*** **sp. Great Victoria Desert (N. Murdoch 44) (P2) habit and inflorescence** (photographs by N. Murdock)

Plate 5: ***Conospermum toddii*** **(P4) habit and inflorescence** (photographs by N. Murdock)

Plate 6: ***Comesperma viscidulum*** **(P4) habit** (photograph by N. Murdock) **and inflorescence** (photograph by F. Riviera)

APPENDIX G: BRIEF DESCRIPTIONS OF PRIORITY FLORA SPECIES RECORDED BY MCPL FOR THE MULGA ROCK URANIUM PROJECT, 2007-2015

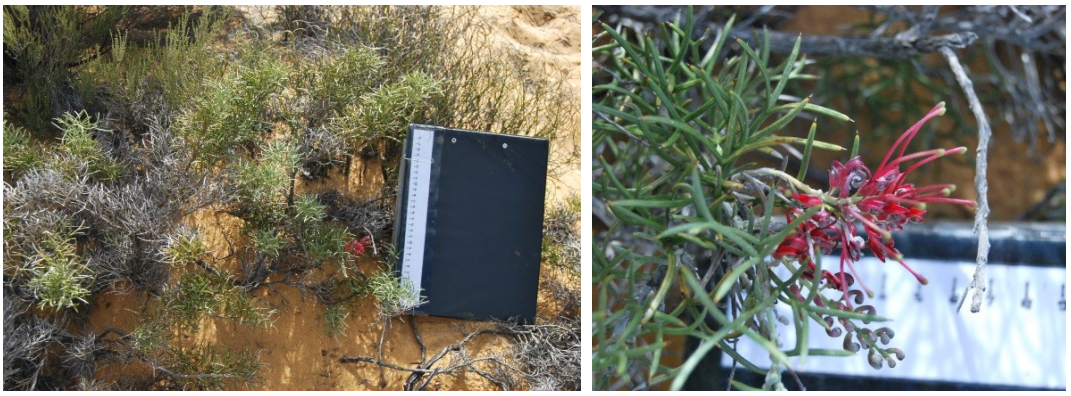

Plate 7: ***Grevillea secunda*** **(P4) habit and inflorescence** (photographs by N. Murdock)

Plate 8: ***Olearia arida*** **(P4) habit and inflorescence** (photographs by N. Murdock)

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Hibbertia crispula	P1 & V	571715	6669122	2009	Helicopter	Heli 13	75 ± 25
	P1 & V	569349	6677810	2009	Helicopter	Heli 16	75 ± 25
	P1 & V	568788	6677433	2009	Plot	VP007	38 ± 12.5
	P1 & V	569844	6671846	2009	Plot	VP010	38 ± 12.5
	P1 & V	572158	6674694	2009	Plot	VP036	1 ± 0
	P1 & V	578943	6681918	2009	Plot	VP043	38 ± 12.5
	P1 & V	580010	6680053	2010	Mapping	JELLO05	23 ± 2.5
	P1 & V	571106	6671885	2010	Mapping	JELLO06	20 ± 5
	P1 & V	571029	6671672	2010	Mapping	JELLO07	33 ± 2.5
	P1 & V	602663	6697296	2014	Borefields Mapping	MURD031	26 ± 0
	P1 & V	568992	6677410	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB006/63	32 ± 0
	P1 & V	569199	6677607	2014	Hc survey-VEG SITE SHEET	HIBB005/62	179 ± 0
	P1 & V	569315	6677414	2014	Hc survey-VEG SITE SHEET	HIBB006/63	194 ± 0
	P1 & V	569496	6677683	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB005/62	0 ± 0
	P1 & V	570058	6670007	2014	Hc survey-VEG SITE SHEET	HIBB010/84	80 ± 0
	P1 & V	570530	6671688	2014	Hc survey-VEG SITE SHEET	HIBB013/81	131 ± 0
	P1 & V	570821	6669489	2014	Hc survey-VEG SITE SHEET	HIBB012/85	82 ± 0
	P1 & V	571312	6669423	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB012/85	27 ± 0
	P1 & V	572170	6668771	2014	Hc survey-VEG SITE SHEET	HIBB011/88	241 ± 0
	P1 & V	572241	6674671	2014	Hc survey-HC SAMPLE SHEET	HIBB003_2/69	0 ± 0
	P1 & V	572581	6674645	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB003/69	0 ± 0
	P1 & V	573346	6673699	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB008/74	15 ± 0
	P1 & V	573417	6673998	2014	Hc survey-VEG SITE SHEET	HIBB007/71	228 ± 0
	P1 & V	573862	6674037	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	40 ± 0
	P1 & V	573929	6674479	2014	Hc survey-VEG SITE SHEET	HIBB003/69	92 ± 0
	P1 & V	574154	6674023	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	38 ± 0
	P1 & V	574440	6674407	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB009/70	26 ± 0
	P1 & V	574848	6674343	2014	Hc survey-VEG SITE SHEET	HIBB009/70	111 ± 0
	P1 & V	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	13 ± 0
	P1 & V	578829	6681464	2014	Hc survey-VEG SITE SHEET	HIBB001/30	119 ± 0
	P1 & V	578970	6681498	2014	Hc survey-HC SAMPLE SHEET	HIBB001_2/30	0 ± 0
	P1 & V	579481	6681700	2014	Hc survey-VEG SITE SHEET	HIBB014/28	25 ± 0
	P1 & V	584532	6677480	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	106 ± 0
	P1 & V	584537	6678078	2014	Hc survey-HC SAMPLE SHEET	HIBB002_2/42	0 ± 0
	P1 & V	584685	6677477	2014	Hc survey-VEG SITE SHEET	HIBB016/DUNE010	113 ± 0
	P1 & V	584690	6677062	2014	Hc survey-VEG SITE SHEET	HIBB015/19002	63 ± 0
	P1 & V	584948	6677492	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	231 ± 0
	P1 & V	585316	6677779	2014	Hc survey-VEG SITE SHEET	HIBB002/42	138 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P1	567211	6676685	2009	Plot	VP005	4 ± 1.5
	P1	568433	6674511	2009	Plot	VP008	18 ± 7.5
	P1	568788	6677433	2009	Plot	VP007	4 ± 1.5
	P1	569844	6671846	2009	Plot	VP010	18 ± 7.5
	P1	573452	6678530	2009	Plot	VP024	4 ± 1.5
	P1	574414	6677859	2009	Plot	VP023	4 ± 1.5
	P1	577897	6672088	2009	Plot	VP033	8 ± 2
	P1	562688	6690605	2010	Plot	VP053	30 ± 0
	P1	609530	6667942	2009	Helicopter	Heli 08	4 ± 1.5
	P1	589950	6683809	2009	Helicopter	Heli 03	18 ± 7.5
	P1	560953	6661371	2009	Helicopter	Heli 15	8 ± 2
	P1	589892	6684265	2009	Helicopter	Heli 04	18 ± 7.5
	P1	601073	6666625	2009	Helicopter	Heli 09	8 ± 2
	P1	576552	6659812	2009	Helicopter	Heli 10	18 ± 7.5
	P1	571715	6669122	2009	Helicopter	Heli 13	18 ± 7.5
	P1	569349	6677810	2009	Helicopter	Heli 16	18 ± 7.5
	P1	605201	6681639	2009	Helicopter	Heli 07	18 ± 7.5
	P1	572281	6656731	2009	Helicopter	Heli 14	18 ± 7.5
	P1	585852	6686123	2009	Opportunistic		4 ± 1.5
Dampiera eriantha (continued)	P1	578943	6681918	2009	Plot	VP043	8 ± 2
	P1	582189	6679087	2009	Plot	VP051	18 ± 7.5
	P1	585371	6685835	2009	Track Clearance		1 ± 0
	P1	574013	6687369	2010	Mapping	OPPO34	1 ± 0
	P1	581571	6687721	2010	Mapping	OPPO47	38 ± 12.5
	P1	582686	6686200	2010	Mapping	OPPO50	8 ± 2
	P1	582135	6686396	2010	Mapping	OPPO51	18 ± 7.5
	P1	582143	6685640	2010	Mapping	OPPO54	4 ± 1.5
	P1	573714	6674509	2010	Mapping	OPPO55	38 ± 12.5
	P1	576279	6675445	2010	Mapping	OPPO57	1 ± 0
	P1	571220	6671907	2010	Mapping	JELLO06	8 ± 2
	P1	571112	6671599	2010	Mapping	JELLO07	19 ± 1.5
	P1	574304	6688227	2010	Mapping	JONE016	1 ± 0
	P1	607920	6704167	2014	Borefields Mapping	MURD002	13 ± 0
	P1	602201	6701750	2014	Borefields Mapping	MURD012	8 ± 0
	P1	602358	6701724	2014	Borefields Mapping	MURD013	21 ± 0
	P1	602464	6701697	2014	Borefields Mapping	MURD013	19 ± 0
	P1	600910	6698635	2014	Borefields Mapping	MURD021	9 ± 0
	P1	602663	6697296	2014	Borefields Mapping	MURD031	12 ± 0

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Dampiera eriantha (continued)	P1	603221	6702217	2014	Borefields Mapping	STAR005	32 ± 0
	P1	603212	6702283	2014	Borefields Mapping	STAR005	25 ± 0
	P1	603214	6702282	2014	Borefields Mapping	STAR005	6 ± 0
	P1	602810	6701537	2014	Borefields Mapping	STAR009	4 ± 0
	P1	602118	6698081	2014	Borefields Mapping	STAR013	10 ± 0
	P1	602043	6698084	2014	Borefields Mapping	STAR013	1 ± 0
	P1	568992	6677410	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB006/63	11 ± 0
	P1	569199	6677607	2014	Hc survey-VEG SITE SHEET	HIBB005/62	29 ± 0
	P1	569315	6677414	2014	Hc survey-VEG SITE SHEET	HIBB006/63	19 ± 0
	P1	569496	6677683	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB005/62	22 ± 0
	P1	570058	6670007	2014	Hc survey-VEG SITE SHEET	HIBB010/84	23 ± 0
	P1	570530	6671688	2014	Hc survey-VEG SITE SHEET	HIBB013/81	29 ± 0
	P1	570821	6669489	2014	Hc survey-VEG SITE SHEET	HIBB012/85	11 ± 0
	P1	571312	6669423	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB012/85	1 ± 0
	P1	572170	6668771	2014	Hc survey-VEG SITE SHEET	HIBB011/88	3 ± 0
	P1	572245	6674670	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB003/69	2 ± 0
	P1	572581	6674645	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB003/69	2 ± 0
	P1	573346	6673699	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB008/74	4 ± 0
	P1	573417	6673998	2014	Hc survey-VEG SITE SHEET	HIBB007/71	27 ± 0
	P1	573862	6674037	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	7 ± 0
	P1	573929	6674479	2014	Hc survey-VEG SITE SHEET	HIBB003/69	14 ± 0
	P1	574440	6674407	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB009/70	2 ± 0
	P1	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	5 ± 0
	P1	578829	6681464	2014	Hc survey-VEG SITE SHEET	HIBB001/30	10 ± 0
	P1	579481	6681700	2014	Hc survey-VEG SITE SHEET	HIBB014/28	19 ± 0
	P1	584331	6680252	2014	Hc survey-DUNE TRAVERSE SHEET	8001	64 ± 0
	P1	584646	6676678	2014	Hc survey-DUNE TRAVERSE SHEET	21002	3 ± 0
	P1	584653	6677058	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	18 ± 0
	P1	584677	6680178	2014	Hc survey-DUNE TRAVERSE SHEET	9001	1 ± 0
	P1	584685	6677477	2014	Hc survey-VEG SITE SHEET	HIBB016/DUNE010	27 ± 0
	P1	584690	6677062	2014	Hc survey-VEG SITE SHEET	HIBB015/19002	22 ± 0
	P1	584690	6677470	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	21 ± 0
	P1	584731	6676822	2014	Hc survey-DUNE TRAVERSE SHEET	20002	49 ± 0
	P1	584754	6676825	2014	Hc survey-DUNE TRAVERSE SHEET	20002	1 ± 0
	P1	584772	6677042	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	24 ± 0
	P1	584810	6677475	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	42 ± 0
	P1	584847	6680077	2014	Hc survey-DUNE TRAVERSE SHEET	11001	16 ± 0
	P1	584980	6680028	2014	Hc survey-DUNE TRAVERSE SHEET	10001	23 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Dampiera eriantha (continued)	P1	585316	6677779	2014	Hc survey-VEG SITE SHEET	HIBB002/42	15 ± 0
	P1	587737	6676125	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P1	587749	6676138	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P1	587757	6676133	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P1	587766	6676143	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P1	587798	6676162	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P1	587806	6676156	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P1	588277	6675991	2014	Hc survey-DUNE TRAVERSE SHEET	17002	25 ± 0
	P1	588290	6676145	2014	Hc survey-DUNE TRAVERSE SHEET	15002	19 ± 0
	P1	588578	6676130	2014	Hc survey-DUNE TRAVERSE SHEET	15002	13 ± 0
	P1	588768	6676078	2014	Hc survey-DUNE TRAVERSE SHEET	15002	8 ± 0
	P1	599389	6668961	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO008/DUNE008	1 ± 0
	P1	599400	6668973	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO008/DUNE008	1 ± 0
	P1	599437	6668993	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO008/DUNE008	1 ± 0
	P1	600342	6668806	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE006	20 ± 0
	P1	601147	6668023	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO007/DUNE005	1 ± 0
	P1	601164	6668014	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO007/DUNE005	3 ± 0
	P1	601234	6668031	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO007/DUNE005	1 ± 0
	P1	601251	6668026	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO007/DUNE005	3 ± 0
	P1	601660	6668047	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE005	52 ± 0
	P1	601688	6668124	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO006/DUNE004	4 ± 0
	P1	601867	6667522	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE003	19 ± 0
	P1	602029	6667421	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE003	3 ± 0
	P1	602617	6667435	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE002	4 ± 0
	P1	602972	6668346	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	3 ± 0
	P1	603000	6668363	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	10 ± 0
	P1	603035	6668368	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	5 ± 0
	P1	603062	6668368	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	5 ± 0
	P1	603185	6668462	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	35 ± 0
	P1	603457	6668394	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	3 ± 0
	P1	565297	6689831	2015	Mapping	STAR038	1 ± 0
	P1	565297	6689831	2015	Mapping	STAR038	5 ± 0
	P1	573746	6681273	2015	Mapping	OPPO89	1 ± 0
	P1	564957	6689855	2015	Mapping	OPPO143	1 ± 0
	P1	564944	6689918	2015	Mapping	OPPO144	3 ± 0
	P1	565129	6690153	2015	Mapping	OPPO149	14 ± 0
	P1	565328	6690164	2015	Mapping	OPPO151	10 ± 0
	P1	565285	6690181	2015	Mapping	OPPO152	1 ± 0

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Neurachne lanigera	P1	596878	6695560	2014	Borefields Mapping	BARR021	1 ± 0
	P1	588571	6689231	2014	Borefields Mapping	STAR031	1 ± 0
	P1	604102	6702206	2014	Borefields Mapping	STAR003	1 ± 0
	P1	601898	6698239	2014	Borefields Mapping	STAR013	1 ± 0
	P1	603687	6697432	2014	Borefields Mapping	STAR014	1 ± 0
	P1	574150	6684857	2015	Mapping	OPPO106	20 ± 0
Isotropis canescens	P2	566165	6689590	2015	Mapping	STAR036	75 ± 0
	P2	565805	6689671	2015	Mapping	STAR037	15 ± 0
	P2	568205	6688132	2015	Mapping	STAR043	3 ± 0
	P2	566450	6690549	2015	Mapping	STAR044	170 ± 0
	P2	569238	6689117	2015	Mapping	STAR054	70 ± 0
	P2	571764	6686196	2015	Mapping	STAR058	40 ± 0
	P2	575504	6685263	2015	Mapping	STAR060	50 ± 0
	P2	576772	6684665	2015	Mapping	STAR061	92 ± 0
	P2	576613	6685435	2015	Mapping	STAR062	80 ± 0
	P2	577325	6684888	2015	Mapping	STAR064	7 ± 0
	P2	577568	6685221	2015	Mapping	STAR066	6 ± 0
	P2	579557	6685135	2015	Mapping	STAR068	50 ± 0
	P2	581191	6684715	2015	Mapping	STAR069	100 ± 0
	P2	576081	6673557	2015	Mapping	OPPO80	100 ± 0
	P2	575986	6673650	2015	Mapping	OPPO81	100 ± 0
	P2	574937	6674481	2015	Mapping	OPPO82	120 ± 0
	P2	575051	6674651	2015	Mapping	OPPO83	200 ± 0
	P2	576601	6674835	2015	Mapping	OPPO84	30 ± 0
	P2	577411	6678019	2015	Mapping	OPPO85	150 ± 0
	P2	575314	6680494	2015	Mapping	OPPO87	60 ± 0
	P2	575149	6680839	2015	Mapping	OPPO88	30 ± 0
	P2	573656	6682035	2015	Mapping	OPPO91	100 ± 0
	P2	573063	6682210	2015	Mapping	OPPO92	25 ± 0
	P2	576868	6685317	2015	Mapping	OPPO93	100 ± 0
	P2	578681	6682655	2015	Mapping	OPPO94	38 ± 0
	P2	575539	6683042	2015	Mapping	OPPO95	10 ± 0
	P2	578006	6683393	2015	Mapping	OPPO96	10 ± 0
	P2	576741	6684554	2015	Mapping	OPPO99	200 ± 0
	P2	576768	6684580	2015	Mapping	OPPO102	160 ± 0
	P2	581075	6684613	2015	Mapping	OPPO104	30 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Isotropis canescens (continued)	P2	579477	6684989	2015	Mapping	OPPO107	200 ± 0
	P2	574217	6685178	2015	Mapping	OPPO109	40 ± 0
	P2	577536	6685271	2015	Mapping	OPPO111	100 ± 0
	P2	576621	6685361	2015	Mapping	OPPO112	50 ± 0
	P2	576895	6685404	2015	Mapping	OPPO113	30 ± 0
	P2	571675	6685841	2015	Mapping	OPPO114	26 ± 0
	P2	571725	6686021	2015	Mapping	OPPO117	49 ± 0
	P2	571739	6686139	2015	Mapping	OPPO118	35 ± 0
	P2	568550	6687709	2015	Mapping	OPPO120	1 ± 0
	P2	568213	6687977	2015	Mapping	OPPO121	48 ± 0
	P2	568935	6688550	2015	Mapping	OPPO125	7 ± 0
	P2	569009	6688675	2015	Mapping	OPPO127	1 ± 0
	P2	568966	6688975	2015	Mapping	OPPO133	1 ± 0
	P2	569209	6689063	2015	Mapping	OPPO134	2 ± 0
	P2	566078	6689593	2015	Mapping	OPPO140	120 ± 0
	P2	566019	6689688	2015	Mapping	OPPO141	25 ± 0
	P2	565339	6689941	2015	Mapping	OPPO145	25 ± 0
	P2	565377	6690003	2015	Mapping	OPPO148	25 ± 0
	P2	564954	6690154	2015	Mapping	OPPO150	5 ± 0
Malleostemon sp. Officer Basin (D. Pearson 350)	P2	589950	6683809	2009	Helicopter	Heli 03	75 ± 25
	P2	571715	6669122	2009	Helicopter	Heli 13	18 ± 7.5
	P2	569349	6677810	2009	Helicopter	Heli 16	18 ± 7.5
	P2	581773	6679131	2009	Helicopter	Heli 02	18 ± 7.5
	P2	582913	6685538	2008	Mapping		4 ± 1.5
	P2	583184	6684698	2008	Mapping		8 ± 2.5
	P2	583847	6684790	2008	Mapping		8 ± 2.5
	P2	567211	6676685	2009	Plot	VP005	8 ± 2
	P2	568433	6674511	2009	Plot	VP008	4 ± 1.5
	P2	568788	6677433	2009	Plot	VP007	18 ± 7.5
	P2	569844	6671846	2009	Plot	VP010	4 ± 1.5
	P2	573452	6678530	2009	Plot	VP024	8 ± 2
	P2	582189	6679087	2009	Plot	VP051	38 ± 12.5
	P2	585371	6685835	2009	Track Clearance		38 ± 12.5
	P2	574013	6687369	2010	Mapping	OPPO34	18 ± 7.5
	P2	581571	6687721	2010	Mapping	OPPO47	8 ± 2
	P2	582143	6685640	2010	Mapping	OPPO54	4 ± 1.5
	P2	573714	6674509	2010	Mapping	OPPO55	75 ± 25

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Malleostemon sp. Officer Basin (D. Pearson 350) (continued)	P2	571106	6671885	2010	Mapping	JELLO06	23 ± 2.5
	P2	571205	6671591	2010	Mapping	JELLO07	16 ± 0
	P2	602464	6701697	2014	Borefields Mapping	MURD013	21 ± 0
	P2	568992	6677410	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB006/63	9 ± 0
	P2	569199	6677607	2014	Hc survey-VEG SITE SHEET	HIBB005/62	16 ± 0
	P2	569315	6677414	2014	Hc survey-VEG SITE SHEET	HIBB006/63	12 ± 0
	P2	570821	6669489	2014	Hc survey-VEG SITE SHEET	HIBB012/85	14 ± 0
	P2	571312	6669423	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB012/85	2 ± 0
	P2	572170	6668771	2014	Hc survey-VEG SITE SHEET	HIBB011/88	11 ± 0
	P2	573346	6673699	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB008/74	11 ± 0
	P2	573417	6673998	2014	Hc survey-VEG SITE SHEET	HIBB007/71	17 ± 0
	P2	573862	6674037	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	4 ± 0
	P2	573929	6674479	2014	Hc survey-VEG SITE SHEET	HIBB003/69	61 ± 0
	P2	574154	6674023	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	1 ± 0
	P2	574440	6674407	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB009/70	10 ± 0
	P2	574848	6674343	2014	Hc survey-VEG SITE SHEET	HIBB009/70	36 ± 0
	P2	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	12 ± 0
	P2	584331	6680252	2014	Hc survey-DUNE TRAVERSE SHEET	8001	69 ± 0
	P2	584647	6677055	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	18 ± 0
	P2	584677	6680178	2014	Hc survey-DUNE TRAVERSE SHEET	9001	27 ± 0
	P2	584685	6677477	2014	Hc survey-VEG SITE SHEET	HIBB016/DUNE010	21 ± 0
	P2	584690	6677062	2014	Hc survey-VEG SITE SHEET	HIBB015/19002	25 ± 0
	P2	584690	6677470	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	21 ± 0
	P2	584742	6676830	2014	Hc survey-DUNE TRAVERSE SHEET	20002	35 ± 0
	P2	584767	6677042	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	48 ± 0
	P2	584787	6680072	2014	Hc survey-DUNE TRAVERSE SHEET	11001	27 ± 0
	P2	584810	6677475	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	12 ± 0
	P2	584931	6680052	2014	Hc survey-DUNE TRAVERSE SHEET	10001	56 ± 0
	P2	585316	6677779	2014	Hc survey-VEG SITE SHEET	HIBB002/42	54 ± 0
	P2	588261	6676132	2014	Hc survey-DUNE TRAVERSE SHEET	15002	74 ± 0
	P2	588277	6675991	2014	Hc survey-DUNE TRAVERSE SHEET	17002	66 ± 0
	P2	588768	6676078	2014	Hc survey-DUNE TRAVERSE SHEET	15002	30 ± 0
Styphelia sp. Great Victoria Desert (N. Murdock 44)	P2	550636	6692247	2010	Plot	VP151	1 ± 0
	P2	563263	6679963	2010	Plot	VP175	1 ± 0
	P2	567839	6689655	2010	Plot	VP189	1 ± 0
	P2	580899	6688228	2010	Plot	VP201	1 ± 0
	P2	572201	6682873	2010	Plot	VP232	1 ± 0
	P2	572914	6682776	2010	Plot	VP234 - OPPO	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P2	571661	6679981	2010	Plot	VP238 - OPPO	1 ± 0
	P2	577557	6681563	2008	Mapping	SR06	1 ± 0
	P2	571474	6684967	2009	Mapping	TM23	1 ± 0
	P2	570458	6685570	2009	Mapping	TM24	1 ± 0
	P2	569455	6685686	2009	Mapping	TM35	1 ± 0
	P2	564879	6686502	2008	Mapping	TR41	1 ± 0
	P2	571393	6685988	2007	Mapping	Track 16	1 ± 0
	P2	573452	6678530	2009	Plot	VP024	1 ± 0
	P2	603570	6704201	2014	Borefields Mapping	BARR003	1 ± 0
	P2	604473	6702646	2014	Borefields Mapping	BARR004	1 ± 0
	P2	604387	6698822	2014	Borefields Mapping	BARR013	6 ± 0
	P2	603275	6697981	2014	Borefields Mapping	BARR015	1 ± 0
	P2	608899	6703734	2014	Borefields Mapping	MURD001	2 ± 0
	P2	605562	6700077	2014	Borefields Mapping	MURD014	3 ± 0
	P2	604973	6698620	2014	Borefields Mapping	MURD016	1 ± 0
	P2	606637	6698011	2014	Borefields Mapping	MURD017	1 ± 0
	P2	603210	6699283	2014	Borefields Mapping	MURD018	1 ± 0
	P2	602928	6696556	2014	Borefields Mapping	MURD021	2 ± 0
Styphelia sp. Great Victoria Desert (N. Murdock 44) (continued)	P2	603994	6696627	2014	Borefields Mapping	MURD021	1 ± 0
	P2	604968	6696469	2014	Borefields Mapping	MURD021	1 ± 0
	P2	604780	6696230	2014	Borefields Mapping	MURD021	3 ± 0
	P2	597687	6696923	2014	Borefields Mapping	MURD027	1 ± 0
	P2	596846	6695401	2014	Borefields Mapping	MURD028	1 ± 0
	P2	594015	6693421	2014	Borefields Mapping	MURD029	1 ± 0
	P2	593436	6693186	2014	Borefields Mapping	MURD029	1 ± 0
	P2	604355	6701675	2014	Borefields Mapping	STAR006	1 ± 0
	P2	600749	6702108	2014	Borefields Mapping	STAR008	1 ± 0
	P2	602043	6698084	2014	Borefields Mapping	STAR013	1 ± 0
	P2	603859	6694101	2014	Borefields Mapping	STAR017	3 ± 0
	P2	597545	6696872	2014	Borefields Mapping	STAR020	3 ± 0
	P2	596930	6695237	2014	Borefields Mapping	STAR020	1 ± 0
	P2	594025	6693408	2014	Borefields Mapping	STAR024	2 ± 0
	P2	573330	6673694	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB008/74	1 ± 0
	P2	573929	6674479	2014	Hc survey-VEG SITE SHEET	HIBB003/69	1 ± 0
	P2	574848	6674343	2014	Hc survey-VEG SITE SHEET	HIBB009/70	1 ± 0
	P2	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	3 ± 0
	P2	578356	6681674	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB001/30	3 ± 0
	P2	578599	6681577	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB001/30	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Styphelia sp. Great Victoria Desert (N. Murdock 44) (continued)	P2	578706	6681493	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB001/30	7 ± 0
	P2	578829	6681464	2014	Hc survey-VEG SITE SHEET	HIBB001/30	13 ± 0
	P2	579481	6681700	2014	Hc survey-VEG SITE SHEET	HIBB014/28	3 ± 0
	P2	584617	6680295	2014	Hc survey-DUNE TRAVERSE SHEET	8001	1 ± 0
	P2	584661	6677060	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	1 ± 0
	P2	584711	6677426	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO009/OPPO	2 ± 0
	P2	584742	6676830	2014	Hc survey-DUNE TRAVERSE SHEET	20002	1 ± 0
	P2	584784	6680150	2014	Hc survey-DUNE TRAVERSE SHEET	9001	1 ± 0
	P2	584999	6677016	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	2 ± 0
	P2	588198	6676127	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P2	588277	6675991	2014	Hc survey-DUNE TRAVERSE SHEET	17002	2 ± 0
	P2	588514	6676135	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P2	588534	6676133	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P2	588768	6676078	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P2	589200	6675892	2014	Hc survey-DUNE TRAVERSE SHEET	17002	2 ± 0
	P2	576757	6685186	2015	Mapping	STAR063	3.5 ± 0
	P2	568588	6688925	2015	Mapping	OPPO130	1 ± 0
Baeckea ?sp. Sandstone (C.A. Gardner s.n. 26 Oct. 1963)	P3	596416	6694929	2014	Borefields Mapping	BARR022	1 ± 0
Labichea eremaea	P3	575666	6692568	2010	Plot	VP129	8 ± 2
	P3	556302	6681922	2010	Plot	VP142	8 ± 2
	P3	576862	6690720	2010	Mapping	OPPO30	75 ± 25
	P3	577203	6690516	2010	Mapping	OPPO31	75 ± 25
	P3	585271	6686689	2010	Mapping	OPPO42	38 ± 12.5
	P3	581630	6687853	2010	Mapping	OPPO48	38 ± 12.5
	P3	585339	6686573	2010	Plot	VP195	38 ± 12.5
	P3	576368	6685854	2010	Mapping	JONE020/OPPO	4 ± 0
Ptilotus blackii	P3	555700	6688778	2010	Mapping	Veg05	2 ± 0
Ptilotus ?blackii	P3	552182	6686503	2010	Plot	VP157	18 ± 7.5
	P3	564723	6678623	2010	Plot	VP179	1 ± 0
	P3	562805	6677588	2010	Plot	VP183	18 ± 7.5
Comesperma viscidulum	P4	575171	6681234	2010	Drill Line Clearance	9	1 ± 0
	P4	575217	6681180	2010	Drill Line Clearance	9	1 ± 0
	P4	575696	6681184	2010	Drill Line Clearance	11	1 ± 0
	P4	576047	6680988	2010	Drill Line Clearance	12	8 ± 2
	P4	576080	6680955	2010	Drill Line Clearance	12	18 ± 7.5
	P4	577172	6682434	2010	Drill Line Clearance	30	1 ± 0
	P4	577763	6682814	2010	Drill Line Clearance	35	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Comesperma viscidulum (continued)	P4	578911	6683636	2010	Drill Line Clearance	50	1 ± 0
	P4	579973	6682896	2010	Drill Line Clearance	46	1 ± 0
	P4	580012	6682856	2010	Drill Line Clearance	46	1 ± 0
	P4	575670	6681053	2008	Drill Holes	P3-08	1 ± 0
	P4	579030	6682402	2009	Drill Holes	Aug018	18 ± 7.5
	P4	579231	6685148	2008	Drill Holes	P2-36	1 ± 0
	P4	579443	6684997	2008	Drill Holes	P2-40	1 ± 0
	P4	580300	6682350	2009	Drill Holes	Sept009	1 ± 0
	P4	573368	6687750	2008	Mapping		1 ± 0
	P4	566036	6687294	2008	Mapping		1 ± 0
	P4	579444	6685002	2008	Mapping		1 ± 0
	P4	580908	6683887	2008	Mapping		2 ± 0
	P4	578061	6682548	2009	Opportunistic		4 ± 1.5
	P4	580185	6672605	2009	Opportunistic		1 ± 0
	P4	567848	6677465	2009	Plot	VP001	1 ± 0
	P4	576995	6683577	2009	Plot	VP049	1 ± 0
	P4	559140	6691180	2007	Recon		1 ± 0
	P4	576485	6682186	2007	Recon		1 ± 0
	P4	566447	6687477	2009	Track Clearance		1 ± 0
	P4	566891	6684131	2009	Track Clearance		1 ± 0
	P4	567728	6686256	2009	Track Clearance		1 ± 0
	P4	569991	6688270	2009	Track Clearance		8 ± 2
	P4	571284	6685561	2009	Track Clearance		1 ± 0
	P4	571307	6684582	2009	Track Clearance		1 ± 0
	P4	579244	6685123	2009	Track Clearance		1 ± 0
	P4	579406	6685027	2009	Track Clearance		1 ± 0
	P4	559913	6691976	2010	Plot	VP059	8 ± 2
	P4	576107	6688936	2010	Mapping	OPPO01	1 ± 0
	P4	578729	6687396	2010	Mapping	OPPO02	2 ± 0
	P4	573730	6687616	2010	Mapping	OPPO33	11 ± 0
	P4	575111	6685221	2010	Mapping	OPPO35	1 ± 0
	P4	583613	6685653	2010	Mapping	OPPO49	1 ± 0
	P4	583326	6686983	2010	Plot	VP203	2 ± 0
	P4	577454	6678115	2010	Plot	VP202	1 ± 0
	P4	573263	6685184	2010	Mapping	GANN24	1 ± 0
	P4	602692	6702292	2014	Borefields Mapping	BARR005	1 ± 0
	P4	602280	6701408	2014	Borefields Mapping	BARR009	30 ± 0
	P4	602305	6701487	2014	Borefields Mapping	BARR009	20 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Comesperma viscidulum (continued)	P4	602300	6701416	2014	Borefields Mapping	BARR009	8 ± 0
	P4	602396	6701497	2014	Borefields Mapping	BARR009	13 ± 0
	P4	606544	6699784	2014	Borefields Mapping	BARR010	10 ± 0
	P4	606616	6699746	2014	Borefields Mapping	BARR010	1 ± 0
	P4	606711	6699706	2014	Borefields Mapping	BARR010	1 ± 0
	P4	603285	6698095	2014	Borefields Mapping	BARR014	1 ± 0
	P4	603238	6698013	2014	Borefields Mapping	BARR014	5 ± 0
	P4	603275	6697981	2014	Borefields Mapping	BARR015	6 ± 0
	P4	596416	6694929	2014	Borefields Mapping	BARR022	8 ± 0
	P4	596462	6694829	2014	Borefields Mapping	BARR022	1 ± 0
	P4	604774	6702994	2014	Borefields Mapping	MURD009	1 ± 0
	P4	603809	6702112	2014	Borefields Mapping	MURD009	2 ± 0
	P4	605573	6701419	2014	Borefields Mapping	MURD011	5 ± 0
	P4	601969	6701862	2014	Borefields Mapping	MURD012	11 ± 0
	P4	602109	6701785	2014	Borefields Mapping	MURD012	5 ± 0
	P4	602155	6701776	2014	Borefields Mapping	MURD012	3 ± 0
	P4	602472	6701574	2014	Borefields Mapping	MURD013	27 ± 0
	P4	604854	6700480	2014	Borefields Mapping	MURD013	1 ± 0
	P4	604495	6700697	2014	Borefields Mapping	MURD016	2 ± 0
	P4	603267	6700378	2014	Borefields Mapping	MURD016	3 ± 0
	P4	604560	6698754	2014	Borefields Mapping	MURD016	56 ± 0
	P4	604895	6698672	2014	Borefields Mapping	MURD016	9 ± 0
	P4	605171	6698546	2014	Borefields Mapping	MURD016	1 ± 0
	P4	605266	6698515	2014	Borefields Mapping	MURD016	3 ± 0
	P4	605592	6698403	2014	Borefields Mapping	MURD016	10 ± 0
	P4	605778	6698312	2014	Borefields Mapping	MURD017	4 ± 0
	P4	606081	6698179	2014	Borefields Mapping	MURD017	2 ± 0
	P4	606387	6698143	2014	Borefields Mapping	MURD017	1 ± 0
	P4	603325	6698855	2014	Borefields Mapping	MURD017	5 ± 0
	P4	603191	6697886	2014	Borefields Mapping	MURD018	3 ± 0
	P4	601040	6698815	2014	Borefields Mapping	MURD021	3 ± 0
	P4	600956	6698533	2014	Borefields Mapping	MURD021	3 ± 0
	P4	600700	6698636	2014	Borefields Mapping	MURD021	2 ± 0
	P4	600591	6698637	2014	Borefields Mapping	MURD021	1 ± 0
	P4	600761	6698630	2014	Borefields Mapping	MURD021	1 ± 0
	P4	601372	6698448	2014	Borefields Mapping	MURD021	4 ± 0
	P4	602709	6697163	2014	Borefields Mapping	MURD021	2 ± 0
	P4	602691	6696949	2014	Borefields Mapping	MURD021	3 ± 0

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Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Comesperma viscidulum (continued)	P4	602704	6696648	2014	Borefields Mapping	MURD021	1 ± 0
	P4	603727	6696559	2014	Borefields Mapping	MURD021	2 ± 0
	P4	603247	6693971	2014	Borefields Mapping	MURD023	1 ± 0
	P4	602674	6696654	2014	Borefields Mapping	MURD025	2 ± 0
	P4	601914	6696840	2014	Borefields Mapping	MURD025	1 ± 0
	P4	600919	6697099	2014	Borefields Mapping	MURD025	2 ± 0
	P4	598411	6696912	2014	Borefields Mapping	MURD026	2 ± 0
	P4	597984	6696943	2014	Borefields Mapping	MURD026	1 ± 0
	P4	597336	6696785	2014	Borefields Mapping	MURD027	1 ± 0
	P4	597007	6696468	2014	Borefields Mapping	MURD027	1 ± 0
	P4	597006	6695936	2014	Borefields Mapping	MURD027	1 ± 0
	P4	596839	6695188	2014	Borefields Mapping	MURD028	1 ± 0
	P4	595862	6694210	2014	Borefields Mapping	MURD029	2 ± 0
	P4	595754	6694116	2014	Borefields Mapping	MURD029	1 ± 0
	P4	603226	6701036	2014	Borefields Mapping	MURD030	1 ± 0
	P4	588976	6689353	2014	Borefields Mapping	MURD034	2 ± 0
	P4	588340	6688953	2014	Borefields Mapping	MURD034	1 ± 0
	P4	586842	6687669	2014	Borefields Mapping	MURD034	1 ± 0
	P4	603829	6702053	2014	Borefields Mapping	STAR004	2 ± 0
	P4	604355	6701675	2014	Borefields Mapping	STAR006	4 ± 0
	P4	602466	6701470	2014	Borefields Mapping	STAR008	3 ± 0
	P4	608662	6698900	2014	Borefields Mapping	STAR010	1 ± 0
	P4	607014	6697886	2014	Borefields Mapping	STAR011	1 ± 0
	P4	601751	6699814	2014	Borefields Mapping	STAR012	4 ± 1.5
	P4	601788	6699832	2014	Borefields Mapping	STAR012	8 ± 0
	P4	601898	6698239	2014	Borefields Mapping	STAR013	10 ± 0
	P4	601993	6698243	2014	Borefields Mapping	STAR013	4 ± 0
	P4	602071	6698226	2014	Borefields Mapping	STAR013	2 ± 0
	P4	602170	6698166	2014	Borefields Mapping	STAR013	2 ± 0
	P4	602204	6698136	2014	Borefields Mapping	STAR013	3 ± 0
	P4	602460	6698071	2014	Borefields Mapping	STAR013	6 ± 0
	P4	602559	6698058	2014	Borefields Mapping	STAR013	3 ± 0
	P4	602768	6697945	2014	Borefields Mapping	STAR013	1 ± 0
	P4	602915	6697887	2014	Borefields Mapping	STAR013	20 ± 0
	P4	604326	6697184	2014	Borefields Mapping	STAR014	2 ± 0
	P4	602097	6696400	2014	Borefields Mapping	STAR018	45 ± 0
	P4	602080	6696384	2014	Borefields Mapping	STAR018	20 ± 0
	P4	601932	6696653	2014	Borefields Mapping	STAR018	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P4	601778	6696799	2014	Borefields Mapping	STAR018	1 ± 0
	P4	599802	6697158	2014	Borefields Mapping	STAR019	1 ± 0
Comesperma viscidulum (continued)	P4	594988	6693874	2014	Borefields Mapping	STAR023	1 ± 0
	P4	589041	6689528	2014	Borefields Mapping	STAR030	2 ± 0
	P4	586868	6687696	2014	Borefields Mapping	STAR034	1 ± 0
	P4	576451	6681520	2010	Drill Line Clearance	17	1 ± 0
	P4	576457	6681606	2010	Drill Line Clearance	18	18 ± 7.5
	P4	576464	6681627	2010	Drill Line Clearance	18	18 ± 7.5
	P4	576473	6681584	2010	Drill Line Clearance	18	18 ± 7.5
	P4	576477	6681499	2010	Drill Line Clearance	17	5 ± 0
	P4	576496	6681490	2010	Drill Line Clearance	17	4 ± 0
	P4	576508	6681482	2010	Drill Line Clearance	17	38 ± 12.5
	P4	576528	6681840	2010	Drill Line Clearance	20	1 ± 0
	P4	576531	6681466	2010	Drill Line Clearance	17	38 ± 12.5
	P4	576554	6681459	2010	Drill Line Clearance	17	4 ± 0
	P4	576559	6681447	2010	Drill Line Clearance	17	8 ± 2
	P4	576566	6681569	2010	Drill Line Clearance	18	8 ± 2
	P4	576570	6681565	2010	Drill Line Clearance	18	8 ± 2
	P4	576589	6681433	2010	Drill Line Clearance	17	8 ± 2
	P4	576595	6681551	2010	Drill Line Clearance	18	4 ± 0
	P4	576604	6681875	2010	Drill Line Clearance	22	4 ± 0
Conospermum toddii	P4	576619	6681528	2010	Drill Line Clearance	18	38 ± 12.5
	P4	576628	6681517	2010	Drill Line Clearance	18	1 ± 0
	P4	576659	6681869	2010	Drill Line Clearance	22	4 ± 0
	P4	576719	6681819	2010	Drill Line Clearance	22	18 ± 7.5
	P4	576751	6681823	2010	Drill Line Clearance	22	8 ± 2
	P4	576796	6681799	2010	Drill Line Clearance	22	38 ± 12.5
	P4	576840	6681873	2010	Drill Line Clearance	23	4 ± 0
	P4	576840	6681903	2010	Drill Line Clearance	23	4 ± 0
	P4	576874	6681846	2010	Drill Line Clearance	23	18 ± 7.5
	P4	577018	6682143	2010	Drill Line Clearance	28	1 ± 0
	P4	577068	6682103	2010	Drill Line Clearance	28	2 ± 0
	P4	577196	6682119	2010	Drill Line Clearance	Oppo	8 ± 2
	P4	577249	6682008	2010	Drill Line Clearance	28	18 ± 7.5
	P4	577351	6682666	2010	Drill Line Clearance	33	2 ± 0
	P4	577356	6682553	2010	Drill Line Clearance	32	1 ± 0
	P4	577595	6682285	2010	Drill Line Clearance	Oppo	11 ± 0
	P4	577625	6682758	2010	Drill Line Clearance	34	47 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	577676	6682728	2010	Drill Line Clearance	34	47 ± 0
	P4	577731	6682712	2010	Drill Line Clearance	34	1 ± 0
	P4	578605	6683846	2010	Drill Line Clearance	50	18 ± 7.5
	P4	578680	6683808	2010	Drill Line Clearance	50	18 ± 7.5
	P4	578716	6682338	2010	Drill Line Clearance	Oppo	75 ± 25
	P4	578720	6683763	2010	Drill Line Clearance	50	8 ± 2
	P4	578875	6682387	2010	Drill Line Clearance	37	1 ± 0
	P4	579078	6684042	2010	Drill Line Clearance	52	1 ± 0
	P4	579284	6683084	2010	Drill Line Clearance	44	38 ± 12.5
	P4	579294	6683060	2010	Drill Line Clearance	44	38 ± 12.5
	P4	579507	6684252	2010	Drill Line Clearance	54	4 ± 0
	P4	522858	6701026	2010	Helicopter	D10	2 ± 0
	P4	536669	6664160	2010	Helicopter	D04	899 ± 0
	P4	538394	6704042	2010	Helicopter	D11	940 ± 0
	P4	538880	6705231	2010	Helicopter	D08	220 ± 0
	P4	542639	6669642	2010	Helicopter	D03	83 ± 0
	P4	544243	6686228	2010	Helicopter	D02	601 ± 0
	P4	546535	6699191	2010	Helicopter	D01	505 ± 0
	P4	571707	6616774	2010	Helicopter	D05	212 ± 0
	P4	577961	6633830	2010	Helicopter	D06	83 ± 0
	P4	590562	6641362	2010	Helicopter	D07	67 ± 0
	P4	595881	6657248	2010	Helicopter	C08	786 ± 0
	P4	598400	6698209	2010	Helicopter	A10	111 ± 0
	P4	617438	6717175	2010	Helicopter	A07	335 ± 0
	P4	625513	6685260	2010	Helicopter	C06	99 ± 0
	P4	625577	6711000	2010	Helicopter	A08	97 ± 0
	P4	625980	6695193	2010	Helicopter	C10	76 ± 0
	P4	629050	6709000	2010	Helicopter	A09	10 ± 0
	P4	644567	6692110	2010	Helicopter	C05	118 ± 0
	P4	655985	6664428	2010	Helicopter	C09	40 ± 0
	P4	567211	6676685	2009	Plot	VP005	75 ± 25
	P4	567428	6671900	2009	Plot	VP013	75 ± 25
	P4	568433	6674511	2009	Plot	VP008	75 ± 25
	P4	568788	6677433	2009	Plot	VP007	75 ± 25
	P4	569844	6671846	2009	Plot	VP010	75 ± 25
	P4	572109	6674744	2009	Plot	VP036	75 ± 25
	P4	573452	6678530	2009	Plot	VP024	18 ± 7.5
	P4	574414	6677859	2009	Plot	VP023	75 ± 25

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	577249	6672512	2009	Plot	VP034	38 ± 12.5
	P4	577897	6672088	2009	Plot	VP033	150 ± 50
	P4	578600	6673472	2009	Plot	VP031	1 ± 0
	P4	562688	6690605	2010	Plot	VP053	1 ± 0
	P4	575870	6682085	2009	Drill Holes	Sept079	1 ± 0
	P4	575939	6682044	2009	Drill Holes	Sept332	1 ± 0
	P4	576185	6682623	2009	Drill Holes	Sept165	1 ± 0
	P4	576421	6681758	2009	Drill Holes	Aug062	4 ± 1.5
	P4	576490	6681717	2009	Drill Holes	Sept336	75 ± 25
	P4	576526	6681451	2009	Drill Holes	Sept343	75 ± 25
	P4	576559	6681677	2009	Drill Holes	Aug063	38 ± 12.5
	P4	577878	6683575	2009	Drill Holes	Sept227	38 ± 12.5
	P4	578603	6684062	2008	Drill Holes	P2-20	18 ± 7.5
	P4	579358	6684027	2008	Drill Holes	P2-17 Oppo	23 ± 2.5
	P4	579363	6684075	2008	Drill Holes	P2-17	1 ± 0
	P4	579550	6683515	2008	Drill Holes	P2-18 Oppo	8 ± 2
	P4	579579	6684476	2008	Drill Holes	P2-28	4 ± 1.5
	P4	579698	6684382	2008	Drill Holes	P2-27	1 ± 0
	P4	581306	6683387	2008	Drill Holes	P2-10	18 ± 7.5
	P4	581398	6683329	2008	Drill Holes	P2-09	4 ± 1.5
	P4	582573	6684110	2008	Drill Holes	P1-36	18 ± 7.5
	P4	583011	6684384	2008	Drill Holes	P1-33	1 ± 0
	P4	583502	6684613	2008	Drill Holes	P1-31	18 ± 7.5
	P4	584145	6685337	2008	Drill Holes	P1-20	4 ± 1.5
	P4	584435	6685164	2008	Drill Holes	P1-23 Oppo	16 ± 4.5
	P4	584790	6685470	2008	Drill Holes	P1-15	1 ± 0
	P4	584819	6685470	2008	Drill Holes	P1-16 Oppo	4 ± 1.5
	P4	586511	6685912	2008	Drill Holes	P1-6 Oppo	8 ± 2
	P4	586622	6685943	2008	Drill Holes	P1-7 Oppo	75 ± 25
	P4	576595	6681902	2009	Drill Holes	Sept330	38 ± 12.5
	P4	576595	6681410	2009	Drill Holes	Aug091	18 ± 7.5
	P4	576627	6681636	2009	Drill Holes	Sept337	4 ± 1.5
	P4	576664	6681862	2009	Drill Holes	Aug065	18 ± 7.5
	P4	576732	6681821	2009	Drill Holes	Sept331	75 ± 25
	P4	576771	6682513	2009	Drill Holes	Sept307	4 ± 1.5
	P4	576801	6681780	2009	Drill Holes	Aug066	4 ± 1.5
	P4	577011	6682134	2009	Drill Holes	Aug071	1 ± 0
	P4	577194	6681802	2009	Drill Holes	Aug092	8 ± 2

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	577334	6682658	2009	Drill Holes	Aug086	4 ± 1.5
	P4	577403	6682617	2009	Drill Holes	Sept302	1 ± 0
	P4	577406	6683116	2009	Drill Holes	Sept251	4 ± 1.5
	P4	577586	6682774	2009	Drill Holes	Aug055	8 ± 2
	P4	577666	6681983	2009	Drill Holes	Aug113	38 ± 12.5
	P4	577724	6682692	2009	Drill Holes	Aug056	8 ± 2
	P4	577748	6682413	2009	Drill Holes	Aug039	8 ± 2
	P4	577787	6682174	2009	Drill Holes	Aug029	75 ± 25
	P4	577902	6683309	2009	Drill Holes	Sept224	8 ± 2
	P4	577924	6682093	2009	Drill Holes	Aug118	75 ± 25
	P4	577928	6683055	2009	Drill Holes	Sept220	4 ± 1.5
	P4	577942	6681820	2009	Drill Holes	Aug106	18 ± 7.5
	P4	577999	6682529	2009	Drill Holes	Aug058	1 ± 0
	P4	578014	6681309	2009	Drill Holes	Aug094	38 ± 12.5
	P4	578016	6683494	2009	Drill Holes	Sept228	4 ± 1.5
	P4	578039	6683227	2009	Drill Holes	Sept225	1 ± 0
	P4	578068	6682488	2009	Drill Holes	Sept293	18 ± 7.5
	P4	578080	6681739	2009	Drill Holes	Aug107	75 ± 25
	P4	578095	6682708	2009	Drill Holes	Aug011	1 ± 0
	P4	578112	6681481	2009	Drill Holes	Aug099	1 ± 0
	P4	578137	6682447	2009	Drill Holes	Aug059	18 ± 7.5
	P4	578153	6681229	2009	Drill Holes	Aug093	38 ± 12.5
	P4	578161	6682168	2009	Drill Holes	Aug030	4 ± 1.5
	P4	578177	6683146	2009	Drill Holes	Sept226	4 ± 1.5
	P4	578200	6681930	2009	Drill Holes	Aug060	38 ± 12.5
	P4	578206	6682406	2009	Drill Holes	Sept294	8 ± 2
	P4	578217	6681657	2009	Drill Holes	Aug108	150 ± 50
	P4	578233	6682626	2009	Drill Holes	Aug012	4 ± 1.5
	P4	578250	6681400	2009	Drill Holes	Aug100	1 ± 0
	P4	578275	6682366	2009	Drill Holes	Aug042	18 ± 7.5
	P4	578298	6682087	2009	Drill Holes	Aug031	150 ± 50
	P4	578337	6681848	2009	Drill Holes	Aug025	18 ± 7.5
	P4	578343	6682325	2009	Drill Holes	Sept295	18 ± 7.5
	P4	578355	6681575	2009	Drill Holes	Aug109	18 ± 7.5
	P4	578412	6682284	2009	Drill Holes	Aug043	38 ± 12.5
	P4	578436	6682005	2009	Drill Holes	Aug032	8 ± 2
	P4	578475	6681766	2009	Drill Holes	Aug026	38 ± 12.5
	P4	578481	6682243	2009	Drill Holes	Sept296	38 ± 12.5

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	578493	6681494	2009	Drill Holes	Aug110	75 ± 25
	P4	578550	6682203	2009	Drill Holes	Aug044	8 ± 2
	P4	578577	6682422	2009	Drill Holes	Sept289	4 ± 1.5
	P4	578613	6681685	2009	Drill Holes	Aug116	150 ± 50
	P4	578619	6682161	2009	Drill Holes	Sept297	38 ± 12.5
	P4	578646	6682381	2009	Drill Holes	Aug002	4 ± 1.5
	P4	578714	6682340	2009	Drill Holes	Sept290	38 ± 12.5
	P4	578756	6682080	2009	Drill Holes	Sept298	18 ± 7.5
	P4	578783	6682300	2009	Drill Holes	Aug003	38 ± 12.5
	P4	578826	6682039	2009	Drill Holes	Aug046	38 ± 12.5
	P4	578849	6681761	2009	Drill Holes	Aug035	4 ± 1.5
	P4	578852	6682259	2009	Drill Holes	Sept291	18 ± 7.5
	P4	578905	6682959	2009	Drill Holes	Sept270	1 ± 0
	P4	578963	6681958	2009	Drill Holes	Aug047	75 ± 25
	P4	579061	6683085	2009	Drill Holes	Sept043	18 ± 7.5
	P4	579099	6682361	2009	Drill Holes	Sept286	38 ± 12.5
	P4	579101	6681876	2009	Drill Holes	Aug048	75 ± 25
	P4	579149	6681973	2009	Drill Holes	Sept394	150 ± 50
	P4	579168	6682321	2009	Drill Holes	Aug019	150 ± 50
	P4	579176	6684191	2009	Drill Holes	Sept239	38 ± 12.5
	P4	579196	6682055	2009	Drill Holes	Aug006	18 ± 7.5
	P4	579198	6683003	2009	Drill Holes	Sept001	18 ± 7.5
	P4	579239	6681795	2009	Drill Holes	Aug049	38 ± 12.5
	P4	579246	6684644	2009	Drill Holes	Sept246	8 ± 2
	P4	579268	6682019	2009	Drill Holes	Sept393	18 ± 7.5
	P4	579334	6681973	2009	Drill Holes	Aug007	8 ± 2
	P4	579376	6681713	2009	Drill Holes	Aug050	38 ± 12.5
	P4	579391	6684564	2009	Drill Holes	Sept242	4 ± 1.5
	P4	579439	6683083	2009	Drill Holes	Sept015	38 ± 12.5
	P4	579450	6684031	2009	Drill Holes	Sept237	75 ± 25
	P4	579514	6681631	2009	Drill Holes	Aug051	18 ± 7.5
	P4	579524	6684481	2009	Drill Holes	Sept243	18 ± 7.5
	P4	579581	6682076	2009	Drill Holes	Aug022	38 ± 12.5
	P4	579652	6681550	2009	Drill Holes	Aug052	4 ± 1.5
	P4	579666	6684394	2009	Drill Holes	Sept244	1 ± 0
	P4	579719	6681994	2009	Drill Holes	Aug023	75 ± 25
	P4	577804	6681902	2009	Drill Holes	Aug114	150 ± 50
	P4	578574	6681924	2009	Drill Holes	Aug033	75 ± 25

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	609530	6667942	2009	Helicopter	Heli 08	148 ± 0
	P4	598718	6681798	2009	Helicopter	Heli 06	86 ± 0
	P4	594301	6671971	2009	Helicopter	Heli 01	250 ± 0
	P4	581773	6679131	2009	Helicopter	Heli 02	338 ± 0
	P4	589950	6683809	2009	Helicopter	Heli 03	4 ± 0
	P4	542182	6674369	2009	Helicopter	Heli 19	628 ± 0
	P4	558266	6674238	2009	Helicopter	Heli 17	659 ± 0
	P4	553069	6664609	2009	Helicopter	Heli 18	933 ± 0
	P4	570634	6702653	2009	Helicopter	Heli 11	274 ± 0
	P4	566776	6707573	2009	Helicopter	Heli 12	1184 ± 0
	P4	560953	6661371	2009	Helicopter	Heli 15	1139 ± 0
	P4	589594	6684433	2009	Helicopter	Heli 05	1300 ± 0
	P4	589892	6684265	2009	Helicopter	Heli 04	310 ± 0
	P4	601073	6666625	2009	Helicopter	Heli 09	382 ± 0
	P4	576552	6659812	2009	Helicopter	Heli 10	676 ± 0
	P4	571715	6669122	2009	Helicopter	Heli 13	904 ± 0
	P4	569349	6677810	2009	Helicopter	Heli 16	1124 ± 0
	P4	605201	6681639	2009	Helicopter	Heli 07	1002 ± 0
	P4	572281	6656731	2009	Helicopter	Heli 14	3246 ± 0
	P4	562333	6688641	2008	Mapping		75 ± 25
	P4	564015	6690910	2008	Mapping		38 ± 12.5
	P4	566177	6691931	2008	Mapping		2 ± 0
	P4	566599	6691684	2008	Mapping		8 ± 2.5
	P4	573170	6687800	2008	Mapping		1 ± 0
	P4	573368	6687750	2008	Mapping		1 ± 0
	P4	574150	6680100	2008	Mapping		18 ± 7.5
	P4	576447	6681700	2008	Mapping		38 ± 12.5
	P4	577296	6683028	2008	Mapping		1 ± 0
	P4	577608	6681683	2008	Mapping		75 ± 25
	P4	577644	6681700	2008	Mapping		14 ± 0
	P4	577767	6682546	2008	Mapping		18 ± 7.5
	P4	577776	6682176	2008	Mapping		38 ± 12.5
	P4	577894	6684478	2008	Mapping		75 ± 25
	P4	578006	6681655	2008	Mapping		100 ± 50
	P4	578047	6682051	2008	Mapping		75 ± 25
	P4	578057	6682370	2008	Mapping		38 ± 12.5
	P4	578134	6682338	2008	Mapping		38 ± 12.5
	P4	578173	6681960	2008	Mapping		18 ± 7.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	578181	6682596	2008	Mapping		7 ± 3
	P4	578265	6681778	2008	Mapping		3 ± 1.5
	P4	578274	6681706	2008	Mapping		100 ± 50
	P4	578294	6681871	2008	Mapping		2 ± 0
	P4	578579	6684074	2008	Mapping		7 ± 3
	P4	578634	6682376	2008	Mapping		4 ± 0
	P4	578744	6682327	2008	Mapping		100 ± 50
	P4	578804	6682236	2008	Mapping		38 ± 12.5
	P4	579041	6681987	2008	Mapping		75 ± 25
	P4	579059	6682047	2008	Mapping		38 ± 12.5
	P4	579346	6684573	2008	Mapping		8 ± 2
	P4	579662	6682024	2008	Mapping		150 ± 50
	P4	580098	6686394	2008	Mapping		18 ± 7.5
	P4	580901	6683647	2008	Mapping		4 ± 1.5
	P4	582014	6684064	2008	Mapping		150 ± 50
	P4	582194	6684392	2008	Mapping		18 ± 7.5
	P4	582431	6683844	2008	Mapping		8 ± 2
	P4	582913	6685538	2008	Mapping		150 ± 50
	P4	583145	6684697	2008	Mapping		38 ± 12.5
	P4	583184	6684698	2008	Mapping		18 ± 7.5
	P4	583432	6685256	2008	Mapping		18 ± 7.5
	P4	583847	6684790	2008	Mapping		18 ± 7.5
	P4	576654	6681875	2008	Mapping		75 ± 25
	P4	577313	6682076	2008	Mapping		1 ± 0
	P4	567352	6676750	2009	Opportunistic		18 ± 7.5
	P4	568840	6670939	2009	Opportunistic		1 ± 0
	P4	577274	6683173	2009	Opportunistic		38 ± 12.5
	P4	577363	6682500	2009	Opportunistic		4 ± 1.5
	P4	577681	6682391	2009	Opportunistic		18 ± 7.5
	P4	577850	6682430	2009	Opportunistic		4 ± 1.5
	P4	577857	6683330	2009	Opportunistic		75 ± 25
	P4	578040	6683479	2009	Opportunistic		150 ± 50
	P4	578046	6683229	2009	Opportunistic		4 ± 1.5
	P4	578061	6682548	2009	Opportunistic		4 ± 1.5
	P4	578258	6682624	2009	Opportunistic		4 ± 1.5
	P4	578335	6683062	2009	Opportunistic		150 ± 50
	P4	578398	6683025	2009	Opportunistic		38 ± 12.5
	P4	579498	6684531	2009	Opportunistic		1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	579569	6684510	2009	Opportunistic		1 ± 0
	P4	579642	6684011	2009	Opportunistic		38 ± 12.5
	P4	579642	6684394	2009	Opportunistic		1 ± 0
	P4	579656	6684433	2009	Opportunistic		1 ± 0
	P4	569413	6675019	2009	Opportunistic		8 ± 2
	P4	577277	6683107	2009	Plot	VP040	75 ± 25
	P4	578257	6681724	2009	Plot	VP037	350 ± 150
	P4	578943	6681918	2009	Plot	VP043	38 ± 12.5
	P4	582178	6678994	2009	Plot	VP052	150 ± 50
	P4	582189	6679087	2009	Plot	VP051	150 ± 50
	P4	576684	6681911	2009	Plot	VP039	75 ± 25
	P4	556063	6691190	2007	Recon		1 ± 0
	P4	558020	6691534	2007	Recon		1 ± 0
	P4	576444	6681672	2007	Recon		8 ± 2
	P4	570298	6685157	2009	Track Clearance		1 ± 0
	P4	571932	6685176	2009	Track Clearance		18 ± 7.5
	P4	571959	6687041	2009	Track Clearance		200 ± 50
	P4	571967	6686607	2009	Track Clearance		200 ± 50
	P4	573076	6686661	2009	Track Clearance		150 ± 50
	P4	579315	6684578	2009	Track Clearance		18 ± 7.5
	P4	575954	6682092	2009	Track Clearance		1 ± 0
	P4	575990	6682087	2009	Track Clearance		7 ± 0
	P4	576562	6681854	2009	Track Clearance		6 ± 0
	P4	576581	6681874	2009	Track Clearance		2 ± 0
	P4	576743	6682521	2009	Track Clearance		1 ± 0
	P4	576849	6682698	2009	Track Clearance		1 ± 0
	P4	576886	6682714	2009	Track Clearance		3 ± 0
	P4	577229	6682640	2009	Track Clearance		2 ± 0
	P4	566001	6684599	2010	Plot	VP074	1 ± 0
	P4	555902	6691250	2010	Plot	VP082	1 ± 0
	P4	571220	6693195	2010	Plot	VP123	4 ± 1.5
	P4	553013	6691256	2010	Mapping	OPPO06	500 ± 50
	P4	564916	6678278	2010	Mapping	OPPO28	31 ± 0
	P4	574013	6687369	2010	Mapping	OPPO34	200 ± 50
	P4	584237	6684147	2010	Mapping	OPPO37	18 ± 7.5
	P4	581571	6687721	2010	Mapping	OPPO47	200 ± 50
	P4	582686	6686200	2010	Mapping	OPPO50	75 ± 25
	P4	582135	6686396	2010	Mapping	OPPO51	38 ± 12.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	581852	6685576	2010	Mapping	OPPO53	1 ± 0
	P4	582143	6685640	2010	Mapping	OPPO54	300 ± 50
	P4	573714	6674509	2010	Mapping	OPPO55	500 ± 50
	P4	576279	6675445	2010	Mapping	OPPO57	500 ± 10
	P4	580110	6678860	2010	Mapping	OPPO64	8 ± 2
	P4	578908	6678603	2010	Mapping	OPPO65	8 ± 2.5
	P4	584084	6684245	2010	Mapping	OPPO69	4 ± 1.5
	P4	584348	6680837	2010	Mapping	OPPO77	18 ± 7.5
	P4	584319	6679919	2010	Mapping	OPPO78	75 ± 25
	P4	580010	6680053	2010	Mapping	JELLO05	289 ± 0
	P4	571106	6671885	2010	Mapping	JELLO06	18 ± 2.5
	P4	571029	6671672	2010	Mapping	JELLO07	28 ± 2.5
	P4	558523	6683219	2010	Plot	VP170	20 ± 0
	P4	573153	6680457	2010	Plot	VP140	7 ± 0
	P4	554399	6691602	2010	Plot	VP153	150 ± 50
	P4	552002	6687452	2010	Plot	VP163	80 ± 0
	P4	583366	6685862	2010	Plot	VP207	18 ± 7.5
	P4	573007	6681158	2010	Mapping	JONE004/OPPO	60 ± 0
	P4	574217	6688261	2010	Mapping	JONE015OPPO	16 ± 0
	P4	574304	6688227	2010	Mapping	JONE016	21 ± 0
	P4	572941	6681746	2010	Plot	VP223	18 ± 7.5
	P4	572914	6682776	2010	Plot	VP234 - OPPO	75 ± 25
	P4	607920	6704167	2014	Borefields Mapping	MURD002	10 ± 0
	P4	602606	6702451	2014	Borefields Mapping	MURD010	3 ± 0
	P4	601854	6701929	2014	Borefields Mapping	MURD012	70 ± 0
	P4	601969	6701862	2014	Borefields Mapping	MURD012	1 ± 0
	P4	602201	6701750	2014	Borefields Mapping	MURD012	2 ± 0
	P4	602278	6701728	2014	Borefields Mapping	MURD012	66 ± 0
	P4	601761	6701939	2014	Borefields Mapping	MURD012	60 ± 0
	P4	602358	6701724	2014	Borefields Mapping	MURD013	250 ± 0
	P4	602464	6701697	2014	Borefields Mapping	MURD013	5 ± 0
	P4	605562	6700077	2014	Borefields Mapping	MURD014	1 ± 0
	P4	605487	6700068	2014	Borefields Mapping	MURD014	30 ± 0
	P4	605468	6700163	2014	Borefields Mapping	MURD014	8 ± 0
	P4	601055	6698569	2014	Borefields Mapping	MURD020	1 ± 0
	P4	600910	6698635	2014	Borefields Mapping	MURD021	47 ± 7
	P4	602816	6697386	2014	Borefields Mapping	MURD021	260 ± 0
	P4	600826	6697105	2014	Borefields Mapping	MURD025	6 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	602663	6697296	2014	Borefields Mapping	MURD031	26 ± 0
	P4	602827	6701256	2014	Borefields Mapping	STAR009	15 ± 0
	P4	602810	6701537	2014	Borefields Mapping	STAR009	55 ± 0
	P4	607069	6697856	2014	Borefields Mapping	STAR011	20 ± 0
	P4	602121	6698080	2014	Borefields Mapping	STAR013	5 ± 0
	P4	602034	6698084	2014	Borefields Mapping	STAR013	26 ± 0
	P4	602304	6698083	2014	Borefields Mapping	STAR013	1 ± 0
	P4	602350	6698148	2014	Borefields Mapping	STAR013	22 ± 0
	P4	604185	6697197	2014	Borefields Mapping	STAR014	25 ± 0
	P4	604329	6697166	2014	Borefields Mapping	STAR014	10 ± 0
	P4	604548	6697101	2014	Borefields Mapping	STAR014	1 ± 0
	P4	568992	6677410	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB006/63	105 ± 0
	P4	569199	6677607	2014	Hc survey-VEG SITE SHEET	HIBB005/62	173 ± 0
	P4	569315	6677414	2014	Hc survey-VEG SITE SHEET	HIBB006/63	137 ± 0
	P4	569496	6677683	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB005/62	63 ± 0
	P4	570058	6670007	2014	Hc survey-VEG SITE SHEET	HIBB010/84	142 ± 0
	P4	570530	6671688	2014	Hc survey-VEG SITE SHEET	HIBB013/81	70 ± 0
	P4	570821	6669489	2014	Hc survey-VEG SITE SHEET	HIBB012/85	66 ± 0
	P4	571312	6669423	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB012/85	2 ± 0
	P4	572170	6668771	2014	Hc survey-VEG SITE SHEET	HIBB011/88	88 ± 0
	P4	572245	6674670	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB003/69	5 ± 0
	P4	572581	6674645	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB003/69	4 ± 0
	P4	573346	6673699	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB008/74	12 ± 0
	P4	573417	6673998	2014	Hc survey-VEG SITE SHEET	HIBB007/71	100 ± 0
	P4	573862	6674037	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	15 ± 0
	P4	573929	6674479	2014	Hc survey-VEG SITE SHEET	HIBB003/69	70 ± 0
	P4	574154	6674023	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	29 ± 0
	P4	574848	6674343	2014	Hc survey-VEG SITE SHEET	HIBB009/70	90 ± 0
	P4	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	138 ± 0
	P4	578829	6681464	2014	Hc survey-VEG SITE SHEET	HIBB001/30	53 ± 0
	P4	579481	6681700	2014	Hc survey-VEG SITE SHEET	HIBB014/28	39 ± 0
	P4	583828	6676738	2014	Hc survey-DUNE TRAVERSE SHEET	21002	600 ± 100
	P4	584245	6677199	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	10 ± 0
	P4	584310	6676654	2014	Hc survey-DUNE TRAVERSE SHEET	21002	250 ± 0
	P4	584331	6680252	2014	Hc survey-DUNE TRAVERSE SHEET	8001	114 ± 0
	P4	584496	6680012	2014	Hc survey-DUNE TRAVERSE SHEET	11001	16 ± 0
	P4	584519	6677099	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	33 ± 0
	P4	584529	6676891	2014	Hc survey-DUNE TRAVERSE SHEET	20002	114 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Conospermum toddii (continued)	P4	584602	6680203	2014	Hc survey-DUNE TRAVERSE SHEET	9001	182 ± 0
	P4	584605	6676684	2014	Hc survey-DUNE TRAVERSE SHEET	21002	350 ± 0
	P4	584685	6677477	2014	Hc survey-VEG SITE SHEET	HIBB016/DUNE010	72 ± 0
	P4	584690	6677062	2014	Hc survey-VEG SITE SHEET	HIBB015/19002	35 ± 0
	P4	584690	6677470	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	110 ± 0
	P4	584693	6680054	2014	Hc survey-DUNE TRAVERSE SHEET	11001	1 ± 0
	P4	584722	6680063	2014	Hc survey-DUNE TRAVERSE SHEET	11001	700 ± 100
	P4	584767	6677042	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	13 ± 0
	P4	584810	6677475	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	27 ± 0
	P4	584931	6680052	2014	Hc survey-DUNE TRAVERSE SHEET	10001	300 ± 50
	P4	585316	6677779	2014	Hc survey-VEG SITE SHEET	HIBB002/42	28 ± 0
	P4	587677	6676055	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587691	6676127	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P4	587714	6676122	2014	Hc survey-DUNE TRAVERSE SHEET	15002	12 ± 0
	P4	587739	6676129	2014	Hc survey-DUNE TRAVERSE SHEET	15002	8 ± 0
	P4	587744	6676138	2014	Hc survey-DUNE TRAVERSE SHEET	15002	17 ± 0
	P4	587885	6676191	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587965	6676187	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P4	588277	6675991	2014	Hc survey-DUNE TRAVERSE SHEET	17002	54 ± 0
	P4	588575	6676128	2014	Hc survey-DUNE TRAVERSE SHEET	15002	43 ± 0
	P4	588768	6676078	2014	Hc survey-DUNE TRAVERSE SHEET	15002	44 ± 0
	P4	601867	6667522	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE003	15 ± 0
	P4	602029	6667450	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE003	4 ± 0
	P4	602617	6667435	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE002	7 ± 0
	P4	603185	6668462	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	21 ± 0
	P4	603457	6668394	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	4 ± 0
	P4	564948	6689948	2015	Mapping	OPPO146	2 ± 0
Dicrastylis cundeeleensis	P4	578439	6682503	2009	Drill Holes	Sept288	4 ± 1.5
	P4	589594	6684433	2009	Helicopter	Heli 05	3 ± 0
	P4	574801	6685408	2008	Mapping		1 ± 0
	P4	574884	6692052	2008	Mapping		8 ± 2
	P4	575458	6690505	2008	Mapping		7 ± 3
	P4	556115	6688192	2010	Plot	VP080	18 ± 7.5
	P4	571837	6691508	2010	Plot	VP086	75 ± 25
	P4	552195	6697551	2010	Plot	VP097	18 ± 7.5
	P4	552479	6699120	2010	Plot	VP100	4 ± 1.5
	P4	543393	6702399	2010	Plot	VP101	8 ± 2
	P4	546968	6700657	2010	Plot	VP102	8 ± 2

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Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Dicrastylis cundeeleensis (continued)	P4	552033	6692300	2010	Plot	VP120	12 ± 3.5
	P4	553405	6692440	2010	Plot	VP121	38 ± 12.5
	P4	575666	6692568	2010	Plot	VP129	8 ± 2
	P4	551305	6689590	2010	Plot	VP131	38 ± 12.5
	P4	556302	6681922	2010	Plot	VP142	18 ± 7.5
	P4	562222	6687080	2010	Mapping	OPPO11	18 ± 7.5
	P4	552725	6687227	2010	Mapping	Veg09	4 ± 1.5
	P4	554367	6686247	2010	Mapping	Veg10	38 ± 12.5
	P4	555512	6694302	2010	Plot	VP148	75 ± 25
	P4	553986	6693586	2010	Plot	VP150	4 ± 1.5
	P4	557699	6681707	2010	Plot	VP172	18 ± 7.5
	P4	557132	6680337	2010	Plot	VP174	8 ± 2
	P4	555457	6680612	2010	Plot	VP176	38 ± 12.5
	P4	556173	6683557	2010	Plot	VP178	18 ± 7.5
	P4	586553	6675838	2010	Plot	VP230	1 ± 0
	P4	550636	6692247	2010	Plot	VP151	1 ± 0
	P4	551391	6685631	2010	Plot	VP155	38 ± 12.5
	P4	552182	6686503	2010	Plot	VP157	38 ± 12.5
	P4	553753	6685338	2010	Plot	VP159	4 ± 1.5
	P4	575443	6689759	2010	Plot	VP139	4 ± 1.5
	P4	574204	6685929	2010	Plot	VP185	1 ± 0
	P4	584387	6687355	2010	Plot	VP193	8 ± 2
	P4	586243	6686281	2010	Plot	VP197	4 ± 1.5
	P4	583326	6686983	2010	Plot	VP203	75 ± 25
	P4	582223	6686584	2010	Plot	VP209	4 ± 1.5
	P4	574137	6689963	2010	Mapping	JONE014	75 ± 25
	P4	602280	6701408	2014	Borefields Mapping	BARR009	1 ± 0
	P4	603135	6704230	2014	Borefields Mapping	MURD007	4 ± 1.5
	P4	607253	6697783	2014	Borefields Mapping	STAR011	1 ± 0
Grevillea secunda	P4	579193	6682169	2010	Drill Line Clearance	37	7 ± 0
	P4	575389	6679921	2010	Drill Line Clearance	2	18 ± 7.5
	P4	576386	6681201	2010	Drill Line Clearance	15	1 ± 0
	P4	576437	6681522	2010	Drill Line Clearance	17	1 ± 0
	P4	576456	6681510	2010	Drill Line Clearance	17	1 ± 0
	P4	576464	6681627	2010	Drill Line Clearance	18	8 ± 2
	P4	576479	6681598	2010	Drill Line Clearance	18	1 ± 0
	P4	576491	6681372	2010	Drill Line Clearance	16	1 ± 0
	P4	576557	6681333	2010	Drill Line Clearance	16	2 ± 0

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	576566	6681569	2010	Drill Line Clearance	18	1 ± 0
	P4	576579	6681902	2010	Drill Line Clearance	22	4 ± 1.5
	P4	576585	6681436	2010	Drill Line Clearance	17	1 ± 0
	P4	576589	6681397	2010	Drill Line Clearance	Oppo	2 ± 0
	P4	576594	6681430	2010	Drill Line Clearance	17	1 ± 0
	P4	576595	6681551	2010	Drill Line Clearance	18	1 ± 0
	P4	576617	6681536	2010	Drill Line Clearance	18	4 ± 0
	P4	576624	6681878	2010	Drill Line Clearance	22	4 ± 1.5
	P4	576636	6681783	2010	Drill Line Clearance	20	2 ± 0
	P4	576670	6681750	2010	Drill Line Clearance	20	1 ± 0
	P4	576676	6681883	2010	Drill Line Clearance	22	1 ± 0
	P4	576707	6681705	2010	Drill Line Clearance	20	1 ± 0
	P4	576719	6681819	2010	Drill Line Clearance	22	2 ± 0
	P4	576791	6681674	2010	Drill Line Clearance	20	1 ± 0
	P4	576796	6681799	2010	Drill Line Clearance	22	2 ± 0
	P4	576840	6681903	2010	Drill Line Clearance	23	1 ± 0
	P4	576851	6681767	2010	Drill Line Clearance	22	1 ± 0
	P4	576985	6682528	2010	Drill Line Clearance	30	1 ± 0
	P4	577068	6682103	2010	Drill Line Clearance	28	2 ± 0
	P4	577124	6682083	2010	Drill Line Clearance	28	8 ± 2
	P4	577153	6682064	2010	Drill Line Clearance	28	2 ± 0
	P4	577180	6682656	2010	Drill Line Clearance	32	1 ± 0
	P4	577189	6682045	2010	Drill Line Clearance	28	4 ± 1.5
	P4	577553	6682684	2010	Drill Line Clearance	34	1 ± 0
	P4	577568	6682536	2010	Drill Line Clearance	33	2 ± 0
	P4	577583	6682412	2010	Drill Line Clearance	32	1 ± 0
	P4	577653	6682485	2010	Drill Line Clearance	33	4 ± 0
	P4	577926	6682683	2010	Drill Line Clearance	35	3 ± 0
	P4	578008	6682676	2010	Drill Line Clearance	35	5 ± 0
	P4	578664	6683805	2010	Drill Line Clearance	50	1 ± 0
	P4	578716	6682338	2010	Drill Line Clearance	Oppo	2 ± 0
	P4	578788	6682919	2010	Drill Line Clearance	40	7 ± 0
	P4	579028	6682228	2010	Drill Line Clearance	Oppo	2 ± 0
	P4	579069	6682232	2010	Drill Line Clearance	37	1 ± 0
	P4	579225	6682141	2010	Drill Line Clearance	37	1 ± 0
	P4	579277	6683088	2010	Drill Line Clearance	44	1 ± 0
	P4	579432	6682983	2010	Drill Line Clearance	44	2 ± 0
	P4	579490	6682951	2010	Drill Line Clearance	44	4 ± 1.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	579533	6682924	2010	Drill Line Clearance	44	18 ± 7.5
	P4	579585	6682897	2010	Drill Line Clearance	44	18 ± 7.5
	P4	580126	6683290	2010	Drill Line Clearance	48	1 ± 0
	P4	523792	6702605	2010	Helicopter	Opportunistic	1 ± 0
	P4	538785	6705278	2010	Helicopter	D08	1 ± 0
	P4	546535	6699191	2010	Helicopter	D01	1 ± 0
	P4	598396	6698254	2010	Helicopter	A10	9 ± 0
	P4	617438	6717175	2010	Helicopter	A07	1 ± 0
	P4	655985	6664428	2010	Helicopter	C09	1 ± 0
	P4	568788	6677433	2009	Plot	VP007	4 ± 1.5
	P4	572109	6674744	2009	Plot	VP036	1 ± 0
	P4	577249	6672512	2009	Plot	VP034	8 ± 2
	P4	577897	6672088	2009	Plot	VP033	1 ± 0
	P4	578600	6673472	2009	Plot	VP031	8 ± 2
	P4	568465	6677514	2009	Plot	VP028	4 ± 1.5
	P4	576421	6681758	2009	Drill Holes	Aug062	1 ± 0
	P4	576526	6681451	2009	Drill Holes	Sept343	1 ± 0
	P4	576559	6681677	2009	Drill Holes	Aug063	1 ± 0
	P4	577878	6683575	2009	Drill Holes	Sept227	4 ± 1.5
	P4	583011	6684384	2008	Drill Holes	P1-33	4 ± 1.5
	P4	583502	6684613	2008	Drill Holes	P1-31	4 ± 1.5
	P4	584145	6685337	2008	Drill Holes	P1-20	4 ± 1.5
	P4	584790	6685470	2008	Drill Holes	P1-15	4 ± 1.5
	P4	584819	6685470	2008	Drill Holes	P1-16 Oppo	4 ± 1.5
	P4	576595	6681902	2009	Drill Holes	Sept330	1 ± 0
	P4	576595	6681410	2009	Drill Holes	Aug091	1 ± 0
	P4	576801	6681780	2009	Drill Holes	Aug066	1 ± 0
	P4	577666	6681983	2009	Drill Holes	Aug113	1 ± 0
	P4	577804	6681902	2009	Drill Holes	Aug114	1 ± 0
	P4	577902	6683309	2009	Drill Holes	Sept224	4 ± 1.5
	P4	577924	6682093	2009	Drill Holes	Aug118	4 ± 1.5
	P4	577942	6681820	2009	Drill Holes	Aug106	1 ± 0
	P4	577975	6681563	2009	Drill Holes	Aug098	4 ± 1.5
	P4	578014	6681309	2009	Drill Holes	Aug094	4 ± 1.5
	P4	578016	6683494	2009	Drill Holes	Sept228	4 ± 1.5
	P4	578080	6681739	2009	Drill Holes	Aug107	4 ± 1.5
	P4	578112	6681481	2009	Drill Holes	Aug099	1 ± 0
	P4	578161	6682168	2009	Drill Holes	Aug030	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	578206	6682406	2009	Drill Holes	Sept294	1 ± 0
	P4	578250	6681400	2009	Drill Holes	Aug100	4 ± 1.5
	P4	578343	6682325	2009	Drill Holes	Sept295	1 ± 0
	P4	578436	6682005	2009	Drill Holes	Aug032	4 ± 1.5
	P4	578475	6681766	2009	Drill Holes	Aug026	4 ± 1.5
	P4	578574	6681924	2009	Drill Holes	Aug033	1 ± 0
	P4	578613	6681685	2009	Drill Holes	Aug116	1 ± 0
	P4	578714	6682340	2009	Drill Holes	Sept290	4 ± 1.5
	P4	578783	6682300	2009	Drill Holes	Aug003	4 ± 1.5
	P4	578849	6681761	2009	Drill Holes	Aug035	8 ± 2
	P4	578852	6682259	2009	Drill Holes	Sept291	1 ± 0
	P4	579061	6683085	2009	Drill Holes	Sept043	4 ± 1.5
	P4	579581	6682076	2009	Drill Holes	Aug022	1 ± 0
	P4	579719	6681994	2009	Drill Holes	Aug023	1 ± 0
	P4	576427	6681281	2009	Drill Holes	Sept349	4 ± 1.5
	P4	576457	6681492	2009	Drill Holes	Aug090	1 ± 0
	P4	576496	6681241	2009	Drill Holes	Sept113	1 ± 0
	P4	576960	6682664	2009	Drill Holes	Aug083	1 ± 0
	P4	577098	6682582	2009	Drill Holes	Aug080	4 ± 1.5
	P4	577144	6682569	2009	Drill Holes	Sept397	4 ± 1.5
	P4	577610	6682495	2009	Drill Holes	Aug038	1 ± 0
	P4	577875	6681392	2009	Drill Holes	Aug095	8 ± 2
	P4	578062	6682011	2009	Drill Holes	Aug115	4 ± 1.5
	P4	578388	6681318	2009	Drill Holes	Aug101	4 ± 1.5
	P4	578711	6681842	2009	Drill Holes	Aug034	4 ± 1.5
	P4	578837	6683001	2009	Drill Holes	Sept063	18 ± 7.5
	P4	578990	6682177	2009	Drill Holes	Sept292	4 ± 1.5
	P4	579059	6682137	2009	Drill Holes	Aug005	1 ± 0
	P4	579260	6682150	2009	Drill Holes	Sept391	4 ± 1.5
	P4	579669	6683425	2008	Drill Holes	P2-32	4 ± 1.5
	P4	581457	6683798	2008	Drill Holes	P2-03	4 ± 1.5
	P4	581539	6683739	2008	Drill Holes	P2-04	4 ± 1.5
	P4	584237	6685276	2008	Drill Holes	P1-21	8 ± 2
	P4	584334	6685224	2008	Drill Holes	P1-22	4 ± 1.5
	P4	584699	6685521	2008	Drill Holes	P1-14	4 ± 1.5
	P4	584892	6685436	2008	Drill Holes	P1-16	1 ± 0
	P4	585072	6685327	2008	Drill Holes	P1-17	4 ± 1.5
	P4	581773	6679131	2009	Helicopter	Heli 02	4 ± 1.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P4	576552	6659812	2009	Helicopter	Heli 10	2 ± 0
	P4	572281	6656731	2009	Helicopter	Heli 14	18 ± 7.5
	P4	576447	6681700	2008	Mapping		1 ± 0
	P4	577608	6681683	2008	Mapping		1 ± 0
	P4	577894	6684478	2008	Mapping		1 ± 0
	P4	578047	6682051	2008	Mapping		1 ± 0
	P4	578134	6682338	2008	Mapping		8 ± 2
	P4	578173	6681960	2008	Mapping		1 ± 0
	P4	578274	6681706	2008	Mapping		1 ± 0
	P4	578294	6681871	2008	Mapping		1 ± 0
	P4	578579	6684074	2008	Mapping		1 ± 0
	P4	578744	6682327	2008	Mapping		1 ± 0
	P4	578804	6682236	2008	Mapping		1 ± 0
	P4	579041	6681987	2008	Mapping		1 ± 0
	P4	579059	6682047	2008	Mapping		1 ± 0
	P4	580098	6686394	2008	Mapping		1 ± 0
	P4	580901	6683647	2008	Mapping		4 ± 1.5
	P4	582431	6683844	2008	Mapping		4 ± 1.5
	P4	583184	6684698	2008	Mapping		1 ± 0
Grevillea secunda (continued)	P4	576654	6681875	2008	Mapping		1 ± 0
	P4	577313	6682076	2008	Mapping		1 ± 0
	P4	559910	6689900	2008	Mapping		7 ± 3.5
	P4	561139	6689256	2008	Mapping		1 ± 0
	P4	561146	6689246	2008	Mapping		4 ± 0
	P4	561207	6688850	2008	Mapping		1 ± 0
	P4	561263	6689118	2008	Mapping		1 ± 0
	P4	561717	6688635	2008	Mapping		1 ± 0
	P4	561836	6688776	2008	Mapping		1 ± 0
	P4	562291	6688484	2008	Mapping		1 ± 0
	P4	563066	6687810	2008	Mapping		1 ± 0
	P4	563091	6693726	2008	Mapping		1 ± 0
	P4	563636	6687176	2008	Mapping		1 ± 0
	P4	563976	6690921	2008	Mapping		1 ± 0
	P4	564879	6686502	2008	Mapping		1 ± 0
	P4	565060	6686398	2008	Mapping		1 ± 0
	P4	565154	6686796	2008	Mapping		1 ± 0
	P4	565163	6686362	2008	Mapping		1 ± 0
	P4	565671	6686769	2008	Mapping		1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	565684	6686748	2008	Mapping		1 ± 0
	P4	565688	6686748	2008	Mapping		1 ± 0
	P4	565716	6686793	2008	Mapping		7 ± 0
	P4	565724	6686772	2008	Mapping		1 ± 0
	P4	565750	6686812	2008	Mapping		1 ± 0
	P4	565837	6686839	2008	Mapping		1 ± 0
	P4	565918	6692075	2008	Mapping		1 ± 0
	P4	565950	6686860	2008	Mapping		1 ± 0
	P4	566036	6687294	2008	Mapping		7 ± 0
	P4	566039	6687037	2008	Mapping		1 ± 0
	P4	566041	6687067	2008	Mapping		1 ± 0
	P4	572315	6688261	2008	Mapping		1 ± 0
	P4	573793	6688925	2008	Mapping		1 ± 0
	P4	574935	6688244	2008	Mapping		1 ± 0
	P4	577357	6683885	2008	Mapping		1 ± 0
	P4	577731	6684581	2008	Mapping		1 ± 0
	P4	578797	6683006	2008	Mapping		1 ± 0
	P4	579481	6682890	2008	Mapping		1 ± 0
	P4	580141	6686470	2008	Mapping		1 ± 0
	P4	581353	6683878	2008	Mapping		4 ± 1.5
	P4	582088	6683996	2008	Mapping		4 ± 1.5
	P4	582954	6685438	2008	Mapping		8 ± 2
	P4	584371	6685200	2008	Mapping		4 ± 1.5
	P4	577681	6682391	2009	Opportunistic		4 ± 1.5
	P4	578040	6683479	2009	Opportunistic		38 ± 12.5
	P4	578046	6683229	2009	Opportunistic		1 ± 0
	P4	578061	6682548	2009	Opportunistic		4 ± 1.5
	P4	578398	6683025	2009	Opportunistic		4 ± 1.5
	P4	567352	6676750	2009	Opportunistic		1 ± 0
	P4	568161	6673392	2009	Opportunistic		4 ± 1.5
	P4	568238	6675530	2009	Opportunistic		4 ± 1.5
	P4	569413	6675019	2009	Opportunistic		4 ± 1.5
	P4	573835	6678133	2009	Opportunistic		1 ± 0
	P4	577945	6671932	2009	Opportunistic		8 ± 2
	P4	578095	6682719	2009	Opportunistic		18 ± 7.5
	P4	578104	6683498	2009	Opportunistic		18 ± 7.5
	P4	578118	6682947	2009	Opportunistic		1 ± 0
	P4	578558	6673568	2009	Opportunistic		4 ± 1.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P4	578835	6683003	2009	Opportunistic		18 ± 7.5
	P4	580185	6672605	2009	Opportunistic		18 ± 7.5
	P4	585469	6685721	2009	Opportunistic		18 ± 7.5
	P4	578257	6681724	2009	Plot	VP037	1 ± 0
	P4	578943	6681918	2009	Plot	VP043	4 ± 1.5
	P4	582178	6678994	2009	Plot	VP052	18 ± 7.5
	P4	582189	6679087	2009	Plot	VP051	8 ± 2
	P4	576684	6681911	2009	Plot	VP039	8 ± 2
	P4	562330	6688477	2007	Recon		1 ± 0
	P4	562734	6688232	2007	Recon		1 ± 0
	P4	563310	6687900	2007	Recon		1 ± 0
	P4	563335	6687440	2007	Recon		1 ± 0
	P4	563480	6687125	2007	Recon		1 ± 0
	P4	576625	6681880	2007	Recon		1 ± 0
	P4	567675	6687718	2009	Track Clearance		4 ± 1.5
	P4	581113	6684011	2009	Track Clearance		4 ± 1.5
	P4	585552	6685661	2009	Track Clearance		18 ± 7.5
	P4	562151	6688872	2010	Plot	VP064	18 ± 7.5
	P4	556970	6690653	2010	Plot	VP081	38 ± 12.5
Grevillea secunda (continued)	P4	563458	6683627	2010	Plot	VP090	1 ± 0
	P4	583181	6678518	2010	Plot	VP093	4 ± 1.5
	P4	584322	6675446	2010	Plot	VP096	4 ± 1.5
	P4	552479	6699120	2010	Plot	VP100	4 ± 1.5
	P4	559095	6686174	2010	Plot	VP104	18 ± 7.5
	P4	579729	6686763	2010	Mapping	OPPO03	1 ± 0
	P4	553487	6691170	2010	Mapping	OPPO05	29 ± 0
	P4	555252	6688630	2010	Mapping	OPPO07	4 ± 1.5
	P4	554531	6688481	2010	Mapping	OPPO08	8 ± 2
	P4	554646	6687825	2010	Mapping	OPPO09	18 ± 7.5
	P4	554757	6685058	2010	Mapping	OPPO10	3 ± 0
	P4	562222	6687080	2010	Mapping	OPPO11	3 ± 0
	P4	561595	6687581	2010	Mapping	OPPO12	12 ± 0
	P4	554780	6688910	2010	Mapping	Veg03	18 ± 7.5
	P4	554367	6686247	2010	Mapping	Veg10	18 ± 7.5
	P4	561743	6687383	2010	Mapping	OPPO15	2 ± 0
	P4	561351	6687605	2010	Mapping	Veg12	1 ± 0
	P4	560889	6687876	2010	Mapping	OPPO16	18 ± 7.5
	P4	559975	6688420	2010	Mapping	Veg13	4 ± 1.5

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SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	559664	6688607	2010	Mapping	OPPO18	8 ± 2
	P4	559374	6688782	2010	Mapping	OPPO20	18 ± 7.5
	P4	558567	6689264	2010	Mapping	OPPO21	18 ± 7.5
	P4	558422	6689350	2010	Mapping	OPPO22	18 ± 7.5
	P4	558322	6688925	2010	Mapping	OPPO23	4 ± 1.5
	P4	558569	6688777	2010	Mapping	OPPO24	8 ± 2
	P4	560566	6687588	2010	Mapping	Veg15	1 ± 0
	P4	560922	6687380	2010	Mapping	OPPO25	38 ± 12.5
	P4	561300	6687164	2010	Mapping	OPPO26	4 ± 1.5
	P4	566080	6687354	2010	Mapping	OPPO27	8 ± 2
	P4	563827	6677956	2010	Mapping	OPPO29	8 ± 2
	P4	576862	6690720	2010	Mapping	OPPO30	8 ± 2
	P4	577203	6690516	2010	Mapping	OPPO31	18 ± 7.5
	P4	577738	6690196	2010	Mapping	OPPO32	75 ± 25
	P4	584237	6684147	2010	Mapping	OPPO37	1 ± 0
	P4	585213	6683639	2010	Mapping	OPPO38	4 ± 1.5
	P4	586105	6683869	2010	Mapping	OPPO39	8 ± 2
	P4	586503	6684379	2010	Mapping	OPPO40	8 ± 2
	P4	586955	6684230	2010	Mapping	OPPO41	8 ± 2
	P4	584784	6686986	2010	Mapping	OPPO43	18 ± 7.5
	P4	586907	6684717	2010	Mapping	OPPO44	75 ± 25
	P4	585367	6685637	2010	Mapping	OPPO45	8 ± 2
	P4	582484	6687358	2010	Mapping	OPPO46	8 ± 2
	P4	582536	6685170	2010	Mapping	OPPO52	4 ± 1.5
	P4	581852	6685576	2010	Mapping	OPPO53	8 ± 2
	P4	582143	6685640	2010	Mapping	OPPO54	1 ± 0
	P4	573960	6674264	2010	Mapping	OPPO56	4 ± 1.5
	P4	560881	6689515	2010	Mapping	JELLO01	8 ± 2.5
	P4	560467	6688821	2010	Mapping	JELLO02	8 ± 2.5
	P4	560286	6688517	2010	Mapping	OPPO58	4 ± 1.5
	P4	560063	6687808	2010	Mapping	OPPO59	8 ± 2
	P4	563234	6676314	2010	Mapping	OPPO60	19 ± 6
	P4	578407	6679884	2010	Mapping	OPPO61	1 ± 0
	P4	560355	6688193	2010	Mapping	JELLO03	4 ± 1.5
	P4	579531	6679215	2010	Mapping	OPPO62	8 ± 2
	P4	579332	6679336	2010	Mapping	OPPO63	8 ± 2
	P4	580110	6678860	2010	Mapping	OPPO64	4 ± 1.5
	P4	581085	6682142	2010	Mapping	OPPO66	8 ± 2

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	583838	6684400	2010	Mapping	OPPO67	4 ± 1.5
	P4	584084	6684245	2010	Mapping	OPPO68	8 ± 2
	P4	584212	6684168	2010	Mapping	OPPO70	8 ± 2
	P4	584490	6684009	2010	Mapping	OPPO71	4 ± 1.5
	P4	584638	6683924	2010	Mapping	OPPO72	4 ± 1.5
	P4	585093	6683028	2010	Mapping	OPPO73	8 ± 2
	P4	584280	6679706	2010	Mapping	OPPO74	8 ± 2
	P4	583717	6676797	2010	Mapping	OPPO75	8 ± 2
	P4	570924	6671745	2010	Mapping	OPPO76	18 ± 7.5
	P4	561169	6687448	2010	Plot	VP156	4 ± 1.5
	P4	557132	6680337	2010	Plot	VP174	10 ± 0
	P4	563288	6676708	2010	Plot	VP188	4 ± 1.5
	P4	573153	6680457	2010	Plot	VP140	8 ± 2
	P4	578274	6679696	2010	Plot	VP200	8 ± 2.5
	P4	580298	6678870	2010	Plot	VP194	18 ± 7.5
	P4	585206	6683701	2010	Plot	VP214	1 ± 0
	P4	584940	6681154	2010	Plot	VP218	7 ± 1
	P4	579299	6680423	2010	Plot	VP222	18 ± 7.5
	P4	586553	6675838	2010	Plot	VP230	1 ± 0
	P4	565761	6686141	2010	Plot	VP169	38 ± 12.5
	P4	577688	6690303	2010	Plot	VP137	100 ± 25
	P4	585339	6686573	2010	Plot	VP195	8 ± 2
	P4	580477	6686322	2010	Plot	VP211	8 ± 2
	P4	581857	6685690	2010	Plot	VP213	4 ± 1.5
	P4	522769	6701073	2010	Helicopter	D10	2 ± 0
	P4	560802	6689373	2010	Mapping	JELLO01 Oppo	8 ± 2.5
	P4	560667	6688014	2010	Mapping	JELLO03 Oppo	40 ± 0
	P4	572247	6681580	2010	Mapping	JONE004/OPPO	61 ± 0
	P4	573063	6681281	2010	Plot	VP236	2 ± 0
	P4	568040	6687638	2010	Plot	VP242 - OPPO	12 ± 0
	P4	606637	6704151	2014	Borefields Mapping	BARR001	22 ± 0
	P4	606383	6704108	2014	Borefields Mapping	BARR001	7 ± 0
	P4	606650	6704167	2014	Borefields Mapping	BARR001	6 ± 0
	P4	607069	6704285	2014	Borefields Mapping	BARR001	10 ± 0
	P4	607076	6702828	2014	Borefields Mapping	BARR002	30 ± 0
	P4	604473	6702646	2014	Borefields Mapping	BARR004	15 ± 0
	P4	606590	6700827	2014	Borefields Mapping	BARR006	35 ± 5
	P4	607501	6699256	2014	Borefields Mapping	BARR010	35 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	607556	6699360	2014	Borefields Mapping	BARR010	50 ± 25
	P4	607351	6699443	2014	Borefields Mapping	BARR010	100 ± 50
	P4	607063	6699564	2014	Borefields Mapping	BARR010	200 ± 50
	P4	606816	6699668	2014	Borefields Mapping	BARR010	60 ± 0
	P4	606711	6699709	2014	Borefields Mapping	BARR010	15 ± 0
	P4	605764	6700103	2014	Borefields Mapping	BARR010	8 ± 0
	P4	606005	6700001	2014	Borefields Mapping	BARR010	12 ± 0
	P4	606099	6699969	2014	Borefields Mapping	BARR010	35 ± 0
	P4	606253	6699897	2014	Borefields Mapping	BARR010	50 ± 0
	P4	606510	6699789	2014	Borefields Mapping	BARR010	80 ± 0
	P4	605249	6698675	2014	Borefields Mapping	BARR012	8 ± 0
	P4	604387	6698822	2014	Borefields Mapping	BARR013	30 ± 0
	P4	603286	6698392	2014	Borefields Mapping	BARR014	8 ± 0
	P4	603284	6698315	2014	Borefields Mapping	BARR014	6 ± 0
	P4	603286	6698211	2014	Borefields Mapping	BARR014	16 ± 0
	P4	603285	6698095	2014	Borefields Mapping	BARR014	15 ± 0
	P4	602709	6696165	2014	Borefields Mapping	BARR017	1 ± 0
	P4	602760	6697173	2014	Borefields Mapping	BARR018	10 ± 0
	P4	600162	6697217	2014	Borefields Mapping	BARR019	20 ± 0
	P4	600034	6697178	2014	Borefields Mapping	BARR019	55 ± 0
	P4	599878	6692162	2014	Borefields Mapping	BARR019	45 ± 0
	P4	597100	6696651	2014	Borefields Mapping	BARR020	6 ± 0
	P4	597167	6696697	2014	Borefields Mapping	BARR020	12 ± 0
	P4	596896	6695939	2014	Borefields Mapping	BARR021	7 ± 0
	P4	596462	6694829	2014	Borefields Mapping	BARR022	12 ± 0
	P4	596398	6694705	2014	Borefields Mapping	BARR022	5 ± 0
	P4	596327	6694624	2014	Borefields Mapping	BARR022	30 ± 0
	P4	608817	6703715	2014	Borefields Mapping	MURD001	25 ± 0
	P4	608567	6703815	2014	Borefields Mapping	MURD001	18 ± 7.5
	P4	607938	6704010	2014	Borefields Mapping	MURD001	50 ± 0
	P4	608899	6703734	2014	Borefields Mapping	MURD001	15 ± 0
	P4	607920	6704167	2014	Borefields Mapping	MURD002	4 ± 0
	P4	607149	6704277	2014	Borefields Mapping	MURD003	10 ± 0
	P4	606229	6704012	2014	Borefields Mapping	MURD004	5 ± 0
	P4	605094	6703378	2014	Borefields Mapping	MURD005	4 ± 0
	P4	604675	6703688	2014	Borefields Mapping	MURD008	12 ± 0
	P4	605073	6703286	2014	Borefields Mapping	MURD008	36 ± 0
	P4	604858	6703126	2014	Borefields Mapping	MURD008	60 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	604523	6701760	2014	Borefields Mapping	MURD010	30 ± 0
	P4	604854	6700480	2014	Borefields Mapping	MURD013	24 ± 0
	P4	605182	6700341	2014	Borefields Mapping	MURD013	30 ± 0
	P4	605595	6700319	2014	Borefields Mapping	MURD014	1 ± 0
	P4	605658	6700293	2014	Borefields Mapping	MURD015	7 ± 0
	P4	603576	6699139	2014	Borefields Mapping	MURD016	24 ± 0
	P4	603800	6699066	2014	Borefields Mapping	MURD016	72 ± 0
	P4	604153	6698920	2014	Borefields Mapping	MURD016	105 ± 0
	P4	604462	6698759	2014	Borefields Mapping	MURD016	82 ± 0
	P4	604560	6698754	2014	Borefields Mapping	MURD016	54 ± 0
	P4	604895	6698672	2014	Borefields Mapping	MURD016	56 ± 0
	P4	604973	6698620	2014	Borefields Mapping	MURD016	19 ± 0
	P4	605171	6698546	2014	Borefields Mapping	MURD016	33 ± 0
	P4	605266	6698515	2014	Borefields Mapping	MURD016	10 ± 0
	P4	605592	6698403	2014	Borefields Mapping	MURD016	31 ± 0
	P4	606137	6698271	2014	Borefields Mapping	MURD017	4 ± 0
	P4	603274	6698625	2014	Borefields Mapping	MURD017	36 ± 0
	P4	603279	6698565	2014	Borefields Mapping	MURD017	17 ± 0
	P4	606197	6698184	2014	Borefields Mapping	MURD017	20 ± 0
	P4	606387	6698143	2014	Borefields Mapping	MURD017	22 ± 0
	P4	606637	6698011	2014	Borefields Mapping	MURD017	12 ± 0
	P4	603325	6698855	2014	Borefields Mapping	MURD017	31 ± 0
	P4	603210	6699283	2014	Borefields Mapping	MURD018	6 ± 0
	P4	603191	6697886	2014	Borefields Mapping	MURD018	34 ± 0
	P4	601208	6698465	2014	Borefields Mapping	MURD020	1 ± 0
	P4	601202	6698473	2014	Borefields Mapping	MURD020	2 ± 0
	P4	601040	6698575	2014	Borefields Mapping	MURD021	5 ± 0
	P4	601015	6698521	2014	Borefields Mapping	MURD021	50 ± 0
	P4	600919	6698532	2014	Borefields Mapping	MURD021	35 ± 0
	P4	600828	6698586	2014	Borefields Mapping	MURD021	25 ± 0
	P4	600700	6698636	2014	Borefields Mapping	MURD021	18 ± 0
	P4	600650	6698632	2014	Borefields Mapping	MURD021	17 ± 0
	P4	600564	6698631	2014	Borefields Mapping	MURD021	7 ± 0
	P4	600761	6698630	2014	Borefields Mapping	MURD021	10 ± 0
	P4	601372	6698448	2014	Borefields Mapping	MURD021	27 ± 0
	P4	603710	6697495	2014	Borefields Mapping	MURD021	56 ± 0
	P4	603630	6697537	2014	Borefields Mapping	MURD021	87 ± 0
	P4	603470	6697618	2014	Borefields Mapping	MURD021	6 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	603163	6697766	2014	Borefields Mapping	MURD021	60 ± 0
	P4	602953	6697599	2014	Borefields Mapping	MURD021	50 ± 0
	P4	602816	6697386	2014	Borefields Mapping	MURD021	17 ± 0
	P4	602709	6697163	2014	Borefields Mapping	MURD021	15 ± 0
	P4	602691	6696949	2014	Borefields Mapping	MURD021	40 ± 0
	P4	602704	6696648	2014	Borefields Mapping	MURD021	105 ± 0
	P4	602928	6696556	2014	Borefields Mapping	MURD021	60 ± 0
	P4	603223	6696561	2014	Borefields Mapping	MURD021	300 ± 0
	P4	603615	6696558	2014	Borefields Mapping	MURD021	80 ± 0
	P4	603727	6696559	2014	Borefields Mapping	MURD021	30 ± 0
	P4	603994	6696627	2014	Borefields Mapping	MURD021	20 ± 0
	P4	604331	6696598	2014	Borefields Mapping	MURD021	3 ± 0
	P4	604985	6696523	2014	Borefields Mapping	MURD022	3 ± 0
	P4	605088	6696446	2014	Borefields Mapping	MURD022	13 ± 0
	P4	605301	6696392	2014	Borefields Mapping	MURD022	9 ± 0
	P4	602690	6696419	2014	Borefields Mapping	MURD022	96 ± 0
	P4	602781	6695960	2014	Borefields Mapping	MURD022	44 ± 0
	P4	603038	6695488	2014	Borefields Mapping	MURD022	67 ± 0
	P4	603364	6695115	2014	Borefields Mapping	MURD023	1 ± 0
	P4	603148	6695245	2014	Borefields Mapping	MURD024	6 ± 0
	P4	603040	6695406	2014	Borefields Mapping	MURD024	6 ± 0
	P4	602674	6696654	2014	Borefields Mapping	MURD025	21 ± 0
	P4	602495	6696709	2014	Borefields Mapping	MURD025	14 ± 0
	P4	602328	6696765	2014	Borefields Mapping	MURD025	19 ± 0
	P4	601914	6696840	2014	Borefields Mapping	MURD025	2 ± 0
	P4	601621	6696953	2014	Borefields Mapping	MURD025	17 ± 0
	P4	601416	6697024	2014	Borefields Mapping	MURD025	53 ± 0
	P4	601101	6697095	2014	Borefields Mapping	MURD025	15 ± 0
	P4	600919	6697099	2014	Borefields Mapping	MURD025	31 ± 0
	P4	600826	6697105	2014	Borefields Mapping	MURD025	13 ± 0
	P4	600488	6697131	2014	Borefields Mapping	MURD025	85 ± 0
	P4	600205	6697152	2014	Borefields Mapping	MURD025	114 ± 0
	P4	599360	6697115	2014	Borefields Mapping	MURD025	78 ± 0
	P4	598564	6696909	2014	Borefields Mapping	MURD026	11 ± 0
	P4	598411	6696912	2014	Borefields Mapping	MURD026	10 ± 0
	P4	597984	6696943	2014	Borefields Mapping	MURD026	35 ± 0
	P4	597738	6696942	2014	Borefields Mapping	MURD026	25 ± 0
	P4	597641	6697020	2014	Borefields Mapping	MURD027	3 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	597687	6696923	2014	Borefields Mapping	MURD027	9 ± 0
	P4	597336	6696785	2014	Borefields Mapping	MURD027	6 ± 0
	P4	596971	6696245	2014	Borefields Mapping	MURD027	36 ± 0
	P4	597004	6696010	2014	Borefields Mapping	MURD027	16 ± 0
	P4	597010	6695760	2014	Borefields Mapping	MURD027	18 ± 0
	P4	596846	6695401	2014	Borefields Mapping	MURD028	4 ± 0
	P4	596883	6695281	2014	Borefields Mapping	MURD028	26 ± 0
	P4	596665	6695049	2014	Borefields Mapping	MURD028	24 ± 0
	P4	596488	6694844	2014	Borefields Mapping	MURD028	82 ± 0
	P4	596155	6694490	2014	Borefields Mapping	MURD028	6 ± 0
	P4	596075	6694418	2014	Borefields Mapping	MURD028	26 ± 0
	P4	596038	6694385	2014	Borefields Mapping	MURD029	26 ± 0
	P4	595862	6694210	2014	Borefields Mapping	MURD029	112 ± 0
	P4	595754	6694116	2014	Borefields Mapping	MURD029	22 ± 0
	P4	595433	6693999	2014	Borefields Mapping	MURD029	63 ± 0
	P4	595208	6693957	2014	Borefields Mapping	MURD029	155 ± 0
	P4	595097	6693945	2014	Borefields Mapping	MURD029	19 ± 0
	P4	594706	6693727	2014	Borefields Mapping	MURD029	123 ± 0
	P4	594424	6693592	2014	Borefields Mapping	MURD029	19 ± 0
	P4	594015	6693421	2014	Borefields Mapping	MURD029	210 ± 0
	P4	593773	6693332	2014	Borefields Mapping	MURD029	65 ± 0
	P4	593563	6693239	2014	Borefields Mapping	MURD029	89 ± 0
	P4	593436	6693186	2014	Borefields Mapping	MURD029	230 ± 0
	P4	593235	6693109	2014	Borefields Mapping	MURD029	176 ± 0
	P4	593159	6693085	2014	Borefields Mapping	MURD029	70 ± 0
	P4	592918	6692887	2014	Borefields Mapping	MURD029	86 ± 0
	P4	592710	6692794	2014	Borefields Mapping	MURD029	164 ± 0
	P4	592381	6692505	2014	Borefields Mapping	MURD029	220 ± 0
	P4	592350	6692486	2014	Borefields Mapping	MURD030	50 ± 0
	P4	592203	6692359	2014	Borefields Mapping	MURD031	81 ± 0
	P4	592003	6692089	2014	Borefields Mapping	MURD031	57 ± 0
	P4	591638	6691731	2014	Borefields Mapping	MURD031	17 ± 0
	P4	590945	6690997	2014	Borefields Mapping	MURD031	4 ± 0
	P4	589089	6689429	2014	Borefields Mapping	MURD033	5 ± 0
	P4	588814	6689265	2014	Borefields Mapping	MURD034	1 ± 0
	P4	588653	6689158	2014	Borefields Mapping	MURD034	31 ± 0
	P4	588460	6689025	2014	Borefields Mapping	MURD034	99 ± 0
	P4	588340	6688953	2014	Borefields Mapping	MURD034	21 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	587878	6688623	2014	Borefields Mapping	MURD034	8 ± 0
	P4	587627	6688483	2014	Borefields Mapping	MURD034	14 ± 0
	P4	587434	6688352	2014	Borefields Mapping	MURD034	108 ± 0
	P4	606280	6704601	2014	Borefields Mapping	STAR001	7 ± 0
	P4	606677	6704480	2014	Borefields Mapping	STAR001	25 ± 0
	P4	606800	6702653	2014	Borefields Mapping	STAR002	2 ± 0
	P4	606690	6702928	2014	Borefields Mapping	STAR002	85 ± 0
	P4	603829	6702053	2014	Borefields Mapping	STAR004	6 ± 0
	P4	602778	6701271	2014	Borefields Mapping	STAR009	5 ± 0
	P4	607784	6699269	2014	Borefields Mapping	STAR010	100 ± 0
	P4	608181	6699102	2014	Borefields Mapping	STAR010	51 ± 0
	P4	607225	6697832	2014	Borefields Mapping	STAR011	11 ± 0
	P4	606473	6698040	2014	Borefields Mapping	STAR011	60 ± 0
	P4	606784	6697958	2014	Borefields Mapping	STAR011	100 ± 0
	P4	607014	6697886	2014	Borefields Mapping	STAR011	60 ± 0
	P4	607251	6697790	2014	Borefields Mapping	STAR011	16 ± 0
	P4	607253	6697783	2014	Borefields Mapping	STAR011	2 ± 0
	P4	607097	6697732	2014	Borefields Mapping	STAR011	1 ± 0
	P4	601751	6699814	2014	Borefields Mapping	STAR012	36 ± 14.5
	P4	601788	6699832	2014	Borefields Mapping	STAR012	20 ± 0
	P4	602005	6699712	2014	Borefields Mapping	STAR012	15 ± 0
	P4	601898	6698239	2014	Borefields Mapping	STAR013	2 ± 0
	P4	602136	6698192	2014	Borefields Mapping	STAR013	25 ± 0
	P4	602204	6698136	2014	Borefields Mapping	STAR013	12 ± 0
	P4	602033	6698171	2014	Borefields Mapping	STAR013	12 ± 0
	P4	602304	6698083	2014	Borefields Mapping	STAR013	8 ± 0
	P4	602460	6698071	2014	Borefields Mapping	STAR013	1 ± 0
	P4	602559	6698058	2014	Borefields Mapping	STAR013	4 ± 0
	P4	602648	6698011	2014	Borefields Mapping	STAR013	15 ± 0
	P4	602719	6697974	2014	Borefields Mapping	STAR013	8 ± 0
	P4	602915	6697887	2014	Borefields Mapping	STAR013	22 ± 0
	P4	602817	6697828	2014	Borefields Mapping	STAR013	1 ± 0
	P4	603113	6697792	2014	Borefields Mapping	STAR013	12 ± 0
	P4	603687	6697432	2014	Borefields Mapping	STAR014	7 ± 0
	P4	605650	6696685	2014	Borefields Mapping	STAR014	2 ± 0
	P4	605554	6696738	2014	Borefields Mapping	STAR014	3 ± 0
	P4	605488	6696786	2014	Borefields Mapping	STAR014	12 ± 0
	P4	605416	6696779	2014	Borefields Mapping	STAR014	11 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	605321	6696810	2014	Borefields Mapping	STAR014	20 ± 0
	P4	603857	6697422	2014	Borefields Mapping	STAR014	60 ± 0
	P4	603949	6697378	2014	Borefields Mapping	STAR014	50 ± 0
	P4	604018	6697341	2014	Borefields Mapping	STAR014	25 ± 0
	P4	604129	6697297	2014	Borefields Mapping	STAR014	25 ± 0
	P4	604343	6697228	2014	Borefields Mapping	STAR014	80 ± 0
	P4	604402	6697200	2014	Borefields Mapping	STAR014	35 ± 0
	P4	604488	6697169	2014	Borefields Mapping	STAR014	2 ± 0
	P4	604694	6697079	2014	Borefields Mapping	STAR014	22 ± 0
	P4	605108	6696900	2014	Borefields Mapping	STAR014	15 ± 0
	P4	605233	6696848	2014	Borefields Mapping	STAR014	19 ± 0
	P4	605741	6696430	2014	Borefields Mapping	STAR015	1 ± 0
	P4	601778	6696799	2014	Borefields Mapping	STAR018	1 ± 0
	P4	599573	6697129	2014	Borefields Mapping	STAR019	2 ± 0
	P4	599729	6697164	2014	Borefields Mapping	STAR019	33 ± 0
	P4	599802	6697158	2014	Borefields Mapping	STAR019	21 ± 0
	P4	597508	6696862	2014	Borefields Mapping	STAR020	29 ± 0
	P4	597545	6696872	2014	Borefields Mapping	STAR020	16 ± 0
	P4	597622	6696891	2014	Borefields Mapping	STAR020	17 ± 0
	P4	596779	6695149	2014	Borefields Mapping	STAR021	5 ± 0
	P4	596215	6694581	2014	Borefields Mapping	STAR022	7 ± 0
	P4	596299	6694580	2014	Borefields Mapping	STAR022	82 ± 0
	P4	594988	6693874	2014	Borefields Mapping	STAR023	22 ± 0
	P4	594025	6693408	2014	Borefields Mapping	STAR024	20 ± 0
	P4	593050	6693078	2014	Borefields Mapping	STAR025	15 ± 0
	P4	603119	6696536	2014	Borefields Mapping	STAR026	40 ± 0
	P4	569199	6677607	2014	Hc survey-VEG SITE SHEET	HIBB005/62	1 ± 0
	P4	569315	6677414	2014	Hc survey-VEG SITE SHEET	HIBB006/63	1 ± 0
	P4	570821	6669489	2014	Hc survey-VEG SITE SHEET	HIBB012/85	3 ± 0
	P4	583877	6676743	2014	Hc survey-DUNE TRAVERSE SHEET	21002	5 ± 0
	P4	583958	6676747	2014	Hc survey-DUNE TRAVERSE SHEET	21002	6 ± 0
	P4	584034	6676747	2014	Hc survey-DUNE TRAVERSE SHEET	21002	10 ± 0
	P4	584111	6676708	2014	Hc survey-DUNE TRAVERSE SHEET	21002	6 ± 0
	P4	584144	6676998	2014	Hc survey-DUNE TRAVERSE SHEET	20002	30 ± 0
	P4	584190	6676684	2014	Hc survey-DUNE TRAVERSE SHEET	21002	10 ± 0
	P4	584245	6677199	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	17 ± 0
	P4	584289	6676653	2014	Hc survey-DUNE TRAVERSE SHEET	21002	8 ± 0
	P4	584445	6676610	2014	Hc survey-DUNE TRAVERSE SHEET	21002	12 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P4	584468	6677502	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	4 ± 0
	P4	584469	6680013	2014	Hc survey-DUNE TRAVERSE SHEET	11001	1 ± 0
	P4	584545	6677094	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB015/19002	11 ± 0
	P4	584602	6680203	2014	Hc survey-DUNE TRAVERSE SHEET	9001	2 ± 0
	P4	584690	6677062	2014	Hc survey-VEG SITE SHEET	HIBB015/19002	1 ± 0
	P4	584711	6677426	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO009/OPPO	5 ± 0
	P4	584785	6676670	2014	Hc survey-DUNE TRAVERSE SHEET	21002	1 ± 0
	P4	587489	6676072	2014	Hc survey-DUNE TRAVERSE SHEET	16002	3 ± 0
	P4	587595	6676148	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587659	6676135	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587688	6676057	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587699	6676055	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587717	6676063	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587790	6676162	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587796	6676051	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587799	6676163	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587814	6676045	2014	Hc survey-DUNE TRAVERSE SHEET	16002	1 ± 0
	P4	587866	6676181	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P4	587885	6676191	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
Grevillea secunda (continued)	P4	587909	6676202	2014	Hc survey-DUNE TRAVERSE SHEET	15002	4 ± 0
	P4	587943	6676193	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587965	6676187	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	587988	6676124	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO004/OPPO	7 ± 0
	P4	588005	6676174	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	588085	6676159	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	588193	6675997	2014	Hc survey-DUNE TRAVERSE SHEET	17002	8 ± 0
	P4	588207	6676128	2014	Hc survey-DUNE TRAVERSE SHEET	15002	4 ± 0
	P4	588511	6676134	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	588525	6676145	2014	Hc survey-DUNE TRAVERSE SHEET	15002	1 ± 0
	P4	588611	6676110	2014	Hc survey-DUNE TRAVERSE SHEET	15002	2 ± 0
	P4	589150	6675908	2014	Hc survey-DUNE TRAVERSE SHEET	17002	2 ± 0
	P4	599721	6668994	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO008/DUNE008	8 ± 0
	P4	603283	6668434	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	28 ± 0
	P4	568882	6688914	2015	Mapping	OPPO79	7 ± 0
	P4	576081	6673557	2015	Mapping	OPPO80	1 ± 0
	P4	575986	6673650	2015	Mapping	OPPO81	1 ± 0
	P4	575051	6674651	2015	Mapping	OPPO83	1 ± 0
	P4	576601	6674835	2015	Mapping	OPPO84	60 ± 0
	P4	573516	6678616	2015	Mapping	OPPO86	6 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
	P4	573063	6682210	2015	Mapping	OPPO92	30 ± 0
	P4	576868	6685317	2015	Mapping	OPPO93	1 ± 0
	P4	578063	6683475	2015	Mapping	OPPO97	15 ± 0
	P4	581035	6684557	2015	Mapping	OPPO100	2 ± 0
	P4	576767	6684571	2015	Mapping	OPPO101	2 ± 0
	P4	577440	6685188	2015	Mapping	OPPO110	1 ± 0
	P4	571675	6685841	2015	Mapping	OPPO114	2 ± 0
	P4	571708	6685891	2015	Mapping	OPPO115	1 ± 0
	P4	571718	6685976	2015	Mapping	OPPO116	10 ± 0
	P4	571725	6686021	2015	Mapping	OPPO117	3 ± 0
	P4	568813	6688418	2015	Mapping	OPPO122	95 ± 0
	P4	568656	6688422	2015	Mapping	OPPO123	150 ± 0
	P4	568913	6688501	2015	Mapping	OPPO124	60 ± 0
	P4	568908	6688883	2015	Mapping	OPPO128	13 ± 0
	P4	568860	6688922	2015	Mapping	OPPO129	3 ± 0
	P4	568838	6688938	2015	Mapping	OPPO131	2 ± 0
	P4	569153	6688955	2015	Mapping	OPPO132	3 ± 0
	P4	568962	6689368	2015	Mapping	OPPO135	64 ± 0
Grevillea secunda (continued)	P4	569427	6689385	2015	Mapping	OPPO136	37 ± 0
	P4	569344	6689412	2015	Mapping	OPPO137	15 ± 0
	P4	569172	6689436	2015	Mapping	OPPO138	350 ± 0
	P4	569087	6689447	2015	Mapping	OPPO139	75 ± 0
	P4	566291	6689774	2015	Mapping	OPPO142	2 ± 0
	P4	565377	6690003	2015	Mapping	OPPO148	2 ± 0
	P4	569451	6689379	2015	Mapping	STAR053	40 ± 0
	P4	569238	6689117	2015	Mapping	STAR054	5 ± 0
	P4	569135	6688807	2015	Mapping	STAR055	22 ± 0
	P4	568826	6688418	2015	Mapping	STAR056	20 ± 0
	P4	571764	6686196	2015	Mapping	STAR058	5 ± 0
	P4	574146	6685250	2015	Mapping	STAR059	11 ± 0
	P4	575504	6685263	2015	Mapping	STAR060	1 ± 0
	P4	576772	6684665	2015	Mapping	STAR061	6 ± 0
	P4	576613	6685435	2015	Mapping	STAR062	2 ± 0
	P4	576757	6685186	2015	Mapping	STAR063	1 ± 0
	P4	577325	6684888	2015	Mapping	STAR064	1 ± 0
	P4	576900	6685472	2015	Mapping	STAR065	2 ± 0
	P4	577568	6685221	2015	Mapping	STAR066	4 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Grevillea secunda (continued)	P4	579557	6685135	2015	Mapping	STAR068	2 ± 0
	P4	581289	6684401	2015	Mapping	STAR070	15 ± 0
Grevillea ?secunda	P4	565805	6689671	2015	Mapping	STAR037	25 ± 0
	P4	565297	6689831	2015	Mapping	STAR038	8 ± 2
	P4	564886	6690041	2015	Mapping	STAR040	4 ± 1.5
	P4	568560	6687762	2015	Mapping	STAR042	4 ± 1.5
	P4	566492	6690233	2015	Mapping	STAR045	25 ± 0
Olearia arida	P4	578936	6682572	2010	Drill Line Clearance	38	2 ± 0
	P4	577246	6675764	2009	Plot	VP014	1 ± 0
	P4	578439	6682503	2009	Drill Holes	Sept288	18 ± 7.5
	P4	578892	6682484	2009	Drill Holes	Aug017	1 ± 0
	P4	579818	6682636	2009	Drill Holes	Sept268	1 ± 0
	P4	580202	6683583	2008	Drill Holes	P2-13	4 ± 1.5
	P4	585748	6685436	2008	Drill Holes	P1-13	4 ± 1.5
	P4	586512	6685888	2008	Drill Holes	P1-06	4 ± 1.5
	P4	557509	6691337	2008	Mapping		4 ± 0
	P4	569369	6694155	2008	Mapping		7 ± 0
	P4	569919	6692686	2008	Mapping		38 ± 12.5
	P4	571241	6691901	2008	Mapping		18 ± 7.5
	P4	574608	6684073	2008	Mapping		1 ± 0
	P4	574653	6683710	2008	Mapping		2 ± 1
	P4	574801	6685408	2008	Mapping		10 ± 0
	P4	575021	6684242	2008	Mapping		1 ± 0
	P4	576760	6682545	2008	Mapping		1 ± 0
	P4	577028	6682398	2008	Mapping		4 ± 0
	P4	577415	6682139	2008	Mapping		8 ± 2
	P4	578432	6682522	2008	Mapping		1 ± 0
	P4	580370	6683693	2008	Mapping		4 ± 1.5
	P4	580872	6682653	2008	Mapping		1 ± 0
	P4	586310	6685169	2008	Mapping		1 ± 0
	P4	585816	6686068	2009	Opportunistic		18 ± 7.5
	P4	576587	6682358	2009	Plot	VP038	4 ± 1.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Olearia arida (continued)	P4	576995	6683577	2009	Plot	VP049	4 ± 1.5
	P4	555825	6690760	2007	Recon		1 ± 0
	P4	557572	6691798	2007	Recon		1 ± 0
	P4	557785	6692165	2007	Recon		1 ± 0
	P4	574700	6683925	2007	Recon		1 ± 0
	P4	574750	6684025	2007	Recon		2 ± 0
	P4	575000	6684280	2007	Recon		2 ± 0
	P4	575759	6680732	2007	Recon		1 ± 0
	P4	576146	6680491	2007	Recon		1 ± 0
	P4	577117	6682501	2007	Recon		1 ± 0
	P4	577482	6682490	2007	Recon		1 ± 0
	P4	568833	6684609	2009	Track Clearance		1 ± 0
	P4	570502	6685026	2009	Track Clearance		1 ± 0
	P4	579244	6685123	2009	Track Clearance		1 ± 0
	P4	585500	6685905	2009	Track Clearance		18 ± 7.5
	P4	584006	6679248	2010	Plot	VP094	4 ± 1.5
	P4	568491	6681992	2010	Plot	VP106	4 ± 1.5
	P4	553870	6688290	2010	Mapping	Veg06a	2 ± 0
	P4	561765	6685429	2010	Plot	VP160	1 ± 0
	P4	584387	6687355	2010	Plot	VP193	18 ± 7.5
	P4	586243	6686281	2010	Plot	VP197	4 ± 1.5
	P4	587384	6685282	2010	Plot	VP199	38 ± 12.5
	P4	582223	6686584	2010	Plot	VP209	4 ± 1.5
	P4	574818	6687928	2010	Mapping	JONE017	1 ± 0
	P4	606598	6699679	2014	Borefields Mapping	BARR011	1 ± 0
	P4	606137	6698271	2014	Borefields Mapping	MURD017	6 ± 0
	P4	606387	6698143	2014	Borefields Mapping	MURD017	11 ± 0
	P4	600749	6697119	2014	Borefields Mapping	MURD025	18 ± 0
	P4	603499	6700846	2014	Borefields Mapping	MURD030	11 ± 0
	P4	606800	6702653	2014	Borefields Mapping	STAR002	1 ± 0
	P4	588021	6688655	2014	Borefields Mapping	STAR032	28 ± 0
	P4	586326	6686901	2014	Borefields Mapping	STAR035	26 ± 0
	P4	567473	6688744	2015	Mapping	STAR041	7 ± 0
	P4	566450	6690549	2015	Mapping	STAR044	56 ± 0
	P4	567665	6690021	2015	Mapping	STAR049	10 ± 0
	P4	573628	6681961	2015	Mapping	OPPO90	5 ± 0
	P4	573958	6684466	2015	Mapping	OPPO98	28 ± 0
	P4	576786	6684605	2015	Mapping	OPPO103	1 ± 0

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Olearia arida (continued)	P4	581140	6684669	2015	Mapping	OPPO105	23 ± 0
	P4	574206	6685104	2015	Mapping	OPPO108	3 ± 0
	P4	569154	6687418	2015	Mapping	OPPO119	3 ± 0
	P4	567485	6688566	2015	Mapping	OPPO126	15 ± 0
	P4	569009	6688675	2015	Mapping	OPPO127	70 ± 0
	P4	568069	6690183	2015	Mapping	OPPO153	1 ± 0
Brunonia ?australis var. A Kimberley (K.F. Kenneally 5452) (formerly *Brunonia ?suffruticosa* ms)	Other	556115	6688192	2010	Plot	VP080	4 ± 1.5
	Other	556302	6681922	2010	Plot	VP142	38 ± 12.5
	Other	557699	6681707	2010	Plot	VP172	1 ± 0
Euphorbia drummondii	Other	558226	6690752	2010	Plot	VP057	1 ± 0
	Other	603128	6697974	2014	Mapping	MURD019	4 ± 1.5
Grevillea ?striata **(AWAITING CONFIRMATION FROM WAH TAXONOMISTS)**	Other	565295	6689732	2015	Mapping	STAR039	8 ± 2
Hakea sp. (LAC 139 13/04/14)	Other	590650	6690511	2014	Borefields Mapping	MURD032	8 ± 0
	Other	587668	6688588	2014	Borefields Mapping	STAR033	1 ± 0
	Other	590575	6690413	2015	Mapping	OPPO154	1 ± 0
	Other	590599	6690463	2015	Mapping	OPPO155	15 ± 0
Hakea sp. (LAC 140 13/04/14)	Other	590086	6689959	2014	Borefields Mapping	MURD032	3 ± 0
	Other	590029	6689984	2015	Mapping	OPPO147	7 ± 0
Leucopogon aff. planifolius	Other	601854	6701929	2014	Borefields Mapping	MURD012	4 ± 0
	Other	601969	6701862	2014	Borefields Mapping	MURD012	2 ± 0
	Other	570431	6671707	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB013/81	2 ± 0
	Other	574191	6674023	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB007/71	1 ± 0
	Other	574848	6674343	2014	Hc survey-VEG SITE SHEET	HIBB009/70	8 ± 0
	Other	574954	6673568	2014	Hc survey-VEG SITE SHEET	HIBB008/74	9 ± 0
	Other	578356	6681674	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB001/30	7 ± 0
	Other	578706	6681493	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB001/30	7 ± 0
	Other	584331	6680252	2014	Hc survey-DUNE TRAVERSE SHEET	8001	13 ± 0
	Other	584551	6677480	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB016/DUNE010	2 ± 0
	Other	584585	6680018	2014	Hc survey-DUNE TRAVERSE SHEET	11001	3 ± 0
	Other	584790	6680152	2014	Hc survey-DUNE TRAVERSE SHEET	9001	5 ± 0
	Other	584930	6676846	2014	Hc survey-DUNE TRAVERSE SHEET	20002	1 ± 0
	Other	588976	6675936	2014	Hc survey-DUNE TRAVERSE SHEET	17002	2 ± 0
	Other	601926	6667522	2014	Hc survey-DUNE TRAVERSE SHEET	OPPO005/DUNE003	1 ± 0
	Other	603624	6668297	2014	Hc survey-DUNE TRAVERSE SHEET	HIBB004	1 ± 0
Ophioglossum polyphyllum	Other	554913	6688213	2010	Plot	VP130	75 ± 25
	Other	603128	6697974	2014	Mapping	MURD019	38 ± 12.5

APPENDIX H: LOCATION OF PRIORITY AND OTHER SPECIES OF INTEREST RECORDED BY MCPL FROM 2007-2015, MULGA ROCK URANIUM PROJECT

Note: P1 - P5 denotes priority flora species (DPaW 2015b); V denotes Vulnerable flora species (DotE 2015c). 'Other' denotes range extensions, new populations, or potential new taxa in the MRUP area; Number of individuals were calculated from the median (*if* recorded as a range), and the error associated with that range.

SPECIES	CONSERVATION STATUS	GDA94 - ZONE 51		SURVEY YEAR	MCPL JOB	SITE	COUNT OF INDIVIDUALS
		EASTING	NORTHING				
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)	Other	602709	6696165	2014	Borefields Mapping	BARR017	1 ± 0
	Other	604153	6698920	2014	Borefields Mapping	MURD016	10 ± 0
	Other	604985	6696523	2014	Borefields Mapping	MURD022	18 ± 7.5
	Other	597641	6697020	2014	Borefields Mapping	MURD027	4 ± 1.5

APPENDIX I: VASCULAR PLANT SPECIES RECORDED BY PERMANENT PLOT (2008-2010) AND RELEVE SITE (2014 & 2015 ONLY) AND VEGETATION COMMUNITY IN MULGA ROCK URANIUM PROJECT AREA

Note: * denotes introduced species; T denotes threatened flora and P1-P5 denote priority flora species (DPaW 2015b); V denotes vulnerable flora at the national conservation status level (DotE 2015c); ^ denotes all specimens variants have been referred to in the appendix as Acacia aneura complex since they have been revised recently and will require identification of fresh material.

SPECIES	SITE AND VEGETATION COMMUNITY																																							
	A1			C1		E1				E2		E3																												
	VP115	VP118	VP119	VP057	VP063	VP070	VP102	VP116	VP117	VP065A	VP128	BARR003	BARR005	BARR007	BARR008	BARR009	BARR011	BARR022	MURD007	MURD008	MURD016	MURD017	MURD023	MURD025	MURD026	MURD032	MURD033	STAR001	STAR002	STAR003	STAR005	STAR006	STAR007	STAR008	STAR021	STAR027	STAR032	STAR035	STAR039	STAR058
Abutilon otocarpum																																								
Acacia acanthoclada																																								
Acacia acanthoclada subsp. *acanthoclada*												x		x				x	x	x			x	x	x			x	x		x									
Acacia burkittii																																								
Acacia colletioides						x	x	x	x	x	x															x				x									x	
Acacia desertorum																																								
Acacia desertorum var. *desertorum*										x		x	x		x				x	x			x			x		x	x	x	x			x		x	x			
Acacia effusifolia																																								
Acacia fragilis									x												x			x	x							x								
Acacia helmsiana										x		x	x				x		x	x	x	x	x	x		x	x	x	x		x	x	x	x	x	x	x		x	x
Acacia hemiteles										x																														
Acacia heteroneura																																								
Acacia heteroneura var. *jutsonii*																																								
Acacia inaequiloba						x																																		
Acacia ?incurvaneura																									x															
Acacia jennerae																									x														x	
Acacia kempeana																																								
Acacia ligulata	x					x	x	x	x		x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x		x	x	x		x	x	x	x		
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)																																								
Acacia ?prainii															x					x										x				x						
Acacia rigens					x																																		x	x
Acacia section Juliflorae	x	x	x					x	x		x																													
Acacia sibina										x	x															x	x									x		x		
Acacia ?sibirica																																								
Acacia sp.																																								
Acacia tetragonophylla	x			x																																				
Allocasuarina acutivalvis																x							x																	
Allocasuarina acutivalvis subsp. *acutivalvis*					x																																			
Allocasuarina helmsii																																								
Allocasuarina sp.													x		x				x			x														x				
Allocasuarina spinosissima												x								x							x	x	x	x				x						x
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*		x	x								x																													
Alyogyne pinoniana												x	x																		x					x				
Alyogyne sp.																																								
Alyxia buxifolia	x							x			x																			x										
Amphipogon caricinus																																								
Amphipogon caricinus var. *caricinus*																																								
Androcalva melanopetala																x	x	x	x		x	x		x	x	x		x	x			x			x	x	x			x
Anthotroche pannosa												x	x			x					x	x		x				x		x			x							
?Apiaceae sp.																																								
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii																			x		x	x																		x
Aristida contorta																									x															
Aristida holathera																																								
Aristida holathera var. *holathera*													x	x		x												x									x	x		
Aristida sp.																																								
Atriplex vesicaria				x																																				
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)												x													x	x			x						x	x				
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																		x																						
Banksia elderiana																x		x				x							x						x					
Bertya dimerostigma							x			x	x	x	x		x	x				x			x			x			x	x		x	x	x			x	x	x	
Beyeria sulcata															x																									
Beyeria sulcata var. *sulcata*																																								
Bonamia erecta												x	x			x	x	x	x	x	x	x		x	x			x	x		x				x	x	x			x

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	A1			C1		E1				E2		E3																																
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Boronia coerulescens																																										
Brunonia australis													x																													
Brunonia ?australia var. A. Kimberley (K.F. Kenneally 5452)																																									
Callitris preissii										x	x																															
Callitris sp.																																									x
Callitris verrucosa												x		x	x			x		x			x	x	x	x	x	x	x	x			x	x	x	x		x		
Calothamnus gilesii																x		x						x					x			x									
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																									
Cassytha melantha																																									
Cassytha sp.																																									
Casuarinaceae sp.																																									
Caustis dioica																			x			x										x	x							x
Chamaexeros fimbriata																																									
Choretrum chrysanthum																													x												
Chrysitrix distigmatosa												x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x
Chrysocephalum apiculatum																																									
Chrysocephalum puteale																																									
Codonocarpus cotinifolius							x					x																			x										
?*Codonocarpus* sp.																																									
Comesperma scoparium																																									
Comesperma viscidulum (P4)													x			x		x			x		x									x								
Conospermum toddii (P4)																																									
Convolvulus angustissimus				x																																					
Coopernookia strophiolata																																									
Cryptandra aridicola																																									
Cryptandra connata																																									
Cryptandra distigma												x	x		x	x	x		x	x	x		x			x		x	x			x		x	x	x		x		
Cryptandra sp.																																									
?Cyperaceae sp.																																									
Dampiera eriantha (P1)																																									
Dampiera lavandulacea																																									
Dampiera ramosa																										x															
Dampiera stenophylla														x		x			x					x					x			x								
Dampiera tomentosa																																							x		
Daviesia benthamii subsp. *acanthoclona*													x		x																										
Daviesia grahamii																												x													
Daviesia sp.																																									
Daviesia ulicifolia subsp. *aridicola*										x												x			x			x												
Dianella revoluta																			x		x						x				x									
Dianella revoluta var. *divaricata*																																									
Dicrastylis brunnea																																									
Dicrastylis cundeeleensis (P4)							x									x			x																					
Dicrastylis nicholasii													x						x	x																				
Dicrastylis sp.																																									
Dodonaea lobulata	x																																								
Dodonaea microzyga var. *acrolobata*																																									
Dodonaea stenozyga																																									
Duboisia hopwoodii					x																																				
Dysphania kalpari																																									
Enekbatus eremaeus																												x		x						x	x				x
Eragrostis eriopoda																														x											
Eremophila caperata																																									
Eremophila decipiens subsp. *decipiens*	x			x	x				x																																
Eremophila dempsteri																																									
Eremophila forrestii																																									
Eremophila forrestii subsp. *forrestii*																																									
Eremophila glabra							x																																		

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Eremophila latrobei			x																																						
Eremophila latrobei subsp. *latrobei*												x																														
Eremophila ?*longifolia*																																									
Eremophila oppositifolia subsp. *angustifolia*	x							x																																	
Eremophila ?*paisleyi* subsp. *paisleyi*						x																																			
Eremophila platythamnos																																								x	
Eremophila platythamnos subsp. *platythamnos*												x	x	x	x		x			x	x	x		x	x		x	x	x		x	x	x		x	x	x	x			
Eremophila sp.																																									
Eriachne helmsii																	x							x	x					x			x							
Eriachne mucronata																																									
Eucalyptus celastroides subsp. *virella*																																									
Eucalyptus ceratocorys												x				x				x	x		x				x	x					x							
Eucalyptus comitae-vallis							x																																		
Eucalyptus concinna																																									
Eucalyptus cylindrocarpa									x																																
Eucalyptus effusa																																									
Eucalyptus eremicola								x																																	
Eucalyptus ewartiana																																									
Eucalyptus gongylocarpa										x		x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x		
Eucalyptus gracilis										x																															
Eucalyptus horistes										x																x	x								x						
Eucalyptus hypolaena						x	x	x																																	
Eucalyptus leptophylla						x				x					x		x			x		x						x				x								
Eucalyptus mannensis																																									
Eucalyptus mannensis subsp. *mannensis*												x		x	x						x		x	x		x		x	x			x		x				x		
Eucalyptus oleosa subsp. *oleosa*	x																																								
Eucalyptus platycorys																																									
Eucalyptus rigidula																																									
Eucalyptus rosacea																										x															
Eucalyptus sp.																		x	x												x					x	x			
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																									
Eucalyptus trivalva									x		x																														
Eucalyptus youngiana												x			x	x	x						x		x				x	x	x	x	x	x	x				x	
Euphorbia drummondii				x																																				
Exocarpos aphyllus	x							x																																	
Exocarpos sparteus																	x			x												x								
?Fabaceae sp.																																									
Gastrolobium aculeatum																																									
Gastrolobium brevipes																													x												
Glischrocaryon aureum												x	x			x	x		x		x	x	x	x			x	x	x	x		x	x	x		x	x			x	
Gompholobium gompholobioides																x			x				x																		
Gonocarpus confertifolius																																									
Gonocarpus confertifolius var. *confertifolius*																																									
Gonocarpus confertifolius var. *helmsii*																																									x
Goodenia elderi													x			x	x		x		x		x	x				x	x			x								
Goodenia glandulosa																	x				x					x						x								
Goodenia quasilibera																																									
Goodenia ramelii																																									
Goodenia sp.																																									
Goodenia triodiophila												x		x												x			x		x									
Goodenia xanthosperma												x	x	x		x	x		x			x	x	x	x		x	x	x	x			x		x					
Goodeniaceae sp.																																									
Grevillea acacioides																																									
Grevillea acuaria									x																																
Grevillea didymobotrya																																									
Grevillea didymobotrya subsp. *didymobotrya*													x		x			x	x			x		x	x	x			x			x	x		x					
Grevillea juncifolia										x																													x	x
Grevillea juncifolia subsp. ?*temulenta*																																									

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Grevillea juncifolia subsp. *temulenta*													x		x	x		x	x	x	x								x			x		x		x				
Grevillea nematophylla																																								
Grevillea nematophylla subsp. *planicosta*					x																																			
Grevillea pterosperma																																								
Grevillea sarissa																																								
Grevillea sarissa subsp. *sarissa*																																								
Grevillea secunda (P4)																						x			x			x	x						x					x
Grevillea ?*striata*																																						x	
Grevillea sp.																	x																							
Gyrostemon brownii																																								
Gyrostemon racemiger																																								
Gyrostemon ramulosus																																								
Gyrostemon sp.																																								x
Hakea francisiana					x					x		x			x					x			x			x	x	x	x	x	x		x		x	x	x	x	x
Hakea sp. (LAC 139 13/04/14)																																								
Halgania cyanea																																								
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																								
Halgania erecta														x					x				x																	
Halgania ?integerrima																																								
Hannafordia bissillii subsp. *bissillii*												x		x									x						x				x							
Hemiphora elderi																																								
Hemiphora sp.																																								
Hibbertia crispula (P1)																																								
Hibbertia pungens													x			x																							x	
Homalocalyx thryptomenoides										x			x			x				x									x	x				x						
Hybanthus floribundus subsp. *floribundus*																																								
Isotropis canescens (P2)																																								x
Jacksonia arida																																								
?*Jacksonia* sp.																																								
Kennedia prorepens																									x															
Keraudrenia velutina																																								
Keraudrenia velutina subsp. *velutina* ms												x																									x			
Labichea eremaea (P3)																																								
Lamiaceae sp.																																								x
Laxmannia arida																			x									x												
Lechenaultia brevifolia																																								
Lechenaultia striata																																								
Lepidobolus deserti																x		x	x									x							x					x
Lepidosperma sanguinolentum																																								
Leptosema chambersii												x	x					x	x	x		x			x	x	x	x	x	x	x		x		x	x	x			x
Leptospermum fastigiatum																																	x		x					x
Leucopogon cuneifolius																																								
Leucopogon aff. planifolius																																								
Logania nuda													x	x		x			x			x	x	x				x	x			x								
Lomandra leucocephala																																								x
Lomandra leucocephala subsp. *robusta*																					x	x			x								x	x						
Maireana sp.																																								
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																								
Malvaceae sp.																																								
Marianthus bicolor																					x			x					x											
Marianthus sp.																												x												
Marsdenia australis	x																																							
Marsdenia sp.																																								
Melaleuca eleuterostachya																																								
Melaleuca hamata						x	x			x																			x											
Melaleuca leiocarpa																																								
Microcorys macredieana																x			x	x	x		x	x				x				x	x							
?*Microcorys* sp.																																								

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Micromyrtus ?*stenocalyx*																																								
Micromyrtus stenocalyx															x	x				x		x										x		x						
Minuria leptophylla																																								
Mirbelia depressa																																								
Mirbelia seorsifolia												x	x			x			x				x			x		x	x		x									x
?*Mirbelia* sp.																																								
Monotaxis luteiflora																																								
Myrtaceae sp.															x																									
Neurachne alopecuroidea																																								
Neurachne lanigera (P1)																														x										
Newcastelia bracteosa																																								
Newcastelia hexarrhena												x	x			x					x										x									
Newcastelia sp.																																								
Olearia arida (P4)																	x					x							x								x	x		
Olearia exiguifolia	x							x																																
Olearia incana																										x	x									x			x	
Olearia lanuginosa																																	x							
Olearia muelleri																																								
Olearia subspicata																																							x	
Opercularia spermacocea																																								
Ophioglossum polyphyllum																																								
Paspalidium basicladum				x																																				
Persoonia coriacea																x	x				x			x	x				x		x	x		x						
Persoonia pertinax													x							x								x												x
Phebalium brevifolium																																								
Phebalium canaliculatum			x							x	x																													
Phebalium laevigatum											x																												x	
Phebalium sp.																														x										
Phebalium tuberculosum																																								
Philotheca tomentella		x																																						
Phyllanthus erwinii																																								
Phyllota humilis																																								
Phyllota luehmannii																						x																		
Physopsis viscida					x																																			
Pimelea angustifolia																																								
Pimelea subvillifera																																								
Pimelea trichostachya																																								
Pityrodia lepidota												x	x			x	x		x					x				x			x	x								
Pityrodia loricata																						x																		
Platysace trachymenioides																x	x	x			x			x	x		x								x	x	x			
Pluchea dentex					x		x		x																															
Poaceae sp.				x																x											x									
Pomax sp. desert (A.S. George 11968)																																	x							
Prostanthera althoferi subsp. *althoferi*		x																																						
Prostanthera laricoides		x	x																																					
Proteaceae sp.																																								
Psydrax suaveolens		x																																						
Ptilotus blackii (P3)																																								
Ptilotus drummondii																																								
Ptilotus drummondii var. *minor*																																								
Ptilotus nobilis																																								
Ptilotus obovatus																																								
Ptilotus obovatus var. *obovatus*																									x															
Ptilotus sp.																																								
Salsola australis																																								
Santalum acuminatum	x									x			x						x			x				x				x			x	x				x		
Santalum murrayanum																																								
Santalum sp.																																								

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?Santalaceae sp.																																								
Scaevola basedowii											x						x				x												x						
Scaevola parvifolia																																								
Scaevola parvifolia subsp. *parvifolia*																x																							
Scaevola restiacea subsp. *divaricata*																																								
Scaevola spinescens	x		x			x	x	x	x	x																													x	
Schoenus hexandrus																													x											
Schoenus sp.																																								
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																								
Schoenus subaphyllus																																								
Sclerolaena ?*diacantha*				x																																				
Sclerolaena parviflora																																								
Senna artemisioides subsp. *filifolia*	x						x	x																																
Senna artemisioides subsp. *petiolaris*																																								
Senna artemisioides subsp. x *artemisioides*																																								
Senna pleurocarpa																																								
Senna pleurocarpa var. *pleurocarpa*																									x		x	x	x								x			
Solanum plicatile							x																x		x					x	x	x									
Stackhousia megaloptera																x																							
?*Stackhousia* sp.																						x																	
Stylidium induratum																																			x					
Stylidium limbatum														x													x		x											
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)												x																					x		x						
Swainsona sp.				x																																				
Thryptomene biseriata												x									x														x						x	x
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																								
Tricoryne sp. Mullewa (G.J. Keighery 12080)																x					x	x		x																		
Triodia ?*basedowii*														x					x		x	x	x	x	x		x	x	x						x		x	x		
Triodia desertorum	x		x		x	x	x	x	x		x	x	x	x	x	x	x	x		x						x			x	x	x	x	x	x		x			x	x
Triodia rigidissima																																								
Triodia scariosa										x																													
Triodia sp.																																								
Velleia sp.																																								
Verticordia helmsii																x				x														x						
Westringia cephalantha						x				x	x																												
Westringia cephalantha var. *cephalantha*													x												x						x	x			x						
Westringia rigida														x								x				x	x				x									
Xanthorrhoea thorntonii																		x				x																	
Zygophyllum apiculatum				x																																				
Zygophyllum ?*iodocarpum*																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																						
	E3																						E4																
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Abutilon otocarpum																																							
Acacia acanthoclada					x																																		
Acacia acanthoclada subsp. *acanthoclada*						x									x			x																					
Acacia burkittii																																							
Acacia colletioides											x	x											x	x	x	x					x	x		x	x		x	x	
Acacia desertorum											x										x																		
Acacia desertorum var. *desertorum*						x										x																							
Acacia effusifolia																																					x		
Acacia fragilis						x									x							x														x			
Acacia helmsiana				x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x		x			x	x		x			x	x	x	x
Acacia hemiteles						x						x					x	x																	x	x		x	
Acacia heteroneura																																							
Acacia heteroneura var. *jutsonii*																		x	x		x																		
Acacia inaequiloba																						x																	
Acacia ?incurvaneura																																							
Acacia jennerae																							x																
Acacia kempeana														x					x													x							
Acacia ligulata						x	x	x	x		x		x		x		x				x			x			x												
Acacia murrayana												x													x														
Acacia murrayana (narrow phyllode variant)																																							
Acacia ?prainii																																							
Acacia rigens						x	x															x																	
Acacia section Juliflorae																																							
Acacia sibina													x																		x	x						x	
Acacia ?sibirica																								x															
Acacia sp.	x	x			x																					x		x	x										
Acacia tetragonophylla																																						x	
Allocasuarina acutivalvis																																							
Allocasuarina acutivalvis subsp. *acutivalvis*						x		x		x		x		x	x					x										x						x			x
Allocasuarina helmsii											x			x																									
Allocasuarina sp.																																							
Allocasuarina spinosissima	x		x	x	x	x	x		x			x	x	x	x	x		x	x	x							x			x	x	x							
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																							
Aluta maisonneuvei subsp. *auriculata*																																							
Alyogyne pinoniana																	x																						
Alyogyne sp.	x				x																								x										
Alyxia buxifolia																								x	x	x			x					x			x	x	
Amphipogon caricinus																																							
Amphipogon caricinus var. *caricinus*																	x																						
Androcalva melanopetala	x		x	x	x	x			x						x	x			x	x		x														x			
Anthotroche pannosa			x	x				x		x				x	x		x			x																			
?Apiaceae sp.					x																								x										
Aotus sp. Tortile (G.J. Keighery 3767)																																							
Aotus tietkensii		x			x																															x			
Aristida contorta																																							
Aristida holathera																																							
Aristida holathera var. *holathera*																																							
Aristida sp.																																							
Atriplex vesicaria																																							
Austrostipa platychaeta																																							
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)																																							
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																							
Banksia elderiana						x								x																									
Bertya dimerostigma		x			x	x	x	x	x		x	x	x			x	x		x		x		x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x
Beyeria sulcata																																							
Beyeria sulcata var. *sulcata*							x																																
Bonamia erecta			x		x																																		

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Boronia coerulescens																																								
Brunonia australis	x																																							
Brunonia ?*suffruticosa* ms																																								
Callitris preissii						x				x	x	x	x	x	x	x	x		x	x	x	x								x	x	x	x	x	x	x	x	x	x	x
Callitris sp.	x	x			x																							x												
Callitris verrucosa																							x	x	x		x		x											
Calothamnus gilesii				x		x				x				x						x		x																		
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																								
Cassytha melantha																																								
Cassytha sp.																																								
Casuarinaceae sp.																																								
Caustis dioica	x			x		x			x	x				x	x							x																		
Chamaexeros fimbriata																																								
Choretrum chrysanthum																																								
Chrysitrix distigmatosa	x	x	x	x	x	x	x	x	x	x		x		x		x	x	x	x	x	x	x	x							x				x		x		x	
Chrysocephalum apiculatum																																								
Chrysocephalum puteale															x													x												
Codonocarpus cotinifolius																																				x				
?*Codonocarpus* sp.		x			x																																			
Comesperma scoparium																																								
Comesperma viscidulum (P4)																		x																						
Conospermum toddii (P4)															x																									
Convolvulus angustissimus																																								
Coopernookia strophiolata																																x								
Cryptandra aridicola																																								
Cryptandra connata																																								
Cryptandra distigma						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x			x	x	x	x	x		x	x	x	x	x
Cryptandra sp.																																								
?Cyperaceae sp.			x																									x												
Dampiera eriantha (P1)																																								
Dampiera lavandulacea																																								
Dampiera ramosa																																								
Dampiera stenophylla																																								
Dampiera tomentosa																	x																							
Daviesia benthamii subsp. *acanthoclona*													x																											
Daviesia grahamii																																								
Daviesia sp.																																								
Daviesia ulicifolia subsp. *aridicola*																		x																						
Dianella revoluta																																								
Dianella revoluta var. *divaricata*																																								
Dicrastylis brunnea																																								
Dicrastylis cundeeleensis (P4)																	x																			x				
Dicrastylis nicholasii																																								
Dicrastylis sp.																																								
Dodonaea lobulata																																								
Dodonaea microzyga var. *acrolobata*																																								
Dodonaea stenozyga																																								
Duboisia hopwoodii																																				x				
Dysphania kalpari																																								
Enekbatus eremaeus														x																								x		
Eragrostis eriopoda																																								
Eremophila caperata																																								
Eremophila decipiens subsp. *decipiens*																																								
Eremophila dempsteri																																								
Eremophila forrestii																																				x				
Eremophila forrestii subsp. *forrestii*																																								
Eremophila glabra																																				x				

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Eremophila latrobei																																								
Eremophila latrobei subsp. *latrobei*																																								
Eremophila ?longifolia																																								
Eremophila oppositifolia subsp. *angustifolia*																																								
Eremophila ?paisleyi subsp. *paisleyi*																																								
Eremophila platythamnos																							x	x	x															
Eremophila platythamnos subsp. *platythamnos*						x	x	x				x	x				x	x		x	x	x									x		x	x			x		
Eremophila sp.																																			x			x		
Eriachne helmsii																																								
Eriachne mucronata																																								
Eucalyptus celastroides subsp. *virella*						x	x		x	x												x																		
Eucalyptus ceratocorys																																								
Eucalyptus comitae-vallis					x																																			
Eucalyptus concinna																																								
Eucalyptus cylindrocarpa																																								
Eucalyptus effusa																																								
Eucalyptus eremicola																																								
Eucalyptus ewartiana																																								
Eucalyptus gongylocarpa	x	x	x		x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x
Eucalyptus gracilis																																								
Eucalyptus horistes																	x																x							
Eucalyptus hypolaena																																								
Eucalyptus leptophylla														x				x													x									
Eucalyptus mannensis	x		x	x																									x		x						x			
Eucalyptus mannensis subsp. *mannensis*						x	x												x		x		x	x	x	x	x			x								x	x
Eucalyptus oleosa subsp. *oleosa*																																								
Eucalyptus platycorys																																			x					
Eucalyptus rigidula							x						x																											
Eucalyptus rosacea																																								
Eucalyptus sp.		x							x											x																			
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																								
Eucalyptus trivalva																																								
Eucalyptus youngiana		x	x	x		x		x	x	x	x		x			x	x	x	x		x					x	x	x		x				x		x		
Euphorbia drummondii																																								
Exocarpos aphyllus																																								
Exocarpos sparteus																																								
?Fabaceae sp.																																								
Gastrolobium aculeatum																																								
Gastrolobium brevipes																																								
Glischrocaryon aureum	x		x	x		x		x									x			x	x	x						x								x			
Gompholobium gompholobioides																																								
Gonocarpus confertifolius																																								
Gonocarpus confertifolius var. *confertifolius*																																								
Gonocarpus confertifolius var. *helmsii*			x	x																																			
Goodenia elderi	x					x									x		x				x																			
Goodenia glandulosa																																								
Goodenia quasilibera																																								
Goodenia ramelii																																								
Goodenia sp.																																								
Goodenia triodiophila		x																			x		x																
Goodenia xanthosperma			x		x		x		x						x		x			x	x		x						x							x			
Goodeniaceae sp.																																								
Grevillea acacioides																																								
Grevillea acuaria																																								
Grevillea didymobotrya															x							x																	
Grevillea didymobotrya subsp. *didymobotrya*																				x																			
Grevillea juncifolia			x			x	x	x		x	x			x	x	x	x	x	x	x	x	x	x					x		x		x	x	x		x			
Grevillea juncifolia subsp. *?temulenta*																																								

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Grevillea juncifolia subsp. *temulenta*									x																														
Grevillea nematophylla																																							
Grevillea nematophylla subsp. *planicosta*																																							
Grevillea pterosperma																																							
Grevillea sarissa														x								x																	
Grevillea sarissa subsp. *sarissa*																																x							
Grevillea secunda (P4)	x	x	x	x																								x											
Grevillea ?*striata*																																							
Grevillea sp.																																			x				
Gyrostemon brownii																																							
Gyrostemon racemiger																																							
Gyrostemon ramulosus		x	x		x																																		
Gyrostemon sp.	x			x																									x										
Hakea francisiana		x			x	x	x	x	x	x	x		x	x		x		x	x	x	x	x	x	x	x	x			x	x		x	x		x	x			x
Hakea sp. (LAC 139 13/04/14)																																							
Halgania cyanea							x		x									x																						
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																					x																			
Halgania erecta																																							
Halgania ?integerrima																																							
Hannafordia bissillii subsp. *bissillii*																																							
Hemiphora elderi																																							
Hemiphora sp.					x																																		
Hibbertia crispula (P1)																																							
Hibbertia pungens							x																																
Homalocalyx thryptomenoides													x			x		x	x	x																			
Hybanthus floribundus subsp. *floribundus*																																							
Isotropis canescens (P2)		x	x		x																																		
Jacksonia arida															x																								
?*Jacksonia* sp.																								x															
Kennedia prorepens																																							
Keraudrenia velutina													x										x												x				
Keraudrenia velutina subsp. *velutina* ms																																				x			
Labichea eremaea (P3)																																							
Lamiaceae sp.	x	x	x	x	x																																		
Laxmannia arida																				x																			
Lechenaultia brevifolia							x																																
Lechenaultia striata					x																																		
Lepidobolus deserti				x		x		x	x	x				x	x	x				x	x	x	x	x			x	x				x							
Lepidosperma sanguinolentum																																							
Leptosema chambersii			x		x											x	x												x					x		x		x	
Leptospermum fastigiatum						x				x				x		x				x	x	x																x	
Leucopogon cuneifolius																																							
Leucopogon aff. planifolius																																							
Logania nuda	x					x	x							x							x																		
Lomandra leucocephala	x		x	x																		x						x											
Lomandra leucocephala subsp. *robusta*						x	x	x	x	x					x																									
Maireana sp.																																							
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																							
Malvaceae sp.					x																																		
Marianthus bicolor			x																				x																
Marianthus sp.																																							
Marsdenia australis																																							
Marsdenia sp.																																							
Melaleuca eleuterostachya																																							
Melaleuca hamata																																							
Melaleuca leiocarpa																																							
Microcorys macredieana						x	x	x	x	x						x				x																			
?*Microcorys* sp.																																							

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Micromyrtus ?stenocalyx																																								
Micromyrtus stenocalyx						x		x	x	x				x	x					x		x																		
Minuria leptophylla																																								
Mirbelia depressa																																								
Mirbelia seorsifolia					x		x	x	x				x				x	x																						
?*Mirbelia* sp.																																								
Monotaxis luteiflora																																								
Myrtaceae sp.																																								
Neurachne alopecuroidea																																								
Neurachne lanigera (P1)																																								
Newcastelia bracteosa																																								
Newcastelia hexarrhena	x					x				x				x	x							x					x													
Newcastelia sp.																																								
Olearia arida (P4)									x								x						x		x															
Olearia exiguifolia																																								
Olearia incana																					x		x																	
Olearia lanuginosa						x																																		
Olearia muelleri	x				x																						x		x											
Olearia subspicata											x																				x			x						
Opercularia spermacocea	x																																							
Ophioglossum polyphyllum																																								
Paspalidium basicladum																																								
Persoonia coriacea																																								
Persoonia pertinax						x	x		x	x		x		x	x	x	x			x	x	x					x													
Phebalium brevifolium																					x	x								x			x						
Phebalium canaliculatum																																			x		x	x		
Phebalium laevigatum											x													x											x					
Phebalium sp.																				x					x	x														
Phebalium tuberculosum																																								
Philotheca tomentella													x																											
Phyllanthus erwinii					x																																			
Phyllota humilis																																								
Phyllota luehmannii						x			x					x																										
Physopsis viscida																																								
Pimelea angustifolia																																								
Pimelea subvillifera																																								
Pimelea trichostachya																																								
Pityrodia lepidota						x			x	x				x			x			x																				
Pityrodia loricata				x				x							x													x												
Platysace trachymenioides																																								
Pluchea dentex																																								
Poaceae sp.																																								
Pomax sp. desert (A.S. George 11968)																																								
Prostanthera althoferi subsp. *althoferi*																																								
Prostanthera laricoides																																								
Proteaceae sp.				x																																			
Psydrax suaveolens																																								
Ptilotus blackii (P3)																																								
Ptilotus drummondii																							x																	
Ptilotus drummondii var. *minor*																																								
Ptilotus nobilis																																								
Ptilotus obovatus																																								
Ptilotus obovatus var. *obovatus*																																								
Ptilotus sp.																																								
Salsola australis																																								
Santalum acuminatum							x			x			x			x							x							x		x				x	x		
Santalum murrayanum																							x	x	x															
Santalum sp.														x																			x							

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?Santalaceae sp.																																								
Scaevola basedowii	x														x													x												
Scaevola parvifolia																																								
Scaevola parvifolia subsp. *parvifolia*																																								
Scaevola restiacea subsp. *divaricata*																																								
Scaevola spinescens																									x	x					x	x		x			x	x		
Schoenus hexandrus																																								
Schoenus sp.					x																																			
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																								
Schoenus subaphyllus								x									x																x							
Sclerolaena ?*diacantha*																																								
Sclerolaena parviflora																																								
Senna artemisioides subsp. *filifolia*												x														x						x		x						
Senna artemisioides subsp. *petiolaris*																																								
Senna artemisioides subsp. x *artemisioides*																																								
Senna pleurocarpa																																								
Senna pleurocarpa var. *pleurocarpa*																													x											
Solanum plicatile		x			x												x												x											
Stackhousia megaloptera																	x																							
?*Stackhousia* sp.																																								
Stylidium induratum																																								
Stylidium limbatum				x			x							x			x			x																				
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)																						x																	x
Swainsona sp.																																								
Thryptomene biseriata	x		x	x		x		x	x	x					x	x						x						x											
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																								
Tricoryne sp. Mullewa (G.J. Keighery 12080)			x		x	x			x																														
Triodia ?*basedowii*																																								
Triodia desertorum						x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x						x	x	x	x	x		x		x	x	
Triodia rigidissima						x		x	x	x																				x										
Triodia scariosa		x																					x		x	x	x		x					x		x				
Triodia sp.	x			x	x																							x												
Velleia sp.																																								
Verticordia helmsii						x	x	x						x	x	x			x			x											x				x			
Westringia cephalantha						x					x	x					x		x		x													x		x				
Westringia cephalantha var. *cephalantha*																																								
Westringia rigida																		x													x						x		
Xanthorrhoea thorntonii						x									x																									
Zygophyllum apiculatum																																								
Zygophyllum ?*iodocarpum*																																								

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	E5								E6								E7						E8										E9		E10	E11				
	VP003	VP011	VP025	VP046	VP047	VP083	VP138	VP234	VP001	VP006	VP009	VP014	VP044	VP045	VP144	VP156	VP059	VP060	VP132	VP133	VP134	VP167	STAR061	VP012	VP021	VP022	VP029	VP035	VP048	VP049	VP081	VP210	VP072	VP098	VP004	VP074	VP075	VP091	VP107
Abutilon otocarpum																																							
Acacia acanthoclada																																							
Acacia acanthoclada subsp. *acanthoclada*	x					x													x	x				x	x										x				
Acacia burkittii																																							
Acacia colletioides							x	x					x				x				x	x														x				
Acacia desertorum																																							
Acacia desertorum var. *desertorum*		x	x				x				x				x	x	x		x	x	x	x		x	x	x			x				x						x
Acacia effusifolia																																							
Acacia fragilis																x				x	x								x										x
Acacia helmsiana	x	x	x	x	x	x		x	x	x	x	x	x			x	x		x		x			x	x	x	x	x	x	x		x	x			x	x	x
Acacia hemiteles	x					x	x		x	x	x		x	x		x			x		x			x	x	x	x	x	x	x				x		x	x		
Acacia heteroneura																																							
Acacia heteroneura var. *jutsonii*						x									x																	x		x					
Acacia inaequiloba		x							x			x			x																	x							x
Acacia ?incurvaneura																																							
Acacia jennerae																																							
Acacia kempeana							x																									x					x		
Acacia ligulata	x	x		x		x		x					x					x								x				x			x						
Acacia murrayana																																		x					
Acacia murrayana (narrow phyllode variant)																																							
Acacia ?prainii																																							
Acacia rigens	x			x	x			x				x	x									x			x				x	x				x		x			
Acacia section *Juliflorae*																																							
Acacia sibina								x										x																	x				
Acacia ?sibirica																																							
Acacia sp.																							x																
Acacia tetragonophylla																																							
Allocasuarina acutivalvis																																							
Allocasuarina acutivalvis subsp. *acutivalvis*	x		x				x		x			x				x		x	x					x	x	x		x					x	x					
Allocasuarina helmsii																			x		x	x													x				
Allocasuarina sp.															x																									
Allocasuarina spinosissima		x	x		x	x		x	x		x		x									x		x	x	x		x	x	x			x	x		x		x	x
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																							
Aluta maisonneuvei subsp. *auriculata*																						x																	
Alyogyne pinoniana																																							
Alyogyne sp.																								x															
Alyxia buxifolia																																							
Amphipogon caricinus																																							
Amphipogon caricinus var. *caricinus*																															x								
Androcalva melanopetala		x				x					x	x		x					x					x		x	x	x		x	x		x				x		
Anthotroche pannosa																x										x		x											
?Apiaceae sp.																																							
Aotus sp. Tortile (G.J. Keighery 3767)																															x								
Aotus tietkensii																							x																
Aristida contorta																																							
Aristida holathera																																							
Aristida holathera var. *holathera*																																							
Aristida sp.																																							
Atriplex vesicaria																																							
Austrostipa platychaeta																																							
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)																																							
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																							
Banksia elderiana																								x															
Bertya dimerostigma	x	x	x	x			x	x			x	x			x									x	x		x		x			x							x
Beyeria sulcata																																							
Beyeria sulcata var. *sulcata*			x									x													x														
Bonamia erecta																															x								

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Boronia coerulescens																																							
Brunonia australis																																							
Brunonia ?*suffruticosa* ms																																							
Callitris preissii		x		x	x	x	x	x	x		x					x	x			x	x	x					x		x	x		x	x	x		x	x	x	x
Callitris sp.																							x																	
Callitris verrucosa																																							
Calothamnus gilesii		x				x																		x		x		x											
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																							
Cassytha melantha									x																														
Cassytha sp.																																							
Casuarinaceae sp.																																							
Caustis dioica																x													x								x	x	x
Chamaexeros fimbriata																																							
Choretrum chrysanthum																																							
Chrysitrix distigmatosa	x	x	x	x	x	x		x			x	x		x	x					x			x	x	x	x	x	x	x	x	x	x	x	x		x		x	x
Chrysocephalum apiculatum																																							
Chrysocephalum puteale																																							
Codonocarpus cotinifolius																																							
?*Codonocarpus* sp.																							x																
Comesperma scoparium																																							
Comesperma viscidulum (P4)									x								x													x									
Conospermum toddii (P4)																																				x			
Convolvulus angustissimus																																							
Coopernookia strophiolata																																							
Cryptandra aridicola																																							
Cryptandra connata																																							
Cryptandra distigma	x	x	x	x	x	x	x	x			x	x	x	x	x	x	x		x	x	x	x		x	x		x	x	x	x		x	x	x	x		x		x
Cryptandra sp.																																							
?Cyperaceae sp.																																							
Dampiera eriantha (P1)																																							
Dampiera lavandulacea																																x							
Dampiera ramosa																																							
Dampiera stenophylla																																							
Dampiera tomentosa																																							
Daviesia benthamii subsp. *acanthoclona*	x									x						x			x	x	x																		
Daviesia grahamii	x			x					x	x																									x				
Daviesia sp.																																							
Daviesia ulicifolia subsp. *aridicola*							x										x		x													x							
Dianella revoluta							x																													x	x		
Dianella revoluta var. *divaricata*																								x											x				
Dicrastylis brunnea																																							
Dicrastylis cundeeleensis (P4)																																							
Dicrastylis nicholasii																																							
Dicrastylis sp.																							x																
Dodonaea lobulata																																							
Dodonaea microzyga var. *acrolobata*																																							
Dodonaea stenozyga																																							
Duboisia hopwoodii																																							
Dysphania kalpari																																							
Enekbatus eremaeus															x																								
Eragrostis eriopoda																																							
Eremophila caperata													x										x																
Eremophila decipiens subsp. *decipiens*																																							
Eremophila dempsteri																																							
Eremophila forrestii																																							
Eremophila forrestii subsp. *forrestii*																																							
Eremophila glabra																																							

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Eremophila latrobei																																							
Eremophila latrobei subsp. *latrobei*																																							
Eremophila ?*longifolia*																																							
Eremophila oppositifolia subsp. *angustifolia*																																							
Eremophila ?*paisleyi* subsp. *paisleyi*																																							
Eremophila platythamnos																																							
Eremophila platythamnos subsp. *platythamnos*			x	x	x		x	x		x			x				x	x		x	x	x			x				x	x	x	x	x	x	x	x	x		x
Eremophila sp.																					x																			
Eriachne helmsii																																							
Eriachne mucronata																																							
Eucalyptus celastroides subsp. *virella*																		x																						
Eucalyptus ceratocorys																	x							x	x	x	x	x	x											
Eucalyptus comitae-vallis																		x																						
Eucalyptus concinna				x									x	x															x						x					
Eucalyptus cylindrocarpa																																							
Eucalyptus effusa																																							
Eucalyptus eremicola																																							
Eucalyptus ewartiana																																							
Eucalyptus gongylocarpa	x	x		x	x	x	x	x			x				x					x	x		x	x	x	x	x	x	x	x			x	x		x	x	x	
Eucalyptus gracilis																																							
Eucalyptus horistes																	x																							x
Eucalyptus hypolaena																																							
Eucalyptus leptophylla								x								x	x		x	x	x	x														x		x	x
Eucalyptus mannensis																																		x	x				
Eucalyptus mannensis subsp. *mannensis*																											x	x		x									
Eucalyptus oleosa subsp. *oleosa*																																							
Eucalyptus platycorys																																			x		x		
Eucalyptus rigidula		x	x	x	x	x			x	x		x	x	x	x				x	x							x		x			x							
Eucalyptus rosacea																																							
Eucalyptus sp.																								x															
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)	x						x	x		x		x																							x				
Eucalyptus trivalva																																							
Eucalyptus youngiana		x				x																		x	x	x		x	x						x		x		
Euphorbia drummondii																																							
Exocarpos aphyllus																		x			x																		
Exocarpos sparteus																																							
?Fabaceae sp.																																							
Gastrolobium aculeatum																																							
Gastrolobium brevipes																																							
Glischrocaryon aureum								x	x															x				x		x									
Gompholobium gompholobioides																																							
Gonocarpus confertifolius																																							
Gonocarpus confertifolius var. *confertifolius*																																							
Gonocarpus confertifolius var. *helmsii*																																							
Goodenia elderi			x		x			x					x																											
Goodenia glandulosa																																							
Goodenia quasilibera																																							
Goodenia ramelii																																							
Goodenia sp.																																							
Goodenia triodiophila								x																															
Goodenia xanthosperma			x	x	x							x	x	x		x							x		x	x			x	x					x				
Goodeniaceae sp.																																							
Grevillea acacioides																																							
Grevillea acuaria	x									x						x	x	x	x	x	x	x										x	x		x				
Grevillea didymobotrya																																							
Grevillea didymobotrya subsp. *didymobotrya*		x																								x		x											
Grevillea juncifolia		x	x		x	x	x	x	x	x					x	x	x							x	x	x	x		x		x		x	x		x			
Grevillea juncifolia subsp. ?*temulenta*																																							

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Grevillea juncifolia subsp. *temulenta*				x									x																x										
Grevillea nematophylla																						x																	
Grevillea nematophylla subsp. *planicosta*																	x																						
Grevillea pterosperma																																							
Grevillea sarissa	x												x						x								x												
Grevillea sarissa subsp. *sarissa*																			x	x	x												x					x	x
Grevillea secunda (P4)																x							x								x								
Grevillea ?*striata*																																							
Grevillea sp.																																							
Gyrostemon brownii																																							
Gyrostemon racemiger																																							
Gyrostemon ramulosus																							x																
Gyrostemon sp.																																							
Hakea francisiana	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x
Hakea sp. (LAC 139 13/04/14)																																							
Halgania cyanea	x		x	x	x			x			x	x	x	x					x	x	x	x							x						x	x		x	
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																							
Halgania erecta																																							
Halgania ?*integerrima*																																							
Hannafordia bissillii subsp. *bissillii*																																							
Hemiphora elderi																																							
Hemiphora sp.																																							
Hibbertia crispula (P1)																																							
Hibbertia pungens																											x	x											
Homalocalyx thryptomenoides		x	x					x																										x		x			
Hybanthus floribundus subsp. *floribundus*																																							
Isotropis canescens (P2)																							x																
Jacksonia arida																x																							
?*Jacksonia* sp.																																							
Kennedia prorepens																																							
Keraudrenia velutina						x																	x																
Keraudrenia velutina subsp. *velutina* ms																																							
Labichea eremaea (P3)																																							
Lamiaceae sp.																							x																
Laxmannia arida																																							
Lechenaultia brevifolia																																							
Lechenaultia striata																																							
Lepidobolus deserti		x												x	x	x				x	x			x	x	x	x	x	x	x		x	x	x			x	x	x
Lepidosperma sanguinolentum													x			x																								
Leptosema chambersii	x		x			x					x				x					x					x						x	x			x	x			
Leptospermum fastigiatum		x																									x	x											x
Leucopogon cuneifolius												x																												
Leucopogon aff. planifolius																																							
Logania nuda						x						x												x		x			x		x								
Lomandra leucocephala																																							
Lomandra leucocephala subsp. *robusta*						x																				x	x	x	x		x		x				x		
Maireana sp.																																							
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																							
Malvaceae sp.																							x																
Marianthus bicolor						x																				x													
Marianthus sp.																																							
Marsdenia australis																																							
Marsdenia sp.																																							
Melaleuca eleuterostachya																x		x			x																		
Melaleuca hamata										x								x																						
Melaleuca leiocarpa																																							
Microcorys macredieana		x				x										x	x							x	x		x	x	x		x			x					x
?*Microcorys* sp.																																							

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Micromyrtus ?stenocalyx																																							
Micromyrtus stenocalyx											x					x								x	x	x	x	x				x							
Minuria leptophylla																																							
Mirbelia depressa																											x	x											
Mirbelia seorsifolia		x	x	x	x						x	x		x		x			x				x	x	x	x			x	x		x	x			x			
?*Mirbelia* sp.																																							
Monotaxis luteiflora																																							
Myrtaceae sp.																																							
Neurachne alopecuroidea																																							
Neurachne lanigera (P1)																																							
Newcastelia bracteosa																																							
Newcastelia hexarrhena																																							x
Newcastelia sp.																																							
Olearia arida (P4)												x																		x									
Olearia exiguifolia						x	x	x														x																	
Olearia incana					x															x																			x
Olearia lanuginosa																																							x
Olearia muelleri																							x																
Olearia subspicata																x																							
Opercularia spermacocea																																							
Ophioglossum polyphyllum																																							
Paspalidium basicladum																																							
Persoonia coriacea																																							
Persoonia pertinax		x				x						x			x	x	x							x	x	x	x	x	x		x			x					x
Phebalium brevifolium																											x							x					x
Phebalium canaliculatum																																							
Phebalium laevigatum							x																											x				
Phebalium sp.																																							
Phebalium tuberculosum																								x															
Philotheca tomentella																																							
Phyllanthus erwinii																							x																
Phyllota humilis																																							
Phyllota luehmannii	x																											x	x										
Physopsis viscida																																							
Pimelea angustifolia																																							
Pimelea subvillifera																																							
Pimelea trichostachya																																							
Pityrodia lepidota			x									x														x			x										
Pityrodia loricata				x												x													x		x	x							x
Platysace trachymenioides																											x												
Pluchea dentex																																							
Poaceae sp.																																							
Pomax sp. desert (A.S. George 11968)																																							
Prostanthera althoferi subsp. *althoferi*																																							
Prostanthera laricoides																																							
Proteaceae sp.																																							
Psydrax suaveolens																																							
Ptilotus blackii (P3)																																							
Ptilotus drummondii																																							
Ptilotus drummondii var. *minor*																																							
Ptilotus nobilis																																							
Ptilotus obovatus																																							
Ptilotus obovatus var. *obovatus*																																							
Ptilotus sp.																																							
Salsola australis																																							
Santalum acuminatum				x		x		x					x		x	x		x		x				x				x	x	x				x		x			
Santalum murrayanum							x																								x								
Santalum sp.																																	x					x	

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SPECIES	SITE AND VEGETATION COMMUNITY																																							
	E5								E6								E7						E8										E9		E10	E11				
	VP003	VP011	VP025	VP046	VP047	VP083	VP138	VP234	VP001	VP006	VP009	VP014	VP044	VP045	VP144	VP156	VP059	VP060	VP132	VP133	VP134	VP167	STAR061	VP012	VP021	VP022	VP029	VP035	VP048	VP049	VP081	VP210	VP072	VP098	VP004	VP074	VP075	VP091	VP107
?Santalaceae sp.																																							
Scaevola basedowii																																							
Scaevola parvifolia																																							
Scaevola parvifolia subsp. *parvifolia*																																							
Scaevola restiacea subsp. *divaricata*																																							
Scaevola spinescens							x	x					x								x	x																		
Schoenus hexandrus																																							
Schoenus sp.																																							
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																							
Schoenus subaphyllus			x								x			x															x	x			x		x					
Sclerolaena ?*diacantha*																																							
Sclerolaena parviflora																																							
Senna artemisioides subsp. *filifolia*													x																											
Senna artemisioides subsp. *petiolaris*																																							
Senna artemisioides subsp. x *artemisioides*																																							
Senna pleurocarpa																																							
Senna pleurocarpa var. *pleurocarpa*								x																						x										
Solanum plicatile																							x																	
Stackhousia megaloptera																																							
?*Stackhousia* sp.																																							
Stylidium induratum																																							
Stylidium limbatum														x											x					x	x									
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)																																								
Swainsona sp.																x								x		x	x	x												
Thryptomene biseriata																																								x
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																							
Tricoryne sp. Mullewa (G.J. Keighery 12080)		x						x																x					x		x		x						
Triodia ?*basedowii*																																							
Triodia desertorum	x	x	x	x	x	x	x	x				x			x	x	x	x	x	x	x	x		x	x	x	x	x	x	x		x	x	x		x	x	x	x
Triodia rigidissima	x	x		x	x				x	x	x		x	x																					x					
Triodia scariosa								x																																
Triodia sp.																							x																	
Velleia sp.																																							
Verticordia helmsii		x	x					x			x						x							x	x									x						
Westringia cephalantha	x		x	x	x	x			x	x							x		x			x			x					x	x	x	x	x		x			x	x
Westringia cephalantha var. *cephalantha*																																								
Westringia rigida	x			x				x			x		x	x	x	x	x		x	x									x		x	x	x		x	x	x	x	x
Xanthorrhoea thorntonii																																		x						
Zygophyllum apiculatum																																								
Zygophyllum ?*iodocarpum*																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																								
	E12		E13						E14			S1	S2	S3			S4			S5					S6																
	VP018	VP019	BARR016	BARR020	MURD024	STAR016	STAR017	STAR028	MURD019	MURD027	STAR020	VP062	VP068	VP061	VP097	VP108	VP020	VP064	VP200	STAR051	VP067	VP122	VP123	VP127	BARR013	MURD002	MURD010	MURD012	MURD013	MURD014	MURD021	MURD028	MURD031	STAR038	STAR042	STAR045	STAR047	STAR053	STAR055	STAR063
Abutilon otocarpum									x																																
Acacia acanthoclada																																								
Acacia acanthoclada subsp. *acanthoclada*						x	x			x																															
Acacia burkittii																																								
Acacia colletioides																					x																			
Acacia desertorum															x																									
Acacia desertorum var. *desertorum*				x	x	x	x					x					x								x															
Acacia effusifolia																																								
Acacia fragilis			x					x	x									x	x		x				x		x			x		x								
Acacia helmsiana	x	x			x									x			x	x	x		x							x		x			x			x				
Acacia hemiteles	x																					x														x				
Acacia heteroneura																		x																						
Acacia heteroneura var. *jutsonii*														x									x																	
Acacia inaequiloba															x		x																							
Acacia ?incurvaneura																																								
Acacia jennerae																																		x						
Acacia kempeana																																								
Acacia ligulata			x		x	x				x				x							x						x						x	x						
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)									x																															
Acacia ?prainii																																								
Acacia rigens	x																					x																	
Acacia section Juliflorae																																								
Acacia sibina								x					x					x			x	x	x	x																
Acacia ?sibirica																																								
Acacia sp.															x					x																		x	x	x
Acacia tetragonophylla																																								
Allocasuarina acutivalvis																											x	x	x			x	x	x			x			
Allocasuarina acutivalvis subsp. *acutivalvis*														x		x																								
Allocasuarina helmsii						x																x																		
Allocasuarina sp.			x	x				x		x	x																													
Allocasuarina spinosissima	x	x			x		x							x	x	x	x	x							x	x	x	x	x	x		x		x	x	x	x	x		x
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*																																								
Alyogyne pinoniana																																								
Alyogyne sp.									x																															
Alyxia buxifolia																																								
Amphipogon caricinus																																								
Amphipogon caricinus var. *caricinus*																																								
Androcalva melanopetala	x	x	x	x	x	x	x	x		x	x				x		x	x							x	x								x	x			x		x
Anthotroche pannosa			x	x				x		x	x					x			x						x	x	x	x	x	x	x	x	x	x			x		x
?Apiaceae sp.																																								
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii				x																					x															
Aristida contorta									x																															
Aristida holathera																																								
Aristida holathera var. *holathera*																										x		x			x	x	x							
Aristida sp.																																								
Atriplex vesicaria																																								
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)			x				x	x					x			x		x			x																		
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																								
Banksia elderiana		x	x	x	x		x	x						x					x						x	x								x						x
Bertya dimerostigma	x	x				x							x		x					x	x															x	x			
Beyeria sulcata																																								
Beyeria sulcata var. *sulcata*																																								
Bonamia erecta			x	x	x	x	x																												x						

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SPECIES	SITE AND VEGETATION COMMUNITY																																										
	E12		E13						E14			S1	S2	S3			S4			S5					S6																		
	VP018	VP019	BARR016	BARR020	MURD024	STAR016	STAR017	STAR028	MURD019	MURD027	STAR020	VP062	VP068	VP061	VP097	VP108	VP020	VP064	VP200	STAR051	VP067	VP122	VP123	VP127	BARR013	MURD002	MURD010	MURD012	MURD013	MURD014	MURD021	MURD028	MURD031	STAR038	STAR042	STAR045	STAR047	STAR053	STAR055	STAR063
Boronia coerulescens																																										
Brunonia australis																																										
Brunonia ?*suffruticosa* ms																																										
Callitris preissii		x										x			x	x		x			x																				
Callitris sp.																				x						x																
Callitris verrucosa			x	x	x	x	x	x		x	x												x		x			x		x		x			x	x		x	x		
Calothamnus gilesii			x	x	x	x	x	x										x	x				x		x										x	x					
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																															x		x								
Cassytha melantha																																										
Cassytha sp.																																										
Casuarinaceae sp.																																										
Caustis dioica				x	x									x											x	x	x	x	x	x	x	x	x	x	x	x	x		x	
Chamaexeros fimbriata																																										
Choretrum chrysanthum																																										
Chrysitrix distigmatosa		x	x	x	x	x	x	x						x	x	x	x	x			x	x	x		x		x		x					x	x	x	x			x	
Chrysocephalum apiculatum																																										
Chrysocephalum puteale																										x		x	x		x		x								
Codonocarpus cotinifolius																																										
?*Codonocarpus* sp.																																										
Comesperma scoparium							x																																			
Comesperma viscidulum (P4)																																										
Conospermum toddii (P4)																							x			x	x	x	x	x	x		x								
Convolvulus angustissimus																																										
Coopernookia strophiolata																																										
Cryptandra aridicola																																										
Cryptandra connata																																										
Cryptandra distigma	x	x	x	x	x	x	x	x					x	x	x	x	x			x		x	x					x								x		x			
Cryptandra sp.																																				x			x			
?Cyperaceae sp.																											x		x					x		x		x	x		x	
Dampiera eriantha (P1)																										x			x		x		x	x							
Dampiera lavandulacea																																										
Dampiera ramosa				x																					x	x	x				x	x	x							x	
Dampiera stenophylla				x																						x															
Dampiera tomentosa																																										
Daviesia benthamii subsp. *acanthoclona*																																										
Daviesia grahamii							x																x																		
Daviesia sp.																															x											
Daviesia ulicifolia subsp. *aridicola*							x	x		x	x														x				x				x								
Dianella revoluta																																										
Dianella revoluta var. *divaricata*																																										
Dicrastylis brunnea																																										
Dicrastylis cundeeleensis (P4)															x																										
Dicrastylis nicholasii									x																																
Dicrastylis sp.																																										
Dodonaea lobulata																																										
Dodonaea microzyga var. *acrolobata*																																										
Dodonaea stenozyga																																										
Duboisia hopwoodii																																										
Dysphania kalpari									x		x																														
Enekbatus eremaeus					x	x	x	x						x			x	x	x	x	x	x	x	x																	
Eragrostis eriopoda																																										
Eremophila caperata																																										
Eremophila decipiens subsp. *decipiens*									x																																
Eremophila dempsteri																																										
Eremophila forrestii														x																											
Eremophila forrestii subsp. *forrestii*																																										
Eremophila glabra																																										

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Eremophila latrobei																																									
Eremophila latrobei subsp. *latrobei*																																									
Eremophila ?*longifolia*																																									
Eremophila oppositifolia subsp. *angustifolia*																																									
Eremophila ?*paisleyi* subsp. *paisleyi*																																									
Eremophila platythamnos																																									
Eremophila platythamnos subsp. *platythamnos*	x	x				x						x																														
Eremophila sp.																																									
Eriachne helmsii						x																									x										
Eriachne mucronata																																									
Eucalyptus celastroides subsp. *virella*																																									
Eucalyptus ceratocorys					x		x																				x	x		x				x	x		x	x	x	
Eucalyptus comitae-vallis																					x																				
Eucalyptus concinna																																									
Eucalyptus cylindrocarpa																																									
Eucalyptus effusa																						x																			
Eucalyptus eremicola																																									
Eucalyptus ewartiana																																									
Eucalyptus gongylocarpa			x			x	x							x		x				x	x				x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	
Eucalyptus gracilis																																									
Eucalyptus horistes											x												x																		
Eucalyptus hypolaena																																									
Eucalyptus leptophylla									x	x		x											x			x															
Eucalyptus mannensis																																		x							x
Eucalyptus mannensis subsp. *mannensis*																																									
Eucalyptus oleosa subsp. *oleosa*																																									
Eucalyptus platycorys																																									
Eucalyptus rigidula	x	x												x	x		x																								
Eucalyptus rosacea								x																x																	
Eucalyptus sp.				x								x			x					x																					
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																									
Eucalyptus trivalva	x	x													x																										
Eucalyptus youngiana			x	x	x	x	x		x				x	x		x		x		x		x	x	x	x	x	x			x	x	x	x	x		x	x			
Euphorbia drummondii									x																																
Exocarpos aphyllus																																									
Exocarpos sparteus			x			x	x																								x									
?Fabaceae sp.																																									
Gastrolobium aculeatum																																									
Gastrolobium brevipes							x	x																																	
Glischrocaryon aureum				x		x	x	x		x																x	x			x		x	x			x	x		x		x
Gompholobium gompholobioides				x																																					
Gonocarpus confertifolius																																									
Gonocarpus confertifolius var. *confertifolius*																																									
Gonocarpus confertifolius var. *helmsii*																				x																					x
Goodenia elderi																									x		x	x													
Goodenia glandulosa																																									
Goodenia quasilibera																																									
Goodenia ramelii																																									
Goodenia sp.																																									
Goodenia triodiophila																																									
Goodenia xanthosperma	x		x	x						x																												x		
Goodeniaceae sp.																																									
Grevillea acacioides																		x																						
Grevillea acuaria																																									
Grevillea didymobotrya																																									
Grevillea didymobotrya subsp. *didymobotrya*			x	x	x	x	x	x		x											x					x	x	x	x	x	x	x		x						
Grevillea juncifolia	x	x											x	x	x	x	x	x	x		x														x			x			
Grevillea juncifolia subsp. ?*temulenta*																																									

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Grevillea juncifolia subsp. *temulenta*			x	x			x	x																				x		x										
Grevillea nematophylla																																								
Grevillea nematophylla subsp. *planicosta*																																								
Grevillea pterosperma																																								
Grevillea sarissa																																								
Grevillea sarissa subsp. *sarissa*																																								
Grevillea secunda (P4)										x								x	x						x	x						x		x	x	x		x	x	x
Grevillea ?*striata*																																								
Grevillea sp.																																								
Gyrostemon brownii																																								
Gyrostemon racemiger																																								
Gyrostemon ramulosus																													x		x		x							x
Gyrostemon sp.																				x														x		x		x		
Hakea francisiana	x	x	x			x	x	x		x		x		x	x	x	x	x	x	x	x	x	x						x	x			x		x	x	x	x	x	
Hakea sp. (LAC 139 13/04/14)																																								
Halgania cyanea	x																x																							
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																								
Halgania erecta										x																														
Halgania ?*integerrima*																																								
Hannafordia bissillii subsp. *bissillii*						x																																		
Hemiphora elderi																																								
Hemiphora sp.																																				x				
Hibbertia crispula (P1)																																		x						
Hibbertia pungens																									x															
Homalocalyx thryptomenoides								x					x		x			x				x	x	x																
Hybanthus floribundus subsp. *floribundus*																									x	x	x		x		x		x							
Isotropis canescens (P2)																																								
Jacksonia arida															x										x	x	x	x	x	x	x	x	x	x						
?*Jacksonia* sp.																																								
Kennedia prorepens										x																														
Keraudrenia velutina																																								
Keraudrenia velutina subsp. *velutina* ms								x		x																														
Labichea eremaea (P3)																																								
Lamiaceae sp.																				x																	x	x	x
Laxmannia arida																										x														
Lechenaultia brevifolia																		x							x														x
Lechenaultia striata																																								
Lepidobolus deserti	x	x	x	x	x									x		x	x	x	x						x	x		x		x		x	x	x	x	x	x		x	
Lepidosperma sanguinolentum																																								
Leptosema chambersii			x	x	x									x			x	x																		x			x
Leptospermum fastigiatum			x		x			x					x	x	x			x	x			x							x			x				x	x			x
Leucopogon cuneifolius																																								
Leucopogon aff. planifolius																												x												
Logania nuda										x					x		x				x	x					x													
Lomandra leucocephala																										x	x							x		x	x	x	x	x
Lomandra leucocephala subsp. *robusta*														x											x				x	x	x	x	x						
Maireana sp.																																								
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																								
Malvaceae sp.																																								
Marianthus bicolor																											x													
Marianthus sp.																																								
Marsdenia australis																																								
Marsdenia sp.																																								
Melaleuca eleuterostachya				x																					x														
Melaleuca hamata												x												x																
Melaleuca leiocarpa																																								
Microcorys macredieana															x		x								x		x			x	x									
?*Microcorys* sp.																																			x	x					

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SPECIES	SITE AND VEGETATION COMMUNITY																																									
	E12		E13						E14			S1	S2	S3			S4			S5					S6																	
	VP018	VP019	BARR016	BARR020	MURD024	STAR016	STAR017	STAR028	MURD019	MURD027	STAR020	VP062	VP068	VP061	VP097	VP108	VP020	VP064	VP200	STAR051	VP067	VP122	VP123	VP127	BARR013	MURD002	MURD010	MURD012	MURD013	MURD014	MURD021	MURD028	MURD031	STAR038	STAR042	STAR045	STAR047	STAR053	STAR055	STAR063
Micromyrtus ?stenocalyx																																									
Micromyrtus stenocalyx																x	x											x		x										
Minuria leptophylla									x																																
Mirbelia depressa																																									
Mirbelia seorsifolia	x		x			x											x																								
?*Mirbelia* sp.																																									
Monotaxis luteiflora																																									
Myrtaceae sp.																																									
Neurachne alopecuroidea																																									
Neurachne lanigera (P1)																																									
Newcastelia bracteosa																																									
Newcastelia hexarrhena																										x	x	x	x	x	x	x	x	x			x		x	
Newcastelia sp.																										x		x	x	x	x	x	x		x					
Olearia arida (P4)																																									
Olearia exiguifolia																																									
Olearia incana	x											x																													
Olearia lanuginosa																																									
Olearia muelleri																																		x							
Olearia subspicata																																									
Opercularia spermacocea																																									
Ophioglossum polyphyllum									x																																
Paspalidium basicladum																																									
Persoonia coriacea				x	x																				x			x	x	x	x	x	x							
Persoonia pertinax								x						x			x					x				x								x	x	x		x	x	
Phebalium brevifolium															x		x																							
Phebalium canaliculatum													x									x		x																
Phebalium laevigatum													x		x							x																		
Phebalium sp.																				x																				
Phebalium tuberculosum																																									
Philotheca tomentella																																									
Phyllanthus erwinii																																									
Phyllota humilis																																									
Phyllota luehmannii																										x															
Physopsis viscida						x					x																														
Pimelea angustifolia																																									
Pimelea subvillifera																																									
Pimelea trichostachya																																									
Pityrodia lepidota		x																							x															
Pityrodia loricata															x				x							x	x	x		x	x	x	x	x		x			x	x
Platysace trachymenioides				x																						x			x			x							
Pluchea dentex																																									
Poaceae sp.																																									
Pomax sp. desert (A.S. George 11968)																										x		x	x	x	x		x							
Prostanthera althoferi subsp. *althoferi*																																									
Prostanthera laricoides																																									
Proteaceae sp.																																									
Psydrax suaveolens																																									
Ptilotus blackii (P3)																																									
Ptilotus drummondii																																									
Ptilotus drummondii var. *minor*																																									
Ptilotus nobilis																																									
Ptilotus obovatus																																									
Ptilotus obovatus var. *obovatus*																																									
Ptilotus sp.																																			x	x		x			
Salsola australis																																									
Santalum acuminatum		x								x						x												x					x							
Santalum murrayanum																																									
Santalum sp.																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																									
	E12		E13						E14			S1	S2	S3			S4			S5					S6																	
	VP018	VP019	BARR016	BARR020	MURD024	STAR016	STAR017	STAR028	MURD019	MURD027	STAR020	VP062	VP068	VP061	VP097	VP108	VP020	VP064	VP200	STAR051	VP067	VP122	VP123	VP127	BARR013	MURD002	MURD010	MURD012	MURD013	MURD014	MURD021	MURD028	MURD031	STAR038	STAR042	STAR045	STAR047	STAR053	STAR055	STAR063
?Santalaceae sp.								x																																	
Scaevola basedowii																									x	x	x	x	x	x	x	x	x	x	x		x	x	x
Scaevola parvifolia																																									
Scaevola parvifolia subsp. *parvifolia*																																									
Scaevola restiacea subsp. *divaricata*																																									
Scaevola spinescens																																									
Schoenus hexandrus																																									
Schoenus sp.																																									
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)										x																															
Schoenus subaphyllus																																									
Sclerolaena ?*diacantha*																																									
Sclerolaena parviflora									x																																
Senna artemisioides subsp. *filifolia*									x							x																									
Senna artemisioides subsp. *petiolaris*																																									
Senna artemisioides subsp. x *artemisioides*																																									
Senna pleurocarpa																																									
Senna pleurocarpa var. *pleurocarpa*																																									
Solanum plicatile																				x															x			x		
Stackhousia megaloptera																																			x					
?*Stackhousia* sp.																										x				x											
Stylidium induratum						x		x																																	
Stylidium limbatum				x																						x									x					x
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)							x																		x					x		x								x
Swainsona sp.																																									
Thryptomene biseriata				x	x									x	x	x		x							x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																									
Tricoryne sp. Mullewa (G.J. Keighery 12080)																																			x					
Triodia ?*basedowii*			x	x	x			x			x														x	x		x		x			x							
Triodia desertorum		x				x	x		x	x		x	x	x	x	x	x	x	x		x	x	x	x										x	x		x			
Triodia rigidissima	x	x																																							
Triodia scariosa																																				x					
Triodia sp.																				x																		x	x	x
Velleia sp.																																									
Verticordia helmsii		x	x	x		x		x								x	x		x																x		x			
Westringia cephalantha		x																	x																					
Westringia cephalantha var. *cephalantha*																																									
Westringia rigida	x											x										x																			
Xanthorrhoea thorntonii				x	x																				x							x								
Zygophyllum apiculatum																																									
Zygophyllum ?*iodocarpum*																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																							
	S6										S7																								S8					
	STAR067	VP008	VP010	VP013	VP023	VP024	VP033	VP037	VP043	VP051	STAR037	STAR043	STAR046	STAR054	STAR060	STAR068	VP032	VP034	VP041	VP042	VP054	VP056	VP069	VP085	VP136	VP143	VP191	VP195	VP208	VP212	VP217	VP225	VP240	VP242	STAR036	STAR040	STAR066	STAR070	VP005	VP007
Abutilon otocarpum																																								
Acacia acanthoclada														x																										
Acacia acanthoclada subsp. *acanthoclada*		x		x						x										x						x												x	x
Acacia burkittii																																								
Acacia colletioides																													x			x								
Acacia desertorum																					x	x	x							x										
Acacia desertorum var. *desertorum*																	x		x	x					x		x	x							x					
Acacia effusifolia																																								
Acacia fragilis		x	x	x		x	x	x	x	x														x							x	x						x	x
Acacia helmsiana		x	x	x	x	x	x	x	x	x							x								x		x			x		x				x		x		
Acacia hemiteles																									x		x			x										
Acacia heteroneura																																								
Acacia heteroneura var. *jutsonii*																								x		x	x				x	x	x	x						
Acacia inaequiloba				x					x	x															x															
Acacia ?incurvaneura																																								
Acacia jennerae																																				x				
Acacia kempeana																													x											
Acacia ligulata		x		x			x	x	x	x																x					x	x	x					x	x
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)																																								
Acacia ?prainii																																								
Acacia rigens													x																											
Acacia section *Juliflorae*																																								
Acacia sibina											x		x					x											x	x	x			x	x					
Acacia ?sibirica																																								
Acacia sp.											x	x		x	x	x																						x	x		
Acacia tetragonophylla																																								
Allocasuarina acutivalvis																																				x				
Allocasuarina acutivalvis subsp. *acutivalvis*					x	x	x	x	x	x												x																x	x
Allocasuarina helmsii					x																								x										
Allocasuarina sp.																				x																				
Allocasuarina spinosissima	x	x	x	x	x	x	x	x	x					x	x	x	x	x	x	x		x	x		x	x	x		x	x	x		x		x	x		x	x	
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*																																								
Alyogyne pinoniana																																								
Alyogyne sp.											x	x		x																						x				
Alyxia buxifolia																																								
Amphipogon caricinus																				x																				
Amphipogon caricinus var. *caricinus*																												x												
Androcalva melanopetala			x		x	x	x	x	x	x	x	x			x	x		x							x			x		x		x			x	x	x	x	x	
Anthotroche pannosa	x	x	x	x	x	x	x	x	x	x	x				x		x	x										x				x	x			x	x	x	x	x
?Apiaceae sp.												x																												
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii														x	x													x								x				
Aristida contorta																																								
Aristida holathera																																								
Aristida holathera var. *holathera*																																								
Aristida sp.																																								
Atriplex vesicaria																																								
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)																	x	x		x	x	x	x	x											x	x				
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																								
Banksia elderiana				x		x			x	x							x	x	x		x								x				x							
Bertya dimerostigma		x	x	x	x	x							x				x		x	x	x	x						x	x	x		x	x	x	x					
Beyeria sulcata																																								
Beyeria sulcata var. *sulcata*																																							x	
Bonamia erecta											x	x			x	x												x						x	x			x		

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Boronia coerulescens																																									
Brunonia australis											x			x																					x					
Brunonia ?*suffruticosa* ms																																									
Callitris preissii		x	x	x	x	x	x	x	x	x							x	x	x	x		x			x		x		x	x	x	x		x				x		
Callitris sp.	x											x																							x	x			x	
Callitris verrucosa																																									
Calothamnus gilesii	x		x		x	x	x	x	x	x				x											x							x				x	x	x	x
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)		x																																						
Cassytha melantha																																									
Cassytha sp.																																									
Casuarinaceae sp.																																									
Caustis dioica	x	x	x			x	x	x	x	x								x																		x	x	x	x	x
Chamaexeros fimbriata																																									
Choretrum chrysanthum		x																																						x
Chrysitrix distigmatosa		x	x	x	x	x	x			x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		
Chrysocephalum apiculatum																																								
Chrysocephalum puteale		x					x	x	x	x																														
Codonocarpus cotinifolius																																								
?*Codonocarpus* sp.															x	x																								
Comesperma scoparium					x				x																															x
Comesperma viscidulum (P4)																																								
Conospermum toddii (P4)		x	x	x	x	x	x	x	x	x								x																			x	x
Convolvulus angustissimus																																								
Coopernookia strophiolata																																								
Cryptandra aridicola																																								
Cryptandra connata																																								
Cryptandra distigma		x	x	x	x	x	x	x	x	x			x				x		x	x					x				x	x		x			x			x	
Cryptandra sp.																																				x				
?Cyperaceae sp.	x																																			x		x		
Dampiera eriantha (P1)		x	x		x	x	x		x	x																												x	x
Dampiera lavandulacea								x	x																					x									
Dampiera ramosa	x	x		x				x		x																										x		x		
Dampiera stenophylla																																								
Dampiera tomentosa																																								
Daviesia benthamii subsp. *acanthoclona*																																								
Daviesia grahamii											x	x	x						x																					
Daviesia sp.																																								
Daviesia ulicifolia subsp. *aridicola*								x	x	x																														
Dianella revoluta																x													x										
Dianella revoluta var. *divaricata*				x						x																														x
Dicrastylis brunnea																																								
Dicrastylis cundeeleensis (P4)																																								
Dicrastylis nicholasii																																								
Dicrastylis sp.											x																													
Dodonaea lobulata																																								
Dodonaea microzyga var. *acrolobata*																																								
Dodonaea stenozyga																																								
Duboisia hopwoodii																																								
Dysphania kalpari																																								
Enekbatus eremaeus											x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					
Eragrostis eriopoda																																								
Eremophila caperata																																								
Eremophila decipiens subsp. *decipiens*																																								
Eremophila dempsteri																																								
Eremophila forrestii																																								
Eremophila forrestii subsp. *forrestii*																																								
Eremophila glabra																																								

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Eremophila latrobei																																									
Eremophila latrobei subsp. *latrobei*																																									
Eremophila ?longifolia																																									
Eremophila oppositifolia subsp. *angustifolia*																																									
Eremophila ?paisleyi subsp. *paisleyi*																																									
Eremophila platythamnos													x																												
Eremophila platythamnos subsp. *platythamnos*		x																	x	x					x					x		x									
Eremophila sp.																																									
Eriachne helmsii																																									
Eriachne mucronata																																									
Eucalyptus celastroides subsp. *virella*																																									
Eucalyptus ceratocorys		x		x	x	x		x	x	x																										x	x	x	x	x
Eucalyptus comitae-vallis																																									
Eucalyptus concinna																																									
Eucalyptus cylindrocarpa																																									
Eucalyptus effusa																																									
Eucalyptus eremicola																																									
Eucalyptus ewartiana																																									
Eucalyptus gongylocarpa	x	x	x	x	x	x	x	x	x	x		x		x		x	x					x		x	x							x	x		x	x	x	x	x	x
Eucalyptus gracilis																																									
Eucalyptus horistes																																									
Eucalyptus hypolaena																																									
Eucalyptus leptophylla																									x																
Eucalyptus mannensis	x																																			x	x				
Eucalyptus mannensis subsp. *mannensis*														x																											x
Eucalyptus oleosa subsp. *oleosa*																																									
Eucalyptus platycorys																																									
Eucalyptus rigidula																	x																								
Eucalyptus rosacea																																									
Eucalyptus sp.											x									x				x																	
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																									
Eucalyptus trivalva																										x	x			x											
Eucalyptus youngiana	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x					x	x	x	x		x	x							x	x	x	x	x	
Euphorbia drummondii																																									
Exocarpos aphyllus																																									
Exocarpos sparteus																																									
?Fabaceae sp.																																									
Gastrolobium aculeatum																																									
Gastrolobium brevipes																												x													
Glischrocaryon aureum	x					x									x	x												x				x			x	x	x	x	x	
Gompholobium gompholobioides	x								x																															
Gonocarpus confertifolius																																									
Gonocarpus confertifolius var. *confertifolius*											x	x		x																											
Gonocarpus confertifolius var. *helmsii*	x										x	x		x	x																						x	x			
Goodenia elderi	x			x	x	x			x	x				x																						x		x		
Goodenia glandulosa																																									
Goodenia quasilibera																																									
Goodenia ramelii																																									
Goodenia sp.																																									
Goodenia triodiophila																																x									
Goodenia xanthosperma					x					x	x	x		x	x	x																				x					
Goodeniaceae sp.																																				x					
Grevillea acacioides																																									
Grevillea acuaria																																									
Grevillea didymobotrya											x		x							x																x					
Grevillea didymobotrya subsp. *didymobotrya*		x	x	x	x	x	x											x																			x				x
Grevillea juncifolia		x	x	x	x	x	x	x		x	x		x				x		x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x		x			x
Grevillea juncifolia subsp. *?temulenta*																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																									
	S6										S7																												S8					
	STAR067	VP008	VP010	VP013	VP023	VP024	VP033	VP037	VP043	VP051	STAR037	STAR043	STAR046	STAR054	STAR060	STAR068	VP032	VP034	VP041	VP042	VP054	VP056	VP069	VP085	VP136	VP143	VP191	VP195	VP208	VP212	VP217	VP225	VP240	VP242	STAR036	STAR040	STAR066	STAR070	VP005	VP007
Grevillea juncifolia subsp. *temulenta*																																									
Grevillea nematophylla																																									
Grevillea nematophylla subsp. *planicosta*																																									
Grevillea pterosperma																																x									
Grevillea sarissa								x	x	x																																
Grevillea sarissa subsp. *sarissa*																																									
Grevillea secunda (P4)							x	x	x	x	x			x	x	x		x										x								x	x	x		x	
Grevillea ?*striata*																																									
Grevillea sp.																																						x			
Gyrostemon brownii																																									
Gyrostemon racemiger																												x													
Gyrostemon ramulosus								x	x	x					x	x																					x	x		x	
Gyrostemon sp.											x	x		x																						x	x				
Hakea francisiana		x	x	x	x	x		x	x		x	x	x	x	x		x	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x	x			x	
Hakea sp. (LAC 139 13/04/14)																				x					x															
Halgania cyanea																																									
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																									
Halgania erecta																																									
Halgania ?integerrima																																									
Hannafordia bissillii subsp. *bissillii*																																									
Hemiphora elderi														x																											
Hemiphora sp.											x	x																													
Hibbertia crispula (P1)			x						x																																x
Hibbertia pungens																																									
Homalocalyx thryptomenoides											x		x	x			x		x	x	x	x	x		x	x	x		x	x	x	x	x	x	x					
Hybanthus floribundus subsp. *floribundus*		x			x	x		x	x																														x	
Isotropis canescens (P2)											x	x		x	x	x																				x		x			
Jacksonia arida	x	x	x	x	x	x	x	x	x	x								x																				x	x	x
?*Jacksonia* sp.																																									
Kennedia prorepens																																									
Keraudrenia velutina														x	x										x															
Keraudrenia velutina subsp. *velutina* ms																																x								
Labichea eremaea (P3)																												x												
Lamiaceae sp.											x	x		x	x	x																				x		x	x		
Laxmannia arida																																									
Lechenaultia brevifolia	x	x								x																															x
Lechenaultia striata											x	x																									x				
Lepidobolus deserti		x	x	x	x	x	x	x	x	x			x	x			x	x	x	x		x	x	x	x				x		x		x		x	x		x	x
Lepidosperma sanguinolentum				x																																				
Leptosema chambersii											x	x		x		x	x		x	x	x		x	x			x	x			x		x	x	x				
Leptospermum fastigiatum				x			x		x					x	x		x	x	x	x		x	x	x	x	x	x	x	x		x		x		x		x	x	x
Leucopogon cuneifolius							x			x																														x	
Leucopogon aff. planifolius																																									
Logania nuda			x	x	x	x			x	x															x			x												
Lomandra leucocephala	x																																				x	x	x		
Lomandra leucocephala subsp. *robusta*		x	x	x	x	x	x	x	x	x							x								x													x	x
Maireana sp.																																									
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)		x	x			x				x																												x	x
Malvaceae sp.												x																												
Marianthus bicolor																																								x
Marianthus sp.																																								
Marsdenia australis																																								
Marsdenia sp.																																								
Melaleuca eleuterostachya																														x										
Melaleuca hamata																								x						x				x						
Melaleuca leiocarpa																																									
Microcorys macredieana						x				x							x																						x	x
?*Microcorys* sp.																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																									
	S6										S7																												S8					
	STAR067	VP008	VP010	VP013	VP023	VP024	VP033	VP037	VP043	VP051	STAR037	STAR043	STAR046	STAR054	STAR060	STAR068	VP032	VP034	VP041	VP042	VP054	VP056	VP069	VP085	VP136	VP143	VP191	VP195	VP208	VP212	VP217	VP225	VP240	VP242	STAR036	STAR040	STAR066	STAR070	VP005	VP007
Micromyrtus ?stenocalyx																																									
Micromyrtus stenocalyx		x	x	x	x	x	x		x	x							x	x														x	x						x	x
Minuria leptophylla																																									
Mirbelia depressa																																									
Mirbelia seorsifolia																			x	x								x	x				x	x							
?*Mirbelia* sp.												x		x																												
Monotaxis luteiflora											x	x		x																					x							
Myrtaceae sp.																																										
Neurachne alopecuroidea																																									
Neurachne lanigera (P1)																																									
Newcastelia bracteosa																																									
Newcastelia hexarrhena	x	x	x	x	x	x	x	x	x	x																										x				x	
Newcastelia sp.																																									
Olearia arida (P4)																																									
Olearia exiguifolia																																									
Olearia incana																	x															x									
Olearia lanuginosa		x	x	x	x																																			x	x
Olearia muelleri											x	x		x		x																				x					
Olearia subspicata																									x																
Opercularia spermacocea									x	x																														x	
Ophioglossum polyphyllum																																									
Paspalidium basicladum																																									
Persoonia coriacea																																									
Persoonia pertinax		x	x	x	x	x			x	x								x	x									x										x		x
Phebalium brevifolium																																	x	x							
Phebalium canaliculatum																												x													
Phebalium laevigatum																					x	x																			
Phebalium sp.																																									
Phebalium tuberculosum																																									
Philotheca tomentella																																									
Phyllanthus erwinii																																				x					
Phyllota humilis																																									
Phyllota luehmannii						x																																			
Physopsis viscida																																									
Pimelea angustifolia																													x												
Pimelea subvillifera																																									
Pimelea trichostachya																																									
Pityrodia lepidota			x					x	x																			x													
Pityrodia loricata	x	x	x	x	x	x	x			x								x																	x	x	x	x	x	x
Platysace trachymenioides							x										x																			x				x
Pluchea dentex																																									
Poaceae sp.																																									
Pomax sp. desert (A.S. George 11968)		x	x				x	x	x																																
Prostanthera althoferi subsp. *althoferi*																																									
Prostanthera laricoides																																									
Proteaceae sp.																																						x			
Psydrax suaveolens																																									
Ptilotus blackii (P3)																																									
Ptilotus drummondii																																									
Ptilotus drummondii var. *minor*																																									
Ptilotus nobilis																																									
Ptilotus obovatus																																									
Ptilotus obovatus var. *obovatus*																																									
Ptilotus sp.											x																														
Salsola australis																																									
Santalum acuminatum		x				x		x	x																														x	
Santalum murrayanum																																									
Santalum sp.																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																										
	S6										S7																												S8					
	STAR067	VP008	VP010	VP013	VP023	VP024	VP033	VP037	VP043	VP051	STAR037	STAR043	STAR046	STAR054	STAR060	STAR068	VP032	VP034	VP041	VP042	VP054	VP056	VP069	VP085	VP136	VP143	VP191	VP195	VP208	VP212	VP217	VP225	VP240	VP242	STAR036	STAR040	STAR066	STAR070	VP005	VP007
?Santalaceae sp.																																										
Scaevola basedowii	x						x		x		x																								x							
Scaevola parvifolia																																										
Scaevola parvifolia subsp. *parvifolia*																																										
Scaevola restiacea subsp. *divaricata*																																										
Scaevola spinescens																																x										
Schoenus hexandrus																																										
Schoenus sp.												x																							x							
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																										
Schoenus subaphyllus																			x				x						x		x			x								
Sclerolaena ?*diacantha*																																										
Sclerolaena parviflora																																										
Senna artemisioides subsp. *filifolia*																																										
Senna artemisioides subsp. *petiolaris*																																										
Senna artemisioides subsp. x *artemisioides*																																										
Senna pleurocarpa																																										
Senna pleurocarpa var. *pleurocarpa*												x		x																													
Solanum plicatile											x	x		x																					x							
Stackhousia megaloptera		x	x		x	x		x	x	x	x			x																					x		x		x	x		
?*Stackhousia* sp.																																										
Stylidium induratum							x																								x	x		x	x							
Stylidium limbatum																												x														
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)						x																																				
Swainsona sp.																																										
Thryptomene biseriata	x	x	x	x	x	x	x	x	x	x								x					x		x										x	x	x	x	x		
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																										
Tricoryne sp. Mullewa (G.J. Keighery 12080)																																										
Triodia ?*basedowii*																																										
Triodia desertorum		x	x	x	x	x	x	x	x	x	x			x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x			x	x	
Triodia rigidissima																																										
Triodia scariosa													x																			x										
Triodia sp.	x										x				x	x																					x	x				
Velleia sp.											x	x		x														x							x							
Verticordia helmsii			x		x	x	x			x			x	x				x	x	x	x	x	x	x			x		x		x	x		x						x	
Westringia cephalantha																			x	x					x							x									
Westringia cephalantha var. *cephalantha*																																										
Westringia rigida																									x						x										
Xanthorrhoea thorntonii		x			x		x									x	x												x				x					x	x		
Zygophyllum apiculatum																																										
Zygophyllum ?*iodocarpum*																																										

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SPECIES	SITE AND VEGETATION COMMUNITY																																					
	S8														S9																		S10							
	VP015	VP016	VP027	VP028	VP031	VP036	VP039	VP040	VP052	VP082	VP140	VP223	VP236	VP238	BARR015	BARR021	MURD005	MURD006	MURD009	MURD011	MURD015	MURD018	MURD034	STAR004	STAR009	STAR012	STAR019	STAR029	STAR030	STAR031	STAR033	STAR034	BARR001	BARR002	BARR004	BARR006	BARR010	BARR012	BARR014	BARR017
Abutilon otocarpum																																								
Acacia acanthoclada																																								
Acacia acanthoclada subsp. *acanthoclada*		x	x												x		x	x	x			x		x		x			x									x	
Acacia burkittii																																								
Acacia colletioides																									x															
Acacia desertorum																																								
Acacia desertorum var. *desertorum*							x														x				x			x					x		x	x	x		x	x
Acacia effusifolia																																								
Acacia fragilis	x			x	x	x	x	x	x		x	x	x		x						x	x			x	x	x	x			x	x					x		x
Acacia helmsiana	x	x	x		x		x	x	x			x		x		x					x				x	x	x	x						x				x		x
Acacia hemiteles																												x												
Acacia heteroneura																																								
Acacia heteroneura var. *jutsonii*																																								
Acacia inaequiloba						x		x	x		x			x																										
Acacia ?incurvaneura																																								
Acacia jennerae																																								
Acacia kempeana										x	x																													
Acacia ligulata												x	x		x		x		x					x	x		x											x		
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)																																								
Acacia ?prainii																									x															
Acacia rigens														x			x																							
Acacia section Juliflorae																																								
Acacia sibina											x					x				x			x						x	x	x	x								
Acacia ?sibirica																																								
Acacia sp.																																								
Acacia tetragonophylla																																								
Allocasuarina acutivalvis																									x															
Allocasuarina acutivalvis subsp. *acutivalvis*	x			x	x	x	x	x	x		x	x	x																										
Allocasuarina helmsii																		x																					
Allocasuarina sp.																					x		x					x			x				x				
Allocasuarina spinosissima	x	x				x	x	x	x	x		x	x	x																				x		x		x		x	
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*																																								
Alyogyne pinoniana															x																									
Alyogyne sp.																		x	x			x																		
Alyxia buxifolia																																								
Amphipogon caricinus																																								
Amphipogon caricinus var. *caricinus*																																								
Androcalva melanopetala			x	x		x	x	x	x	x	x	x	x	x		x	x				x					x	x	x			x		x	x			x		x	x
Anthotroche pannosa	x		x	x	x	x	x	x	x	x	x	x	x													x	x	x					x	x	x		x		x	x
?Apiaceae sp.																																								
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii																																								
Aristida contorta															x			x			x	x																		
Aristida holathera																																								
Aristida holathera var. *holathera*																										x			x											
Aristida sp.																		x	x											x	x	x							
Atriplex vesicaria																																								
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)								x							x	x			x	x	x	x				x			x					x		x	x		x	
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																								
Banksia elderiana				x			x		x		x	x	x										x											x	x		x	x		x	x
Bertya dimerostigma	x	x	x			x																		x				x												
Beyeria sulcata																																								
Beyeria sulcata var. *sulcata*																																								
Bonamia erecta															x	x	x							x			x					x	x	x	x			x	x	x

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	S8														S9																		S10							
	VP015	VP016	VP027	VP028	VP031	VP036	VP039	VP040	VP052	VP082	VP140	VP223	VP236	VP238	BARR015	BARR021	MURD005	MURD006	MURD009	MURD011	MURD015	MURD018	MURD034	STAR004	STAR009	STAR012	STAR019	STAR029	STAR030	STAR031	STAR033	STAR034	BARR001	BARR002	BARR004	BARR006	BARR010	BARR012	BARR014	BARR017
Boronia coerulescens																																								
Brunonia australis																																								
Brunonia ?*suffruticosa* ms																																								
Callitris preissii	x			x	x	x		x				x	x	x																										
Callitris sp.																																								
Callitris verrucosa																x								x	x		x	x							x					
Calothamnus gilesii	x	x	x	x	x	x	x	x	x		x		x										x			x			x		x		x		x	x	x	x		x
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																								
Cassytha melantha			x																																					
Cassytha sp.																																								
Casuarinaceae sp.																																		x						
Caustis dioica	x		x	x	x	x	x	x	x	x	x	x	x								x													x					x
Chamaexeros fimbriata																																								
Choretrum chrysanthum																																								
Chrysitrix distigmatosa	x	x		x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x
Chrysocephalum apiculatum																		x																						
Chrysocephalum puteale																																								
Codonocarpus cotinifolius																																								
?*Codonocarpus* sp.																																								
Comesperma scoparium									x																															
Comesperma viscidulum (P4)															x				x	x				x		x			x			x								
Conospermum toddii (P4)					x	x	x	x	x	x	x	x																												
Convolvulus angustissimus																																								
Coopernookia strophiolata																																								
Cryptandra aridicola																													x											
Cryptandra connata																																								
Cryptandra distigma		x	x			x	x	x					x	x	x					x	x							x	x					x	x			x	x	
Cryptandra sp.																																								
?Cyperaceae sp.																																								
Dampiera eriantha (P1)																																								
Dampiera lavandulacea										x																														
Dampiera ramosa										x		x																												
Dampiera stenophylla															x					x	x	x				x								x		x		x	x	x
Dampiera tomentosa																																								
Daviesia benthamii subsp. *acanthoclona*																																								
Daviesia grahamii																													x	x										
Daviesia sp.																			x																					
Daviesia ulicifolia subsp. *aridicola*												x																							x		x	x	x	
Dianella revoluta																x	x								x															
Dianella revoluta var. *divaricata*					x																																			
Dicrastylis brunnea																																								
Dicrastylis cundeeleensis (P4)																																								
Dicrastylis nicholasii																																								
Dicrastylis sp.																																								
Dodonaea lobulata																																								
Dodonaea microzyga var. *acrolobata*															x			x				x		x							x									
Dodonaea stenozyga																																								
Duboisia hopwoodii																																								
Dysphania kalpari																																								
Enekbatus eremaeus																							x	x	x	x		x		x	x	x								
Eragrostis eriopoda																x									x															
Eremophila caperata																																								
Eremophila decipiens subsp. *decipiens*																																								
Eremophila dempsteri																																								
Eremophila forrestii																																								
Eremophila forrestii subsp. *forrestii*													x																											
Eremophila glabra																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																							
	S8														S9																				S10							
	VP015	VP016	VP027	VP028	VP031	VP036	VP039	VP040	VP052	VP082	VP140	VP223	VP236	VP238	BARR015	BARR021	MURD005	MURD006	MURD009	MURD011	MURD015	MURD018	MURD034	STAR004	STAR009	STAR012	STAR019	STAR029	STAR030	STAR031	STAR033	STAR034	BARR001	BARR002	BARR004	BARR006	BARR010	BARR012	BARR014	BARR017
Eremophila latrobei																																								
Eremophila latrobei subsp. *latrobei*																																								
Eremophila ?*longifolia*																																								
Eremophila oppositifolia subsp. *angustifolia*																																								
Eremophila ?*paisleyi* subsp. *paisleyi*																																								
Eremophila platythamnos																																								
Eremophila platythamnos subsp. *platythamnos*														x			x						x	x				x				x								
Eremophila sp.																																								
Eriachne helmsii																x						x		x	x							x								
Eriachne mucronata																																								
Eucalyptus celastroides subsp. *virella*																																								
Eucalyptus ceratocorys	x	x	x					x	x		x	x	x																												
Eucalyptus comitae-vallis																																								
Eucalyptus concinna																																								
Eucalyptus cylindrocarpa																																								
Eucalyptus effusa																																								
Eucalyptus eremicola																																								
Eucalyptus ewartiana																x																				x	x			
Eucalyptus gongylocarpa	x	x	x	x		x	x	x	x	x		x		x					x						x		x							x				x		
Eucalyptus gracilis																																								
Eucalyptus horistes																												x			x								
Eucalyptus hypolaena																																								
Eucalyptus leptophylla														x	x																						x			
Eucalyptus mannensis																																								
Eucalyptus mannensis subsp. *mannensis*			x	x																						x								x					
Eucalyptus oleosa subsp. *oleosa*																																								
Eucalyptus platycorys							x										x	x																						
Eucalyptus rigidula																																								
Eucalyptus rosacea																					x																			
Eucalyptus sp.										x					x								x							x										
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																								
Eucalyptus trivalva																																								
Eucalyptus youngiana	x	x	x	x	x	x	x	x	x	x		x	x							x			x	x									x	x	x			x		x
Euphorbia drummondii																																								
Exocarpos aphyllus																																								
Exocarpos sparteus																	x									x									x					
?Fabaceae sp.																				x																				
Gastrolobium aculeatum	x																																							
Gastrolobium brevipes																																			x					
Glischrocaryon aureum										x		x		x	x		x	x	x	x				x	x	x					x	x	x	x		x	x	x	x
Gompholobium gompholobioides										x									x	x	x								x						x			x	x
Gonocarpus confertifolius																																								
Gonocarpus confertifolius var. *confertifolius*																																								
Gonocarpus confertifolius var. *helmsii*																																								
Goodenia elderi			x			x			x	x		x								x	x					x									x		x	x		x
Goodenia glandulosa																											x													
Goodenia quasilibera																								x																
Goodenia ramelii																																								
Goodenia sp.																													x											
Goodenia triodiophila																					x																			
Goodenia xanthosperma		x													x	x	x	x	x	x	x	x	x	x		x	x	x		x		x			x	x	x	x	x	x
Goodeniaceae sp.																						x																		
Grevillea acacioides																			x	x		x																		
Grevillea acuaria																																								
Grevillea didymobotrya										x																														
Grevillea didymobotrya subsp. *didymobotrya*	x	x		x					x				x	x		x				x									x											
Grevillea juncifolia	x	x	x	x		x	x	x			x	x		x																										
Grevillea juncifolia subsp. ?*temulenta*																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																							
	S8														S9																				S10							
	VP015	VP016	VP027	VP028	VP031	VP036	VP039	VP040	VP052	VP082	VP140	VP223	VP236	VP238	BARR015	BARR021	MURD005	MURD006	MURD009	MURD011	MURD015	MURD018	MURD034	STAR004	STAR009	STAR012	STAR019	STAR029	STAR030	STAR031	STAR033	STAR034	BARR001	BARR002	BARR004	BARR006	BARR010	BARR012	BARR014	BARR017
Grevillea juncifolia subsp. *temulenta*																								x		x							x		x				x	
Grevillea nematophylla																																								
Grevillea nematophylla subsp. *planicosta*															x																									
Grevillea pterosperma																																								
Grevillea sarissa	x					x	x	x																																
Grevillea sarissa subsp. *sarissa*																																								
Grevillea secunda (P4)				x	x	x	x		x		x		x				x				x			x		x							x	x	x	x	x	x	x	x
Grevillea ?*striata*																																								
Grevillea sp.										x																														
Gyrostemon brownii																																								
Gyrostemon racemiger																																								
Gyrostemon ramulosus									x																															
Gyrostemon sp.																																								
Hakea francisiana		x				x						x	x	x										x				x			x									
Hakea sp. (LAC 139 13/04/14)																															x									
Halgania cyanea																																								
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																								
Halgania erecta																																								
Halgania ?integerrima																																								
Hannafordia bissillii subsp. *bissillii*															x	x				x		x	x	x	x	x	x				x									
Hemiphora elderi																																								
Hemiphora sp.																																								
Hibbertia crispula (P1)						x																																		
Hibbertia pungens	x		x		x									x	x						x	x						x												
Homalocalyx thryptomenoides										x	x																													
Hybanthus floribundus subsp. *floribundus*																																								
Isotropis canescens (P2)																																								
Jacksonia arida	x			x	x	x	x	x	x		x																													
?*Jacksonia* sp.																																								
Kennedia prorepens																	x	x	x			x			x		x													
Keraudrenia velutina																																								
Keraudrenia velutina subsp. *velutina* ms																			x					x			x			x										
Labichea eremaea (P3)																																								
Lamiaceae sp.																																								
Laxmannia arida																			x					x									x							
Lechenaultia brevifolia									x			x																												x
Lechenaultia striata										x																														
Lepidobolus deserti	x	x	x	x	x	x	x	x	x		x	x	x	x						x	x												x		x		x	x	x	x
Lepidosperma sanguinolentum																		x																				x		
Leptosema chambersii														x		x	x	x	x					x	x	x	x	x	x	x	x	x	x	x	x	x	x			
Leptospermum fastigiatum	x	x	x	x			x	x	x	x	x	x	x	x		x	x	x	x					x	x								x		x	x	x			x
Leucopogon cuneifolius	x	x																																						
Leucopogon aff. planifolius																																								
Logania nuda				x	x	x		x	x			x		x					x	x						x								x		x	x			
Lomandra leucocephala													x	x																										
Lomandra leucocephala subsp. *robusta*	x		x	x	x	x		x	x	x	x	x																												
Maireana sp.																																								
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																								
Malvaceae sp.																																								
Marianthus bicolor																																								
Marianthus sp.																																								
Marsdenia australis																																								
Marsdenia sp.																																								
Melaleuca eleuterostachya																												x												
Melaleuca hamata															x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x				x	x				
Melaleuca leiocarpa																																								
Microcorys macredieana		x	x	x	x		x	x	x			x	x	x			x																	x						
?*Microcorys* sp.																																								

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Micromyrtus ?stenocalyx										x																													
Micromyrtus stenocalyx	x	x	x	x	x	x	x	x	x		x	x	x								x														x		x	x	x	x
Minuria leptophylla																																								
Mirbelia depressa																							x						x						x					
Mirbelia seorsifolia		x											x	x	x	x	x		x	x	x	x		x	x	x	x		x				x	x	x				x	
?*Mirbelia* sp.																																								
Monotaxis luteiflora																																								
Myrtaceae sp.																																								
Neurachne alopecuroidea																																								
Neurachne lanigera (P1)																x														x										
Newcastelia bracteosa																																								
Newcastelia hexarrhena		x					x	x	x	x		x		x																										
Newcastelia sp.																																								
Olearia arida (P4)																																								
Olearia exiguifolia																																								
Olearia incana																																								
Olearia lanuginosa																																								
Olearia muelleri																																								
Olearia subspicata																																								
Opercularia spermacocea																																								
Ophioglossum polyphyllum																																								
Paspalidium basicladum																																								
Persoonia coriacea																										x	x										x	x		x
Persoonia pertinax	x	x	x	x	x	x	x	x	x	x	x	x	x																											
Phebalium brevifolium		x																																					
Phebalium canaliculatum																																								
Phebalium laevigatum																																								
Phebalium sp.																																								
Phebalium tuberculosum			x																																				
Philotheca tomentella																																								
Phyllanthus erwinii																																								
Phyllota humilis																																								
Phyllota luehmannii				x		x	x	x		x			x																											
Physopsis viscida																																								
Pimelea angustifolia																																			x					
Pimelea subvillifera																																								
Pimelea trichostachya																																								
Pityrodia lepidota							x	x				x							x		x	x				x								x	x	x		x	x	x	x
Pityrodia loricata				x	x	x			x	x	x		x								x	x													x					x
Platysace trachymenioides																					x	x	x							x	x							x	
Pluchea dentex																																								
Poaceae sp.																									x	x			x											
Pomax sp. desert (A.S. George 11968)						x																																		
Prostanthera althoferi subsp. *althoferi*																									x															
Prostanthera laricoides																																								
Proteaceae sp.																																								
Psydrax suaveolens																																								
Ptilotus blackii (P3)																																								
Ptilotus drummondii																																								
Ptilotus drummondii var. *minor*																												x												
Ptilotus nobilis																																								
Ptilotus obovatus																																								
Ptilotus obovatus var. *obovatus*																																								
Ptilotus sp.																																								
Salsola australis																																								
Santalum acuminatum	x				x		x								x		x																							
Santalum murrayanum											x																													
Santalum sp.																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																						
	S8														S9																		S10							
	VP015	VP016	VP027	VP028	VP031	VP036	VP039	VP040	VP052	VP082	VP140	VP223	VP236	VP238	BARR015	BARR021	MURD005	MURD006	MURD009	MURD011	MURD015	MURD018	MURD034	STAR004	STAR009	STAR012	STAR019	STAR029	STAR030	STAR031	STAR033	STAR034	BARR001	BARR002	BARR004	BARR006	BARR010	BARR012	BARR014	BARR017
?Santalaceae sp.																																								
Scaevola basedowii						x				x																														
Scaevola parvifolia																																								
Scaevola parvifolia subsp. *parvifolia*																																								
Scaevola restiacea subsp. *divaricata*																								x			x													
Scaevola spinescens																																								
Schoenus hexandrus																																	x							
Schoenus sp.																																								
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																								x
Schoenus subaphyllus																										x	x													
Sclerolaena ?*diacantha*																																								
Sclerolaena parviflora																																								
Senna artemisioides subsp. *filifolia*																																								
Senna artemisioides subsp. *petiolaris*																																								
Senna artemisioides subsp. x *artemisioides*																								x	x															
Senna pleurocarpa																																								
Senna pleurocarpa var. *pleurocarpa*																			x				x																	
Solanum plicatile																	x		x		x				x															
Stackhousia megaloptera	x																																							
?*Stackhousia* sp.																																								
Stylidium induratum															x				x	x	x	x				x	x	x												
Stylidium limbatum										x										x	x					x						x	x		x			x		x
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)										x					x																			x					
Swainsona sp.																																								
Thryptomene biseriata	x	x	x	x	x	x	x	x	x		x	x	x																						x					
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)												x																											
Tricoryne sp. Mullewa (G.J. Keighery 12080)							x						x																											
Triodia ?*basedowii*																x				x	x		x				x	x		x	x	x	x	x	x		x	x	x
Triodia desertorum	x	x	x	x	x	x	x	x	x		x	x	x	x	x		x	x	x			x		x	x	x		x											
Triodia rigidissima																																								
Triodia scariosa																																								
Triodia sp.										x																														
Velleia sp.																																								
Verticordia helmsii		x		x		x	x		x		x	x	x	x						x	x	x	x			x									x	x	x			
Westringia cephalantha			x																																					
Westringia cephalantha var. *cephalantha*																								x																
Westringia rigida														x			x																							
Xanthorrhoea thorntonii	x				x																																			
Zygophyllum apiculatum																																								
Zygophyllum ?*iodocarpum*																																								

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SPECIES	SITE AND VEGETATION COMMUNITY																																										
	S10																				UN-MAPPED																							
	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
Abutilon otocarpum																																										
Acacia acanthoclada																																										
Acacia acanthoclada subsp. *acanthoclada*		x																x												x		x									
Acacia burkittii																																										
Acacia colletioides																											x		x							x					
Acacia desertorum																																										
Acacia desertorum var. *desertorum*		x	x	x						x				x		x	x	x	x	x		x							x					x							
Acacia effusifolia																																										
Acacia fragilis	x	x				x	x	x	x		x		x	x			x	x	x									x					x		x					
Acacia helmsiana						x						x		x								x	x		x				x	x	x	x	x	x	x		x				
Acacia hemiteles																					x	x		x		x						x									
Acacia heteroneura																																						x	x			
Acacia heteroneura var. *jutsonii*																									x												x			x	
Acacia inaequiloba																														x											
Acacia ?incurvaneura																																										
Acacia jennerae																																										
Acacia kempeana																										x		x	x		x										
Acacia ligulata						x						x			x							x														x					
Acacia murrayana																																				x	x					
Acacia murrayana (narrow phyllode variant)																																										
Acacia ?prainii																																										
Acacia rigens																								x												x					
Acacia section Juliflorae																																										
Acacia sibina																							x	x								x		x							
Acacia ?sibirica																																										
Acacia sp.																																										x
Acacia tetragonophylla																																										
Allocasuarina acutivalvis																																										
Allocasuarina acutivalvis subsp. *acutivalvis*																						x			x										x	x		x	x	x
Allocasuarina helmsii																					x			x					x			x								
Allocasuarina sp.									x										x																						
Allocasuarina spinosissima	x			x		x	x									x						x	x		x				x	x	x		x	x	x		x	x	x	x
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)											x	x	x	x																										
Aluta maisonneuvei subsp. *auriculata*																																										
Alyogyne pinoniana																										x															
Alyogyne sp.																					x																				
Alyxia buxifolia																																										
Amphipogon caricinus																																										
Amphipogon caricinus var. *caricinus*																																										
Androcalva melanopetala	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x			x			x	x		x		x		x			x		x
Anthotroche pannosa	x		x	x	x	x		x	x	x	x		x	x			x	x	x	x		x	x					x					x							
?Apiaceae sp.																																										
Aotus sp. Tortile (G.J. Keighery 3767)					x																														x						
Aotus tietkensii	x			x			x			x	x																														
Aristida contorta													x																												
Aristida holathera																										x		x													
Aristida holathera var. *holathera*					x	x				x		x																												
Aristida sp.																																										
Atriplex vesicaria																																										
Austrostipa platychaeta																											x														
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)			x				x	x	x	x						x	x	x											x							x				
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																										
Banksia elderiana	x		x	x		x	x	x	x		x		x	x	x	x	x	x	x	x															x		x				
Bertya dimerostigma															x							x	x						x		x			x		x	x		x	
Beyeria sulcata																																										
Beyeria sulcata var. *sulcata*																																								x	
Bonamia erecta		x			x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x																				x

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	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
Boronia coerulescens																																										
Brunonia australis																					x																					
Brunonia ?*suffruticosa* ms																												x													
Callitris preissii																						x	x		x				x	x	x			x		x	x		x		
Callitris sp.																																										
Callitris verrucosa		x				x				x		x		x																												
Calothamnus gilesii	x	x	x	x		x	x	x	x	x	x		x	x			x	x	x	x					x								x		x			x	x		
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																									
Cassytha melantha																																									
Cassytha sp.																																									
Casuarinaceae sp.																																									
Caustis dioica	x		x	x		x	x				x														x			x		x			x		x			x		x	
Chamaexeros fimbriata																																									
Choretrum chrysanthum																																									
Chrysitrix distigmatosa	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x			x		x	x	x	x		x	x		x	x	x
Chrysocephalum apiculatum																																									
Chrysocephalum puteale																																									
Codonocarpus cotinifolius																																									
?*Codonocarpus* sp.																																									
Comesperma scoparium																																									
Comesperma viscidulum (P4)												x			x		x																								
Conospermum toddii (P4)																						x																			
Convolvulus angustissimus																																									
Coopernookia strophiolata																																									
Cryptandra aridicola																																									
Cryptandra connata																																									
Cryptandra distigma	x				x	x	x				x	x	x	x		x	x	x			x	x	x		x				x	x	x	x	x	x			x		x		
Cryptandra sp.																																									
?Cyperaceae sp.																																									
Dampiera eriantha (P1)																						x																			
Dampiera lavandulacea																												x							x					
Dampiera ramosa											x			x																											
Dampiera stenophylla	x	x		x	x		x	x		x	x	x				x		x	x	x																				
Dampiera tomentosa																																									
Daviesia benthamii subsp. *acanthoclona*																										x							x								
Daviesia grahamii		x																												x										
Daviesia sp.																																									
Daviesia ulicifolia subsp. *aridicola*			x		x	x	x	x	x	x			x				x	x	x										x											
Dianella revoluta																														x										
Dianella revoluta var. *divaricata*																																									
Dicrastylis brunnea																												x												
Dicrastylis cundeeleensis (P4)																												x												x
Dicrastylis nicholasii						x																																		
Dicrastylis sp.																																									
Dodonaea lobulata																																									
Dodonaea microzyga var. *acrolobata*																																									
Dodonaea stenozyga																																									
Duboisia hopwoodii																																									
Dysphania kalpari																																									
Enekbatus eremaeus			x						x				x						x					x	x					x							x			
Eragrostis eriopoda												x	x																												
Eremophila caperata																																									
Eremophila decipiens subsp. *decipiens*																										x	x														
Eremophila dempsteri																																									
Eremophila forrestii																									x										x			x		x
Eremophila forrestii subsp. *forrestii*																																									
Eremophila glabra																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																																											
	S10																					UN-MAPPED																							
	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
Eremophila latrobei																																											
Eremophila latrobei subsp. *latrobei*																																											
Eremophila ?*longifolia*																																											
Eremophila oppositifolia subsp. *angustifolia*																																											
Eremophila ?*paisleyi* subsp. *paisleyi*																																											
Eremophila platythamnos																																											
Eremophila platythamnos subsp. *platythamnos*	x					x																x						x	x			x		x		x	x					
Eremophila sp.						x				x		x															x															
Eriachne helmsii						x				x		x																															
Eriachne mucronata																																											
Eucalyptus celastroides subsp. *virella*																																											
Eucalyptus ceratocorys						x																											x									
Eucalyptus comitae-vallis																																											
Eucalyptus concinna																																											
Eucalyptus cylindrocarpa																																											
Eucalyptus effusa																																											
Eucalyptus eremicola																																											
Eucalyptus ewartiana																																											
Eucalyptus gongylocarpa						x	x		x	x	x	x		x	x					x	x	x			x			x	x	x	x	x		x	x	x	x		x		
Eucalyptus gracilis																																											
Eucalyptus horistes					x																						x						x									
Eucalyptus hypolaena																																											
Eucalyptus leptophylla		x																								x								x			x				
Eucalyptus mannensis																							x		x			x						x		x			x		
Eucalyptus mannensis subsp. *mannensis*					x																																					
Eucalyptus oleosa subsp. *oleosa*																																											
Eucalyptus platycorys																													x													
Eucalyptus rigidula																					x				x				x	x	x	x									
Eucalyptus rosacea			x					x		x							x	x	x	x																					
Eucalyptus sp.																																											
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)																																											
Eucalyptus trivalva																					x																					
Eucalyptus youngiana	x	x		x		x	x		x	x	x	x	x	x	x		x	x	x		x	x			x								x		x		x	x	x		
Euphorbia drummondii																																											
Exocarpos aphyllus																																											
Exocarpos sparteus		x								x																																
?Fabaceae sp.																																											
Gastrolobium aculeatum																																	x		x							
Gastrolobium brevipes							x	x	x				x						x	x															x						
Glischrocaryon aureum	x	x		x	x	x		x	x	x		x	x	x			x	x	x	x								x						x					x	
Gompholobium gompholobioides				x			x	x									x	x		x								x						x						
Gonocarpus confertifolius																																											
Gonocarpus confertifolius var. *confertifolius*																																											
Gonocarpus confertifolius var. *helmsii*																																											
Goodenia elderi				x			x	x			x	x								x								x											x	
Goodenia glandulosa																																											
Goodenia quasilibera																																											
Goodenia ramelii																																											
Goodenia sp.																																											
Goodenia triodiophila																					x															x					
Goodenia xanthosperma		x			x	x	x	x		x		x	x		x	x	x	x		x	x					x		x							x					
Goodeniaceae sp.																																											
Grevillea acacioides								x																																		
Grevillea acuaria																										x						x	x								
Grevillea didymobotrya																												x														
Grevillea didymobotrya subsp. *didymobotrya*	x		x	x		x	x		x	x	x	x	x	x	x	x		x	x	x																					
Grevillea juncifolia																									x				x			x		x			x		x	x	
Grevillea juncifolia subsp. ?*temulenta*																						x																			

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SPECIES	SITE AND VEGETATION COMMUNITY																																										
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	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
Grevillea juncifolia subsp. *temulenta*		x	x			x	x							x			x		x																					
Grevillea nematophylla																																									
Grevillea nematophylla subsp. *planicosta*																																									
Grevillea pterosperma																																									
Grevillea sarissa					x																																				
Grevillea sarissa subsp. *sarissa*																							x						x	x	x		x								
Grevillea secunda (P4)	x	x	x	x	x	x	x	x	x		x	x	x	x		x	x	x	x	x													x		x			x		x
Grevillea ?*striata*																																									
Grevillea sp.											x																														
Gyrostemon brownii																												x												
Gyrostemon racemiger																																									
Gyrostemon ramulosus																																									
Gyrostemon sp.																					x																				
Hakea francisiana						x			x				x				x				x	x	x		x				x	x	x	x	x	x			x	x		
Hakea sp. (LAC 139 13/04/14)																																									
Halgania cyanea																										x						x									
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																									
Halgania erecta													x																												
Halgania ?integerrima																																									
Hannafordia bissillii subsp. *bissillii*		x							x				x																												
Hemiphora elderi																																									
Hemiphora sp.																					x																				
Hibbertia crispula (P1)																																									
Hibbertia pungens													x				x	x		x										x											x
Homalocalyx thryptomenoides			x																	x			x	x					x		x			x			x			
Hybanthus floribundus subsp. *floribundus*																																									
Isotropis canescens (P2)																					x																				
Jacksonia arida											x																								x				x	x
?*Jacksonia* sp.																																									
Kennedia prorepens																																									
Keraudrenia velutina																																									
Keraudrenia velutina subsp. *velutina* ms													x																					x							
Labichea eremaea (P3)																																									
Lamiaceae sp.																					x																				
Laxmannia arida				x	x					x	x				x			x	x																						
Lechenaultia brevifolia											x																									x					
Lechenaultia striata																																									
Lepidobolus deserti	x		x	x		x	x	x			x					x			x	x	x	x		x					x	x	x	x	x	x		x	x	x	
Lepidosperma sanguinolentum			x		x				x									x														x								
Leptosema chambersii			x										x			x	x	x	x								x			x	x			x			x			
Leptospermum fastigiatum	x		x	x	x		x	x	x	x	x	x	x	x		x	x	x	x	x			x		x				x	x	x			x			x	x	x	
Leucopogon cuneifolius																																									
Leucopogon aff. planifolius																																									
Logania nuda		x	x	x	x	x	x	x	x	x	x	x					x			x		x						x			x									
Lomandra leucocephala																						x																			
Lomandra leucocephala subsp. *robusta*						x	x				x			x	x								x		x			x		x					x						x
Maireana sp.																																									
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																									
Malvaceae sp.																																									
Marianthus bicolor																												x												
Marianthus sp.																																									
Marsdenia australis																																									
Marsdenia sp.																																									
Melaleuca eleuterostachya	x																															x								
Melaleuca hamata		x							x																																
Melaleuca leiocarpa																																									
Microcorys macredieana					x	x	x			x		x						x		x					x					x	x		x		x				x	x
?*Microcorys* sp.																																									

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SPECIES	SITE AND VEGETATION COMMUNITY																			
	S10																			
	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026
Micromyrtus ?stenocalyx																				
Micromyrtus stenocalyx	x		x		x		x	x			x			x			x			x
Minuria leptophylla																				
Mirbelia depressa		x	x			x			x								x			x
Mirbelia seorsifolia				x			x			x			x			x		x	x	x
?*Mirbelia* sp.																				
Monotaxis luteiflora																				
Myrtaceae sp.																				
Neurachne alopecuroidea																				
Neurachne lanigera (P1)												x	x							
Newcastelia bracteosa																				
Newcastelia hexarrhena															x					
Newcastelia sp.																				
Olearia arida (P4)																				
Olearia exiguifolia																				
Olearia incana																				
Olearia lanuginosa																				
Olearia muelleri																				
Olearia subspicata																				
Opercularia spermacocea																				
Ophioglossum polyphyllum																				
Paspalidium basicladum																				
Persoonia coriacea	x	x	x			x		x	x		x					x				
Persoonia pertinax					x												x			x
Phebalium brevifolium																				
Phebalium canaliculatum																				
Phebalium laevigatum																				
Phebalium sp.																				
Phebalium tuberculosum																				
Philotheca tomentella																				
Phyllanthus erwinii																				
Phyllota humilis																				
Phyllota luehmannii				x			x													
Physopsis viscida																				
Pimelea angustifolia											x									
Pimelea subvillifera																				
Pimelea trichostachya																				
Pityrodia lepidota				x	x			x	x	x	x	x			x		x	x	x	x
Pityrodia loricata	x					x	x													
Platysace trachymenioides		x	x					x	x	x	x						x	x	x	
Pluchea dentex																				
Poaceae sp.																				x
Pomax sp. desert (A.S. George 11968)																				
Prostanthera althoferi subsp. *althoferi*																				
Prostanthera laricoides																				
Proteaceae sp.																				
Psydrax suaveolens																				
Ptilotus blackii (P3)																				
Ptilotus drummondii																				
Ptilotus drummondii var. *minor*																				
Ptilotus nobilis																				
Ptilotus obovatus																				
Ptilotus obovatus var. *obovatus*																				
Ptilotus sp.																				
Salsola australis																				
Santalum acuminatum					x				x											
Santalum murrayanum																				
Santalum sp.																				

SPECIES	SITE AND VEGETATION COMMUNITY																			
	UN-MAPPED																			
	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
Micromyrtus ?stenocalyx																				
Micromyrtus stenocalyx					x					x			x		x				x	
Minuria leptophylla																				
Mirbelia depressa																				x
Mirbelia seorsifolia											x				x					
?*Mirbelia* sp.																				
Monotaxis luteiflora	x																			
Myrtaceae sp.																				
Neurachne alopecuroidea																				
Neurachne lanigera (P1)																				
Newcastelia bracteosa																				
Newcastelia hexarrhena		x						x		x					x					
Newcastelia sp.																				
Olearia arida (P4)	x															x				
Olearia exiguifolia																x				
Olearia incana																				
Olearia lanuginosa																				
Olearia muelleri							x													
Olearia subspicata																				
Opercularia spermacocea								x												
Ophioglossum polyphyllum																				
Paspalidium basicladum																				
Persoonia coriacea																				
Persoonia pertinax		x			x				x	x	x	x	x	x	x				x	x
Phebalium brevifolium																			x	
Phebalium canaliculatum				x																
Phebalium laevigatum			x														x		x	
Phebalium sp.																				
Phebalium tuberculosum																				
Philotheca tomentella																				
Phyllanthus erwinii																				
Phyllota humilis																				
Phyllota luehmannii		x						x		x	x									
Physopsis viscida																				
Pimelea angustifolia								x												x
Pimelea subvillifera																				
Pimelea trichostachya	x																			
Pityrodia lepidota								x												
Pityrodia loricata		x	x		x			x		x	x		x		x					x
Platysace trachymenioides																				
Pluchea dentex																				
Poaceae sp.																				
Pomax sp. desert (A.S. George 11968)																				
Prostanthera althoferi subsp. *althoferi*																				
Prostanthera laricoides																				
Proteaceae sp.																				
Psydrax suaveolens																				
Ptilotus blackii (P3)																				
Ptilotus drummondii																				
Ptilotus drummondii var. *minor*																				
Ptilotus nobilis						x														
Ptilotus obovatus																				
Ptilotus obovatus var. *obovatus*																				
Ptilotus sp.	x																			
Salsola australis																				
Santalum acuminatum		x								x	x		x				x			
Santalum murrayanum																				
Santalum sp.														x						

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SPECIES	SITE AND VEGETATION COMMUNITY																																									
	S10																				UN-MAPPED																						
	BARR018	BARR019	MURD001	MURD003	MURD004	MURD020	MURD022	MURD029	MURD030	STAR010	STAR011	STAR013	STAR014	STAR015	STAR018	STAR022	STAR023	STAR024	STAR025	STAR026	STAR044	VP053	VP058	VP071	VP073	VP078	VP079	VP080	VP085A	VP087	VP088	VP089	VP090	VP092	VP093	VP094	VP095	VP096	VP099	VP100
?Santalaceae sp.																																										
Scaevola basedowii					x	x					x																				x										
Scaevola parvifolia																												x														
Scaevola parvifolia subsp. *parvifolia*																																										
Scaevola restiacea subsp. *divaricata*																																										
Scaevola spinescens																																					x					
Schoenus hexandrus		x	x													x			x		x																					
Schoenus sp.																																										
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)							x																																		
Schoenus subaphyllus					x																							x													
Sclerolaena ?*diacantha*																																										
Sclerolaena parviflora																																										
Senna artemisioides subsp. *filifolia*																										x	x															
Senna artemisioides subsp. *petiolaris*																						x																			
Senna artemisioides subsp. x *artemisioides*																																										
Senna pleurocarpa																																										
Senna pleurocarpa var. *pleurocarpa*																																					x					
Solanum plicatile					x								x								x					x															
Stackhousia megaloptera		x									x										x																				
?*Stackhousia* sp.																																										
Stylidium induratum		x						x				x					x				x																				
Stylidium limbatum				x			x	x	x	x						x	x			x								x							x						
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)																		x																							
Swainsona sp.																																										
Thryptomene biseriata	x			x							x												x		x					x			x		x					x
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																										
Tricoryne sp. Mullewa (G.J. Keighery 12080)																												x				x	x								
Triodia ?*basedowii*	x	x	x	x		x	x	x	x			x		x		x	x	x	x	x			x																			
Triodia desertorum					x					x	x	x	x		x							x	x	x	x	x				x	x	x	x	x		x	x	x	x	x	x
Triodia rigidissima																																										
Triodia scariosa																					x																				
Triodia sp.																											x	x						x							
Velleia sp.																																										
Verticordia helmsii			x					x	x					x									x	x												x		x			
Westringia cephalantha																							x						x			x		x							
Westringia cephalantha var. *cephalantha*																																										
Westringia rigida					x																					x		x	x	x	x	x				x					
Xanthorrhoea thorntonii							x		x				x															x					x		x			x			
Zygophyllum apiculatum																																										
Zygophyllum ?*iodocarpum*																																										

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Abutilon otocarpum																																								
Acacia acanthoclada																																								
Acacia acanthoclada subsp. *acanthoclada*									x								x		x					x			x						x					x		
Acacia burkittii																x																								
Acacia colletioides	x	x														x										x		x						x						x
Acacia desertorum						x		x	x						x																									
Acacia desertorum var. *desertorum*		x																				x	x	x		x		x	x			x		x				x	x	
Acacia effusifolia																																								
Acacia fragilis							x																																x	
Acacia helmsiana							x										x						x			x		x	x								x		x	
Acacia hemiteles		x			x						x	x								x								x			x	x						x	x	
Acacia heteroneura							x																																	
Acacia heteroneura var. *jutsonii*									x	x	x																	x												x
Acacia inaequiloba																	x				x										x								
Acacia ?incurvaneura																																								
Acacia jennerae																																								
Acacia kempeana																										x														
Acacia ligulata	x						x										x	x	x				x	x	x					x	x						x			x
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)																																								
Acacia ?prainii																																								
Acacia rigens			x								x										x							x		x										
Acacia section *Juliflorae*	x													x				x																						
Acacia sibina			x	x				x	x	x	x		x	x							x	x														x				x
Acacia ?sibirica																																								
Acacia sp.																																								
Acacia tetragonophylla																																								
Allocasuarina acutivalvis																																								
Allocasuarina acutivalvis subsp. *acutivalvis*							x		x	x							x	x	x				x		x	x	x									x				x
Allocasuarina helmsii	x	x									x																											x			
Allocasuarina sp.																									x																
Allocasuarina spinosissima			x	x		x	x		x				x									x	x										x					x	x	
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*														x																										
Alyogyne pinoniana																														x	x		x	x						
Alyogyne sp.																																								
Alyxia buxifolia					x									x																										
Amphipogon caricinus																																								
Amphipogon caricinus var. *caricinus*						x		x					x					x	x	x	x				x					x	x		x	x	x		x			
Androcalva melanopetala			x										x		x		x		x	x	x		x				x	x		x	x		x	x			x			
Anthotroche pannosa			x									x	x				x		x		x						x	x									x			
?Apiaceae sp.																																								
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii																	x		x					x			x													
Aristida contorta																																					x		x		
Aristida holathera																	x																								
Aristida holathera var. *holathera*																																								
Aristida sp.																																								
Atriplex vesicaria																																								
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)								x	x	x			x		x																					x		x		
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																								
Banksia elderiana									x			x					x		x				x			x	x													
Bertya dimerostigma	x			x	x	x	x	x	x	x	x	x					x					x	x		x					x	x		x	x	x	x		x	x	x
Beyeria sulcata																											x													
Beyeria sulcata var. *sulcata*							x																																	
Bonamia erecta																					x				x	x	x														

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Boronia coerulescens																											x													
Brunonia australis																					x						x				x									
Brunonia ?*suffruticosa* ms																					x																			
Callitris preissii		x	x	x	x	x	x	x		x										x			x						x	x	x	x	x			x	x	x	x	x
Callitris sp.																																									
Callitris verrucosa																																									
Calothamnus gilesii												x							x		x		x			x	x														
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																									
Cassytha melantha																																									
Cassytha sp.																															x									
Casuarinaceae sp.																																									
Caustis dioica																																									
Chamaexeros fimbriata																																									
Choretrum chrysanthum																																									
Chrysitrix distigmatosa			x	x				x	x	x	x	x	x		x		x		x	x	x	x	x	x	x	x	x		x			x		x		x	x	x		x
Chrysocephalum apiculatum																																									
Chrysocephalum puteale																																									
Codonocarpus cotinifolius	x																																		x						
?*Codonocarpus* sp.																																									
Comesperma scoparium																											x														
Comesperma viscidulum (P4)																																									
Conospermum toddii (P4)																																					x				
Convolvulus angustissimus																																									
Coopernookia strophiolata																																									
Cryptandra aridicola																																									
Cryptandra connata														x																											
Cryptandra distigma	x	x	x	x						x	x										x		x						x	x		x	x	x		x	x	x	x	x	
Cryptandra sp.																																									
?Cyperaceae sp.																																									
Dampiera eriantha (P1)																																									
Dampiera lavandulacea																	x				x						x				x		x							
Dampiera ramosa																																									
Dampiera stenophylla																																									
Dampiera tomentosa																	x							x								x								
Daviesia benthamii subsp. *acanthoclona*		x																																	x	x				
Daviesia grahamii			x	x																					x																
Daviesia sp.																																									
Daviesia ulicifolia subsp. *aridicola*																										x															
Dianella revoluta																					x															x				
Dianella revoluta var. *divaricata*																															x									
Dicrastylis brunnea	x																																							
Dicrastylis cundeeleensis (P4)	x											x	x		x		x			x	x			x		x	x			x	x		x							
Dicrastylis nicholasii																																									
Dicrastylis sp.																																			x						
Dodonaea lobulata																																									
Dodonaea microzyga var. *acrolobata*																																									
Dodonaea stenozyga																																									
Duboisia hopwoodii																																									
Dysphania kalpari																																									
Enekbatus eremaeus	x		x	x		x		x	x	x	x	x	x	x	x		x	x		x	x	x		x	x															
Eragrostis eriopoda																																									
Eremophila caperata																																									
Eremophila decipiens subsp. *decipiens*																x												x													
Eremophila dempsteri																																									
Eremophila forrestii														x				x																							
Eremophila forrestii subsp. *forrestii*																																									
Eremophila glabra	x												x																												

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Eremophila latrobei																																								
Eremophila latrobei subsp. *latrobei*														x																										
Eremophila ?*longifolia*																																								
Eremophila oppositifolia subsp. *angustifolia*									x																															
Eremophila ?*paisleyi* subsp. *paisleyi*																																								
Eremophila platythamnos																																								
Eremophila platythamnos subsp. *platythamnos*							x												x				x	x	x	x			x	x	x	x	x	x					x	
Eremophila sp.		x												x																										
Eriachne helmsii																																								
Eriachne mucronata																	x								x															
Eucalyptus celastroides subsp. *virella*																																								
Eucalyptus ceratocorys																							x														x			
Eucalyptus comitae-vallis																																								
Eucalyptus concinna																																								
Eucalyptus cylindrocarpa																																								
Eucalyptus effusa											x																													
Eucalyptus eremicola																																								
Eucalyptus ewartiana																																								
Eucalyptus gongylocarpa		x	x		x	x	x		x	x							x			x			x	x	x					x			x	x			x	x	x	x
Eucalyptus gracilis																																								
Eucalyptus horistes																																								
Eucalyptus hypolaena	x																																							
Eucalyptus leptophylla		x																										x							x	x			x	
Eucalyptus mannensis																									x															
Eucalyptus mannensis subsp. *mannensis*																																								
Eucalyptus oleosa subsp. *oleosa*																																								
Eucalyptus platycorys																														x	x		x							
Eucalyptus rigidula																													x											
Eucalyptus rosacea														x					x																					
Eucalyptus sp.							x											x		x				x		x														
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)	x														x																									
Eucalyptus trivalva																																								
Eucalyptus youngiana				x				x	x	x	x		x				x		x	x	x				x		x							x		x			x	
Euphorbia drummondii																																								
Exocarpos aphyllus																																								
Exocarpos sparteus																																								
?Fabaceae sp.																																								
Gastrolobium aculeatum																																								
Gastrolobium brevipes																																								
Glischrocaryon aureum																	x		x	x						x	x						x	x	x		x			
Gompholobium gompholobioides												x							x							x														
Gonocarpus confertifolius																									x															
Gonocarpus confertifolius var. *confertifolius*																																								
Gonocarpus confertifolius var. *helmsii*																																								
Goodenia elderi												x					x		x		x						x						x		x		x			
Goodenia glandulosa																																								
Goodenia quasilibera																																								
Goodenia ramelii																								x															
Goodenia sp.																																								
Goodenia triodiophila																																								
Goodenia xanthosperma												x					x		x	x	x				x	x	x			x			x	x	x					
Goodeniaceae sp.																																								
Grevillea acacioides																		x	x	x																				
Grevillea acuaria		x																										x							x					
Grevillea didymobotrya																	x									x														
Grevillea didymobotrya subsp. *didymobotrya*																																								
Grevillea juncifolia						x	x	x	x	x	x	x	x									x	x				x	x	x					x			x		x	
Grevillea juncifolia subsp. ?*temulenta*																																								

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Grevillea juncifolia subsp. *temulenta*																																			x					
Grevillea nematophylla																																								
Grevillea nematophylla subsp. *planicosta*																																								
Grevillea pterosperma																																								
Grevillea sarissa																x						x										x				x		x		x
Grevillea sarissa subsp. *sarissa*		x	x	x																	x															x		x		x
Grevillea secunda (P4)			x																x																				
Grevillea ?*striata*																																								
Grevillea sp.																																								
Gyrostemon brownii																	x																							
Gyrostemon racemiger																											x						x		x					
Gyrostemon ramulosus																																								
Gyrostemon sp.																																								
Hakea francisiana	x	x	x	x		x	x		x	x	x	x					x					x	x			x	x	x	x	x	x	x	x			x	x	x	x	x
Hakea sp. (LAC 139 13/04/14)																																								
Halgania cyanea		x															x			x								x		x					x					
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																								
Halgania erecta																																								
Halgania ?*integerrima*																																								
Hannafordia bissillii subsp. *bissillii*																	x	x	x	x	x			x																x
Hemiphora elderi												x					x							x			x			x										
Hemiphora sp.																																								
Hibbertia crispula (P1)																																								
Hibbertia pungens																											x													
Homalocalyx thryptomenoides			x	x							x	x			x							x					x										x			x
Hybanthus floribundus subsp. *floribundus*																																				x				
Isotropis canescens (P2)																																								
Jacksonia arida													x		x											x														
?*Jacksonia* sp.																																								
Kennedia prorepens																								x																
Keraudrenia velutina	x														x			x		x				x									x							
Keraudrenia velutina subsp. *velutina* ms																																								
Labichea eremaea (P3)															x						x																			
Lamiaceae sp.																																								
Laxmannia arida																																								
Lechenaultia brevifolia															x																					x				
Lechenaultia striata																	x																							
Lepidobolus deserti			x	x					x	x							x			x							x											x		
Lepidosperma sanguinolentum				x																																				
Leptosema chambersii			x														x	x	x	x	x					x	x			x	x	x	x	x	x		x	x	x
Leptospermum fastigiatum			x	x								x									x	x					x													
Leucopogon cuneifolius																																								
Leucopogon aff. planifolius																																								
Logania nuda												x	x				x		x		x					x	x								x					
Lomandra leucocephala																																								
Lomandra leucocephala subsp. *robusta*																	x										x						x				x			
Maireana sp.																																								
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																								
Malvaceae sp.																																								
Marianthus bicolor																																								
Marianthus sp.																			x																					
Marsdenia australis																																								
Marsdenia sp.																							x																	
Melaleuca eleuterostachya																																								
Melaleuca hamata													x					x	x																		x			
Melaleuca leiocarpa	x																																							
Microcorys macredieana																										x	x						x							
?*Microcorys* sp.																																								

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Micromyrtus ?stenocalyx																																										
Micromyrtus stenocalyx			x						x														x			x	x												x		
Minuria leptophylla																																										
Mirbelia depressa				x								x															x															
Mirbelia seorsifolia			x	x								x			x		x		x	x	x			x			x					x									
?*Mirbelia* sp.																																										
Monotaxis luteiflora																																										
Myrtaceae sp.																																										
Neurachne alopecuroidea																																										
Neurachne lanigera (P1)																																										
Newcastelia bracteosa																														x	x											
Newcastelia hexarrhena																											x			x						x					
Newcastelia sp.																																										
Olearia arida (P4)					x																													x								
Olearia exiguifolia		x			x																																					
Olearia incana																													x													
Olearia lanuginosa																											x															
Olearia muelleri																												x														
Olearia subspicata																						x															x					
Opercularia spermacocea																																										
Ophioglossum polyphyllum																x																										
Paspalidium basicladum																x																										
Persoonia coriacea																																										
Persoonia pertinax							x										x		x				x						x					x		x	x				
Phebalium brevifolium																																										
Phebalium canaliculatum				x		x			x	x	x			x								x																	x		
Phebalium laevigatum					x	x	x		x	x																														x	
Phebalium sp.																																										
Phebalium tuberculosum										x			x																												
Philotheca tomentella																																										
Phyllanthus erwinii																																										
Phyllota humilis												x			x		x																									
Phyllota luehmannii																								x										x								
Physopsis viscida																																										
Pimelea angustifolia																																										
Pimelea subvillifera																																										
Pimelea trichostachya																																										
Pityrodia lepidota																	x			x				x		x																
Pityrodia loricata												x	x						x	x	x						x			x							x				
Platysace trachymenioides																																										
Pluchea dentex																x																										
Poaceae sp.																																										
Pomax sp. desert (A.S. George 11968)																																										
Prostanthera althoferi subsp. *althoferi*	x													x							x																				
Prostanthera laricoides																																										
Proteaceae sp.																																										
Psydrax suaveolens		x												x																												
Ptilotus blackii (P3)																															x											
Ptilotus drummondii																																										
Ptilotus drummondii var. *minor*																																										
Ptilotus nobilis																																										
Ptilotus obovatus																																										
Ptilotus obovatus var. *obovatus*																																										
Ptilotus sp.																																										
Salsola australis																x																										
Santalum acuminatum				x	x		x																x											x					x		
Santalum murrayanum																																			x					x		
Santalum sp.																																										

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?Santalaceae sp.																																										
Scaevola basedowii																																					x				
Scaevola parvifolia																	x										x														
Scaevola parvifolia subsp. *parvifolia*																																										
Scaevola restiacea subsp. *divaricata*																																									
Scaevola spinescens		x			x																							x													
Schoenus hexandrus																																									
Schoenus sp.																																									
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																									
Schoenus subaphyllus												x	x														x			x			x								
Sclerolaena ?*diacantha*																																									
Sclerolaena parviflora																																									
Senna artemisioides subsp. *filifolia*																x												x		x							x				
Senna artemisioides subsp. *petiolaris*																																									
Senna artemisioides subsp. x *artemisioides*																																									
Senna pleurocarpa	x																																								
Senna pleurocarpa var. *pleurocarpa*																																									
Solanum plicatile	x											x					x			x				x	x		x			x	x		x	x			x				
Stackhousia megaloptera																																		x							
?*Stackhousia* sp.																																									
Stylidium induratum																																									
Stylidium limbatum												x	x				x		x	x	x			x		x	x														
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)																											x														
Swainsona sp.																																									
Thryptomene biseriata				x						x		x					x										x										x				
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																									
Tricoryne sp. Mullewa (G.J. Keighery 12080)				x																																					
Triodia ?*basedowii*																																									
Triodia desertorum		x	x	x		x	x	x	x	x		x	x		x				x	x	x	x	x		x		x		x	x	x	x	x	x	x		x		x	x
Triodia rigidissima																																									
Triodia scariosa					x						x			x														x								x		x			
Triodia sp.																	x							x		x															
Velleia sp.																																									
Verticordia helmsii			x	x				x	x	x	x																									x		x			
Westringia cephalantha		x				x																							x	x	x	x	x		x			x		
Westringia cephalantha var. *cephalantha*																																									
Westringia rigida																				x								x	x				x		x	x		x	x		
Xanthorrhoea thorntonii				x																																					
Zygophyllum apiculatum																x																									
Zygophyllum ?*iodocarpum*																x																									

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	UN-MAPPED																																							
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Abutilon otocarpum																																								
Acacia acanthoclada																																								
Acacia acanthoclada subsp. *acanthoclada*																																					x			
Acacia burkittii																																								
Acacia colletioides											x			x	x	x		x			x					x	x										x			
Acacia desertorum																																								
Acacia desertorum var. *desertorum*	x	x		x					x				x				x				x													x	x					
Acacia effusifolia																																								
Acacia fragilis		x	x			x	x					x	x							x												x			x	x		x	x	
Acacia helmsiana			x	x	x		x		x		x	x	x				x		x				x	x		x			x	x		x		x		x	x	x	x	x
Acacia hemiteles	x														x					x	x	x				x	x	x										x		
Acacia heteroneura																																								
Acacia heteroneura var. *jutsonii*																									x	x					x			x				x	x	
Acacia inaequiloba							x	x		x			x													x		x				x		x		x				
Acacia ?incurvaneura																																								
Acacia jennerae																																								
Acacia kempeana																		x				x		x	x	x				x						x		x		x
Acacia ligulata					x		x										x		x								x	x	x			x					x			
Acacia murrayana																																								
Acacia murrayana (narrow phyllode variant)																																								
Acacia ?prainii																																								
Acacia rigens																		x	x	x		x																		
Acacia section Juliflorae																																								
Acacia sibina																x			x																			x		
Acacia ?sibirica																																								
Acacia sp.										x																														
Acacia tetragonophylla																																								
Allocasuarina acutivalvis																																								
Allocasuarina acutivalvis subsp. *acutivalvis*			x					x				x						x				x			x			x	x	x		x	x	x	x	x	x		x	
Allocasuarina helmsii	x											x								x	x		x				x											x		
Allocasuarina sp.					x					x														x																
Allocasuarina spinosissima	x	x	x	x			x		x			x	x											x		x		x	x		x			x				x	x	x
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)																																								
Aluta maisonneuvei subsp. *auriculata*																																								
Alyogyne pinoniana																							x				x													
Alyogyne sp.																																								
Alyxia buxifolia											x																										x			
Amphipogon caricinus																																								
Amphipogon caricinus var. *caricinus*								x		x													x				x	x	x		x		x							
Androcalva melanopetala			x	x	x	x	x	x	x	x			x							x				x				x			x	x		x	x				x	
Anthotroche pannosa			x		x	x	x					x	x										x	x	x			x			x	x	x		x	x			x	
?Apiaceae sp.																																								
Aotus sp. Tortile (G.J. Keighery 3767)																																								
Aotus tietkensii																													x		x		x							
Aristida contorta																																								
Aristida holathera																																								
Aristida holathera var. *holathera*																																								
Aristida sp.																																								
Atriplex vesicaria																																								
Austrostipa platychaeta																																								
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)		x	x	x			x																									x		x	x					
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)																																								
Banksia elderiana					x	x																		x				x						x	x				x	x
Bertya dimerostigma	x						x		x			x					x		x	x		x	x	x	x	x	x		x	x		x	x				x			x
Beyeria sulcata																																								
Beyeria sulcata var. *sulcata*																																								
Bonamia erecta					x	x		x		x																		x	x		x		x					x		

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Boronia coerulescens																																										
Brunonia australis																															x										
Brunonia ?*suffruticosa* ms					x																																				
Callitris preissii	x			x			x		x	x		x	x				x	x	x			x		x	x	x				x		x		x		x	x	x	x	x	x
Callitris sp.																																										
Callitris verrucosa																																										
Calothamnus gilesii	x		x			x			x				x				x		x									x					x		x	x	x		x		
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)																																									
Cassytha melantha																																									
Cassytha sp.																																									
Casuarinaceae sp.																																									
Caustis dioica		x	x	x	x	x	x		x				x							x				x				x				x		x	x	x			x	
Chamaexeros fimbriata																																							x		
Choretrum chrysanthum																																									
Chrysitrix distigmatosa	x	x		x	x	x	x	x	x	x		x	x				x		x	x			x	x	x	x		x	x		x	x	x	x	x	x	x	x	x	x
Chrysocephalum apiculatum																																									
Chrysocephalum puteale																																									
Codonocarpus cotinifolius																																									
?*Codonocarpus* sp.																																									
Comesperma scoparium																																									
Comesperma viscidulum (P4)																													x												
Conospermum toddii (P4)			x																													x									
Convolvulus angustissimus																																									
Coopernookia strophiolata																																									
Cryptandra aridicola																																									
Cryptandra connata																																									
Cryptandra distigma	x	x		x			x		x	x		x	x				x		x	x		x		x	x	x			x	x		x		x			x	x	x	x
Cryptandra sp.																																									
?Cyperaceae sp.																																									
Dampiera eriantha (P1)																																									
Dampiera lavandulacea								x											x												x		x							
Dampiera ramosa					x	x																																			
Dampiera stenophylla																																									
Dampiera tomentosa																							x				x		x												
Daviesia benthamii subsp. *acanthoclona*																				x	x																				
Daviesia grahamii																																									
Daviesia sp.																																									
Daviesia ulicifolia subsp. *aridicola*																																									
Dianella revoluta																												x		x											
Dianella revoluta var. *divaricata*																																		x							
Dicrastylis brunnea																																									
Dicrastylis cundeeleensis (P4)					x	x		x		x							x						x						x				x								
Dicrastylis nicholasii																																										
Dicrastylis sp.																																										
Dodonaea lobulata																																										
Dodonaea microzyga var. *acrolobata*																																										
Dodonaea stenozyga																																										
Duboisia hopwoodii																													x												
Dysphania kalpari																																										
Enekbatus eremaeus																								x	x						x		x								
Eragrostis eriopoda																																										
Eremophila caperata																							x																		
Eremophila decipiens subsp. *decipiens*											x			x	x	x					x																				
Eremophila dempsteri																																										
Eremophila forrestii																																										
Eremophila forrestii subsp. *forrestii*																																										
Eremophila glabra																																										

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Eremophila latrobei	x																																							
Eremophila latrobei subsp. *latrobei*																																								
Eremophila ?*longifolia*																																								
Eremophila oppositifolia subsp. *angustifolia*																																								
Eremophila ?*paisleyi* subsp. *paisleyi*																																								
Eremophila platythamnos																																								
Eremophila platythamnos subsp. *platythamnos*	x			x	x							x					x		x			x	x	x	x	x	x	x	x		x				x			x
Eremophila sp.																x																								
Eriachne helmsii																																								
Eriachne mucronata																																								
Eucalyptus celastroides subsp. *virella*																																								
Eucalyptus ceratocorys				x			x				x		x																			x			x	x	x			x
Eucalyptus comitae-vallis																																								
Eucalyptus concinna																																								
Eucalyptus cylindrocarpa																																								
Eucalyptus effusa																																								
Eucalyptus eremicola																																								
Eucalyptus ewartiana																																								
Eucalyptus gongylocarpa	x			x	x		x	x	x			x					x		x				x	x	x		x	x	x	x		x	x	x		x	x	x		x
Eucalyptus gracilis																																								
Eucalyptus horistes														x		x					x											x								
Eucalyptus hypolaena																																								
Eucalyptus leptophylla	x			x																x			x																	
Eucalyptus mannensis																																								
Eucalyptus mannensis subsp. *mannensis*									x										x									x	x										
Eucalyptus oleosa subsp. *oleosa*											x				x			x																						
Eucalyptus platycorys				x																								x											
Eucalyptus rigidula																						x																		
Eucalyptus rosacea																																								
Eucalyptus sp.		x			x			x		x			x				x	x																						
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)											x				x																								
Eucalyptus trivalva																																								
Eucalyptus youngiana		x	x				x		x			x					x					x		x		x		x	x	x					x	x			x	x	x
Euphorbia drummondii																																								
Exocarpos aphyllus																																								
Exocarpos sparteus																																								
?Fabaceae sp.																																								
Gastrolobium aculeatum							x																																	
Gastrolobium brevipes						x		x																																
Glischrocaryon aureum					x		x	x	x	x													x					x	x	x		x		x						
Gompholobium gompholobioides					x																											x								
Gonocarpus confertifolius																																								
Gonocarpus confertifolius var. *confertifolius*																																								
Gonocarpus confertifolius var. *helmsii*																																								
Goodenia elderi					x	x	x	x															x					x	x	x										
Goodenia glandulosa																																								
Goodenia quasilibera																																								
Goodenia ramelii																																								
Goodenia sp.																																								
Goodenia triodiophila																																								
Goodenia xanthosperma					x			x		x													x						x		x	x	x	x						
Goodeniaceae sp.																																								
Grevillea acacioides																											x													
Grevillea acuaria	x			x																x							x												
Grevillea didymobotrya																																								
Grevillea didymobotrya subsp. *didymobotrya*																																								
Grevillea juncifolia		x	x	x	x		x		x			x	x			x				x				x	x	x				x		x		x	x	x		x	x	x
Grevillea juncifolia subsp. ?*temulenta*																																								

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Grevillea juncifolia subsp. *temulenta*																																								
Grevillea nematophylla								x		x									x	x		x																		
Grevillea nematophylla subsp. *planicosta*						x																																		
Grevillea pterosperma																																								
Grevillea sarissa					x							x																x			x									
Grevillea sarissa subsp. *sarissa*																																								
Grevillea secunda (P4)		x				x														x				x										x	x	x			x	
Grevillea ?*striata*																																								
Grevillea sp.																																								
Gyrostemon brownii																																								
Gyrostemon racemiger																													x		x				x					
Gyrostemon ramulosus																																								
Gyrostemon sp.																																								
Hakea francisiana	x	x	x	x					x	x		x	x			x	x	x	x	x	x	x	x	x	x	x			x	x	x	x	x	x		x	x	x	x	x
Hakea sp. (LAC 139 13/04/14)																																								
Halgania cyanea	x			x				x									x			x		x																		
Halgania cyanea var. *Charleville* (R.W. Purdie +111)																																								
Halgania erecta																																								
Halgania ?*integerrima*																												x												
Hannafordia bissillii subsp. *bissillii*																	x																							
Hemiphora elderi																							x																	
Hemiphora sp.																																								
Hibbertia crispula (P1)																																								
Hibbertia pungens																													x											
Homalocalyx thryptomenoides																									x	x								x						
Hybanthus floribundus subsp. *floribundus*																												x												
Isotropis canescens (P2)																																								
Jacksonia arida			x			x	x						x											x							x				x	x			x	
?*Jacksonia* sp.																																								
Kennedia prorepens																																								
Keraudrenia velutina				x																			x				x						x			x				
Keraudrenia velutina subsp. *velutina* ms																																								
Labichea eremaea (P3)																																								
Lamiaceae sp.																																								
Laxmannia arida																																								
Lechenaultia brevifolia						x																		x				x	x		x	x	x	x	x	x	x	x	x
Lechenaultia striata																																								
Lepidobolus deserti		x	x				x		x		x	x	x							x				x							x		x	x	x		x	x	x
Lepidosperma sanguinolentum																																								
Leptosema chambersii		x			x			x	x	x																												x		
Leptospermum fastigiatum		x	x		x	x	x		x				x							x				x						x				x	x	x		x	
Leucopogon cuneifolius																								x															x	
Leucopogon aff. planifolius																																								
Logania nuda	x				x	x		x		x																		x		x		x							
Lomandra leucocephala																																								
Lomandra leucocephala subsp. *robusta*		x	x		x	x	x		x	x			x							x				x				x			x	x			x	x			x	
Maireana sp.															x																										
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)																																								
Malvaceae sp.																																								
Marianthus bicolor																																								
Marianthus sp.																												x	x											
Marsdenia australis																																								
Marsdenia sp.																																								
Melaleuca eleuterostachya																x				x																				
Melaleuca hamata																																								
Melaleuca leiocarpa																																								
Microcorys macredieana		x			x				x				x															x			x			x	x	x			x	
?*Microcorys* sp.																																								

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Micromyrtus ?stenocalyx																																									
Micromyrtus stenocalyx			x				x						x											x											x	x	x		x		
Minuria leptophylla																																									
Mirbelia depressa	x									x										x																					
Mirbelia seorsifolia								x		x																x			x					x					x		
?*Mirbelia* sp.																																									
Monotaxis luteiflora																x																									
Myrtaceae sp.																																									
Neurachne alopecuroidea																																									
Neurachne lanigera (P1)																																									
Newcastelia bracteosa																													x		x										
Newcastelia hexarrhena					x		x																						x			x									
Newcastelia sp.																																										
Olearia arida (P4)																							x				x						x								
Olearia exiguifolia											x				x															x								x			
Olearia incana																																										
Olearia lanuginosa																																x					x				
Olearia muelleri																																										
Olearia subspicata																																										
Opercularia spermacocea																																										
Ophioglossum polyphyllum																																										
Paspalidium basicladum																																										
Persoonia coriacea																																										
Persoonia pertinax		x	x		x	x	x	x	x	x		x	x							x								x	x			x		x	x	x		x		
Phebalium brevifolium																									x			x	x										x		
Phebalium canaliculatum																																										
Phebalium laevigatum																																										
Phebalium sp.																																										
Phebalium tuberculosum																																										
Philotheca tomentella																																										
Phyllanthus erwinii																																										
Phyllota humilis																																										
Phyllota luehmannii			x		x	x	x		x				x							x				x				x			x			x						
Physopsis viscida																																										
Pimelea angustifolia						x																																				
Pimelea subvillifera																												x														
Pimelea trichostachya																																										
Pityrodia lepidota							x	x				x																	x												
Pityrodia loricata			x		x	x	x						x										x	x	x			x	x		x	x	x		x	x				
Platysace trachymenioides																																										
Pluchea dentex																																										
Poaceae sp.																																										
Pomax sp. desert (A.S. George 11968)																																										
Prostanthera althoferi subsp. *althoferi*																																										
Prostanthera laricoides																																										
Proteaceae sp.																																										
Psydrax suaveolens																																										
Ptilotus blackii (P3)											x				x																										
Ptilotus drummondii																							x				x														
Ptilotus drummondii var. *minor*																																										
Ptilotus nobilis																																										
Ptilotus obovatus															x																										
Ptilotus obovatus var. *obovatus*																																										
Ptilotus sp.																																										
Salsola australis																																										
Santalum acuminatum				x			x		x								x						x																		
Santalum murrayanum	x							x		x		x				x								x		x				x							x				
Santalum sp.																																										

APPENDIX I: VASCULAR PLANT SPECIES RECORDED BY PERMANENT PLOT (2008-2010) AND RELEVE SITE (2014 & 2015 ONLY) AND VEGETATION COMMUNITY IN MULGA ROCK URANIUM PROJECT AREA

Note: * denotes introduced species; T denotes threatened flora and P1-P5 denote priority flora species (DPaW 2015b); V denotes vulnerable flora at the national conservation status level (DotE 2015c); ^ denotes all specimens variants have been referred to in the appendix as Acacia aneura complex since they have been revised recently and will require identification of fresh material.

SPECIES	SITE AND VEGETATION COMMUNITY																																							
	UN-MAPPED																																								
	VP168	VP169	VP170	VP171	VP172	VP174	VP175	VP176	VP177	VP178	VP179	VP180	VP181	VP182	VP183	VP184	VP185	VP186	VP187	VP188	VP190	VP192	VP193	VP194	VP196	VP198	VP199	VP201	VP203	VP204	VP205	VP207	VP209	VP211	VP213	VP214	VP215	VP216	VP218	VP220
?Santalaceae sp.																																								
Scaevola basedowii					x																																			
Scaevola parvifolia								x																																
Scaevola parvifolia subsp. *parvifolia*																																								
Scaevola restiacea subsp. *divaricata*																																								
Scaevola spinescens											x				x												x													
Schoenus hexandrus																																								
Schoenus sp.																																								
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)																																								
Schoenus subaphyllus						x																				x		x												
Sclerolaena ?*diacantha*																																								
Sclerolaena parviflora																																								
Senna artemisioides subsp. *filifolia*											x			x	x	x		x			x																			
Senna artemisioides subsp. *petiolaris*																																								
Senna artemisioides subsp. x *artemisioides*																																								
Senna pleurocarpa																																								
Senna pleurocarpa var. *pleurocarpa*																							x																	
Solanum plicatile																							x				x		x											
Stackhousia megaloptera																											x													
?*Stackhousia* sp.																																								
Stylidium induratum																																								
Stylidium limbatum	x					x		x		x																	x	x		x										
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)							x																					x												
Swainsona sp.																																								
Thryptomene biseriata			x		x	x	x		x	x			x											x				x				x	x	x	x	x			x	
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)																																								
Tricoryne sp. Mullewa (G.J. Keighery 12080)																																								
Triodia ?*basedowii*																																								
Triodia desertorum	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x		x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x
Triodia rigidissima																																								
Triodia scariosa																x																								
Triodia sp.																																								
Velleia sp.																																								
Verticordia helmsii				x					x			x	x						x	x				x	x	x					x				x				x
Westringia cephalantha				x														x		x	x	x		x			x			x						x			
Westringia cephalantha var. *cephalantha*																																								
Westringia rigida	x																x			x			x												x				
Xanthorrhoea thorntonii																																x								x
Zygophyllum apiculatum																																								
Zygophyllum ?*iodocarpum*																																								

APPENDIX I: VASCULAR PLANT SPECIES RECORDED BY PERMANENT PLOT (2008-2010) AND RELEVÉ SITE (2014 & 2015 ONLY) AND VEGETATION COMMUNITY IN MULGA ROCK URANIUM PROJECT AREA

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SPECIES	SITE AND VEGETATION COMMUNITY UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
Abutilon otocarpum						
Acacia acanthoclada						
Acacia acanthoclada subsp. *acanthoclada*						
Acacia burkittii						
Acacia colletioides						
Acacia desertorum						
Acacia desertorum var. *desertorum*			x			
Acacia effusifolia						
Acacia fragilis	x			x		
Acacia helmsiana	x			x	x	
Acacia hemiteles						
Acacia heteroneura						
Acacia heteroneura var. *jutsonii*				x		
Acacia inaequiloba					x	
Acacia ?incurvaneura						
Acacia jennerae						
Acacia kempeana		x	x		x	x
Acacia ligulata						
Acacia murrayana						
Acacia murrayana (narrow phyllode variant)						
Acacia ?prainii						
Acacia rigens						
Acacia section *Juliflorae*		x				
Acacia sibina			x			
Acacia ?sibirica						
Acacia sp.						
Acacia tetragonophylla						
Allocasuarina acutivalvis						
Allocasuarina acutivalvis subsp. *acutivalvis*						x
Allocasuarina helmsii			x			
Allocasuarina sp.						
Allocasuarina spinosissima	x			x	x	
Allocasuarina spinosissima subsp. *Short spine* (D.L. Serventy & A.R. Main s.n. 25/8/1960)						
Aluta maisonneuvei subsp. *auriculata*						
Alyogyne pinoniana						
Alyogyne sp.						
Alyxia buxifolia						
Amphipogon caricinus						
Amphipogon caricinus var. *caricinus*						x
Androcalva melanopetala		x		x	x	x
Anthotroche pannosa	x				x	x
?Apiaceae sp.						
Aotus sp. Tortile (G.J. Keighery 3767)						
Aotus tietkensii						
Aristida contorta						
Aristida holathera						
Aristida holathera var. *holathera*						
Aristida sp.						
Atriplex vesicaria						
Austrostipa platychaeta						
Baeckea sp. Great Victoria Desert (A.S. Weston 14813)				x		
Baeckea ?sp. *Sandstone* (C.A. Gardner s.n. 26 Oct. 1963) (P3)						
Banksia elderiana	x				x	x
Bertya dimerostigma	x	x				
Beyeria sulcata						
Beyeria sulcata var. *sulcata*						
Bonamia erecta						x

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SPECIES	SITE AND VEGETATION COMMUNITY UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
Boronia coerulescens						
Brunonia australis						
Brunonia ?*suffruticosa* ms						
Callitris preissii	x	x		x	x	
Callitris sp.						
Callitris verrucosa						
Calothamnus gilesii	x					x
Calotis sp. Carnarvon Range (D.J. Edinger & K.F. Kenneally D 2708 K 12243)						
Cassytha melantha						
Cassytha sp.						
Casuarinaceae sp.						
Caustis dioica	x			x		x
Chamaexeros fimbriata						
Choretrum chrysanthum						
Chrysitrix distigmatosa			x	x	x	x
Chrysocephalum apiculatum						
Chrysocephalum puteale						x
Codonocarpus cotinifolius						
?*Codonocarpus* sp.						
Comesperma scoparium						
Comesperma viscidulum (P4)						
Conospermum toddii (P4)						
Convolvulus angustissimus						
Coopernookia strophiolata						
Cryptandra aridicola						
Cryptandra connata						
Cryptandra distigma	x	x		x	x	
Cryptandra sp.						
?Cyperaceae sp.						
Dampiera eriantha (P1)						
Dampiera lavandulacea						
Dampiera ramosa						x
Dampiera stenophylla						
Dampiera tomentosa						
Daviesia benthamii subsp. *acanthoclona*						
Daviesia grahamii						
Daviesia sp.						
Daviesia ulicifolia subsp. *aridicola*						
Dianella revoluta	x		x			
Dianella revoluta var. *divaricata*						
Dicrastylis brunnea						
Dicrastylis cundeeleensis (P4)						x
Dicrastylis nicholasii						
Dicrastylis sp.						
Dodonaea lobulata						
Dodonaea microzyga var. *acrolobata*						
Dodonaea stenozyga			x			
Duboisia hopwoodii						
Dysphania kalpari						
Enekbatus eremaeus	x		x			
Eragrostis eriopoda						
Eremophila caperata						
Eremophila decipiens subsp. *decipiens*						
Eremophila dempsteri		x				
Eremophila forrestii						
Eremophila forrestii subsp. *forrestii*						
Eremophila glabra						

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SPECIES	SITE AND VEGETATION COMMUNITY UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
Eremophila latrobei						
Eremophila latrobei subsp. *latrobei*						
Eremophila ?*longifolia*						
Eremophila oppositifolia subsp. *angustifolia*						
Eremophila ?*paisleyi* subsp. *paisleyi*						
Eremophila platythamnos						
Eremophila platythamnos subsp. *platythamnos*		x				x
Eremophila sp.						
Eriachne helmsii						
Eriachne mucronata			x			
Eucalyptus celastroides subsp. *virella*						
Eucalyptus ceratocorys					x	
Eucalyptus comitae-vallis						
Eucalyptus concinna						
Eucalyptus cylindrocarpa						
Eucalyptus effusa						
Eucalyptus eremicola						
Eucalyptus ewartiana						
Eucalyptus gongylocarpa	x			x	x	x
Eucalyptus gracilis						
Eucalyptus horistes						
Eucalyptus hypolaena						
Eucalyptus leptophylla						
Eucalyptus mannensis						
Eucalyptus mannensis subsp. *mannensis*						
Eucalyptus oleosa subsp. *oleosa*						
Eucalyptus platycorys						
Eucalyptus rigidula						
Eucalyptus rosacea						
Eucalyptus sp.						
Eucalyptus sp. Mulga Rock (K.D. Hill & L.A.S. Johnson KH 2668)						
Eucalyptus trivalva				x		
Eucalyptus youngiana		x				x
Euphorbia drummondii						
Exocarpos aphyllus						
Exocarpos sparteus						
?Fabaceae sp.						
Gastrolobium aculeatum						
Gastrolobium brevipes						
Glischrocaryon aureum				x		x
Gompholobium gompholobioides						
Gonocarpus confertifolius						
Gonocarpus confertifolius var. *confertifolius*						
Gonocarpus confertifolius var. *helmsii*						
Goodenia elderi						
Goodenia glandulosa						
Goodenia quasilibera						
Goodenia ramelii						
Goodenia sp.						
Goodenia triodiophila						
Goodenia xanthosperma						
Goodeniaceae sp.						
Grevillea acacioides			x			
Grevillea acuaria						
Grevillea didymobotrya						
Grevillea didymobotrya subsp. *didymobotrya*				x		
Grevillea juncifolia	x	x		x	x	x
Grevillea juncifolia subsp. ?*temulenta*						

APPENDIX I: VASCULAR PLANT SPECIES RECORDED BY PERMANENT PLOT (2008-2010) AND RELEVÉ SITE (2014 & 2015 ONLY) AND VEGETATION COMMUNITY IN MULGA ROCK URANIUM PROJECT AREA

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SPECIES	SITE AND VEGETATION COMMUNITY					
	UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
Grevillea juncifolia subsp. *temulenta*						
Grevillea nematophylla						
Grevillea nematophylla subsp. *planicosta*			x			
Grevillea pterosperma				x		
Grevillea sarissa						
Grevillea sarissa subsp. *sarissa*						
Grevillea secunda (P4)	x					x
Grevillea ?*striata*						
Grevillea sp.						
Gyrostemon brownii						
Gyrostemon racemiger						
Gyrostemon ramulosus						
Gyrostemon sp.						
Hakea francisiana	x	x	x	x	x	x
Hakea sp. (LAC 139 13/04/14)						
Halgania cyanea						
Halgania cyanea var. *Charleville* (R.W. Purdie +111)						
Halgania erecta						
Halgania ?*integerrima*						
Hannafordia bissillii subsp. *bissillii*			x			
Hemiphora elderi						
Hemiphora sp.						
Hibbertia crispula (P1)						
Hibbertia pungens					x	
Homalocalyx thryptomenoides			x		x	
Hybanthus floribundus subsp. *floribundus*						x
Isotropis canescens (P2)						
Jacksonia arida	x					
?*Jacksonia* sp.						
Kennedia prorepens						
Keraudrenia velutina						
Keraudrenia velutina subsp. *velutina* ms						
Labichea eremaea (P3)						
Lamiaceae sp.						
Laxmannia arida						
Lechenaultia brevifolia	x					x
Lechenaultia striata						
Lepidobolus deserti	x			x	x	
Lepidosperma sanguinolentum						
Leptosema chambersii						x
Leptospermum fastigiatum	x			x	x	x
Leucopogon cuneifolius	x					
Leucopogon aff. planifolius						
Logania nuda						
Lomandra leucocephala				x		
Lomandra leucocephala subsp. *robusta*	x				x	x
Maireana sp.						
Malleostemon sp. Officer Basin (D. Pearson 350) (P2)						
Malvaceae sp.						
Marianthus bicolor						
Marianthus sp.						
Marsdenia australis						
Marsdenia sp.						
Melaleuca eleuterostachya						
Melaleuca hamata			x			
Melaleuca leiocarpa						
Microcorys macredieana						x
?*Microcorys* sp.						

APPENDIX I: VASCULAR PLANT SPECIES RECORDED BY PERMANENT PLOT (2008-2010) AND RELEVÉ SITE (2014 & 2015 ONLY) AND VEGETATION COMMUNITY IN MULGA ROCK URANIUM PROJECT AREA

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SPECIES	SITE AND VEGETATION COMMUNITY UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
Micromyrtus ?stenocalyx						
Micromyrtus stenocalyx	x				x	
Minuria leptophylla						
Mirbelia depressa						
Mirbelia seorsifolia						
?Mirbelia sp.						
Monotaxis luteiflora						
Myrtaceae sp.						
Neurachne alopecuroidea			x			
Neurachne lanigera (P1)						
Newcastelia bracteosa						
Newcastelia hexarrhena						
Newcastelia sp.						
Olearia arida (P4)						
Olearia exiguifolia						
Olearia incana		x				
Olearia lanuginosa						
Olearia muelleri						
Olearia subspicata						
Opercularia spermacocea						x
Ophioglossum polyphyllum						
Paspalidium basicladum						
Persoonia coriacea						
Persoonia pertinax	x			x	x	x
Phebalium brevifolium		x				
Phebalium canaliculatum			x			
Phebalium laevigatum						
Phebalium sp.						
Phebalium tuberculosum						
Philotheca tomentella						
Phyllanthus erwinii						
Phyllota humilis						
Phyllota luehmannii	x			x		
Physopsis viscida						
Pimelea angustifolia						
Pimelea subvillifera						
Pimelea trichostachya						
Pityrodia lepidota				x		
Pityrodia loricata	x					
Platysace trachymenioides						
Pluchea dentex						
Poaceae sp.						
Pomax sp. desert (A.S. George 11968)						
Prostanthera althoferi subsp. *althoferi*			x			
Prostanthera laricoides						
Proteaceae sp.						
Psydrax suaveolens						
Ptilotus blackii (P3)						
Ptilotus drummondii						
Ptilotus drummondii var. *minor*						
Ptilotus nobilis						
Ptilotus obovatus						
Ptilotus obovatus var. *obovatus*						
Ptilotus sp.						
Salsola australis						
Santalum acuminatum				x		
Santalum murrayanum					x	
Santalum sp.						

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SPECIES	SITE AND VEGETATION COMMUNITY UN-MAPPED					
	VP222	VP224	VP226	VP227	VP228	VP230
?Santalaceae sp.						
Scaevola basedowii					x	x
Scaevola parvifolia						
Scaevola parvifolia subsp. *parvifolia*						
Scaevola restiacea subsp. *divaricata*						
Scaevola spinescens			x			
Schoenus hexandrus						
Schoenus sp.						
Schoenus sp. A1 Boorabbin (K.L. Wilson 2581)						
Schoenus subaphyllus						
Sclerolaena ?*diacantha*						
Sclerolaena parviflora						
Senna artemisioides subsp. *filifolia*		x				
Senna artemisioides subsp. *petiolaris*						
Senna artemisioides subsp. x *artemisioides*						
Senna pleurocarpa						
Senna pleurocarpa var. *pleurocarpa*		x				
Solanum plicatile						
Stackhousia megaloptera						
?*Stackhousia* sp.						
Stylidium induratum						
Stylidium limbatum						
Styphelia sp. Great Victoria Desert (N. Murdock 44) (P2)						
Swainsona sp.						
Thryptomene biseriata	x			x		x
Thysanotus ?sp. *Eremaean* (S. van Leeuwen 1067)						
Tricoryne sp. Mullewa (G.J. Keighery 12080)						
Triodia ?*basedowii*						
Triodia desertorum	x	x	x	x	x	x
Triodia rigidissima						
Triodia scariosa						
Triodia sp.						
Velleia sp.						
Verticordia helmsii			x	x	x	
Westringia cephalantha				x		
Westringia cephalantha var. *cephalantha*						
Westringia rigida					x	
Xanthorrhoea thorntonii	x					
Zygophyllum apiculatum						
Zygophyllum ?*iodocarpum*						

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J1: Vegetation Community A1 (representative photograph from VP118)

PHOTOGRAPH J2: Vegetation Community C1 (representative photograph from VP063)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J3: Vegetation Community E1 (representative photograph from VP070)

PHOTOGRAPH J4: Vegetation Community E2 (representative photograph from VP065)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J5: Vegetation Community E3 (representative photograph from VP030)

PHOTOGRAPH J6: Vegetation Community E4 (representative photograph from VP124)

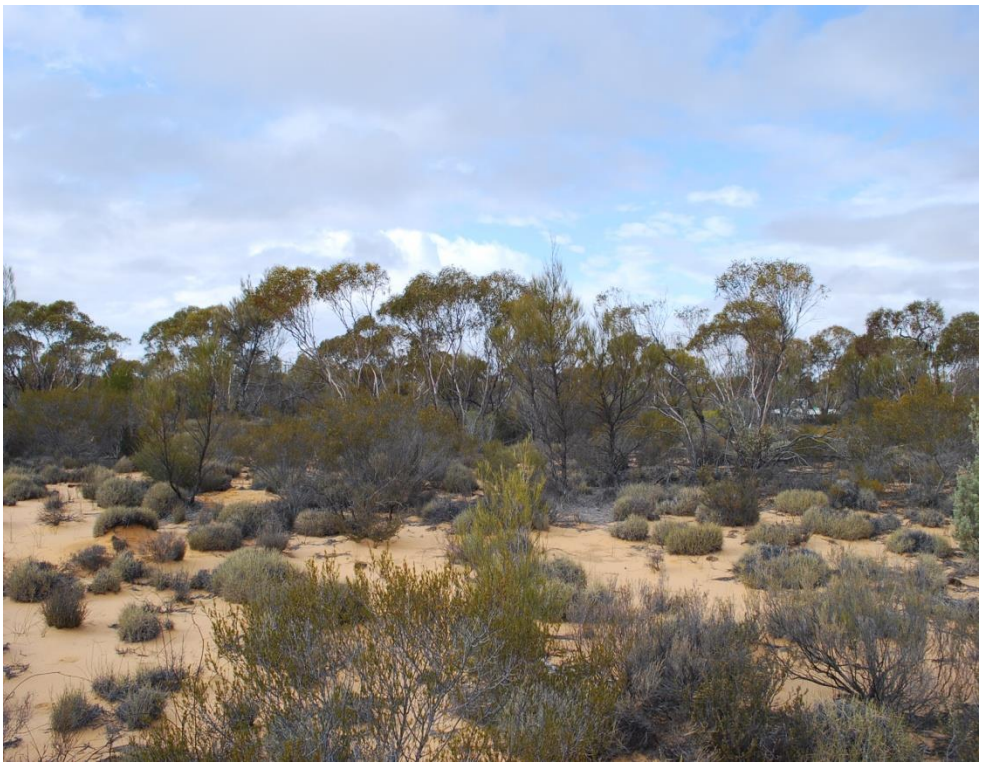
APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J7: Vegetation Community E5 (representative photograph from VP046)

PHOTOGRAPH J8: Vegetation Community E6 (representative photograph from VP014)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J9: Vegetation Community E7 (representative photograph from VP059)



PHOTOGRAPH J10: Vegetation Community E8 (representative photograph from VP029)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J11: Vegetation Community E9 (representative photograph from VP072)

PHOTOGRAPH J12: Vegetation Community E10 (representative photograph from VP004)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J13: Vegetation Community E11 (representative photograph from VP074)

PHOTOGRAPH J14: Vegetation Community E12 (representative photograph from VP019)

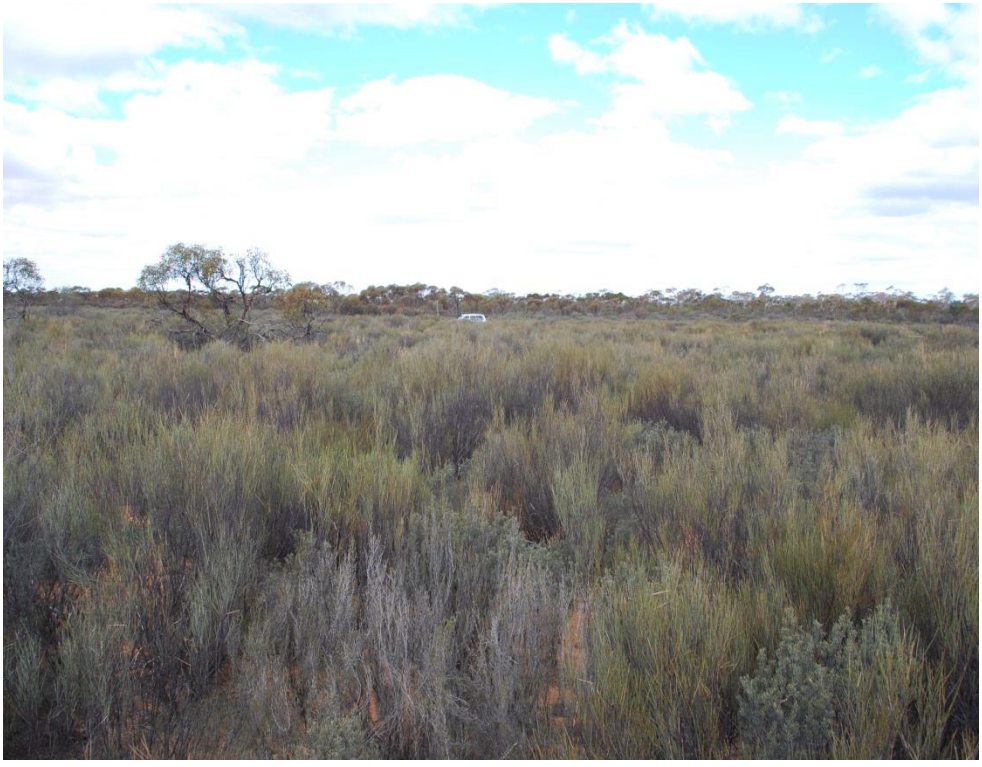
APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J15: Vegetation Community E13 (representative photograph from BARR016)

PHOTOGRAPH J16: Vegetation Community E14 (representative photograph from MURD027)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

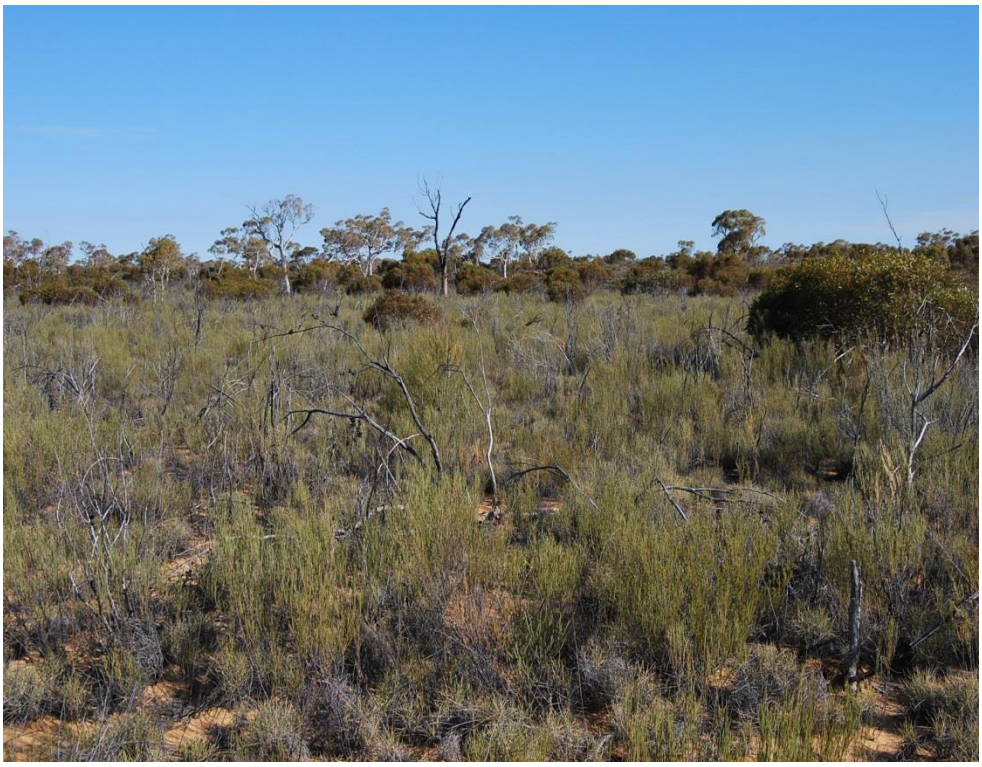
PHOTOGRAPH J17: Vegetation Community S1 (representative photograph from VP062)



PHOTOGRAPH J18: Vegetation Community S2 (representative photograph from VP068)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J19: Vegetation Community S3 (representative photograph from VP061)



PHOTOGRAPH J20: Vegetation Community S4 (representative photograph from VP020)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J21: Vegetation Community S5 (representative photograph from VP067)

PHOTOGRAPH J22: Vegetation Community S6 (representative photograph from VP010)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J23: Vegetation Community S7 (representative photograph from VP041)

PHOTOGRAPH J24: Vegetation Community S8 (representative photograph from VP027)

APPENDIX J: PHOTOGRAPHIC RECORD OF VEGETATION COMMUNITIES DESCRIBED WITHIN THE MULGA ROCK URANIUM PROJECT AREA

PHOTOGRAPH J25: Vegetation Community S9 (representative photograph from MURD011)

PHOTOGRAPH J26: Vegetation Community S10 (representative photograph from MURD029)