tern
Ecosystem Research Infrastructure

Summary of TERN plots in the Great Victoria Desert, Western Australia

Report to the Great Victoria Desert Biodiversity Trust

November 2023

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An Australian Government Initiative

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Contributions

This document was prepared by TERN based at The University of Adelaide.

Photographs presented in this report were contributed by TERN staff. Photographs may be available for use, please contact TERN tern@adelaide.edu.au

Front cover photograph: Windmill, Great Victoria Desert, Western Australia. (Credit: TERN).

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For more information

TERN provides researchers with access to field and sensor data representing key attributes of Australia's terrestrial ecosystems. The data are gathered with the use of survey tools, remote sensing and sensors such as those for soil moisture, acoustics, flux and phenology. Related soil and vegetation samples are also collected by TERN for researcher use.

For more information on TERN, visit tern.org.au. For more information regarding this document, please contact tern@adelaide.edu.au

Key operating partners:

Co-investment:

Acknowledgments

TERN gratefully acknowledge the Great Victoria Desert Biodiversity Trust for enabling the survey work to be completed. TERN also recognises the indigenous peoples of the Great Victoria Desert, the Spinifex and Pilki People, and the Yilka People, for allowing access to their country, and the collection and removal of scientific samples and specimens. Thank you to the volunteers who helped collect, curate and process the data and samples. Lastly, many thanks to staff from the Western Australian Herbarium for undertaking the plant identifications.

This work is funded by TERN, an Australian Government National Collaborative Research Infrastructure Strategy (NCRIS) project, and the Great Victoria Desert Biodiversity Trust, contracted by AngloGold Ashanti Australia Ltd (GVD-P-21-003).

The fieldwork presented in this report was conducted under a Western Australian Government permits, including Flora Taking (Other Purposes) Licence (FT6100830 - Michael Starkey). The fieldwork was conducted by TERN personnel Michael Starkey, Kirrily Blaylock, Luke Finn, Lachlan Pink and Lilian Mackintosh, and volunteer Thomas Jamieson.

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Introduction

TERN is an Australian Government, National Collaborative Infrastructure Strategy (NCRIS) funded environmental monitoring project. TERN is national research infrastructure, collecting long-term ecosystem data and samples from around Australia using highly instrumented monitoring sites, field surveys and remote-sensing techniques such as drones and satellites. TERN shares these data to enable Australia's world-leading research on climate, biodiversity, and soil.

Through its surveillance monitoring program, TERN aims to ensure every terrestrial ecosystem in Australia is represented in the sample and data libraries so that environmental change across all systems can be monitored. Over the past 10 years, TERN's Ecosystem Surveillance platform has been collecting soil and vegetation data and samples from over 835 monitoring plots across the Australian continent (Figure 1) using standardised field survey protocols. The protocols were co-created with the assistance of state and territory experts, representatives of the federal environment department and academic experts from across the country. The protocols were published in a step-by-step instructional manual in 2012 (White *et al.*), which provides the surveyor with all the information required to implement the protocol to the specified standard. The manual is readily available to download from the TERN website. Further information on the rationale for the method is available in Sparrow *et al.* (2020).

TERN was contracted by AngloGold Ashanti, to conduct survey work for the Great Victoria Desert Biodiversity Trust Landscape Conservation Initiative (LCI) monitoring program. Plots were located to meet the objectives of the LCI in consultation with GVDBT personnel. The surveys were conducted from 29th April to 7th May 2022, with 16 plots established and surveyed.

This report provides a snapshot of the data collected by TERN. Also included in this report is information on how to access the data, descriptions of data types, panorama photos and examples of research using TERN data.

Figure 1 shows the TERN plot network nationally with the Great Victoria Desert locations highlighted.

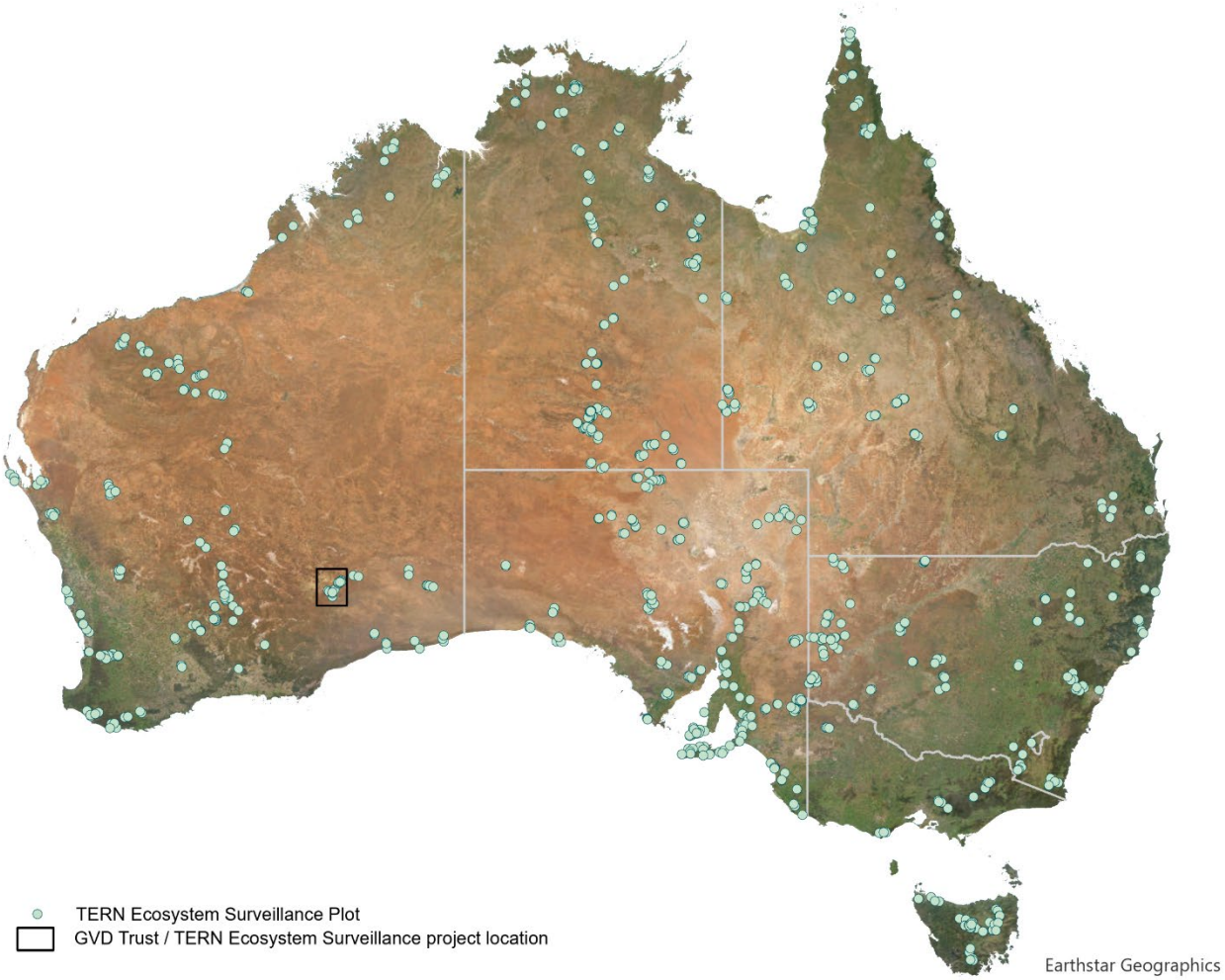
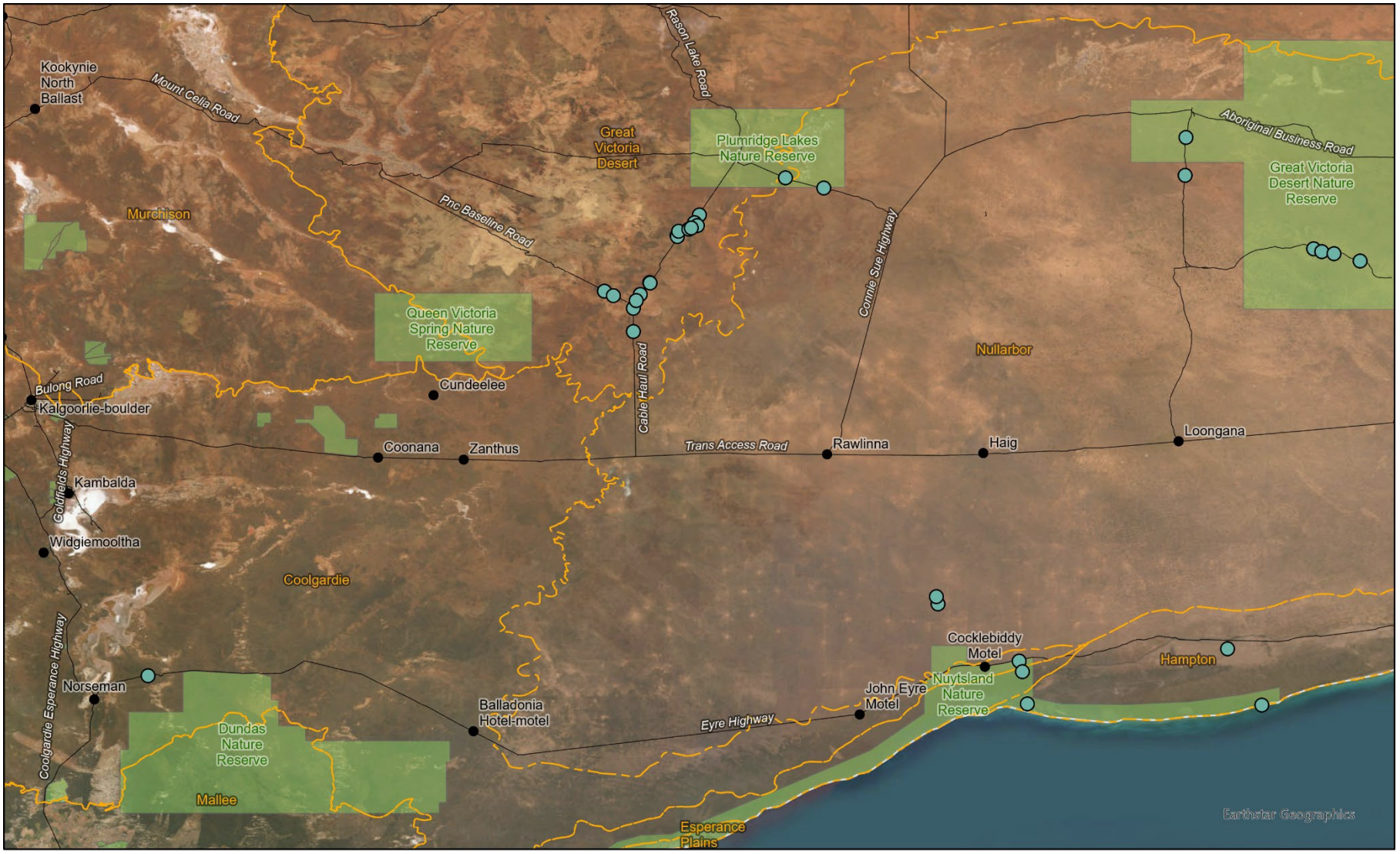


Figure 1. TERN plot network

Regional context

The Australian continent is divided into 89 distinct bioregions. These regions are classified on the basis of landform, geology, climate and native vegetation characteristics. TERN operates within this regional framework and the plots for the Great Victoria Desert Biodiversity Trust are within the Great Victoria Desert (GVD) Bioregion (Figure 2). The plots are approximately 150-175 km east of Kirgella Rocks, Western Australia. .



Dept. of Climate Change, Energy, the Environment and Water (2020), Interim Biogeographic Regionalisation for Australia (Subregions) Version 7, (IBRA). CC BY 3.0 AU
Collaborative Australian Protected Areas Database (CAPAD) 2022, Commonwealth of Australia 2023. CC BY 3.0 AU
Geodata Topo 250K Series 3 (2006). Commonwealth of Australia (Geoscience Australia) 2021. CC BY 4.0

Figure 2. Broad landscape position of the TERN plots established within the Great Victoria Desert IBRA region and the surrounding IBRA regions

Methods summary and access to the data and samples

TERN Ecosystem Surveillance monitoring data are available using the ausplotsR package for use in R Statistical software (https://github.com/ternaustralia/ausplotsR). ausplotsR provides a suite of tools to facilitate access and preliminary analysis of TERN plot-based data and samples, and provides the most up-to-date data stream. EcoPlots is TERN's new plot-based ecological data repository which amalgamates data from different sources to enable integrated searches and access based on different jurisdictions, observation themes, observed properties, projects/programs and temporal extent - see https://ecoplots.tern.org.au/

TERN Australia Soil and Herbarium Collection

TERN is an internationally recognised herbarium, holding over 50,000 plant voucher specimens and 70,000 genetic samples of Australia's flora collected from each TERN plot. Plant samples collected by Ecosystem Surveillance are also contributed to partner herbaria, with duplicates curated and stored at The TERN Collection at The University of Adelaide. TERN's soils collection consists of 22,000 500g soil samples and 10,000 top layer soil (metagenomics) for DNA analysis. Scientists access the TERN Collection to investigate the physical, chemical, and biological characteristics of Australia's soils. All samples are freely available for use by researchers upon application

To discuss opportunities to use our samples or how TERN data could contribute to your ecological research or management please contact tern@adelaide.edu.au, or download a specimen loan application form.

Cover data

TERN cover data is quantitative, accurate and repeatable measures of vegetation and substrate cover within the plot, using the point intercept method. Cover is defined as the percentage of vertical projection of the vegetation or substrate present within the plot. Vegetation cover is characterised by species, growth form and the height of lower, mid and upper vegetation strata while substrate cover is characterised by substrate type (e.g. bare ground, cryptogam, litter, rocks (Sparrow et at 2020). The information produced at each plot can be compared spatially to assess plot differences, and temporally to indicate change over time. Additionally, the cover data collected at each plot can be used to validate cover data obtained through remote sensing techniques.

Plot description information

Contextual information is also collected at each plot. This includes measures of slope and aspect, surface strew and lithology along with information on the grazing and fire history of the plot. The plot location is also recorded with a differential GPS and the plot corners and centres (with landholder permission) marked with a star picket.

Detailed structural summary information is also collected at each plot. When combined with the height and cover information from the point intercept data it enables the creation of a plot structural description compatible with a NVIS level 5 description.

Basal area

Basal area measurements are collected across plots where trees taller than two meters occur. Basal area measurements provide information useful for calculating biomass and carbon levels and for structural and productivity studies. Measurements utilise a tool called a basal wedge to obtain a rapid estimate of plot, and occasionally species basal area. Data collected using the basal wedge can be supplemented further using the three-dimensional photo points and development of algorithms to provide information on vegetation community structure.

Plant collections

Samples available on request.

Each species that is found within the plot has an herbarium grade sample taken. These voucher specimens have all been formally identified by the relevant state or Commonwealth herbarium. This material is then lodged with either the applicable herbarium or at the TERN Soil and Herbarium Collection at The University of Adelaide.

Plant tissue samples

Samples are available on request.

The herbarium samples also have leaf tissue samples taken. This involves placing leaf samples from each species into a synthetic bag and drying them on silica desiccant. All dominant species have an extra four replicate samples collected from different individuals of the same species located across the plot. These samples are available for use on application to TERN at the University of Adelaide. Samples can be used for a range of genetic and isotopic applications.

Soil classification

Samples are available on request.

Description and information on soil properties are sparse across the rangeland regions of Australia. The plot descriptions and soil characterisations collected using the TERN methods will contribute a great deal to providing information in this substantial gap. The data collected can also be used to increase the reliability of the Soil and Landscape Grid of Australia, produced by TERN and consistent with the Global Soil Map specifications. Analyses of the collected samples will greatly enhance the level of knowledge (e.g. nutrient and carbon levels) and hence understanding of Australian soils and how they will respond to climate change and management interventions.

Soil meta barcoding samples

Samples are available on request.

Metagenomics is the study of genetic material recovered directly from environmental samples. Soil metagenomics provides the opportunity to understand what organisms are present at survey plots and provides an indication of their abundance. All of the TERN plots have soil meta barcoding samples collected at each visit, and these are available for researchers to utilise. Currently there are projects underway investigating fauna and fungi distribution and diversity.

Soil bulk density

The soil bulk density (BD) is the weight of dry soil divided by the total soil volume. The total soil volume is the combined volume of solids and pores which may contain air or water, or both. The average values of air, water and solids in the sample are easily measured and are a useful indication of a soils physical condition. Soil test results are most often presented either as a percentage of soil (e.g. % organic carbon) or as a weight per unit of soil (e.g. nitrogen, mg/kg). As bulk density is a measure of soil weight in a given volume, it provides a useful conversion from these units to volumetric measures (g/m^3). This allows any soil properties obtained from physical, chemical or biological analysis to be converted to volumetric measures.

3D photo panorama

The TERN survey method uses a three-dimensional method for photographing the plot. This involves taking three 360-degree panoramas in a triangular pattern. This allows the creation of a 3D model of the vegetation within the plot which can be used to monitor change over time, track plot condition as well as providing a unique, fast measurement of basal area and biomass.

Field survey results

The field surveys were conducted by TERN from 29th April to 7th May 2022, with 16 plots established and surveyed. Table 1 summarises each plot's structural description, including dominant flora species. A summary of the plot data is presented in Appendix 1, whilst Figure 2 provides a map of the plot locations.

The majority of the plots were dominated by mallee woodland with hummock grasses dominating the ground stratum, and five plots were dominated by *Eucalyptus gongylocarpa* (commonly referred to Ghost gum or Desert gum), with or without *Callitris* spp. Plot WAAGVD0012 is a shrubland dominated by *Acacia ligulata* with *Eucalyptus gongylocarpa* as an emergent. The ground stratum for the *Eucalyptus gongylocarpa* dominated plots were characterised by tussock grasses, hummock grasses and shrubs.

Species diversity ranged from 18 to 48 species per plot (including infraspecifc ranks). The lowest species diversity was recorded at plot WAAGVD0007 and the highest at WAAGVD0010. Other plots with high species diversity (40-47 species per plot) included WAAGVD0010, WAAGDV0011, WAAGVD0012 and WAAGDV0013. Six plots supported five Western Australia priority listed taxa. Priority flora were:

- *Lechenaultia aphylla* - Priority Flora Category 1
- *Isotropis canescens* - Priority Flora Category 2
- *Dampiera eriantha* - Priority Flora Category 2
- Caustis deserti – Priority Flora Category 3
- *Dicrastylis cundeeleensis* - Priority Flora Category 4.

Plot WAAGVD0013 supported three of the five Priority Flora flora including *Caustis deserti*, *Dampiera eriantha*, *Dicrastylis cundeeleensis*. There were no threatened flora species detected on the monitoring plots.

Priority flora are possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened flora. Species that are adequately known, are rare but not threatened, or meet criteria for near threatened are placed in Priority 4. These species require regular monitoring. An updated list of Western Australian threatened and priority flora is available here https://www.dbca.wa.gov.au/wildlife-and-ecosystems/plants/list-threatened-and-priority-flora

A full list of species by plot is provided in Appendix 3, and Appendix 4 details point intercept data with percentage cover for each species recorded. Appendix 5 summaries the substrate and growth form information, and Appendix 5 provides the soil classification summary of each plot.

Example photos of the field team in action are provided in Figure 3 to Figure 6.

Photo panoramas of each plot are shown in Figure 7 to Figure 21.

Table 1. Structural summary of the GVD plots

Plot name	Structural description
WAAGVD0002	Mixed mallee woodland dominated by *Eucalyptus* sp. and *E. concinna* (average height 3-4m, maximum height 5m), with isolated *E. youngiana* in the south-west corner. Shrub layer (0.3-1m height) is dominated by *Acacia hemiteles* and *Westringia cephalantha* var. *cephalantha* with scattered *Callitris columellaris, Dodonaea stenozyga* and *Beyeria sulcata* var. *sulcata*. Ground layer is open, dominated by *Triodia tomentosa* (0.1-0.3m).
WAAGVD0003	*Callitris columellaris* low open woodland (3-5m) with *Eucalyptus gongylocarpa* (5-7m). Low open mid stratum (0.5-1.5m) of *Acacia ligulata* and *A. desertorum* var. *desertorum*. Low open ground stratum of *Triodia tomentosa* (<0.5m).
WAAGVD0004	Low mallee woodland (3-4m, emergent >6m) of *Eucalyptus concinna* and *E.* sp. Mid stratum of *Westringia cephalantha* var. *cephalantha* (0.7-1.3m), *Acacia hemiteles*, *Grevillea huegelii* (0.6-0.9m), *Daviesia aphylla* (0.3-0.5m) and juvenile *Eucalyptus* spp. (1.3-2m). Ground stratum is dominated by *Triodia tomentosa* (0.1-0.3m).
WAAGVD0005	Open ghost gum woodland (8-12m) over mixed mallee (3-4m) (smaller fruited, Glossy gob), E. youngiana (2-3m) species and isolated Callitris sp. (4m). Mid-storey of hook leaved shrub (0.5-0.8m), Acacia ligulata (1m), thin yellow shrub (0.7m) and Triodia sp. (<0.3m).
WAAGVD0006	Mixed mallee (2.5-5m) woodland of Triangular fruited mallee and Eucalyptus youngiana with emergent Ghost Gum(5-7m). Mid-storey (0.5-1.5m) is sparse with Grey Acacia, Hooked-tipped shrub and scattered Grevillea sp. and Hakea sp. and young mallee and Ghost Gums. Ground storey (<0.3m) of Triodia short-leaf and Triodia long-leaf.
WAAGVD0007	Mixed mallee woodland (3-6m) of fluted and goblet mallee with some Rim mallee and tiny fruited mallee. Open mid-storey (0.5-1.5m)of Acacia ligulata, Myoporum sp., Grey Acacia and Senna artemisioides petiolaris with an individual Acacia nyssophylla. Ground storey (<0.3m) dominated by Triodia sp.
WAAGVD0008	Mixed mallee woodland (2.5-3m) of Rim mallee, goblet and small fruited mallee. Mid-storey (0.5- 0.7m) of Acacia ligulata, leafless Daviesia and slivery melaleuca. Ground storey of long leaf Triodia (0.3m).
WAAGVD0009	Open Ghost gum (7-9m) woodland. Mid-storey of mallee (2-3m), Broad leaf hakea (1-2m), Callitris (1-2m) and Acacia ligulata(1m). ground storey of Triodia (short) hummocks(0.1-0.2m), Eremophila forrestii (0.5m).
WAAGVD0010	Open Ghost Gum(10-12m) woodland over thin grey mallee (4-6m burnt)(1-1.5m regrowth), E. youngiana(3m burnt)(1m basal growth), Callitris (2-3m), hakea(2-3m). Mid-storey of fuzzy passion (0.5m), ball fruit shrub (0.4-0.5m).
WAAGVD0011	Open burnt mallee woodland (3-4.5m). Mid-storey of re-sprouting (0.5-1.5m) narrow leaf euc, E. youngiana, U fruit Euc and Acacia ligulata (0.3m). Ground storey (0.1-0.3m) of passion shrub, Aristida holathera, Prostanthera.
WAAGVD0012	Acacia ligulata, (0.2-0.5m) Eucalyptus gongylocarpa (1-2m) low sparse shrubland with isolated Eucalyptus gongylocarpa. A very sparse ground layer dominated by Anthotroche pannosa with Bertya dimerostigma and Pityrodia loricata
WAAGVD0013	Low open mallee woodland of Eucalyptus youngiana (2-3m). Diverse shrub layer (0.3-1m) with Menthol shrub, Fuzzy passion and fluffy daisy. Ground storey of short Triodia (0.1m), Noodly forb (0.1-0.5m)
WAAGVD0014	Eucalyptus youngiana (2-4m) open mallee woodland with mixed Rim Mallee, Small fruited mallee and concave mallee. Mid-storey of wispy acacia (1-2m), Allocasuarina (0.5-1.5m) and gland leaf ozo (1m). Ground storey (<0.3m) of Triodia sp., Round –leaf heath and spotted heath.
WAAGVD0015	Ghost gum (8-9m) woodland with Eclipse mallee, Nargob mallee, small fruited mallee(3m). Mid-storey of juvenile Ghost gum, Acacia ligulata (1.3-2m), Dodonaea lobulata (0.5-0.8m) , Eremophila latrobei(1m). Scattered recruiting Callitris sp. (0.5-1.5m). Ground storey of Short Triodia, Long Triodia (0.15-0.3m).
WAAGVD0016	Open mallee woodland straddling dune
WAAGVD0017	Mallee shrubland of Rim mallee and half mallee- (1.5-2.5m), recently burnt, with scattered ghost gum and a very sparse ground storey (0.15-0.4m) of the hookleaf shrub and the glossy leaved shrub, and isolated Triodia

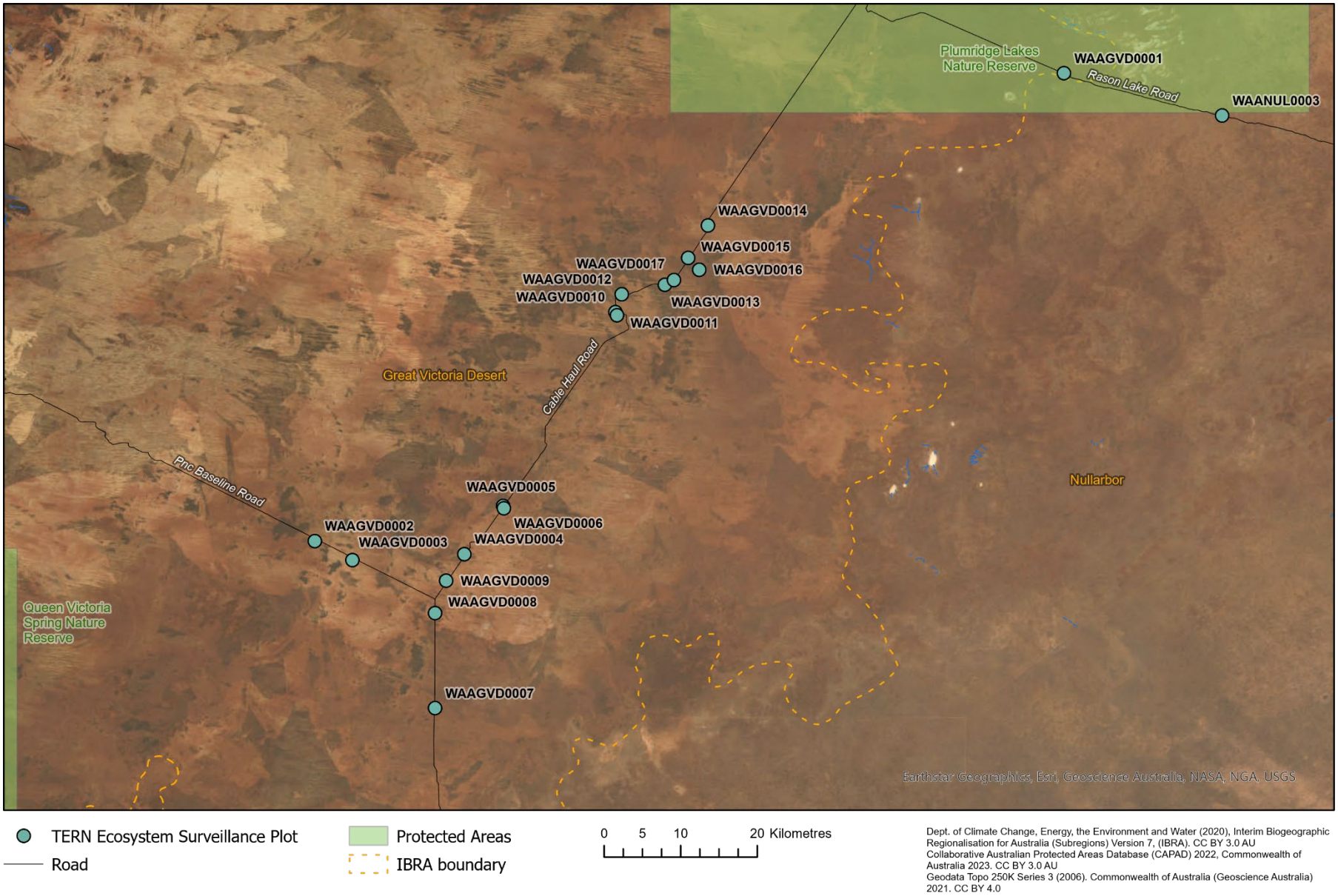


Figure 3. Location of TERN plots established for the Great Victoria Desert Biodiversity Trust, 2022

Figure 4. TERN personnel collecting soil sub-pit samples (left), examining flora (centre), and recording information directly into the TERN Auscribe field collection app (right)

Figure 5. TERN personnel completing soil pit sampling

Figure 6. TERN personnel conducting point intercept vegetation surveys

Figure 7. TERN personnel conducting point intercept vegetation surveys and recording overstory canopy height

Figure 8. Plot panorama WAAGVD002

Figure 9. Plot panorama WAAGVD003

Figure 10. Plot panorama WAAGVD004

Figure 11. Plot panorama WAAGVD005

Figure 12. Plot panorama WAAGVD006

Figure 13. Plot panorama WAAGVD007

Figure 14. Plot panorama WAAGVD008

Figure 15. Plot panorama WAAGVD009

Figure 16. Plot panorama WAAGVD010

Figure 17. Plot panorama WAAGVD011

Figure 18. Plot panorama WAAGVD012

Figure 19. Plot panorama WAAGVD013

Figure 20. Plot panorama WAAGVD014

Figure 21. Plot panorama WAAGVD015

Figure 22. Plot panorama WAAGVD016

Figure 23. Plot panorama WAAGVD017

Data use and reason for collection

The TERN AusPlots Survey Method was developed out of a need for consistent, national scale ecological data and surveillance monitoring. As of November 2023, TERN has established over 950 survey plots across the nation. The data and samples collected at these plots are being used for research and land management and some example are presented below.

Example projects and collections

Greg R. Guerin ,Ben Sparrow, Andrew Tokmakoff, Anita Smyth, Emrys Leitch, Zdravko Baruch, Andrew J. Lowe (2017) **Opportunities for Integrated Ecological Analysis across Inland Australia with Standardised Data from Ausplots Rangelands** https://doi.org/10.1371/journal.pone.0170137

How species abundance distributions (SADs) vary over climatic gradients is a key question for the influence of environmental change on ecosystem processes. This research involved an analysis of the entire TERN plot network and found linear relationships between SAD shape and rainfall within grassland and shrubland communities, indicating more uneven abundance in deserts and suggesting relative abundance may shift as a consequence of climate change, resulting in altered diversity and ecosystem function.

Zdravko Baruch, Stefan Caddy-Retalic, Greg R. Guerin, Ben Sparrow, Emrys Leitch, Andrew Tokmakoff, Andrew J. Lowe (2018) **Floristic and structural assessment of Australian rangeland vegetation with standardized plot-based surveys** PloS ONE 13 (9) e0202073 https://doi.org/10.1371/journal.pone.0202073Vegetation classification at a continental scale has been lacking over the rangelands in Australia due to a lack of consistent data beyond state and regional levels. This research undertook an integrated and comparative environmental, floristic and structural description of rangeland vegetation based on the TERN AusPlots method surveys. The results offer a tentative classification scheme that is novel, ecologically sound and coherent in terms of floristic composition and structural attributes.

Munroe, S.E.M., Guerin, G.R., McInerney, F.A. et al. **A vegetation carbon isoscape for Australia built by combining continental-scale field surveys with remote sensing**. Landscape Ecology 37, 1987–2006 (2022). https://doi.org/10.1007/s10980-022-01476-y

This research draws upon a diverse combination of TERN resources including plant and soil samples, plot vegetation observations, and remotely sensed data to develop environmental models that describe the proportional distribution, abundance, and richness of C3 and C4 plants. These models will enable the prediction of C4 distribution under future climate scenarios. To complete this project, transect-plot data from > 600 TERN plots to estimate relative C3 and C4 cover throughout Australia and use stable isotope analysis to determine the C3 or C4 status of unknown plants. Plant samples have been taken from approximately 100 plots from across Australia.

The national reference library of expert plot condition assessments project

Lead research organisation: CSIRO (Commonwealth Scientific and Industrial Research Organisation)

This project is eliciting plot-level ecological condition assessments from Australia's ecological science and natural resource management communities. The contributed assessments will be among the data sources used to build a library of plot condition observations from across Australia. The library of condition data will support ongoing development of the CSIRO-DEE (Department of the Environment and Energy, now DAWE – Department of Agriculture, Water and the Environment) Habitat Condition Assessment System (HCAS), a novel method of assessing continent-wide ecological condition using remotely sensed data. The library will also be made available to the research community for other purposes as appropriate.

Jean-François Bastin et al. **The extent of forest in dryland biomes**. Science 356, 635-638(2017).DOI:10.1126/science.aam6527 The vegetation cover data from a large number of the TERN plots were part of a recent mapping project undertaken by the UN's Food and Agriculture Organisation (FAO). FAO showed that in 2015, 1327 million hectares of drylands had more than 10% tree-cover globally, and 1079 million hectares comprised forest. The figures derived as part of this work are 40 to 47% higher than previous estimates, corresponding to 467 million hectares of forest that have never been reported before. This increases current estimates of global forest cover by at least 9%.

Soil and Landscape Grid of Australia. https://www.csiro.au/en/research/natural-environment/land/soil-and-landscape-grid-of-australia

Lead research organisation: CSIRO (Commonwealth Scientific and Industrial Research Organisation), TERN

The TERN Soil and Landscape Grid of Australia provides relevant, consistent, comprehensive, nation-wide data in an easily-accessible format. The datasets are a first approximation (version 1) of national scale maps designed to be updated and improved over time as resources, new data and improved methods and technologies become available. Soil chemistry and bulk density data from all of the Rangelands Method plots are helping to improve the mapping. TERN has now published a reliable Australian Soil Classification map using these data.

Collins, T., Bruhl, J.J., Andrew, R., Telford, I.R.H. and Schmidt-Lebuhn, A.N. (2022), **Phylogenetic relationships of Xerochrysum, Coronidium and Helichrysum leucopsideum reveal a new genus, Leucozoma (Asteraceae: Gnaphalieae).** TAXON, 71: 1044-1062. https://doi.org/10.1002/tax.12771

This project used TERN's leaf tissue sample collections to undertake a major revision of the paper daisies *Xerochrysum* and *Coronidium*. The two genera were complex and poorly understood and his work helped to unravel this resulting in the discovery of several new species.

Other potential uses for TERN AusPlots data

- Assessing vegetation change using the AusPlots methodology as both a baseline and a continued surveillance monitoring tool
- Detecting the impact of invasive species based on soil and vegetation data
- Ground-truthing satellite derived vegetation and soil data
- Soil carbon analysis using the soil bulk density samples
- Mapping soil phosphorus, nitrogen and other nutrients using soil pit and sub-plot samples
- Assessing fuel loading using the basal area and leaf area data
- Use of the leaf tissue samples for genetic and isotopic analysis.

For more information

More information on the AusPlots method can be found on the TERN website tern.org.au

For more information regarding the ecosystem monitoring conducted by TERN presented in this report, contact TERN at the University of Adelaide team directly via email tern@adelaide.edu.au

Further reading

An extensive list of publications that have arisen from TERN data is available from the TERN website www.tern.org.au/research-publications/

Key documents listed:

Sparrow, B.D., Foulkes, J.N., Wardle, G.M., Leitch, E.J., Caddy-Retalic, S., van Leeuwen, S.J., Tokmakoff, A., Thurgate, N.Y., Guerin, G.R., Lowe, A.J. (2020) A vegetation and soil survey method for surveillance monitoring of rangeland environments. Frontiers in Ecology and Evolution. DOI:10.3389/fevo.2020.00157

White A., Sparrow B., Leitch E., Foulkes J., Flitton R., Lowe A.J. and Caddy-Retalic S. (2012) AusPlots Rangelands Survey Protocols Manual. The University of Adelaide Press, Adelaide DOI:10.3389/fevo.2020.00157

Appendices

Appendix 1. Summary of TERN plot data and samples from the Great Victoria Desert 2022 surveys

TERN data and samples	Count	GVD 2022
Total species list		512
Total plant collections	94	543
Total leaf tissue samples - Primary	145	533
Total leaf tissue samples – Secondary		284
Total number of soil samples	72	
Total weight of soil (kg)	72	
Number of plots with bulk density data	1	
Number of plots with LAI	2	NA
Total metagenomic samples	27	
Total metagenomic weight (kg)	14	

Appendix 2. Plot locations

Plot name	Date	Location	Latitude	Longitude
WAAGVD0002	29/04/2022	Crown land. 261 km NW of Cocklebiddy. 95.4 km NW of Kanandah.	-30.2177894	124.251202
WAAGVD0003	29/04/2022	91 km NW of Kanandah, 138 km east of Kirgella Rocks	-30.240136	124.295597
WAAGVD0004	30/04/2022	Crown land. 84.6 km NW of Kanandah HS. 150 km East of Kergella Rocks	-30.2330469	124.426669
WAAGVD0005	1/05/2022	Crown land. 88 km NNW of Kanandah. 156km East of Kirgella Rocks	-30.176561	124.472317
WAAGVD0006	5/05/2022	Crown land. 88 km NNW of Kanandah. 154km East of Kirgella Rocks	-30.1795596	124.473083
WAAGVD0007	2/05/2022	Crown land. 70 km NW of Kanandah HS. 151 km ESE of Kirgella Rocks	-30.413884	124.39249
WAAGVD0008	2/05/2022	Crown land. 80 km NW of Kanandah HS. 148 km ESE Kirgella Rocks.	-30.3021721	124.392638
WAAGVD0009	10/11/2022	82 km NW of Kanandah. 183 km east of Yindi.	-30.2642739	124.405381
WAAGVD0010	4/05/2022	Great Victoria Desert. 108 km NNW of Kanandah. 167 km east of Kirgella Rocks.	-29.949171	124.603989
WAAGVD0011	4/05/2022	Crown land. 107 km NNE of Kanandah. 167 km WNW of Kirgella Rocks.	-29.9528501	124.605704
WAAGVD0012	5/05/2022	Crown Land. 110 km NNW of Kanandah. 168km E of Kirgella Rocks.	-29.9283253	124.61156
WAAGVD0013	5/05/2022	173km Eof Kirgella Rocks. 110 km N of Kanandah.	-29.9171784	124.662235
WAAGVD0014	17/11/2022	117km Nof Kanandah. 179 km E of Kirgella Rocks.	-29.8478028	124.712573
WAAGVD0015	6/05/2022	113km N of Kanandah. 176 km E of Kirgella Rocks.	-29.8855406	124.689341
WAAGVD0016	7/05/2022	111km N of Kanandah. 177 km E of Kirgella Rocks.	-29.8994967	124.702182
WAAGVD0017	16/11/2022	Great Victoria Desert crown land. 110 km NW of Seemore Downs. 174 km E of Kirgella Rocks.	-29.9116759	124.672644

Appendix 3. Plant collection

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0002	Fabaceae	*Acacia colletioides*	Species	
WAAGVD0002	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0002	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0002	Casuarinaceae	*Allocasuarina helmsii*	Species	
WAAGVD0002	Myrtaceae	*Aluta maisonneuvei* subsp. *auriculata*	Subspecies	
WAAGVD0002	Poaceae	*Aristida contorta*	Species	
WAAGVD0002	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0002	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0002	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0002	Sapindaceae	*Dodonaea stenozyga*	Species	
WAAGVD0002	Scrophulariaceae	*Eremophila longifolia*	Species	
WAAGVD0002	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0002	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0002	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0002	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0002		Indeterminate		
WAAGVD0002		Indeterminate		
WAAGVD0002	Amaranthaceae	*Ptilotus*	Genus	
WAAGVD0002	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0002	Malvaceae	*Seringia exastia*	Species	
WAAGVD0002	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0002	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0002	Lamiaceae	*Westringia rigida*	Species	
WAAGVD0003	Fabaceae	*Acacia desertorum* var. *desertorum*	Varietas	
WAAGVD0003	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0003	Apocynaceae	*Alyxia buxifolia*	Species	
WAAGVD0003	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0003	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0003	Cupressaceae	*Callitris verrucosa*	Species	
WAAGVD0003	Myrtaceae	*Calothamnus gilesii*	Species	
WAAGVD0003	Santalaceae	*Choretrum chrysanthum*	Species	
WAAGVD0003	Hemerocallidaceae	*Dianella revoluta* var. *divaricata*	Varietas	
WAAGVD0003	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0003	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0003	Goodeniaceae	*Goodenia triodiophila*	Species	
WAAGVD0003	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0003	Pittosporaceae	*Marianthus bicolor*	Species	
WAAGVD0003	Apiaceae	*Platysace trachymenioides*	Species	
WAAGVD0003	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0003	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0003	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0003	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0004	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0004	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0004	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0004	Asteraceae	*Cratystylis conocephala*	Species	
WAAGVD0004	Fabaceae	*Daviesia aphylla*	Species	
WAAGVD0004	Scrophulariaceae	*Eremophila platythamnos* subsp. *platythamnos*	Subspecies	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0004	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0004	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0004	Myrtaceae	*Eucalyptus eremicola* subsp. *eremicola*	Subspecies	
WAAGVD0004	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0004	Myrtaceae	*Eucalyptus platycorys*	Species	
WAAGVD0004	Proteaceae	*Grevillea huegelii*	Species	
WAAGVD0004	Boraginaceae	*Halgania erecta*	Species	
WAAGVD0004	Pittosporaceae	*Marianthus bicolor*	Species	
WAAGVD0004	Myrtaceae	*Melaleuca zeteticorum*	Species	
WAAGVD0004	Asteraceae	*Olearia incana*	Species	
WAAGVD0004	Amaranthaceae	*Ptilotus sessilifolius*	Species	
WAAGVD0004	Cyperaceae	*Schoenus subaphyllus*	Species	
WAAGVD0004	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0004	Fabaceae	*Senna pleurocarpa* var. *pleurocarpa*	Varietas	
WAAGVD0004	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0004	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0005	Fabaceae	*Acacia gilesiana*	Species	
WAAGVD0005	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0005	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0005	Fabaceae	*Acacia sibina*	Species	
WAAGVD0005	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0005	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0005	Convolvulaceae	*Bonamia erecta*	Species	
WAAGVD0005	Cupressaceae	*Callitris*	Genus	
WAAGVD0005	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0005	Scrophulariaceae	*Eremophila platythamnos* subsp. *platythamnos*	Subspecies	
WAAGVD0005	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0005	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0005	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0005	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0005		*Eucalyptus rigidula* subsp. *interior*		
WAAGVD0005	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0005	Goodeniaceae	*Goodenia xanthosperma*	Species	
WAAGVD0005	Pittosporaceae	*Marianthus bicolor*	Species	
WAAGVD0005	Amaranthaceae	*Ptilotus*	Genus	
WAAGVD0005	Fabaceae	*Senna pleurocarpa* var. *pleurocarpa*	Varietas	
WAAGVD0005	Malvaceae	*Seringia exastia*	Species	
WAAGVD0005	Fabaceae	*Templetonia aculeata*	Species	
WAAGVD0005	Asparagaceae	*Thysanotus*	Genus	
WAAGVD0005	Poaceae	*Triodia*	Genus	
WAAGVD0005	Apocynaceae	*Vincetoxicum lineare*	Species	
WAAGVD0005	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0006	Fabaceae	*Acacia gilesiana*	Species	
WAAGVD0006	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0006	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0006	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0006	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0006	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0006	Myrtaceae	*Calothamnus gilesii*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0006	Asteraceae	*Chrysocephalum apiculatum* subsp. *glandulosum*	Subspecies	
WAAGVD0006	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0006	Scrophulariaceae	*Eremophila platythamnos* subsp. *platythamnos*	Subspecies	
WAAGVD0006	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0006	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0006	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0006	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0006	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0006	Goodeniaceae	*Goodenia triodiophila*	Species	
WAAGVD0006	Goodeniaceae	*Goodenia triodiophila*	Species	
WAAGVD0006	Goodeniaceae	*Goodenia xanthosperma*	Species	
WAAGVD0006	Proteaceae	*Grevillea juncifolia*	Species	
WAAGVD0006	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0006	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0006		Indeterminate		
WAAGVD0006	Fabaceae	*Leptosema aculeatum*	Species	
WAAGVD0006	Pittosporaceae	*Marianthus bicolor*	Species	
WAAGVD0006	Euphorbiaceae	*Monotaxis luteiflora*	Species	
WAAGVD0006	Lamiaceae	*Pityrodia lepidota*	Species	
WAAGVD0006	Lamiaceae	*Pityrodia lepidota*	Species	
WAAGVD0006	Amaranthaceae	*Ptilotus*	Genus	
WAAGVD0006	Malvaceae	*Seringia exastia*	Species	
WAAGVD0006	Malvaceae	*Seringia velutina*	Species	
WAAGVD0006	Fabaceae	*Templetonia aculeata*	Species	
WAAGVD0006	Poaceae	*Triodia rigidissima*	Species	
WAAGVD0006	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0006	Apocynaceae	*Vincetoxicum lineare*	Species	
WAAGVD0006	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0007	Fabaceae	*Acacia colletioides*	Species	
WAAGVD0007	Fabaceae	*Acacia eremophila* var. *eremophila*	Varietas	
WAAGVD0007	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0007	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0007	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0007	Fabaceae	*Daviesia aphylla*	Species	
WAAGVD0007	Scrophulariaceae	*Eremophila decipiens*	Species	
WAAGVD0007	Scrophulariaceae	*Eremophila longifolia*	Species	
WAAGVD0007	Scrophulariaceae	*Eremophila longifolia*	Species	
WAAGVD0007	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0007	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0007	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0007	Myrtaceae	*Eucalyptus cylindrocarpa*	Species	
WAAGVD0007	Myrtaceae	*Eucalyptus oleosa* subsp. *oleosa*	Subspecies	
WAAGVD0007	Chenopodiaceae	*Maireana*	Genus	
WAAGVD0007	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0007	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0007	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0008	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0008	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0008	Fabaceae	*Acacia nyssophylla*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0008	Euphorbiaceae	*Beyeria sulcata*	Species	
WAAGVD0008	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0008	Goodeniaceae	*Dampiera lavandulacea*	Species	
WAAGVD0008	Fabaceae	*Daviesia aphylla*	Species	
WAAGVD0008	Sapindaceae	*Dodonaea stenozyga*	Species	
WAAGVD0008	Poaceae	*Eragrostis*	Genus	
WAAGVD0008	Scrophulariaceae	*Eremophila caperata*	Species	
WAAGVD0008	Scrophulariaceae	*Eremophila youngii*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus hypolaena*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus hypolaena*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus platycorys*	Species	
WAAGVD0008	Myrtaceae	*Eucalyptus platycorys*	Species	
WAAGVD0008	Santalaceae	*Exocarpos aphyllus*	Species	
WAAGVD0008	Proteaceae	*Grevillea huegelii*	Species	
WAAGVD0008	Proteaceae	*Grevillea juncifolia*	Species	
WAAGVD0008	Proteaceae	*Grevillea sarissa*	Species	
WAAGVD0008	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0008	Myrtaceae	*Melaleuca exuvia*	Species	
WAAGVD0008	Asteraceae	*Olearia exiguifolia*	Species	
WAAGVD0008	Asteraceae	*Olearia incana*	Species	
WAAGVD0008	Asteraceae	*Olearia muelleri*	Species	
WAAGVD0008	Santalaceae	*Santalum acuminatum*	Species	
WAAGVD0008	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0008	Chenopodiaceae	*Sclerolaena parviflora*	Species	
WAAGVD0008	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0008	Fabaceae	*Senna pleurocarpa*	Species	
WAAGVD0008	Malvaceae	*Seringia velutina*	Species	
WAAGVD0008	Poaceae	*Triodia scariosa*	Species	
WAAGVD0008	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0009	Fabaceae	*Acacia fragilis*	Species	
WAAGVD0009	Fabaceae	*Acacia hemiteles*	Species	
WAAGVD0009	Fabaceae	*Acacia jamesiana*	Species	
WAAGVD0009	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0009	Casuarinaceae	*Allocasuarina helmsii*	Species	
WAAGVD0009	Myrtaceae	*Aluta maisonneuvei* subsp. *auriculata*	Subspecies	
WAAGVD0009	Malvaceae	*Alyogyne pinoniana* var. *pinoniana*	Varietas	
WAAGVD0009	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0009	Poaceae	*Aristida contorta*	Species	
WAAGVD0009	Euphorbiaceae	*Beyeria sulcata var. sulcata*	Varietas	
WAAGVD0009	Cupressaceae	*Callitris verrucosa*	Species	
WAAGVD0009	Rhamnaceae	*Cryptandra*	Genus	
WAAGVD0009	Hemerocallidaceae	*Dianella revoluta* var. *divaricata*	Varietas	
WAAGVD0009	Sapindaceae	*Dodonaea adenophora*	Species	
WAAGVD0009	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0009	Scrophulariaceae	*Eremophila forrestii* subsp. *forrestii*	Subspecies	
WAAGVD0009	Scrophulariaceae	*Eremophila platythamnos* subsp. *platythamnos*	Subspecies	
WAAGVD0009	Myrtaceae	*Eucalyptus*	Genus	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0009	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0009	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0009	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0009	Goodeniaceae	*Goodenia triodiophila*	Species	
WAAGVD0009	Goodeniaceae	*Goodenia xanthosperma*	Species	
WAAGVD0009	Proteaceae	*Grevillea stenobotrya*	Species	
WAAGVD0009	Gyrostemonaceae	*Gyrostemon ramulosus*	Species	
WAAGVD0009	Proteaceae	*Hakea minyma*	Species	
WAAGVD0009	Boraginaceae	*Halgania erecta*	Species	
WAAGVD0009	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0009	Apocynaceae	*Leichhardtia australis*	Species	
WAAGVD0009	Fabaceae	*Leptosema aculeatum*	Species	
WAAGVD0009	Lamiaceae	*Pityrodia lepidota*	Species	
WAAGVD0009	Santalaceae	*Santalum*	Genus	
WAAGVD0009	Fabaceae	*Senna artemisioides* subsp. *x petiolaris*	Subspecies	
WAAGVD0009	Malvaceae	*Seringia velutina*	Species	
WAAGVD0009	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0009	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0009	Poaceae	*Triodia tomentosa*	Species	
WAAGVD0009	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0010	Fabaceae	*Acacia jamesiana*	Species	
WAAGVD0010	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0010	Violaceae	*Afrohybanthus aurantiacus*	Species	
WAAGVD0010	Violaceae	*Afrohybanthus aurantiacus*	Species	
WAAGVD0010	Malvaceae	*Alyogyne pinoniana* var. *pinoniana*	Varietas	
WAAGVD0010	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0010	Solanaceae	*Anthotroche pannosa*	Species	
WAAGVD0010	Poaceae	*Aristida contorta*	Species	
WAAGVD0010	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0010	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0010	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0010	Asteraceae	*Chrysocephalum apiculatum* subsp. *glandulosum*	Subspecies	
WAAGVD0010	Gyrostemonaceae	*Codonocarpus cotinifolius*	Species	
WAAGVD0010	Goodeniaceae	*Dampiera stenophylla*	Species	
WAAGVD0010	Lamiaceae	*Dicrastylis*	Genus	
WAAGVD0010	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0010	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0010	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0010	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0010	Haloragaceae	*Glischrocaryon aureum*	Species	
WAAGVD0010	Goodeniaceae	*Goodenia glandulosa*	Species	
WAAGVD0010	Goodeniaceae	*Goodenia xanthosperma*	Species	
WAAGVD0010	Proteaceae	*Grevillea*	Genus	
WAAGVD0010	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0010	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0010	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0010	Fabaceae	*Indigofera psammophila*	Species	
WAAGVD0010	Fabaceae	*Isotropis canescens*	Species	Priority Flora Category 2
WAAGVD0010	Apocynaceae	*Leichhardtia australis*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0010	Lamiaceae	*Microcorys macredieana*	Species	
WAAGVD0010	Fabaceae	*Mirbelia seorsifolia*	Species	
WAAGVD0010	Myrtaceae	*Myrtaceae*	Familia	
WAAGVD0010	Asteraceae	*Olearia muelleri*	Species	
WAAGVD0010	Proteaceae	*Persoonia coriacea*	Species	
WAAGVD0010	Fabaceae	*Phyllota*	Genus	
WAAGVD0010	Amaranthaceae	*Ptilotus drummondii*	Species	
WAAGVD0010	Amaranthaceae	*Ptilotus sessilifolius*	Species	
WAAGVD0010	Goodeniaceae	*Scaevola basedowii*	Species	
WAAGVD0010	Goodeniaceae	*Scaevola parvifolia*	Species	
WAAGVD0010	Malvaceae	*Seringia velutina*	Species	
WAAGVD0010	Malvaceae	*Sida* sp. Golden calyces glabrous fruit (H.N.Foote) WA Herbarium	Species	
WAAGVD0010	Malvaceae	*Sida* sp. Golden calyces glabrous fruit (H.N.Foote) WA Herbarium	Species	
WAAGVD0010	Solanaceae	*Solanum plicatile*	Species	
WAAGVD0010	Fabaceae	*Templetonia aculeata*	Species	
WAAGVD0010	Poaceae	*Triodia*	Genus	
WAAGVD0010	Goodeniaceae	*Velleia connata*	Species	
WAAGVD0010	Goodeniaceae	*Velleia daviesii*	Species	
WAAGVD0010	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0011	Fabaceae	*Acacia gilesiana*	Species	
WAAGVD0011	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0011	Violaceae	*Afrohybanthus aurantiacus*	Species	
WAAGVD0011	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0011	Solanaceae	*Anthotroche pannosa*	Species	
WAAGVD0011	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0011	Euphorbiaceae	*Beyeria sulcata var. sulcata*	Varietas	
WAAGVD0011	Fabaceae	*Caesia* sp. Great Victoria Desert (C.Tauss 2835) WA Herbarium	Species	
WAAGVD0011	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0011	Cyperaceae	*Caustis deserti*	Species	Priority Flora Category 3
WAAGVD0011	Gyrostemonaceae	*Codonocarpus cotinifolius*	Species	
WAAGVD0011	Goodeniaceae	*Dampiera lavandulacea*	Species	
WAAGVD0011	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0011	Myrtaceae	*Eucalyptus ceratocorys*	Species	
WAAGVD0011	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0011	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0011	Haloragaceae	*Glischrocaryon*	Genus	
WAAGVD0011	Haloragaceae	*Gonocarpus confertifolius*	Species	
WAAGVD0011	Proteaceae	*Grevillea*	Genus	
WAAGVD0011	Proteaceae	*Grevillea*	Genus	
WAAGVD0011	Gyrostemonaceae	*Gyrostemon ramulosus*	Species	
WAAGVD0011	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0011	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0011	Violaceae	*Hybanthus floribundus* subsp. *floribundus*	Subspecies	
WAAGVD0011		Indeterminate		
WAAGVD0011	Fabaceae	*Jacksonia arida*	Species	
WAAGVD0011	Goodeniaceae	*Lechenaultia striata*	Species	
WAAGVD0011	Fabaceae	*Leptosema aculeatum*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0011	Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	Subspecies	
WAAGVD0011	Lamiaceae	*Microcorys macredieana*	Species	
WAAGVD0011	Euphorbiaceae	*Monotaxis luteiflora*	Species	
WAAGVD0011	Myrtaceae	*Myrtaceae*	Familia	
WAAGVD0011	Lamiaceae	*Pityrodia loricata*	Species	
WAAGVD0011	Goodeniaceae	*Scaevola parvifolia*	Species	
WAAGVD0011	Fabaceae	*Senna pleurocarpa* var. *pleurocarpa*	Varietas	
WAAGVD0011	Malvaceae	*Seringia velutina*	Species	
WAAGVD0011	Malvaceae	*Sida*	Genus	
WAAGVD0011	Poaceae	*Triodia*	Genus	
WAAGVD0011	Goodeniaceae	*Velleia connata*	Species	
WAAGVD0011	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	
WAAGVD0012	Fabaceae	*Acacia burkittii*	Species	
WAAGVD0012	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0012	Malvaceae	*Alyogyne pinoniana* var. *pinoniana*	Varietas	
WAAGVD0012	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0012	Solanaceae	*Anthotroche pannosa*	Species	
WAAGVD0012	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0012	Euphorbiaceae	*Bertya dimerostigma*	Species	
WAAGVD0012	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0012	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0012	Asteraceae	*Chrysocephalum puteale*	Species	
WAAGVD0012	Gyrostemonaceae	*Codonocarpus cotinifolius*	Species	
WAAGVD0012	Goodeniaceae	*Dampiera eriantha*	Species	Priority Flora Category 2
WAAGVD0012	Goodeniaceae	*Dampiera ramosa*	Species	
WAAGVD0012	Goodeniaceae	*Dampiera stenophylla*	Species	
WAAGVD0012	Goodeniaceae	*Dampiera tomentosa*	Species	
WAAGVD0012	Fabaceae	*Daviesia ulicifolia* subsp. *aridicola*	Subspecies	
WAAGVD0012	Lamiaceae	*Dicrastylis*	Genus	
WAAGVD0012	Lamiaceae	*Dicrastylis cundeeleensis*	Species	Priority Flora Category 4
WAAGVD0012	Sapindaceae	*Dodonaea adenophora*	Species	
WAAGVD0012	Solanaceae	*Duboisia hopwoodii*	Species	
WAAGVD0012	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0012	Scrophulariaceae	*Eremophila*	Genus	
WAAGVD0012	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0012	Myrtaceae	*Eucalyptus rigidula* subsp. *interior*	Species	
WAAGVD0012	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0012	Gyrostemonaceae	*Gyrostemon ramulosus*	Species	
WAAGVD0012	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0012	Myrtaceae	*Leptospermum fastigiatum*	Species	
WAAGVD0012	Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	Subspecies	
WAAGVD0012	Lamiaceae	*Pityrodia loricata*	Species	
WAAGVD0012	Rubiaceae	*Pomax ammophila*	Species	
WAAGVD0012	Lamiaceae	*Prostanthera campbellii*	Species	
WAAGVD0012	Amaranthaceae	*Ptilotus drummondii*	Species	
WAAGVD0012	Goodeniaceae	*Scaevola basedowii*	Species	
WAAGVD0012	Goodeniaceae	*Scaevola basedowii*	Species	
WAAGVD0012	Goodeniaceae	*Scaevola basedowii*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0012	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0012	Fabaceae	*Senna pleurocarpa* var. *pleurocarpa*	Varietas	
WAAGVD0012	Malvaceae	*Seringia velutina*	Species	
WAAGVD0012	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0012	Poaceae	*Triodia*	Genus	
WAAGVD0013	Fabaceae	*Acacia desertorum* var. *desertorum*	Varietas	
WAAGVD0013	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0013	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0013	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0013	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0013	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0013	Fabaceae	*Caesia* sp. Great Victoria Desert (C.Tauss 2835) WA Herbarium	Species	
WAAGVD0013	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0013	Myrtaceae	*Calothamnus gilesii*	Species	
WAAGVD0013	Cyperaceae	*Caustis deserti*	Species	Priority Flora Category 3
WAAGVD0013	Asteraceae	*Chrysocephalum puteale*	Species	
WAAGVD0013	Gyrostemonaceae	*Codonocarpus cotinifolius*	Species	
WAAGVD0013	Goodeniaceae	*Dampiera eriantha*	Species	Priority Flora Category 2
WAAGVD0013	Fabaceae	*Daviesia ulicifolia* subsp. *aridicola*	Subspecies	
WAAGVD0013	Lamiaceae	*Dicrastylis*	Genus	
WAAGVD0013	Lamiaceae	*Dicrastylis cundeeleensis*	Species	Priority Flora Category 4
WAAGVD0013	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0013	Scrophulariaceae	*Eremophila forrestii* subsp. *forrestii*	Subspecies	
WAAGVD0013	Myrtaceae	*Eucalyptus rosacea*	Species	
WAAGVD0013	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0013	Proteaceae	*Grevillea didymobotrya* subsp. *didymobotrya*	Subspecies	
WAAGVD0013	Proteaceae	*Grevillea obliquistigma*	Species	
WAAGVD0013	Proteaceae	*Grevillea stenobotrya*	Species	
WAAGVD0013	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0013	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0013	Violaceae	*Hybanthus floribundus* subsp. *floribundus*	Subspecies	
WAAGVD0013	Violaceae	*Hybanthus floribundus* subsp. *floribundus*	Subspecies	
WAAGVD0013	Goodeniaceae	*Lechenaultia striata*	Species	
WAAGVD0013	Restionaceae	*Lepidobolus deserti*	Species	
WAAGVD0013	Fabaceae	*Leptosema chambersii*	Species	
WAAGVD0013	Myrtaceae	*Leptospermum fastigiatum*	Species	
WAAGVD0013	Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	Subspecies	
WAAGVD0013	Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	Subspecies	
WAAGVD0013	Myrtaceae	*Malleostemon* sp. Officer Basin (D.Pearson 350) WA Herbarium	Species	
WAAGVD0013	Myrtaceae	*Micromyrtus stenocalyx*	Species	
WAAGVD0013	Lamiaceae	*Newcastelia hexarrhena*	Species	
WAAGVD0013	Loganiaceae	*Orianthera nuda*	Species	
WAAGVD0013	Lamiaceae	*Pityrodia loricata*	Species	
WAAGVD0013	Lamiaceae	*Prostanthera*	Genus	
WAAGVD0013	Goodeniaceae	*Scaevola parvifolia* subsp. *parvifolia*	Subspecies	
WAAGVD0013	Malvaceae	*Seringia velutina*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0013	Solanaceae	*Solanum*	Genus	
WAAGVD0013	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0013	Poaceae	*Triodia*	Genus	
WAAGVD0014	Fabaceae	*Acacia colletioides*	Species	
WAAGVD0014	Fabaceae	*Acacia desertorum* var. *desertorum*	Varietas	
WAAGVD0014	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0014	Casuarinaceae	*Allocasuarina helmsii*	Species	
WAAGVD0014	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0014	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0014	Cupressaceae	*Callitris columellaris*	Species	
WAAGVD0014	Myrtaceae	*Calothamnus gilesii*	Species	
WAAGVD0014	Rhamnaceae	*Cryptandra*	Genus	
WAAGVD0014	Hemerocallidaceae	*Dianella revoluta* var. *divaricata*	Varietas	
WAAGVD0014	Sapindaceae	*Dodonaea adenophora*	Species	
WAAGVD0014	Scrophulariaceae	*Eremophila forrestii*	Species	
WAAGVD0014	Scrophulariaceae	*Eremophila glabra* subsp. *glabra*	Subspecies	
WAAGVD0014	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0014	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0014	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0014	Myrtaceae	*Eucalyptus plumula*	Species	
WAAGVD0014	Myrtaceae	*Eucalyptus youngiana*	Species	
WAAGVD0014	Santalaceae	*Exocarpos sparteus*	Species	
WAAGVD0014	Santalaceae	*Exocarpos sparteus*	Species	
WAAGVD0014	Proteaceae	*Grevillea*	Genus	
WAAGVD0014	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0014	Myrtaceae	*Homalocalyx thryptomenoides*	Species	
WAAGVD0014	Goodeniaceae	*Lechenaultia striata*	Species	
WAAGVD0014	Restionaceae	*Lepidobolus deserti*	Species	
WAAGVD0014	Restionaceae	*Lepidobolus deserti*	Species	
WAAGVD0014	Myrtaceae	*Leptospermum fastigiatum*	Species	
WAAGVD0014	Asparagaceae	*Lomandra leucocephala* subsp. *robusta*	Subspecies	
WAAGVD0014	Lamiaceae	*Pityrodia loricata*	Species	
WAAGVD0014	Apiaceae	*Platysace trachymenioides*	Species	
WAAGVD0014	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0014	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0014	Poaceae	*Triodia desertorum*	Species	
WAAGVD0014	Lamiaceae	*Westringia rigida*	Species	
WAAGVD0015	Fabaceae	*Acacia caesaneura*	Species	
WAAGVD0015	Fabaceae	*Acacia colletioides*	Species	
WAAGVD0015	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0015	Fabaceae	*Acacia mulganeura*	Species	
WAAGVD0015	Fabaceae	*Acacia prainii*	Species	
WAAGVD0015	Fabaceae	*Acacia rhodophloia*	Species	
WAAGVD0015	Fabaceae	*Acacia tetragonophylla*	Species	
WAAGVD0015	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0015	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0015	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0015	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0015	Cupressaceae	*Callitris columellaris*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0015	Sapindaceae	*Dodonaea lobulata*	Species	
WAAGVD0015	Sapindaceae	*Dodonaea stenozyga*	Species	
WAAGVD0015	Poaceae	*Eragrostis eriopoda*	Species	
WAAGVD0015	Scrophulariaceae	*Eremophila*	Genus	
WAAGVD0015	Scrophulariaceae	*Eremophila forrestii* subsp. *forrestii*	Subspecies	
WAAGVD0015	Scrophulariaceae	*Eremophila latrobei* subsp. *glabra*	Subspecies	
WAAGVD0015	Scrophulariaceae	*Eremophila longifolia*	Species	
WAAGVD0015	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0015	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0015	Myrtaceae	*Eucalyptus eremicola* subsp. *eremicola*	Subspecies	
WAAGVD0015	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0015	Myrtaceae	*Eucalyptus platycorys*	Species	
WAAGVD0015	Proteaceae	*Grevillea nematophylla* subsp. *planicosta*	Subspecies	
WAAGVD0015		Indeterminate		
WAAGVD0015	Apocynaceae	*Leichhardtia australis*	Species	
WAAGVD0015	Lamiaceae	*Prostanthera campbellii*	Species	
WAAGVD0015	Amaranthaceae	*Ptilotus drummondii*	Species	
WAAGVD0015	Goodeniaceae	*Scaevola bursariifolia*	Species	
WAAGVD0015	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0015	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0015	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0015	Poaceae	*Triodia*	Genus	
WAAGVD0015	Poaceae	*Triodia scariosa*	Species	
WAAGVD0016	Fabaceae	*Acacia colletioides*	Species	
WAAGVD0016	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0016	Fabaceae	*Acacia mulganeura*	Species	
WAAGVD0016	Fabaceae	*Acacia prainii*	Species	
WAAGVD0016	Malvaceae	*Alyogyne* sp. Great Victoria Desert (D.J.Edinger 6212)	Species	
WAAGVD0016	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0016	Poaceae	*Aristida contorta*	Species	
WAAGVD0016	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0016	Poaceae	*Austrostipa scabra* subsp. *scabra*	Subspecies	
WAAGVD0016	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0016	Cupressaceae	*Callitris*	Genus	
WAAGVD0016	Gyrostemonaceae	*Codonocarpus cotinifolius*	Species	
WAAGVD0016	Apocynaceae	*Cynanchum viminale* subsp. *brunonianum*	Subspecies	
WAAGVD0016	Lamiaceae	*Dicrastylis brunnea*	Species	
WAAGVD0016	Lamiaceae	*Dicrastylis nicholasii*	Species	
WAAGVD0016	Sapindaceae	*Dodonaea stenozyga*	Species	
WAAGVD0016	Solanaceae	*Duboisia hopwoodii*	Species	
WAAGVD0016	Poaceae	*Eragrostis*	Genus	
WAAGVD0016	Scrophulariaceae	*Eremophila clarkei*	Species	
WAAGVD0016	Scrophulariaceae	*Eremophila longifolia*	Species	
WAAGVD0016	Myrtaceae	*Eucalyptus gongylocarpa*	Species	
WAAGVD0016	Myrtaceae	*Eucalyptus oleosa* subsp. *oleosa*	Subspecies	
WAAGVD0016	Myrtaceae	*Eucalyptus platycorys*	Species	
WAAGVD0016	Myrtaceae	*Eucalyptus socialis* subsp. *victoriensis*	Subspecies	
WAAGVD0016	Haloragaceae	*Glischrocaryon aureum*	Species	
WAAGVD0016	Goodeniaceae	*Goodenia*	Genus	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0016	Gyrostemonaceae	*Gyrostemon ramulosus*	Species	
WAAGVD0016		Indeterminate		
WAAGVD0016	Goodeniaceae	*Lechenaultia aphylla*	Species	Priority Flora Category 1
WAAGVD0016	Apocynaceae	*Leichhardtia australis*	Species	
WAAGVD0016	Asteraceae	*Olearia exiguifolia*	Species	
WAAGVD0016	Asteraceae	*Olearia incana*	Species	
WAAGVD0016	Poaceae	*Paspalidium basicladum*	Species	
WAAGVD0016	Proteaceae	*Proteaceae*	Familia	
WAAGVD0016	Amaranthaceae	*Ptilotus drummondii*	Species	
WAAGVD0016	Amaranthaceae	*Ptilotus sessilifolius*	Species	
WAAGVD0016	Goodeniaceae	*Scaevola parvifolia*	Species	
WAAGVD0016	Goodeniaceae	*Scaevola spinescens*	Species	
WAAGVD0016	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0016	Fabaceae	*Senna pleurocarpa* var. *pleurocarpa*	Varietas	
WAAGVD0016	Malvaceae	*Seringia*	Genus	
WAAGVD0016	Malvaceae	*Seringia velutina*	Species	
WAAGVD0016	Solanaceae	*Solanum lasiophyllum*	Species	
WAAGVD0016	Solanaceae	*Solanum plicatile*	Species	
WAAGVD0016	Fabaceae	*Templetonia aculeata*	Species	
WAAGVD0016	Myrtaceae	*Thryptomene biseriata*	Species	
WAAGVD0016	Poaceae	*Triodia rigidissima*	Species	
WAAGVD0017	Fabaceae	*Acacia burkittii*	Species	
WAAGVD0017	Fabaceae	*Acacia ligulata*	Species	
WAAGVD0017	Fabaceae	*Acacia prainii*	Species	
WAAGVD0017	Malvaceae	*Alyogyne* sp. Great Victoria Desert (D.J.Edinger 6212)	Species	
WAAGVD0017	Poaceae	*Amphipogon caricinus* var. *caricinus*	Varietas	
WAAGVD0017	Malvaceae	*Androcalva melanopetala*	Species	
WAAGVD0017	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0017	Poaceae	*Aristida holathera* var. *holathera*	Varietas	
WAAGVD0017	Euphorbiaceae	*Beyeria sulcata* var. *sulcata*	Varietas	
WAAGVD0017	Goodeniaceae	*Dampiera stenophylla*	Species	
WAAGVD0017	Lamiaceae	*Dicrastylis cundeeleensis*	Species	Priority Flora Category 4
WAAGVD0017	Solanaceae	*Duboisia hopwoodii*	Species	
WAAGVD0017	Scrophulariaceae	*Eremophila forrestii* subsp. *forrestii*	Subspecies	
WAAGVD0017	Myrtaceae	*Eucalyptus*	Genus	
WAAGVD0017	Myrtaceae	*Eucalyptus concinna*	Species	
WAAGVD0017	Myrtaceae	*Eucalyptus oleosa* subsp. *oleosa*	Subspecies	
WAAGVD0017	Myrtaceae	*Eucalyptus socialis*	Species	
WAAGVD0017	Myrtaceae	*Eucalyptus socialis* subsp. *victoriensis*	Subspecies	
WAAGVD0017	Myrtaceae	*Eucalyptus socialis* subsp. *victoriensis*	Subspecies	
WAAGVD0017	Haloragaceae	*Glischrocaryon aureum*	Species	
WAAGVD0017	Goodeniaceae	*Goodenia ramelii*	Species	
WAAGVD0017	Goodeniaceae	*Goodenia xanthosperma*	Species	
WAAGVD0017	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0017	Proteaceae	*Hakea francisiana*	Species	
WAAGVD0017	Malvaceae	*Hannafordia bissillii* subsp. *bissillii*	Subspecies	
WAAGVD0017	Apocynaceae	*Leichhardtia australis*	Species	
WAAGVD0017	Fabaceae	*Leptosema aculeatum*	Species	

Plot name	Family	Herbarium determination	Taxon Rank	WA cons. code
WAAGVD0017	Asteraceae	*Olearia incana*	Species	
WAAGVD0017	Pittosporaceae	*Pittosporum angustifolium*	Species	
WAAGVD0017	Amaranthaceae	*Ptilotus sessilifolius*	Species	
WAAGVD0017	Goodeniaceae	*Scaevola basedowii*	Species	
WAAGVD0017	Goodeniaceae	*Scaevola bursariifolia*	Species	
WAAGVD0017	Goodeniaceae	*Scaevola parvifolia*	Species	
WAAGVD0017	Fabaceae	*Senna artemisioides* subsp. *filifolia*	Subspecies	
WAAGVD0017	Solanaceae	*Solanum plicatile*	Species	
WAAGVD0017	Fabaceae	*Templetonia aculeata*	Species	
WAAGVD0017	Poaceae	*Triodia*	Genus	
WAAGVD0017	Lamiaceae	*Westringia cephalantha* var. *cephalantha*	Varietas	

Appendix 4. Point intercept data

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0002	*Acacia colletioides*	1	0.1%
WAAGVD0002	*Acacia hemiteles*	15	1.5%
WAAGVD0002	*Acacia ligulata*	1	0.1%
WAAGVD0002	*Beyeria sulcata* var. *sulcata*	2	0.2%
WAAGVD0002	*Callitris columellaris*	5	0.5%
WAAGVD0002	*Dodonaea stenozyga*	4	0.4%
WAAGVD0002	*Eremophila longifolia*	6	0.6%
WAAGVD0002	*Eucalyptus*	89	8.7%
WAAGVD0002	*Eucalyptus concinna*	62	6.1%
WAAGVD0002	*Eucalyptus youngiana*	1	0.1%
WAAGVD0002	Indeterminate	4	0.4%
WAAGVD0002	*Triodia tomentosa*	96	9.4%
WAAGVD0002	*Westringia cephalantha* var. *cephalantha*	72	7.1%
WAAGVD0003	*Acacia desertorum* var. *desertorum*	5	0.5%
WAAGVD0003	*Acacia ligulata*	5	0.5%
WAAGVD0003	*Alyxia buxifolia*	1	0.1%
WAAGVD0003	*Beyeria sulcata* var. *sulcata*	12	1.2%
WAAGVD0003	*Callitris columellaris*	140	13.7%
WAAGVD0003	*Callitris verrucosa*	80	7.8%
WAAGVD0003	*Eucalyptus*	10	1.0%
WAAGVD0003	*Eucalyptus gongylocarpa*	93	9.1%
WAAGVD0003	*Hakea francisiana*	1	0.1%
WAAGVD0003	*Thryptomene biseriata*	3	0.3%
WAAGVD0003	*Triodia tomentosa*	154	15.1%
WAAGVD0004	*Acacia hemiteles*	22	2.2%
WAAGVD0004	*Acacia ligulata*	2	0.2%
WAAGVD0004	*Beyeria sulcata* var. *sulcata*	6	0.6%
WAAGVD0004	*Daviesia aphylla*	22	2.2%
WAAGVD0004	*Eremophila platythamnos* subsp. *platythamnos*	1	0.1%
WAAGVD0004	*Eucalyptus*	74	7.3%
WAAGVD0004	*Eucalyptus concinna*	55	5.4%
WAAGVD0004	*Eucalyptus eremicola* subsp. *eremicola*	19	1.9%
WAAGVD0004	*Eucalyptus gongylocarpa*	3	0.3%
WAAGVD0004	*Eucalyptus platycorys*	22	2.2%
WAAGVD0004	*Grevillea huegelii*	6	0.6%
WAAGVD0004	*Halgania erecta*	1	0.1%
WAAGVD0004	*Triodia tomentosa*	75	7.4%
WAAGVD0004	*Westringia cephalantha* var. *cephalantha*	30	2.9%
WAAGVD0005	*Acacia hemiteles*	4	0.4%
WAAGVD0005	*Acacia ligulata*	2	0.2%
WAAGVD0005	*Acacia sibina*	1	0.1%
WAAGVD0005	*Beyeria sulcata* var. *sulcata*	42	4.1%
WAAGVD0005	*Callitris*	2	0.2%
WAAGVD0005	*Eucalyptus*	7	0.7%
WAAGVD0005	*Eucalyptus concinna*	24	2.4%
WAAGVD0005	*Eucalyptus gongylocarpa*	58	5.7%
WAAGVD0005	*Eucalyptus rigidula* subsp. *interior*	20	2.0%
WAAGVD0005	*Eucalyptus youngiana*	2	0.2%
WAAGVD0005	*Marianthus bicolor*	2	0.2%
WAAGVD0005	*Senna pleurocarpa* var. *pleurocarpa*	1	0.1%
WAAGVD0005	*Seringia exastia*	5	0.5%
WAAGVD0005	*Templetonia aculeata*	1	0.1%
WAAGVD0005	*Triodia*	429	42.1%
WAAGVD0005	*Westringia cephalantha* var. *cephalantha*	3	0.3%

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0006	*Acacia hemiteles*	10	1.0%
WAAGVD0006	*Androcalva melanopetala*	1	0.1%
WAAGVD0006	*Aristida holathera* var. *holathera*	1	0.1%
WAAGVD0006	*Beyeria sulcata* var. *sulcata*	20	2.0%
WAAGVD0006	*Calothamnus gilesii*	4	0.4%
WAAGVD0006	*Eragrostis eriopoda*	1	0.1%
WAAGVD0006	*Eucalyptus*	72	7.1%
WAAGVD0006	*Eucalyptus concinna*	30	2.9%
WAAGVD0006	*Eucalyptus gongylocarpa*	25	2.5%
WAAGVD0006	*Eucalyptus youngiana*	34	3.3%
WAAGVD0006	*Hakea francisiana*	5	0.5%
WAAGVD0006	*Marianthus bicolor*	7	0.7%
WAAGVD0006	*Seringia exastia*	1	0.1%
WAAGVD0006	*Seringia velutina*	10	1.0%
WAAGVD0006	*Templetonia aculeata*	1	0.1%
WAAGVD0006	*Triodia rigidissima*	42	4.1%
WAAGVD0006	*Triodia tomentosa*	20	2.0%
WAAGVD0006	*Westringia cephalantha* var. *cephalantha*	2	0.2%
WAAGVD0007	*Acacia colletioides*	1	0.1%
WAAGVD0007	*Acacia hemiteles*	9	0.9%
WAAGVD0007	*Acacia ligulata*	12	1.2%
WAAGVD0007	*Daviesia aphylla*	9	0.9%
WAAGVD0007	*Eremophila decipiens*	1	0.1%
WAAGVD0007	*Eremophila longifolia*	7	0.7%
WAAGVD0007	*Eucalyptus*	94	9.2%
WAAGVD0007	*Eucalyptus concinna*	6	0.6%
WAAGVD0007	*Eucalyptus cylindrocarpa*	79	7.7%
WAAGVD0007	*Eucalyptus oleosa* subsp. *oleosa*	10	1.0%
WAAGVD0007	*Senna artemisioides* subsp. *filifolia*	2	0.2%
WAAGVD0007	*Triodia tomentosa*	229	22.5%
WAAGVD0008	*Acacia hemiteles*	6	0.6%
WAAGVD0008	*Acacia ligulata*	8	0.8%
WAAGVD0008	*Beyeria sulcata*	1	0.1%
WAAGVD0008	*Daviesia aphylla*	16	1.6%
WAAGVD0008	*Eremophila youngii*	1	0.1%
WAAGVD0008	*Eucalyptus concinna*	19	1.9%
WAAGVD0008	*Eucalyptus hypolaena*	32	3.1%
WAAGVD0008	*Eucalyptus platycorys*	47	4.6%
WAAGVD0008	*Grevillea huegelii*	8	0.8%
WAAGVD0008	*Melaleuca exuvia*	14	1.4%
WAAGVD0008	*Senna artemisioides* subsp. *filifolia*	2	0.2%
WAAGVD0008	*Seringia velutina*	1	0.1%
WAAGVD0008	*Triodia scariosa*	143	14.0%
WAAGVD0008	*Triodia tomentosa*	14	1.4%
WAAGVD0009	*Acacia fragilis*	4	0.4%
WAAGVD0009	*Acacia hemiteles*	1	0.1%
WAAGVD0009	*Acacia jamesiana*	1	0.1%
WAAGVD0009	*Acacia ligulata*	64	6.3%
WAAGVD0009	*Allocasuarina helmsii*	3	0.3%
WAAGVD0009	*Beyeria sulcata* var. *sulcata*	15	1.5%
WAAGVD0009	*Callitris verrucosa*	7	0.7%
WAAGVD0009	*Cryptandra*	9	0.9%
WAAGVD0009	*Dodonaea adenophora*	5	0.5%
WAAGVD0009	*Eremophila forrestii* subsp. *forrestii*	22	2.2%
WAAGVD0009	*Eremophila platythamnos* subsp. *platythamnos*	6	0.6%
WAAGVD0009	*Eucalyptus*	9	0.9%

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0009	*Eucalyptus gongylocarpa*	49	4.8%
WAAGVD0009	*Grevillea stenobotrya*	3	0.3%
WAAGVD0009	*Hakea minyma*	9	0.9%
WAAGVD0009	*Halgania erecta*	2	0.2%
WAAGVD0009	*Hannafordia bissillii* subsp. *bissillii*	12	1.2%
WAAGVD0009	*Seringia velutina*	1	0.1%
WAAGVD0009	*Thryptomene biseriata*	19	1.9%
WAAGVD0009	*Triodia tomentosa*	62	6.1%
WAAGVD0009	*Westringia cephalantha* var. *cephalantha*	10	1.0%
WAAGVD0010	*Acacia ligulata*	7	0.7%
WAAGVD0010	*Androcalva melanopetala*	6	0.6%
WAAGVD0010	*Anthotroche pannosa*	29	2.8%
WAAGVD0010	*Aristida holathera* var. *holathera*	59	5.8%
WAAGVD0010	*Callitris columellaris*	8	0.8%
WAAGVD0010	*Codonocarpus cotinifolius*	3	0.3%
WAAGVD0010	*Dampiera stenophylla*	4	0.4%
WAAGVD0010	*Dicrastylis*	3	0.3%
WAAGVD0010	*Eragrostis eriopoda*	1	0.1%
WAAGVD0010	*Eucalyptus*	14	1.4%
WAAGVD0010	*Eucalyptus gongylocarpa*	11	1.1%
WAAGVD0010	*Eucalyptus youngiana*	5	0.5%
WAAGVD0010	*Glischrocaryon aureum*	1	0.1%
WAAGVD0010	*Goodenia xanthosperma*	1	0.1%
WAAGVD0010	*Grevillea*	1	0.1%
WAAGVD0010	*Hakea francisiana*	2	0.2%
WAAGVD0010	*Hannafordia bissillii* subsp. *bissillii*	11	1.1%
WAAGVD0010	*Mirbelia seorsifolia*	2	0.2%
WAAGVD0010	*Olearia muelleri*	1	0.1%
WAAGVD0010	*Persoonia coriacea*	1	0.1%
WAAGVD0010	*Phyllota*	3	0.3%
WAAGVD0010	*Seringia velutina*	6	0.6%
WAAGVD0010	*Sida* sp. Golden calyces glabrous fruit (H.N.Foote) WA Herbarium	10	1.0%
WAAGVD0010	*Solanum plicatile*	1	0.1%
WAAGVD0010	*Templetonia aculeata*	1	0.1%
WAAGVD0010	*Triodia*	13	1.3%
WAAGVD0010	*Velleia connata*	9	0.9%
WAAGVD0010	*Westringia cephalantha* var. *cephalantha*	2	0.2%
WAAGVD0011	*Acacia ligulata*	9	0.9%
WAAGVD0011	*Afrohybanthus aurantiacus*	1	0.1%
WAAGVD0011	*Androcalva melanopetala*	7	0.7%
WAAGVD0011	*Anthotroche pannosa*	33	3.2%
WAAGVD0011	*Aristida holathera* var. *holathera*	14	1.4%
WAAGVD0011	*Callitris columellaris*	1	0.1%
WAAGVD0011	*Caustis deserti*	3	0.3%
WAAGVD0011	*Eucalyptus*	12	1.2%
WAAGVD0011	*Eucalyptus ceratocorys*	9	0.9%
WAAGVD0011	*Eucalyptus youngiana*	5	0.5%
WAAGVD0011	*Grevillea*	3	0.3%
WAAGVD0011	*Gyrostemon ramulosus*	1	0.1%
WAAGVD0011	*Hakea francisiana*	2	0.2%
WAAGVD0011	*Hannafordia bissillii* subsp. *bissillii*	4	0.4%
WAAGVD0011	*Hybanthus floribundus* subsp. *floribundus*	1	0.1%
WAAGVD0011	Indeterminate	2	0.2%
WAAGVD0011	*Jacksonia arida*	1	0.1%
WAAGVD0011	*Lechenaultia striata*	5	0.5%
WAAGVD0011	*Leptosema aculeatum*	1	0.1%
WAAGVD0011	*Lomandra leucocephala* subsp. *robusta*	7	0.7%
WAAGVD0011	*Microcorys macredieana*	22	2.2%

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0011	*Myrtaceae*	3	0.3%
WAAGVD0011	*Pityrodia loricata*	5	0.5%
WAAGVD0011	*Scaevola parvifolia*	4	0.4%
WAAGVD0011	*Seringia velutina*	1	0.1%
WAAGVD0011	*Triodia*	18	1.8%
WAAGVD0011	*Velleia connata*	2	0.2%
WAAGVD0012	*Acacia burkittii*	1	0.1%
WAAGVD0012	*Acacia ligulata*	42	4.1%
WAAGVD0012	*Anthotroche pannosa*	76	7.5%
WAAGVD0012	*Aristida holathera* var. *holathera*	4	0.4%
WAAGVD0012	*Bertya dimerostigma*	17	1.7%
WAAGVD0012	*Beyeria sulcata* var. *sulcata*	11	1.1%
WAAGVD0012	*Callitris columellaris*	7	0.7%
WAAGVD0012	*Chrysocephalum puteale*	1	0.1%
WAAGVD0012	*Codonocarpus cotinifolius*	1	0.1%
WAAGVD0012	*Dampiera eriantha*	2	0.2%
WAAGVD0012	*Daviesia ulicifolia* subsp. *aridicola*	3	0.3%
WAAGVD0012	*Dicrastylis cundeeleensis*	6	0.6%
WAAGVD0012	*Dodonaea adenophora*	4	0.4%
WAAGVD0012	*Duboisia hopwoodii*	1	0.1%
WAAGVD0012	*Eremophila*	2	0.2%
WAAGVD0012	*Eucalyptus gongylocarpa*	37	3.6%
WAAGVD0012	*Eucalyptus rigidula* subsp. *interior*	22	2.2%
WAAGVD0012	*Eucalyptus youngiana*	2	0.2%
WAAGVD0012	*Gyrostemon ramulosus*	6	0.6%
WAAGVD0012	*Hannafordia bissillii* subsp. *bissillii*	5	0.5%
WAAGVD0012	*Lomandra leucocephala* subsp. *robusta*	7	0.7%
WAAGVD0012	*Pityrodia loricata*	15	1.5%
WAAGVD0012	*Pomax ammophila*	1	0.1%
WAAGVD0012	*Prostanthera campbellii*	1	0.1%
WAAGVD0012	*Scaevola basedowii*	1	0.1%
WAAGVD0012	*Senna artemisioides* subsp. *filifolia*	1	0.1%
WAAGVD0012	*Senna pleurocarpa* var. *pleurocarpa*	1	0.1%
WAAGVD0012	*Thryptomene biseriata*	6	0.6%
WAAGVD0012	*Triodia*	9	0.9%
WAAGVD0013	*Acacia desertorum* var. *desertorum*	1	0.1%
WAAGVD0013	*Acacia ligulata*	1	0.1%
WAAGVD0013	*Beyeria sulcata* var. *sulcata*	5	0.5%
WAAGVD0013	*Callitris columellaris*	1	0.1%
WAAGVD0013	*Calothamnus gilesii*	8	0.8%
WAAGVD0013	*Caustis deserti*	1	0.1%
WAAGVD0013	*Codonocarpus cotinifolius*	2	0.2%
WAAGVD0013	*Dampiera eriantha*	1	0.1%
WAAGVD0013	*Dicrastylis cundeeleensis*	11	1.1%
WAAGVD0013	*Eremophila forrestii* subsp. *forrestii*	76	7.5%
WAAGVD0013	*Eucalyptus youngiana*	15	1.5%
WAAGVD0013	*Grevillea didymobotrya* subsp. *didymobotrya*	2	0.2%
WAAGVD0013	*Grevillea obliquistigma*	7	0.7%
WAAGVD0013	*Grevillea stenobotrya*	10	1.0%
WAAGVD0013	*Hybanthus floribundus* subsp. *floribundus*	6	0.6%
WAAGVD0013	*Lechenaultia striata*	1	0.1%
WAAGVD0013	*Lepidobolus deserti*	8	0.8%
WAAGVD0013	*Leptospermum fastigiatum*	5	0.5%
WAAGVD0013	*Lomandra leucocephala* subsp. *robusta*	7	0.7%
WAAGVD0013	*Malleostemon* sp. Officer Basin (D.Pearson 350) WA Herbarium	1	0.1%
WAAGVD0013	*Newcastelia hexarrhena*	4	0.4%
WAAGVD0013	*Orianthera nuda*	2	0.2%
WAAGVD0013	*Scaevola parvifolia* subsp. *parvifolia*	15	1.5%

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0013	*Solanum*	3	0.3%
WAAGVD0013	*Thryptomene biseriata*	17	1.7%
WAAGVD0013	*Triodia*	13	1.3%
WAAGVD0014	*Acacia desertorum* var. *desertorum*	24	2.4%
WAAGVD0014	*Acacia ligulata*	9	0.9%
WAAGVD0014	*Allocasuarina helmsii*	86	8.4%
WAAGVD0014	*Beyeria sulcata* var. *sulcata*	1	0.1%
WAAGVD0014	*Callitris columellaris*	6	0.6%
WAAGVD0014	*Calothamnus gilesii*	25	2.5%
WAAGVD0014	*Cryptandra*	1	0.1%
WAAGVD0014	*Eucalyptus*	1	0.1%
WAAGVD0014	*Eucalyptus concinna*	6	0.6%
WAAGVD0014	*Eucalyptus plumula*	7	0.7%
WAAGVD0014	*Eucalyptus youngiana*	34	3.3%
WAAGVD0014	*Exocarpos sparteus*	3	0.3%
WAAGVD0014	*Grevillea*	25	2.5%
WAAGVD0014	*Hakea francisiana*	5	0.5%
WAAGVD0014	*Homalocalyx thryptomenoides*	6	0.6%
WAAGVD0014	*Lepidobolus deserti*	2	0.2%
WAAGVD0014	*Leptospermum fastigiatum*	1	0.1%
WAAGVD0014	*Thryptomene biseriata*	22	2.2%
WAAGVD0014	*Triodia desertorum*	264	25.9%
WAAGVD0015	*Acacia caesaneura*	1	0.1%
WAAGVD0015	*Acacia ligulata*	94	9.2%
WAAGVD0015	*Acacia mulganeura*	1	0.1%
WAAGVD0015	*Acacia prainii*	6	0.6%
WAAGVD0015	*Acacia rhodophloia*	1	0.1%
WAAGVD0015	*Amphipogon caricinus* var. *caricinus*	1	0.1%
WAAGVD0015	*Beyeria sulcata* var. *sulcata*	45	4.4%
WAAGVD0015	*Callitris columellaris*	22	2.2%
WAAGVD0015	*Dodonaea lobulata*	8	0.8%
WAAGVD0015	*Dodonaea stenozyga*	2	0.2%
WAAGVD0015	*Eremophila latrobei* subsp. *glabra*	18	1.8%
WAAGVD0015	*Eremophila longifolia*	4	0.4%
WAAGVD0015	*Eucalyptus concinna*	47	4.6%
WAAGVD0015	*Eucalyptus eremicola* subsp. *eremicola*	10	1.0%
WAAGVD0015	*Eucalyptus gongylocarpa*	108	10.6%
WAAGVD0015	*Eucalyptus platycorys*	3	0.3%
WAAGVD0015	*Leichhardtia australis*	1	0.1%
WAAGVD0015	*Prostanthera campbellii*	1	0.1%
WAAGVD0015	*Scaevola spinescens*	2	0.2%
WAAGVD0015	*Triodia*	10	1.0%
WAAGVD0015	*Triodia scariosa*	33	3.2%
WAAGVD0016	*Acacia ligulata*	14	1.4%
WAAGVD0016	*Acacia mulganeura*	1	0.1%
WAAGVD0016	*Acacia prainii*	4	0.4%
WAAGVD0016	*Alyogyne* sp. Great Victoria Desert (D.J.Edinger 6212)	1	0.1%
WAAGVD0016	*Amphipogon caricinus* var. *caricinus*	1	0.1%
WAAGVD0016	*Aristida holathera* var. *holathera*	1	0.1%
WAAGVD0016	*Beyeria sulcata* var. *sulcata*	7	0.7%
WAAGVD0016	*Codonocarpus cotinifolius*	21	2.1%
WAAGVD0016	*Dicrastylis brunnea*	1	0.1%
WAAGVD0016	*Dicrastylis nicholasii*	1	0.1%
WAAGVD0016	*Dodonaea stenozyga*	15	1.5%
WAAGVD0016	*Eragrostis*	1	0.1%
WAAGVD0016	*Eremophila longifolia*	7	0.7%
WAAGVD0016	*Eucalyptus gongylocarpa*	10	1.0%

Plot name	Herbarium determination	No. hits	% species cover
WAAGVD0016	*Eucalyptus oleosa* subsp. *oleosa*	48	4.7%
WAAGVD0016	*Eucalyptus platycorys*	37	3.6%
WAAGVD0016	*Eucalyptus socialis* subsp. *victoriensis*	3	0.3%
WAAGVD0016	*Lechenaultia aphylla*	2	0.2%
WAAGVD0016	*Ptilotus drummondii*	2	0.2%
WAAGVD0016	*Scaevola spinescens*	3	0.3%
WAAGVD0016	*Senna artemisioides* subsp. *filifolia*	1	0.1%
WAAGVD0016	*Seringia*	1	0.1%
WAAGVD0016	*Solanum plicatile*	35	3.4%
WAAGVD0016	*Triodia rigidissima*	3	0.3%
WAAGVD0017	*Acacia ligulata*	16	1.6%
WAAGVD0017	*Androcalva melanopetala*	1	0.1%
WAAGVD0017	*Beyeria sulcata* var. *sulcata*	16	1.6%
WAAGVD0017	*Dicrastylis cundeeleensis*	4	0.4%
WAAGVD0017	*Eremophila forrestii* subsp. *forrestii*	16	1.6%
WAAGVD0017	*Eucalyptus*	1	0.1%
WAAGVD0017	*Eucalyptus concinna*	44	4.3%
WAAGVD0017	*Eucalyptus oleosa* subsp. *oleosa*	10	1.0%
WAAGVD0017	*Eucalyptus socialis* subsp. *victoriensis*	7	0.7%
WAAGVD0017	*Glischrocaryon aureum*	3	0.3%
WAAGVD0017	*Hannafordia bissillii* subsp. *bissillii*	4	0.4%
WAAGVD0017	*Leptosema aculeatum*	1	0.1%
WAAGVD0017	*Scaevola bursariifolia*	74	7.3%
WAAGVD0017	*Solanum plicatile*	2	0.2%
WAAGVD0017	*Triodia*	17	1.7%
WAAGVD0017	*Westringia cephalantha* var. *cephalantha*	14	1.4%

Appendix 5. Substrate and growth form summary

Plot name	Substrate	No. hits	% substrate
WAAGVD0002	Bare ground	551	54
WAAGVD0002	Cryptogam	21	2
WAAGVD0002	Leaf litter	447	44

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0002	Hummock Grass	96	9.2
WAAGVD0002	Tree Mallee	136	13
WAAGVD0002	Tree/Palm	1	0.1
WAAGVD0002	Shrub	140	13
WAAGVD0002	Shrub Mallee	5	0.5
WAAGVD0002	Tree Mallee (dead)	1	0.1
WAAGVD0002	Shrub (dead)	25	2.4

Plot name	Substrate	No. hits	% substrate
WAAGVD0003	Leaf litter	640	59
WAAGVD0003	Bare ground	444	41
WAAGVD0003	Cryptogam	9	10

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0003	Forb	2	0.2
WAAGVD0003	Hummock grass	154	15.1
WAAGVD0003	Shrub	52	5.1
WAAGVD0003	Tree Malle	10	1
WAAGVD0003	Tree/Palm	246	24.1
WAAGVD0003	Shrub (dead)	9	0.9
WAAGVD0003	Tree/Palm (dead)	33	3.2

Plot name	Substrate	No. hits	% substrate
WAAGVD0004	Bare ground	573	55
WAAGVD0004	Cryptogam	19	2
WAAGVD0004	Leaf Litter	447	43

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0004	Heath shrub	6	0.6
WAAGVD0004	Hummock grass	75	7.4
WAAGVD0004	Shrub	84	8.2
WAAGVD0004	Shrub (dead)	18	1.8
WAAGVD0004	Shrub Mallee (dead)	1	0.1
WAAGVD0004	Tree Mallee	155	15.2
WAAGVD0004	Tree Mallee (dead)	6	0.6

Plot name	Substrate	No. hits	% substrate
WAAGVD0005	Bare ground	391	36
WAAGVD0005	Leaf litter	706	64

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0005	Forb	3	0.3
WAAGVD0005	Hummock grass	201	19.7
WAAGVD0005	Hummock grass (dead)	228	22.4
WAAGVD0005	Shrub	53	5.2
WAAGVD0005	Shrub (dead)	37	3.6
WAAGVD0005	Shrub Mallee	2	0.2
WAAGVD0005	Tree Mallee	48	4.7
WAAGVD0005	Tree Mallee (dead)	3	0.3

WAAGVD0005	Tree/Palm	56	5.5
WAAGVD0005	Tree/Palm (dead)	4	0.4
WAAGVD0005	Vine	2	0.2

Plot name	Substrate	No. hits	% substrate
WAAGVD0006	Bare ground	507	48
WAAGVD0006	Cryptogam	11	1.9
WAAGVD0006	Gravel	1	0.1
WAAGVD0006	Leaf litter	520	50

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0006	Forb	2	0.2
WAAGVD0006	Hummock grass	62	6.1
WAAGVD0006	Shrub	59	5.8
WAAGVD0006	Shrub (dead)	28	2.7
WAAGVD0006	Shrub Mallee	8	0.8
WAAGVD0006	Tree Mallee	123	12.1
WAAGVD0006	Tree Mallee (dead)	16	1.6
WAAGVD0006	Tree/Palm	20	2
WAAGVD0006	Tussock grass	2	0.2
WAAGVD0006	Vine	7	0.7

Plot name	Substrate	No. hits	% substrate
WAAGVD0007	Bare ground	381	36
WAAGVD0007	Cryptogam	101	9.9
WAAGVD0007	Gravel	2	0.1
WAAGVD0007	Leaf litter	569	54

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0007	Hummock grass	149	14.7
WAAGVD0007	Hummock grass (dead)	80	7.8
WAAGVD0007	Shrub	43	4.2
WAAGVD0007	Shrub (dead)	6	0.6
WAAGVD0007	Shrub Mallee	6	0.6
WAAGVD0007	Tree Mallee	176	17.3
WAAGVD0007	Tree Mallee (dead)	4	0.4

Plot name	Substrate	No. hits	% substrate
WAAGVD0008	Bare ground	508	48
WAAGVD0008	Cryptogam	21	5
WAAGVD0008	Leaf litter	515	47

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0008	Hummock grass	153	15
WAAGVD0008	Hummock grass (dead)	4	0.4
WAAGVD0008	Shrub	55	5.4
WAAGVD0008	Shrub (dead)	20	2
WAAGVD0008	Shrub Mallee	6	0.6

WAAGVD0008	Tree Mallee	87	8.5
WAAGVD0008	Tree Mallee (dead)	5	0.5
WAAGVD0008	Tree/Palm (dead)	10	1
WAAGVD0008	Tussock grass	1	0.1

Plot name	Substrate	No. hits	% substrate
WAAGVD0009	Bare ground	692	55
WAAGVD0009	Cryptogam	6	1
WAAGVD0009	Leaf litter	339	41
WAAGVD0009	Unknown	20	3

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0009	Heath-shrub	28	2.7
WAAGVD0009	Hummock grass	62	6.1
WAAGVD0009	Shrub	157	15.4
WAAGVD0009	Shrub (dead)	40	3.9
WAAGVD0009	Shrub Mallee	1	0.1
WAAGVD0009	Tree Mallee	8	0.8
WAAGVD0009	Tree/Palm	44	4.3

Plot name	Substrate	No. hits	% substrate
WAAGVD0010	Ash	45	5
WAAGVD0010	Bare ground	699	68
WAAGVD0010	Leaf litter	280	27
WAAGVD0010	Unknown	1	0.1

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0010	Forb	76	7.5
WAAGVD0010	Heath-shrub	1	0.1
WAAGVD0010	Hummock grass	5	0.5
WAAGVD0010	Hummock grass (dead)	8	0.8
WAAGVD0010	Shrub	32	3.1
WAAGVD0010	Shrub (dead)	11	1.1
WAAGVD0010	Shrub Mallee	12	1.2
WAAGVD0010	Shrub Mallee (dead)	4	0.4
WAAGVD0010	Tree Mallee	1	0.1
WAAGVD0010	Tree Mallee (dead)	2	0.2
WAAGVD0010	Tree/Palm	4	0.4
WAAGVD0010	Tree/Palm (dead)	10	1
WAAGVD0010	Tussock grass	60	5.9

Plot name	Substrate	No. hits	% substrate
WAAGVD0011	Ash	74	7
WAAGVD0011	Bare ground	825	76
WAAGVD0011	Cryptogam	1	0.1
WAAGVD0011	Leaf litter	191	17

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0011	Forb	23	2.3
WAAGVD0011	Heath-shrub	1	0.1
WAAGVD0011	Hummock grass	1	0.1
WAAGVD0011	Hummock grass (dead)	17	1.7
WAAGVD0011	Rush	10	1
WAAGVD0011	Shrub	81	7.9
WAAGVD0011	Shrub (dead)	17	1.7
WAAGVD0011	Shrub Mallee	10	1
WAAGVD0011	Shrub Mallee	2	0.2
WAAGVD0011	Tree Mallee (dead)	14	1.4
WAAGVD0011	Tussock grass	14	1.4

Plot name	Substrate	No. hits	% substrate
WAAGVD0012	Ash	233	15
WAAGVD0012	Bare ground	759	70
WAAGVD0012	Cryptogam	2	0.1
WAAGVD0012	Leaf litter	234	15

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0012	Forb	3	0.3
WAAGVD0012	Heath-shrub	6	0.6
WAAGVD0012	Hummock grass	2	0.2
WAAGVD0012	Hummock grass (dead)	7	0.7
WAAGVD0012	Rush	7	0.7
WAAGVD0012	Shrub	210	20.6
WAAGVD0012	Shrub (dead)	45	4.4
WAAGVD0012	Shrub Mallee	21	2.1
WAAGVD0012	Shrub Mallee (dead)	2	0.2
WAAGVD0012	Tree Mallee	1	0.1
WAAGVD0012	Tree/Palm	8	0.8
WAAGVD0012	Tussock grass	4	0.4

Plot name	Substrate	No. hits	% substrate
WAAGVD0013	Ash	118	12
WAAGVD0013	Bare ground	669	65
WAAGVD0013	Cryptogam	1	0.1
WAAGVD0013	Leaf litter	234	23

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0013	Forb	38	3.7
WAAGVD0013	Forb (dead)	3	0.3
WAAGVD0013	Heath-shrub	1	0.1
WAAGVD0013	Hummock grass	4	0.4
WAAGVD0013	Hummock grass (dead)	9	0.9
WAAGVD0013	Rush	7	0.7
WAAGVD0013	Sedge	9	0.9
WAAGVD0013	Shrub	138	13.5
WAAGVD0013	Shrub (dead)	38	3.7
WAAGVD0013	Shrub Mallee	9	0.9
WAAGVD0013	Shrub Mallee (dead)	3	0.3
WAAGVD0013	Tree Mallee	1	0.1
WAAGVD0013	Tree Mallee (dead)	2	0.2
WAAGVD0013	Tree/Palm	2	0.2
WAAGVD0013	Tussock grass	1	0.1

Plot name	Substrate	No. hits	% substrate
WAAGVD0014	Bare ground	587	57
WAAGVD0014	Cryptogam	16	2
WAAGVD0014	Gravel	1	0.1
WAAGVD0014	Leaf litter	416	41

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0014	Heath-shrub	59	5.8
WAAGVD0014	Heath-shrub (dead)	4	0.4
WAAGVD0014	Hummock grass	211	20.7
WAAGVD0014	Hummock grass (dead)	53	5.2
WAAGVD0014	Rush	2	0.2
WAAGVD0014	Shrub	105	10.3
WAAGVD0014	Shrub (dead)	84	8.2
WAAGVD0014	Shrub Mallee	2	0.2
WAAGVD0014	Tree Mallee	44	4.3

WAAGVD0014	Tree Mallee (dead)	3	0.3
WAAGVD0014	Tree/Palm	2	0.2

Plot name	Substrate	No. hits	% substrate
WAAGVD0015	Bare ground	533	52
WAAGVD0015	Cryptogam	33	3
WAAGVD0015	Leaf litter	508	45

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0015	Hummock grass	32	3.1
WAAGVD0015	Hummock grass (dead)	11	1.1
WAAGVD0015	Shrub	224	22
WAAGVD0015	Shrub (dead)	52	5.1
WAAGVD0015	Shrub Mallee	1	0.1
WAAGVD0015	Tree Mallee	60	5.9
WAAGVD0015	Tree/Palm	2	0.2
WAAGVD0015	Tree/Palm (dead)	60	5.9
WAAGVD0015	Tussock grass	1	0.1
WAAGVD0015	Vine	1	0.1

Plot name	Substrate	No. hits	% substrate
WAAGVD0016	Ash	35	3
WAAGVD0016	Bare ground	566	54
WAAGVD0016	Cryptogam	6	0.1
WAAGVD0016	Gravel	2	0.1
WAAGVD0016	Leaf litter	415	42

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0016	Forb	18	1.8
WAAGVD0016	Forb (dead)	22	2.2
WAAGVD0016	Hummock grass	3	0.3
WAAGVD0016	Shrub	61	6.0
WAAGVD0016	Shrub (dead)	5	0.5
WAAGVD0016	Shrub Mallee	85	8.3
WAAGVD0016	Shrub Mallee (dead)	3	0.3
WAAGVD0016	Tree Mallee (dead)	1	0.1
WAAGVD0016	Tree/Palm	8	0.8
WAAGVD0016	Tree/Palm (dead)	19	1.9
WAAGVD0016	Tussock grass	3	0.3

Plot name	Substrate	No. hits	% substrate
WAAGVD0017	Ash	2	0.1
WAAGVD0017	Bare ground	812	79
WAAGVD0017	Cryptogam	12	1
WAAGVD0017	Leaf litter	195	20

Plot name	Growth form	No. hits	% cover by growth form
WAAGVD0017	Forb	7	0.7
WAAGVD0017	Hummock grass	2	0.2
WAAGVD0017	Hummock grass (dead)	15	1.5
WAAGVD0017	Shrub	141	13.8
WAAGVD0017	Shrub (dead)	9	0.9
WAAGVD0017	Shrub Mallee	59	5.8
WAAGVD0017	Shrub Mallee (dead)	4	0.4

Appendix 6. Soil classification summary

WAAGVD0002

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA055902	0.00	0.02	M	Sand	2.5YR56	5.8	0.026	Non calcareous
WAA055903	0.02	0.05	A11	Sand	2.5YR48	5.7	0.015	Non calcareous
WAA055904	0.05	0.15	A12	Sand	2.5YR48	5.4	0.017	Non calcareous
WAA055905	0.15	0.30	A13	Sand	2.5YR48	5.9	0.014	Non calcareous
WAA055906	0.30	0.50	A13	Sand	2.5YR48	5.5	0.011	Non calcareous
	0.50	0.60	B21	Loamy Sand	2.5YR48			Non calcareous
WAA055907	0.60	0.80	B21	Loamy Sand	2.5YR48	6.3	0.013	Non calcareous
	0.80	0.90	B21	Loamy Sand	2.5YR48			Non calcareous
WAA055908	0.90	1.00	B22	Clayey Sand	2.5YR48	6.3	0.018	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	620526	6656527	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.63
0.1 - 0.2	1.57
0.2 - 0.3	1.56

WAAGVD0003

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA055936	0.00	0.02	M	Loamy Sand	5YR44	5.2	0.010	Non calcareous
WAA055937	0.02	0.15	A11	Loamy Sand	5YR34	4.3	0.011	Non calcareous
WAA055938	0.15	0.30	A12	Loamy Sand	5YR46	4.5	0.010	Non calcareous
WAA055939	0.30	0.50	A12	Loamy Sand	5YR46	4.7	0.009	Non calcareous
	0.50	0.60	B21w	Loamy Sand	2.5YR44			
WAA055940	0.60	0.80	B21w	Loamy Sand	2.5YR44	5.2	0.011	Non calcareous
	0.80	0.90	B21w	Loamy Sand	2.5YR44			
WAA055941	0.90	1.00	B22w	Loamy Sand	2.5YR46	5.4	0.012	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AI EKK- NR	624767	6653953	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.65
0.1 - 0.2	1.56
0.2 - 0.3	1.6

WAAGVD0004

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA055969	0.00	0.01	M	Sand	2.5YR44	6.6	0.036	Non calcareous
WAA055970	0.01	0.05	A1	Sand	2.5YR36	6.5	0.030	Non calcareous
WAA055971	0.05	0.15	A1	Sand	2.5YR36	6.0	0.027	Non calcareous
WAA055972	0.15	0.40	A3	Clayey Sand	2.5YR36	6.7	0.030	Non calcareous
WAA055973	0.40	0.50	B11	Sandy Loam	2.5YR46	7.3	0.040	Non calcareous
WAA055974	0.50	0.70	B12	Sandy Clay Loam	2.5YR46	8.5	0.081	Moderately calcareous
WAA055975	0.70	0.90	B21k	Light Clay	2.5YR58	8.7	0.105	Very highly calcareous
WAA055976	0.90	1.00	B21k	Light Clay	2.5YR58	9.5	0.171	Very highly calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
4 DE AA CQ EO BEKO-	637369	6654522	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.56
0.1 - 0.2	1.53
0.2 - 0.3	1.6

WAAGVD0005

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056004	0.00	0.01	M	Sand	5YR34	7.0	0.117	Non calcareous
WAA056005	0.01	0.10	A11	Sand	5YR34	6.9	0.060	Non calcareous
WAA056006	0.10	0.20	A12	Sand	2.5YR36	6.5	0.028	Non calcareous
WAA056007	0.20	0.30	A12	Sand	2.5YR36	5.8	0.017	Non calcareous
WAA056008	0.30	0.50	B21	Clayey Sand	2.5YR36	6.4	0.021	Non calcareous
WAA056009	0.50	0.70	B21	Clayey Sand	2.5YR36	5.5	0.014	Non calcareous
WAA056010	0.70	0.90	B22	Clayey Sand	2.5YR36	5.6	0.017	Non calcareous
WAA056011	0.90	1.10	B22	Clayey Sand	2.5YR36	5.4	0.019	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	641828	6660814	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.62
0.1 - 0.2	1.63
0.2 - 0.3	1.61

WAAGVD0006

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056038	0.00	0.01	M	Sand	2.5YR44	6.6	0.007	Non calcareous
WAA056039	0.01	0.10	A1	Loamy Sand	2.5YR34	6.0	0.009	Non calcareous
WAA056040	0.10	0.20	B2	Clayey Sand	2.5YR36	6.3	0.011	Non calcareous
WAA056041	0.20	0.30	B2	Clayey Sand	2.5YR36	6.0	0.011	Non calcareous
WAA056042	0.30	0.70	B2	Clayey Sand	2.5YR36	6.2	0.009	Non calcareous
WAA056044	0.70	0.90	B2	Clayey Sand	2.5YR36	6.1	0.008	Non calcareous
WAA056045	0.90	1.00	B2	Clayey Sand	2.5YR36	6.3	0.013	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	641824	6660406	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.63
0.1 - 0.2	1.6
0.2 - 0.3	1.69

WAAGVD0007

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056073	0.00	0.02	M	Loamy Sand	2.5YR34	6.7	0.016	Non calcareous
WAA056074	0.02	0.05	A11	Clayey Sand	2.5YR44	8.2	0.040	Non calcareous
WAA056075	0.05	0.15	A12	Clayey Sand	2.5YR36	8.5	0.069	Non calcareous
WAA056076	0.15	0.35	B2	Sandy Loam	2.5YR24	8.9	0.093	Highly calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
4 CA DA DZ IB BEKLU NR	633744	6634559	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.61
0.1 - 0.2	1.34
0.2 - 0.3	NC

WAAGVD0008

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056104	0.00	0.01	A11	Loamy Sand	2.5YR34	7.5	0.040	Non calcareous
WAA056105	0.01	0.10	A12	Clayey Sand	2.5YR34	7.0	0.022	Non calcareous
WAA056106	0.10	0.20	A3	Sandy Loam	2.5YR36	7.2	0.022	Non calcareous
WAA056107	0.20	0.40	B11	Sandy Clay Loam	2.5YR36	7.5	0.026	Slightly calcareous
WAA056108	0.40	0.60	B12	Clay Loam Sandy	2.5YR46	8.6	0.073	Highly calcareous
WAA056109	0.60	0.70	B12	Clay Loam Sandy	2.5YR46	8.7	0.097	Very highly calcareous
WAA056110	0.70	0.90	B21	Light Clay	5YR36	8.7	0.090	Very highly calcareous
WAA056111	0.90	1.00	B22	Light Medium Clay	5YR36	9.0	0.130	Very highly calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 DE AA CQ EO BEKO-	633915	6646961	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.55
0.1 - 0.2	1.56
0.2 - 0.3	1.52

WAAGVD0009

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056139	0.00	0.01	M	Sand	2.5YR44	7.9	0.052	Non calcareous
WAA056140	0.01	0.10	A1	Loamy Sand	2.5YR43	6.9	0.032	Non calcareous
WAA056141	0.10	0.20	A1	Loamy Sand	2.5YR43	7.5	0.029	Non calcareous
WAA056142	0.20	0.40	B21	Clayey Sand	2.5YR44	7.0	0.025	Non calcareous
WAA056143	0.40	0.60	B22	Clayey Sand	2.5YR48	7.2	0.028	Non calcareous
WAA056144	0.60	0.90	B22	Clayey Sand	2.5YR48	7.3	0.026	Non calcareous
WAA056145	0.90	1.10	B22	Clayey Sand	2.5YR48	8.0	0.036	Non calcareous
WAA056139	0.00	0.01	M	Sand	2.5YR44	7.9	0.052	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JQ AR EKK- NR	635295	6651172	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.61
0.1 - 0.2	1.65
0.2 - 0.3	1.56

WAAGVD0010

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056171	0.00	0.01	M	Sand	5YR34	7.1	0.013	Non calcareous
WAA056172	0.01	0.05	A11	Loamy Sand	5YR34	5.9	0.008	Non calcareous
WAA056173	0.05	0.15	A12	Loamy Sand	5YR46	5.8	0.010	Non calcareous
WAA056174	0.15	0.30	B21	Clayey Sand	5YR46	5.8	0.011	Non calcareous
WAA056175	0.30	0.50	B21	Clayey Sand	5YR46	5.9	0.009	Non calcareous
WAA056176	0.50	0.65	B22	Clayey Sand	2.5YR46	5.5	0.009	Non calcareous
WAA056177	0.65	0.85	B22	Clayey Sand	2.5YR46	5.9	0.012	Non calcareous
WAA056178	0.85	1.00	B22	Clayey Sand	2.5YR46	5.6	0.010	Non calcareous
WAA056179	1.00	1.15	B22	Clayey Sand	2.5YR46	5.8	0.010	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	654870	6685760	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.52
0.1 - 0.2	1.52
0.2 - 0.3	1.51

WAAGVD0011

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056205	0.00	0.03	M	Sand	7.5YR46	6.0	0.012	Non calcareous
WAA056206	0.03	0.10	A1	Sand	7.5YR44	5.7	0.011	Non calcareous
WAA056207	0.10	0.20	B21	Loamy Sand	5YR44	5.2	0.012	Non calcareous
WAA056208	0.20	0.40	B22	Loamy Sand	5YR56	5.1	0.008	Non calcareous
WAA056209	0.40	0.60	B22	Loamy Sand	5YR56	6.1	0.009	Non calcareous
WAA056210	0.60	0.80	B22	Loamy Sand	5YR56	5.8	0.008	Non calcareous
WAA056211	0.80	1.00	B22	Loamy Sand	5YR56	5.8	0.009	Non calcareous
WAA056212	1.00	1.20	B22	Loamy Sand	5YR56	5.9	0.009	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	655054	6685422	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.51
0.1 - 0.2	1.56
0.2 - 0.3	1.53

WAAGVD0012

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056240	0	0.01	M	Sand	5YR44	6.6	0.008	Non-calcareous
WAA056241	0.01	0.05	A11	Loamy sand	5YR46	6.6	0.008	Non-calcareous
WAA056242	0.05	0.15	A12	Loamy sand	5YR46	6.3	0.008	Non-calcareous
WAA056243	0.15	0.3	A12	Loamy sand	5YR46	5.8	0.006	Non-calcareous
WAA056244	0.3	0.5	A13	Loamy sand	5YR46	5.9	0.006	Non-calcareous
WAA056245	0.5	0.7	A13	Loamy sand	5YR46	5.8	0.009	Non-calcareous
WAA056246	0.7	0.9	B21	Clayey sand	2.5YR48	6	0.006	Non-calcareous
WAA056247	0.9	1	B21	Clayey sand	2.5YR48	6.2	0.008	Non-calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	655547	6688153	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.65
0.1 - 0.2	1.59
0.2 - 0.3	1.68

WAAGVD0013

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056275	0.00	0.01	M	Sand	5YR36	6.1	0.008	Non calcareous
WAA056276	0.01	0.05	A1	Loamy Sand	7.5YR46	5.8	0.007	Non calcareous
WAA056277	0.05	0.15	B21	Loamy Sand	5YR56	5.1	0.006	Non calcareous
WAA056278	0.15	0.30	B21	Loamy Sand	5YR56	4.7	0.006	Non calcareous
	0.30	0.40	B21	Loamy Sand	5YR56			
WAA056279	0.40	0.50	B21	Loamy Sand	5YR56	5.0	0.007	Non calcareous
	0.50	0.60	B22	Loamy Sand	5YR48			
WAA056280	0.60	0.70	B22	Loamy Sand	5YR48	5.6	0.006	Non calcareous
	0.70	0.80	B22	Loamy Sand	5YR48			
WAA056281	0.80	0.90	B22	Loamy Sand	5YR48	5.8	0.006	Non calcareous
	0.90	1.00	B22	Loamy Sand	5YR48			
WAA056282	1.00	1.10	B22	Loamy Sand	5YR48	5.7	0.005	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JQ AR EKK- NR	660457	6689315	51

Bulk density

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.67
0.1 - 0.2	1.58
0.2 - 0.3	1.62

WAAGVD0014

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056310	0.00	0.01	A11	Sand	5YR34	5.9	0.007	Non calcareous
WAA056311	0.01	0.05	A12	Sand	5YR46	5.5	0.007	Non calcareous
WAA056312	0.05	0.20	A3	Loamy Sand	5YR36	5.0	0.007	Non calcareous
WAA056313	0.20	0.40	B21	Clayey Sand	2.5YR36	5.8	0.005	Non calcareous
WAA056314	0.40	0.60	B21	Clayey Sand	2.5YR36	6.0	0.008	Non calcareous
WAA056315	0.60	0.90	B22	Clayey Sand	2.5YR36	5.6	0.008	Non calcareous
WAA056316	0.90	1.00	B22	Clayey Sand	2.5YR36	5.6	0.008	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JL AR EKK- NR	665541	6696919	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.72
0.1 - 0.2	1.68
0.2 - 0.3	1.67

WAAGVD0015

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056344	0.00	0.02	M	Sand	5YR48	5.8	0.005	Non calcareous
WAA056345	0.02	0.10	A1	Loamy Sand	5YR36	5.1	0.006	Non calcareous
WAA056346	0.10	0.20	A3	Loamy Sand	2.5YR44	5.0	0.005	Non calcareous
WAA056347	0.20	0.30	A3	Loamy Sand	2.5YR44	4.7	0.007	Non calcareous
WAA056348	0.30	0.50	B21	Clayey Sand	2.5YR36	5.2	0.008	Non calcareous
WAA056349	0.50	0.70	B21	Clayey Sand	2.5YR36	5.1	0.010	Non calcareous
WAA056350	0.70	0.90	B22	Clayey Sand	2.5YR36	5.7	0.011	Non calcareous
WAA056351	0.90	1.00	B22	Clayey Sand	2.5YR36	5.3	0.011	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
3 RE AA JQ AI EKK- NR	663241	6692767	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.66
0.1 - 0.2	1.64
0.2 - 0.3	1.61

WAAGVD0016

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056378	0.00	0.01	A11	Clayey Sand	2.5YR44	6.8	0.015	Non calcareous
WAA056379	0.01	0.10	A12	Clayey Sand	2.5YR44	6.9	0.019	Non calcareous
WAA056380	0.10	0.20	B3	Loamy Sand	2.5YR46	7.4	0.024	Non calcareous
	0.20	0.21	R					

Australian Soil Classification	Pit Easting	Pit Northing	Zone
4 RU CY DZ AR GKT-	664455	6691120	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.51
0.1 - 0.2	1.5
0.2 - 0.3	NC

WAAGVD0017

Sample	Upper depth (m)	Lower depth (m)	Horizon	Texture	Colour when moist	pH	EC (dS/m)	Effervescence
WAA056405	0.00	0.02	M	Sand	5YR46	6.2	0.007	Non calcareous
WAA056406	0.02	0.05	A11	Loamy Sand	5YR36	5.5	0.013	Non calcareous
WAA056407	0.05	0.15	A12	Loamy Sand	5YR36	5.7	0.005	Non calcareous
WAA056408	0.15	0.25	A13	Loamy Sand	2.5YR46	5.6	0.007	Non calcareous
WAA056409	0.25	0.40	A13	Loamy Sand	2.5YR46	6.4	0.011	Non calcareous
WAA056410	0.40	0.60	B2	Clayey Sand	2.5YR36	6.2	0.009	Non calcareous
WAA056411	0.60	0.80	B2	Clayey Sand	2.5YR36	6.3	0.012	Non calcareous
WAA056412	0.80	1.00	B2	Clayey Sand	2.5YR36	6.6	0.011	Non calcareous

Australian Soil Classification	Pit Easting	Pit Northing	Zone
4 RE AA JQ AR EKK- NR	661583	6689815	51

Bulk density:

Depth range (m)	Fine earth bulk density (g/cm^3)
0.0 - 0.1	1.66
0.1 - 0.2	1.57
0.2 - 0.3	1.59

We at TERN acknowledge the traditional owners and their custodianship of the lands on which TERN operates. We pay our respects to their ancestors and their descendants, who continue cultural and spiritual connections to country.

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