

Belisama Conventional Gas Project

Flora and Vegetation Survey

Report to Hancock Energy (PBN) Pty Ltd

25 March 2026



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3				

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Executive Summary

Hancock Energy (PBN) Pty Ltd is proposing to extract natural gas from wells and transport it to a gas plant for processing before feeding it into the Dampier to Bunbury Natural Gas Pipeline (DBNGP), referred to as the Belisama Conventional Gas Project (Belisama Project). The Belisama Project involves the construction of a central flowline to the Central Processing Facility (CPF) to process upstream supplies from the adjacent gas fields and feeding it directly into the DBNGP through the construction of an export pipeline. Hancock Energy commissioned Biologic Environmental Pty Ltd (Biologic), in partnership with Virdis Environmental Pty Ltd (Viridis) and Umwelt (Australia) Pty Ltd (Umwelt), to undertake a flora and vegetation assessment in the exploration permit EP 368 area to support the Belisama Project. The Development Envelope for the Belisama Project includes the following proposed elements: the central flowline, CPF and export pipeline to the DBNGP, totalling 1,327 hectares. The Survey Area for the flora and vegetation assessment included additional areas around the Development Envelope, totalling 6,830 hectares.

The field survey consisted of a reconnaissance, detailed, and targeted flora and vegetation survey, undertaken by three separate consultancies across ten trips and totalling 164 person days. A total of 43 quadrats, 36 relevés and 130 vegetation mapping notes were sampled, as well as targeted traverses for significant flora. The Survey Area is located in an area that has been extensively cleared for agricultural purposes, with patches of remnant vegetation surrounded by cleared paddocks. As such, weed loads were very high across the majority of the Survey Area.

A total of 504 confirmed vascular flora taxa, representing 72 families and 222 genera were recorded within the Survey Area. This comprised of 450 confirmed native flora taxa and 54 confirmed introduced flora taxa, with one listed as a Declared Pest, Paterson's Curse (*_Echium plantagineum_).

Twenty-nine significant flora taxa were recorded within the Survey Area, including one Threatened taxon (_Thelymitra stellata_), two Priority 1 taxa (_Malleostemon decipiens_, _Poranthera asybosca_), four Priority 2 taxa (_Poranthera moorokatta_, _Schoenus badius_, _Schoenus_ sp. Eneabba (F. Obbens & C. Godden I154), _Thysanotus kalbarriensis_), 16 Priority 3 taxa (_Acacia isoneura_ subsp. _isoneura_, _Baeckea_ sp. Walkaway (A.S. George 11249), _Banksia fraseri_ var. _crebra_, _Comesperma rhadinocarpum_, _Gastrolobium rotundifolium_, _Hopkinsia anoectocolea_, _Lechenaultia juncea_, _Mesomelaena stygia_ subsp. _deflexa_, _Persoonia rudis_, _Stylidium drummondianum_, _Stylidium torticarpum_, _Styphelia hyaline_, _Thryptomene nitida_, _Tricoryne soullierae_, _Verticordia densiflora_ var. _roseostella_, _Verticordia luteola_ var. _luteola_) and six Priority 4 taxa (_Banksia elegans_, _Banksia scabrella_, _Eucalyptus macrocarpa_ subsp. _elachantha_, _Schoenus griffinianus_, _Stawellia dimorphantha_, _Stylidium longitubum_). Three

flora taxa remained Possible to occur post-survey (*Paracaleana dixonii* (T), *Comesperma griffinii* (P2), *Austrostipa nunaginensis* (P3)).

A total of 23 vegetation types were described and delineated in the Survey Area, as well as four additional degraded vegetation units and four mapping units. Vegetation condition in the Survey Area ranged from Excellent to Completely Degraded, with the majority of native vegetation considered to be in Good or better condition (77.60%). No significant ecological communities were assessed as being present within the Survey Area. Vegetation type VT13 contained facultative phreatophyte *Eucalyptus camaldulensis* and may be dependent on groundwater, however the majority (96%) of VT13 was in a Degraded or Completely Degraded condition and lacking an intact understorey.

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1 Introduction

1.1 Background

Hancock Energy (PBN) Pty Ltd (Hancock Energy) is proposing to extract natural gas from wells and transport it to a gas plant for processing before feeding it into the Dampier to Bunbury Natural Gas Pipeline (DBNGP), referred to as the Belisama Conventional Gas Project (Belisama Project). Hancock Energy commissioned Biologic Environmental Pty Ltd (Biologic), in partnership with Viridis Environmental Pty Ltd (Viridis) and Umwelt (Australia) Pty Ltd (Umwelt), to undertake a flora and vegetation assessment in the exploration permit EP 368 area to support the Belisama Project. The Belisama Project involves the construction of a central flowline to the Central Processing Facility (CPF) to process upstream supplies from the adjacent gas fields and feeding it directly into the DBNGP through the construction of an export pipeline.

The Belisama Project is located approximately 35 kilometres (km) southeast of Dongara and 230 km north of Perth, within the Perth Basin. For the purposes of this flora and vegetation assessment, the Belisama Project includes the following proposed elements: the central flowline, CPF and export pipeline to the DBNGP. Collectively, these components are referred to as the Development Envelope. The flora and vegetation assessment included additional areas and allowed for an expanded corridor around the pipelines, hereafter referred to as the Survey Area (Figure 1.1). The Survey Area covers approximately 6,830 hectares (ha), while the Development Envelope covers approximately 1,327 ha. Within the Development Envelope, the current indicative Disturbance Footprint covers approximately 298 ha (Figure 1.1)[1].

1.1.1 Objective and Scope

The overarching objective of the flora and vegetation assessment was to identify the flora and vegetation values of the Survey Area and place them in a local and regional context to assist with any future environmental impact assessments. To meet this objective, the scope of works included a comprehensive desktop assessment, and flora and vegetation surveys (reconnaissance, detailed and targeted). The surveys aim to delineate key flora, soil and surface water values (wetlands) and potential sensitivity to impact significant flora and ecological communities. The scope of works was addressed via:

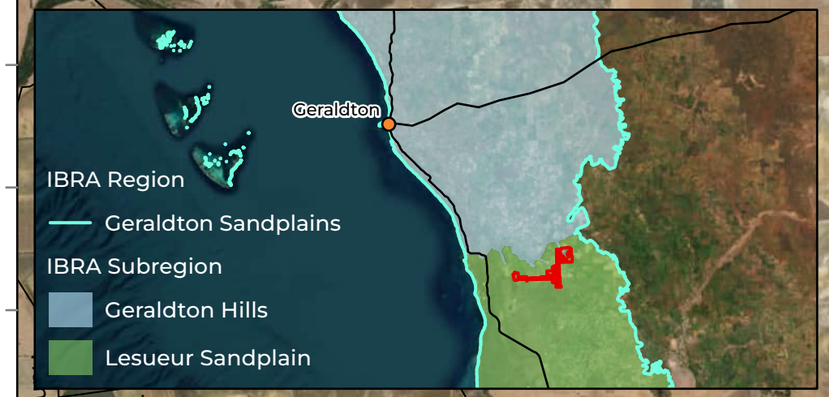
- A desktop assessment to gather contextual information on the Survey Area and surrounds;
- A reconnaissance flora and vegetation survey of the Survey Area to define the values;
- A detailed flora and vegetation survey of the Survey Area;

[1] This report does not display any specific information for the Development Envelope or Disturbance Footprint (e.g. hectares, numbers of significant flora). The Disturbance Envelope, as of writing this report, is shown in figures. However, this boundary may change in response to survey results and further impact assessment.

- A targeted significant flora survey of the Survey Area, focusing on Threatened flora; and
- The preparation of a technical report with supporting spatial data.

An overview of information relevant to the protection of flora and vegetation in Western Australia is provided in Appendix A.

320000
328000
336000
344000
6760000
6752000



Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

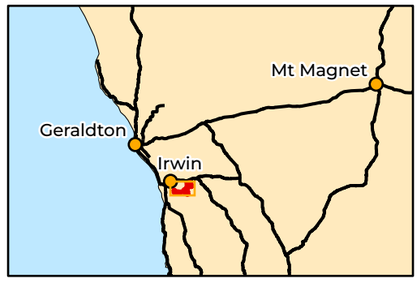
- Survey Area
- Development Envelope
- Local Road
- State Road
- Rail

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 11/03/2026



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Figure 1.1: Survey Area and regional context

1.2 Regional Context

The majority of the Survey Area is located within the Lesueur Sandplain (GES02) subregion of the Geraldton Sandplains (GES) bioregion; however, a small section of the Survey Area occurs in the Geraldton Hills (GES01) subregion of GES bioregion (Figure 1.1), as defined by the Interim Biogeographic Regionalisation for Australia (IBRA) (Thackway & Cresswell, 1995). The Geraldton Sandplains IBRA bioregion has a warm semi-arid to Mediterranean climate, with cool wet winters and warm, relatively dry summers (Desmond & Chant, 2003). Average annual rainfall ranges between 300 and 500 millimetres (mm), with seven to eight dry months per year (Beard, 2015).

The Survey Area is located within the Pinjarra Element (almost identical to the Pinjarra Orogen), a tectonic super province that lies on the western margin of the Australian continent, consisting of Proterozoic (and younger) granite, granite wash, tillite and crystalline metamorphic rocks (Geoscience Australia, 2013, 2021). Overlying the Pinjarra Element is the Perth Basin, a large onshore and offshore basin of younger Permian origins with predominantly siliciclastic marine and nonmarine sedimentary rocks (Geoscience Australia, 2013). At a finer scale, most of the Survey Area falls within the Yarragadee Formation (J-_ya-st), which is part of the Perth Basin, with fine to coarse-grained sandstone, and thin shale interbeds. The eastern edge of the Survey Area intersects with the Otorowiri Formation (JK-Pao-sfl) consisting of siltstone and sandstone and the Parmelia Group (JK-PA-st) which is mainly sandstone (GSWA, 2020b). The Survey Area is also located within five regolith geological units including an alluvial/fluvial unit (_A-WCP), a colluvial unit (_C-WCP), an Eolian unit (_E-WCP) and two residual or relict units (_Rr-f-WCP and _Rs-l-WCP) (Figure Series 1) (GSWA, 2020a).

The Survey Area falls within three land systems: from east to west these are the Mt Horner System, Mount Adams System and Beharra System (Figure Series 1). Broadly, these have gentle slopes with low gravel ridges, occasional lateritic breakaways, gently undulating sandplains and some playas and swampy depressions further inland (DAFWA, 2018). The Survey Area overlies three soil units as defined by CSIRO (1967). These include gently undulating plateau with yellow earthy sands (AC3), broad valleys, interfluvial areas, breakaways, and occasional mesas with laterite and acidic yellow mottled sands (Wd9) and sandy plains with occasional sand dunes (Ca27) (Figure Series 1).

The Survey Area occurs within the Greenough River Basin and two catchments; Arrowsmith River, and Irwin River (DWER, 2018). The Survey Area also occurs within the Arrowsmith hydrogeological zone (DPIRD, 2018). Groundwater of the Arrowsmith hydrogeological zone is mostly unconfined and of low salinity and forms part of the Yarragadee Formation (DPIRD, 2018). The Yarragadee Formation is a major aquifer containing large volumes of fresh groundwater, flowing mainly from the east where recharge occurs from infiltration of rainfall (Kern, 1997). Several minor ephemeral watercourses intersect with the Survey Area, including

Sandplain Creek and other un-named creeklines. These flow north or west, converging with the Irwin River approximately 4 km north and 7 km west of the Survey Area, ultimately discharging into the ocean at Port Denison (DWER, 2021) (Figure Series 1). No nationally important wetlands are found within the vicinity of the Survey Area (DCCEEW, 2022).

Groundwater Dependent Ecosystems (GDEs) are ecosystems that rely upon groundwater for their continued existence (BoM, 2025a) (Appendix B). The Bureau of Meteorology (BoM) Groundwater Dependent Ecosystems Atlas (GDE Atlas) indicates the eastern half of the Survey Area as having moderate to high potential to support terrestrial GDEs (BoM, 2025a) (Figure Series 1). These lie mostly along and between ephemeral watercourses, at low points in the landscape which are closer to groundwater. There are two potential aquatic GDEs within the Survey Area according to the GDE Atlas, however their potential to support GDEs is unclassified (Figure Series 1). One of these, Mooriary Spring, is considered to be permanent or near-permanent and is located within the Survey Area. The GDE Atlas also indicates areas which are likely to be inflow-dependent and accessing water in addition to rainfall (such as soil moisture, surface water or groundwater) (BoM, 2025a). The Survey Area has an Inflow Dependant Ecosystem (IDE) rating between 4 and 10, with ratings above six indicating that a landscape is likely to be inflow dependent. Most of the Survey Area with potential to support terrestrial GDEs have IDE ratings of 9 or 10, particularly in the northeast section. The Survey Area is therefore likely to be inflow dependent in these areas, indicating the importance of surface and subsurface flows across the Survey Area.

Four vegetation system associations occur across the Survey Area (Figure Series 1). Of these, the three dominant vegetation associations (Tathra 379, Irwin 352 and Eridoon 378) comprise mixed heath with scattered tall shrubs including *Acacia* spp., and species from the Proteaceae and Myrtaceae families (DPIRD, 2021). It is important to highlight the unique biodiversity, biological convergence, geographically distinct and taxonomically complex plant families and genera known to occur in the Geraldton Sandplains bioregion (common families include Ericaceae, Restionaceae, Myrtaceae, Proteaceae, Orchidaceae, and Asteraceae). The extremely high floristic endemism, includes over 250 species of sandplain flora endemic to the area, for which it forms part of a nationally and internationally recognised biodiversity hotspot (Desmond & Chant, 2003). To further illustrate this, this subregion supports 393 significant flora taxa, 63 of which are Threatened Flora (WAH, 1998 -).

1.3 Desktop Study

The Survey Area occurs in an area that has been well surveyed for flora and vegetation within the past 20 years. Database searches were undertaken to identify vascular flora taxa and ecological communities previously recorded within and near the Survey Area (Appendix C). Twenty-two previous flora and vegetation assessments were reviewed, with four intersecting or partially intersecting the Survey Area (Appendix C). A total of 835 native vascular flora taxa

from 69 families and 252 genera were identified during the desktop study as well as 62 introduced flora taxa from 25 families (Appendix C).

1.3.1 Significant Flora

A total of 117 significant flora species have the potential to occur within the Survey Area based on database searches and review of other reports (ROOR), of which 92 occurred within a 30 km radius of the Survey Area (Figure 1.2, Appendix C). Of the 117 taxa, 21 are listed as Threatened under the BC Act and EPBC Act. The remaining taxa are categorised as follows: seven listed as Priority 1, 15 as Priority 2, 56 as Priority 3 and 18 as Priority 4. Key findings from the review of other reports are presented in Appendix C.

The significant taxa identified from the desktop assessment were ranked for likelihood of occurrence in the Survey Area (Appendix C). Six of the desktop taxa have been previously Confirmed within the Survey Area (four by DBCA records and two by (JBS&G, 2021)), seven were assessed as Highly Likely to occur, 26 as Likely to occur and 32 as Possible to occur. The remaining taxa were assessed as either Unlikely (26) or Highly Unlikely (20) to occur pre-survey (Appendix C). A summary of the review of the Confirmed to Possible pre-survey taxa, and the reasoning for the change/no change is presented in Table 3.4.

1.3.2 Significant Vegetation

Six Threatened Ecological Communities (TECs) listed under the BC Act are recognised for the Northern Sandplains (DBCA, 2025d). The desktop assessment identified five significant vegetation communities within 30 km of the Survey Area (Figure 1.3, Appendix C). Two of these significant vegetation communities are listed as a critically endangered TECs in WA under the BC Act. Furthermore, the desktop assessment identified the EPBC-listed 'Eucalypt woodlands of the Western Australian wheatbelt' TEC (state-listed PEC) and the EPBC-listed 'Subtropical and Temperate Coastal Saltmarsh' (state-listed PEC). The wheatbelt woodlands TEC is restricted to the Avon Wheatbelt IBRA region and is unlikely to occur within the Survey Area and has not been shown on Figure 1.3. The coastal saltmarsh TEC is located along the Irwin River mouth and is generally associated with coastal landforms, so is unlikely to occur in the Survey Area. The closest occurrence of a state-listed TEC to the Study Area, the 'Mound Springs (Three Springs area)', is located 17 km to the south-east of the Study Area.

The desktop assessment identified three Priority Ecological Communities (PECs), inclusive of the two EPBC-listed TECs (DBCA, 2025b). The nearest PEC, the 'Coastal sands with *Acacia rostellifera*, mallees' (P1), is located 12 km to the west of the Survey Area (Figure 1.3, Appendix C).

300000 315000 330000 345000 360000

6765000

6750000

6735000

Mingenew Morawa Rd

Mingenew

Millendon Junction Narngulu Railway

Irwin

Dongara

Port Denison

Dongara

Dongara Eneabba Railway

Brand Hwy

Midlands Rd

Yandanooka

Indian Ocean Dr

LEGEND

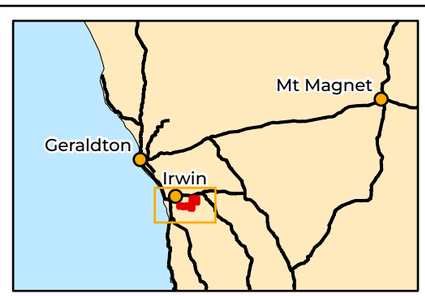
- Survey Area
- Development Envelope
- Operating Mine
- State Road
- Rail

Biologic Environmental

Scale 1:200,000

0 4 8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 23/03/2026



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Figure 1.2: Significant flora records from the desktop assessment

Significant Flora

Threatened

- *Chorizema humile*
- *Conostylis micrantha*
- *Daviesia speciosa*
- *Eucalyptus crispata*
- *Eucalyptus leprophloia*
- *Grevillea phanerophlebia*
- *Paracaleana dixonii*
- *Thelymitra stellata*
- *Wurmbea tubulosa*

Priority 1

- *Verticordia dasystylis subsp. oestopoia*
- *Stylidium carnosum* subsp. Narrow leaves (J.A. Wege 490)
- *Micromyrtus rogeri*
- *Malleostemon decipiens*
- *Lasiopetalum ogilvieanum*

Priority 2

- *Acacia vittata*
- *Comesperma griffinii*
- *Eucalyptus abdita*
- *Homalocalyx chapmanii*
- *Schoenus badius*
- *Schoenus* sp. Eneabba (F. Obbens & C. Godden I154)
- *Scholtzia calcicola*
- *Stylidium pseudocaespitosum*
- *Stylidium* sp. Three Springs (J.A. Wege & C. Wilkins JAW 600)
- *Synaphea sparsiflora*
- *Thomasia rulingioides*

Priority 3

- *Acacia isoneura* subsp. *isoneura*
- *Acacia lanceolata*
- *Acacia megacephala*
- *Acacia telmica*
- *Allocasuarina grevilleoides*
- *Austrostipa nunaginensis*
- *Baeckea* sp. Walkaway (A.S. George 11249)
- *Banksia fraseri* var. *crebra*
- *Beyeria cinerea* subsp. *cinerea*
- *Beyeria gardneri*
- *Comesperma rhadinocarpum*
- *Dampiera tephrea*
- *Eremaea acutifolia*
- *Eucalyptus arachnaea* subsp. *arrecta*
- *Eucalyptus macrocarpa x pyriformis*
- *Guichenotia alba*
- *Haemodorum loratum*
- *Haloragis foliosa*
- *Hemiandra* sp. Eneabba (H. Demarz 3687)
- *Hensmania stoniella*
- *Hibbertia subvillosa*
- *Hopkinsia anoectocolea*
- *Melaleuca sclerophylla*
- *Mesomelaena stygia* subsp. *deflexa*
- *Persoonia chapmaniana*
- *Persoonia filiformis*
- *Persoonia rudis*
- *Scholtzia prostrata*
- *Stylidium drummondianum*
- *Stylidium torticarpum*
- *Styphelia hyalina*
- *Synaphea oulopha*
- *Thryptomene butleri*
- *Thryptomene nitida*
- *Thysanotus vernalis*
- *Verticordia densiflora* var. *roseostella*
- *Verticordia luteola* var. *luteola*

Priority 4

- *Banksia elegans*
- *Banksia scabrella*
- *Calytrix chrysantha*
- *Eucalyptus ebbanoensis* subsp. *photina*
- *Eucalyptus macrocarpa* subsp. *elachantha*
- *Eucalyptus zopherophloia*
- *Pityrodia viscida*
- *Schoenus griffinianus*
- *Stawellia dimorphantha*
- *Thysanotus glaucus*

Biologic Environmental

300000 315000 330000 345000 360000

6765000 6750000 6735000

Mt Horner West Rd
Water Supply Rd
Piggery L
Tabletop Rd
Pwd Rd
Burma Rd
Strawberry North East Rd
Depot Hill Rd
Telara Rd
Coalseam Rd
Narandagy - Pintharuka Rd
Mingenew Morawa Rd
Yandanooka Melara Rd
Wye Farm Rd
Yardarino Rd
Pinchers Rd
Millendon Junction Narngulu Railway
Irwin
Mingenew
Switchback Rd
Wick Rd
Midlands Rd
Yandanooka North East Rd
Hunt Farm Rd
Milo Rd
Ejarno Spring Rd
Brand Hwy
Dongara
Port Denison
Kailis Dr
Mooriary Rd
Mingenew South Rd
Yandanooka
Enokurra Rd
Yandanooka West Rd
Metcalfe Rd
Scott Rd
Mitchell Rd
Carey Rd
Natta Rd
Mt Adams Rd
Maley Rd
Arrino West Rd
Arrino
Sunset Rd
Tomkins Rd

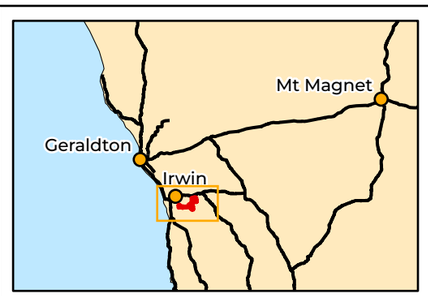
Community - Category
- Ferricrete - BCA Critically Endangered
- Mound Springs (Three Springs area) - BCA Critically Endangered
- Coastal sands with Acacia rostellifera, mallees - Priority 1
- Coastal Saltmarsh - Priority 3

LEGEND
- Survey Area
- Development Envelope
- Operating Mine
- Local Road
- State Road
- Rail

Biologic Environmental

Scale 1:200,000
0 4 8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 11/03/2026



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Figure 1.3: Significant ecological communities from the desktop assessment

2 Methods

2.1 Survey Scope and Planning

The Survey Area occurs in a floristically rich and diverse bioregion coupled with a high degree of historical land clearing for agriculture and was expected to have a relatively large number of significant flora and vegetation values. The desktop study revealed a total of 117 significant flora, including 21 that were listed as Threatened, either at a federal and/or state level. A reconnaissance survey was completed in late July / early August of 2025 to provide additional context and to inform survey planning. Although much of the Survey Area has been subject to historical clearing, remnant vegetation exists alongside roads and in some larger remnants as well. Many rare flora species in the southwest, particularly within highly altered agricultural regions, are restricted to roadside remnant vegetation. These remnants thus become critical for conservation of these taxa. A detailed flora and vegetation survey was necessary to adequately assess for the significant flora and vegetation values potentially present within the Survey Area.

The desktop assessment also highlighted two Threatened orchid species (*Paracaleana dixonii* and *Thelymitra stellata*) that were assessed as Highly Likely to occur. These taxa are small, cryptic and exist as tubers underground for much of the year. An additional 37 significant flora were either Confirmed within the Survey Area or deemed Highly Likely or Likely to occur in the desktop assessment, many of which are cryptic annual species. Additional targeted flora surveys were required to adequately search for cryptic species at an appropriate time of year (i.e. during flowering), as well as for other significant flora taxa.

2.1.1 Flora

The scope of the flora survey was to compile a comprehensive list of flora species that occurs within the Survey Area, and to record locations of significant flora taxa. Although the reconnaissance survey did record flora, it was not the focus of this survey. Flora was more comprehensively assessed as part of the detailed flora and vegetation survey, as well as through targeted surveys which focused on potential significant taxa. Analysis of aerial photography and significant flora locations was conducted prior to the survey to identify any areas of suitable habitat for targeted survey. Field personnel familiarised themselves with the list of potential significant flora via photographs, reference samples and descriptions of these taxa. Standard field survey techniques and information gathered as part of flora surveys are outlined in Appendix D.

2.1.2 Vegetation

The scope of the vegetation survey was to record and map vegetation types and their condition throughout the Survey Area, as well as assessing the presence and extent of any significant ecological communities (TECs and/or PECs). Vegetation was assessed through a reconnaissance and detailed flora and vegetation survey. Standard field survey techniques utilised are detailed in Appendix D, and vegetation mapping is further described in Section 2.7.

2.2 Field Survey Timing and Personnel

The field survey consisted of a reconnaissance, detailed, and targeted flora and vegetation survey, undertaken by three separate consultancies across ten trips and totalling 164 person days (Table 2.1).

Table 2.1: Field survey details

Consultant	Fieldtrip	Survey Type	Dates	Person Hours	Person Days
Biologic	Trip 1	Reconnaissance and Targeted	30 July 2025 – 2 August 2025	96	8
	Trip 6	Targeted	12 October 2025 – 17 October 2025	144	12
	Trip 9	Targeted	14 November 2025 – 17 November 2025	96	8
Viridis	Trip 2	Reconnaissance and Targeted	20 August 2025 – 22 August 2025	72	6
	Trip 5	Targeted	7 October 2025 – 10 October 2025	192	16
	Trip 7	Targeted	22 October 2025 – 24 October 2025	192	16
	Trip 8	Targeted	4 November 2025 – 5 November 2025	72	6
	Trip 10	Targeted	26 November 2025 – 28 November 2025	144	12
Umwelt	Trip 3	Detailed	18 August 2025 – 29 August 2025	480	40
	Trip 4	Detailed	15 September 2025 - 26 September 2025	480	40

The field surveys were completed between July/August and November 2025, which is consistent with the optimal survey period recommended for the South West (EPA, 2016b). All personnel held the current and relevant licensing and had adequate experience for the bioregion. All team leads had at least 5 years' experience, as recommended by the technical guidance (EPA, 2016b). All survey personnel were experienced in undertaking surveys of similar size and scope within the Northern Sandplains bioregion. Details of survey team, including experience and licence numbers are provided in Appendix E.

2.3 Weather Conditions

The survey was designed to sample the project area at multiple times of the year for adequate seasonal timing and optimal species representation. Seasonal timing of the field surveys was adequate and is not expected to present a limitation for the project. In the months prior to each of the ten surveys, mean temperatures were compared to long-term averages (LTA) (1997 to 2024), and mean rainfall was compared to LTAs (1980 to 2024) in the 6 months prior to each of the surveys (Figure 2.1). Rainfall recorded from Irwin House weather station, 11 km northwest of the Survey Area, was well above average between June and August 2025 (BoM, 2025b).

Weather conditions during all ten trips were mostly adequate to complete the survey; with generally fine and slightly overcast conditions. Conditions during trip 3 and trip 4 were challenging at times, with substantial rainfall and thunderstorms hindering access on some of the days. Temperature maximums, recorded at Geraldton Airport weather station 70 km northwest of the Survey Area, ranged from 20-41°C (BoM, 2025b). Weather conditions did not present any survey limitations. The majority of flora species were exhibiting flowering material and ephemeral species were evident during most trips. Survey timing ensured cross-over with expected flowering times for the key Threatened orchid species known to occur in the region.

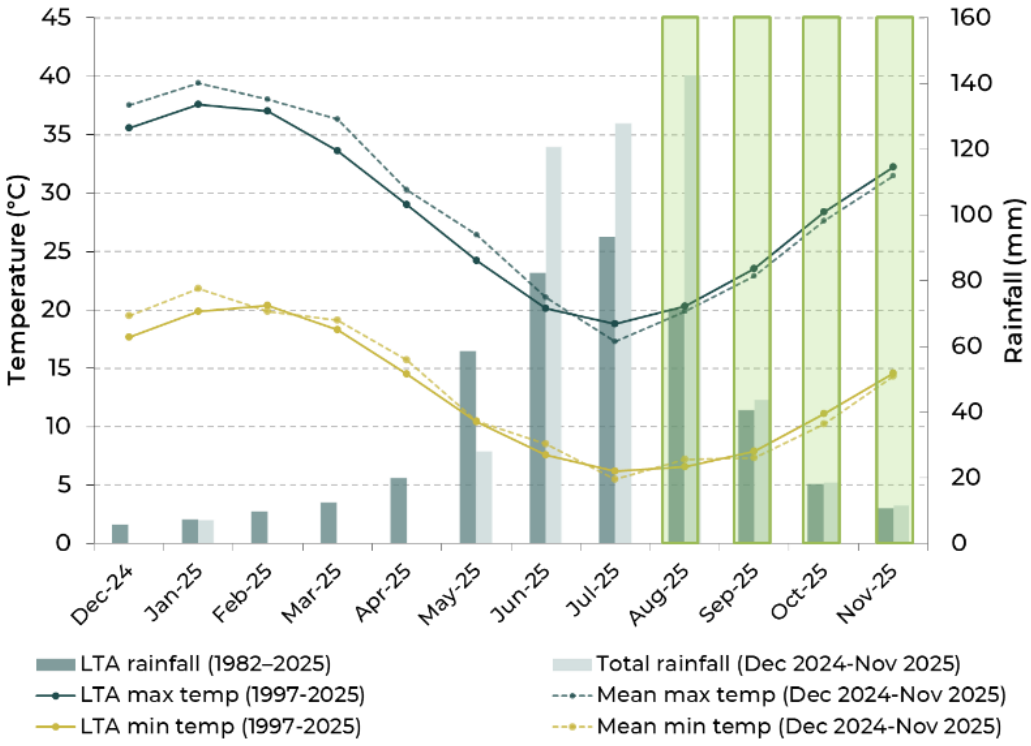


Figure 2.1: Long-term and current climatic data for the Survey Area (green bars represent survey periods)

2.4 Flora Sampling Sites

A combination of quadrats, relevés, vegetation mapping notes, meandering traverses, targeted searches and opportunistic sampling were used during the field surveys (EPA, 2016b). These standard techniques are described further Appendix D.

All major intact vegetation units and landform types were sampled with appropriate replication to ensure adequate coverage. Additional quadrats were assigned to larger units to ensure spatial coverage (Figure 2.2, Figure Series 2). Where possible, a minimum of three quadrats were established and sampled within each intact vegetation unit.

Table 2.2: Sampling across landforms and vegetation types

Broad Landform	Vegetation Type	Sample Sites		
		Quadrat	Relevé	Vegetation Mapping Note
Drainage Lines/ Floodplains	VT01	1	5	4
	VT02	2	2	7
	VT03	-	2	1
	VT04	2	3	1
	VT05	3	2	1
	VT06	3	3	10
Lateritic uplands and upper slopes	VT20	2	1	1
	VT21	1	1	-
	VT23	1	1	3
Sandplains	VT16	6	-	11
	VT18	1	-	1
	VT19	2	-	7
Undulating plains	VT07	1	1	1
	VT08	-	2	-
	VT09	2	-	5
	VT10	5	1	17
	VT11	2	-	
	VT12	3	-	4
	VT13	-	2	9
	VT14	-	1	3
	VT15	2	2	9
	VT17	2	-	1
	VT22	2	-	4

2.4.1 Reconnaissance

2.4.1.1 Trip 1 (Biologic)

A total of 38 vegetation mapping notes were sampled across the Survey Area during Trip 1 (Figure 2.2, Figure Series 2). Sampling focused on vegetation close to roads and tracks, to maximise coverage of the Survey Area. Targeted searches for *Daviesia speciosa* (T) were completed in suitable habitat (Figure Series 2).

2.4.1.2 Trip 2 (Viridis)

Trip 2 was a reconnaissance and targeted survey to ensure target areas were appropriately recognised. A total of 12 vegetation mapping notes were sampled across the Survey Area during Trip 2 (Figure 2.2, Figure Series 2). Further targeted searches for *Daviesia speciosa* (T) were completed in suitable habitat and additional targeted searches were commenced in the Survey Area along Yandanooka West Road with gridlines of 10 m (Figure Series 2).

2.4.2 Detailed

2.4.2.1 Trip 3 (Umwelt)

A total of 69 sites were sampled across the Survey Area (30 quadrats, 22 relevés, 17 vegetation mapping notes) during Trip 3 (Figure 2.2, Figure Series 2, Appendix F). Quadrats measured 10 m x 10 m as per guidance for the South West (EPA, 2016b) and Interzone botanical provinces.

2.4.2.2 Trip 4 (Umwelt)

A total of 85 new sites were sampled across the Survey Area (13 quadrats, 14 relevés, 58 vegetation mapping notes) during Trip 4 (Figure 2.2, Figure Series 2, Appendix F). Quadrats measured 10 m x 10 m as per guidance for the South West (EPA, 2016b) and Interzone botanical provinces.

2.4.3 Targeted

2.4.3.1 Trip 5 (Viridis)

A total of two vegetation mapping notes were sampled across the Survey Area during Trip 5 (Figure 2.2, Figure Series 2). Trip 5 involved targeted searching for the Threatened orchid *Thelymitra stellata*. Suitable habitat for this species is sandy, gravel, lateritic loam, which was present in some areas along Yandanooka West Road. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). The targeted survey also included searches for other Threatened and Priority flora species. Targeted searches concentrated on vegetation along Yandanooka West Road.

318000 324000 330000 336000 342000

6762000

6756000

6750000

Hunt Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

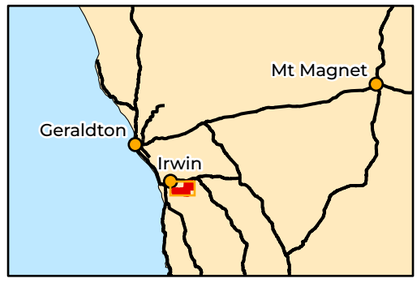
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:80,000
0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure 2.2: Flora sample sites and traverses

2.4.3.2 Trip 6 (Biologic)

Trip 6 involved targeted searching for the Threatened orchid *Thelymitra stellata*. Suitable habitat for this species is sandy, gravel, lateritic loam, which was present in some areas along Yandanooka West Road. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). The targeted survey also included searches for other Threatened and Priority flora species. Biologic concentrated on areas in the north and south-east of the Survey Area.

2.4.3.3 Trip 7 (Viridis)

Trip 7 involved targeted searching for the Threatened orchid *Thelymitra stellata* due to delayed flowering of the species. Suitable habitat for this species is sandy, gravel, lateritic loam, which was present in some areas along Yandanooka West Road. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). Viridis concentrated on Yandanooka West Road and west of the Survey Area and included searches for other Threatened and Priority flora species.

2.4.3.4 Trip 8 (Viridis)

Trip 8 involved targeted searching for the Threatened orchid *Paracaleana dixonii*. Suitable habitat for this species is grey sand, deep sandy soils, which was present across areas of Yandanooka West Road and the west of the Survey Area. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). The targeted survey also included searches for other Threatened and Priority flora species.

2.4.3.5 Trip 9 (Biologic)

A total of three vegetation mapping notes were sampled across the Survey Area during Trip 9 (Figure 2.2, Figure Series 2). Trip 9 involved targeted searching for the Threatened orchid *Paracaleana dixonii*. Suitable habitat for this species is grey sand, deep sandy soils, which was present across areas of Yandanooka West Road and the west of the Survey Area. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). The targeted survey also included searches for other Threatened and Priority flora species.

2.4.3.6 Trip 10 (Viridis)

Trip 10 involved targeted searching for the Threatened orchid *Paracaleana dixonii*. Suitable habitat for this species is grey sand, deep sandy soils, which was present across areas of Yandanooka West Road and the west of the Survey Area. Gridlines of 5 m (expanding to 10 m in some scenarios) were traversed across suitable habitat (Figure 2.2, Figure Series 2). The targeted survey also included searches for other Threatened and Priority flora species.

2.5 Specimen Identification

Flora nomenclature used in this report is consistent with the WAH's plant census, provided on Florabase (WAH, 1998 -). All species names are current at the time of report preparation. Specimens collected from the field by Biologic, Umwelt and Viridis were identified by a team of experienced taxonomists, identification botanists and experts from WAH (Appendix E).

Specimens were identified using the appropriate taxonomic keys, Western Australian reference herbarium and, where required, relevant taxonomic experts at the WAH. Significant flora specimens or unusual, unique or potential new species were submitted to the WAH for formal identification (accession numbers TR0007E; TR0214E; TR025E; TR/0221/E; TR/0223/E). Thirty-nine (39) specimens were sent for formal identification (Appendix G).

2.6 Floristic Data Analysis

Floristic data was analysed using R version 4.4.3 (R Core Team, 2025).

2.6.1 Data Transformation & Reconciliation

During Trips 3 and 4, flora taxa were recorded as an estimate of the percent foliage cover of each taxon within each quadrat. Following the survey, the flora taxa list was reconciled to ensure the data were consistent and comparable (Appendix H). Indeterminable taxa only confirmed to family or genus level were removed. Tentative genus identifications (e.g. *Caesia ?micrantha*) were included in the analysis as the confirmed taxon (i.e. *Caesia micrantha*) if confirmed records of the species existed. The final dataset used in the analyses comprised 337 flora taxa from 43 sample sites (Appendix I).

Singletons (taxa which were only recorded once) were removed from the dataset as these may act as outliers and are unlikely to contribute meaningful structure to the clustering. Annual taxa and introduced taxa were excluded from the analysis as perennial taxa are likely to give the best overview of the underlying vegetation type.

To adjust for strong right-skewed values (most observations were 0.1%), cover data were log transformed using $\log_1 p()$ (R Core Team, 2025). Bray-Curtis dissimilarity was calculated using vegdist() from the vegan package (Oksanen J, 2022). In order to make the dissimilarity matrix metric and to allow for disparity in cover between different strata, values were square root transformed.

2.6.2 Hierarchical Clustering

The final dendrogram for vegetation mapping was created using the hclust() function from the dendextend package (Galili, 2015) with Ward's D linkage (ward.D2) (Appendix J). Simper (similarity percent) analysis displays the most important taxa in distinguishing each pair of groups (species which contribute at least to 70 % of the difference). However, the apparent differences can also be caused by variation in species abundance. While Simper analysis is

common, the results are difficult to interpret and are often misunderstood (see simper vignette in Oksanen J, 2022). Consequently, a fidelity analysis using the "indicspecies" package (De Caceres & Legendre, 2009) has been used as an exploratory tool to investigate dendrogram groups (Appendix J).

2.6.3 Species Accumulation Curve

Species accumulation curves provide a visual overview of the observed number of flora taxa as the number of sample sites (quadrats) increases. When the curve reaches an asymptote (i.e. flattens), it indicates that further sampling is unlikely to add many new species, suggesting that most of the plant species present in the area have been recorded (Gotelli & Colwell, 2001). The value at which the curve reaches an asymptote can also be used as an approximate measure of the total size of the species complement at that location (Gotelli & Colwell, 2001). The species accumulation curves were created using the reconciled native flora taxa list (presence/absence) for each quadrat (Appendix H). The total number of taxa that may be present in the community was calculated using the poolaccum() function in the vegan package (Oksanen J, 2022). This function generated estimator curves using Chao, Jackknife 1, Jackknife 2, and Bootstrap methods, which predict how many species could be present if sampling continued.

2.7 Vegetation Mapping

Dendrogram results were used together with floristic data, on-ground observations, aerial imagery and regional and local knowledge of vegetation to define vegetation units and their boundaries. Dendrogram groupings (Appendix J) must make ecological and spatial sense, and consequently the mapped vegetation units may differ from the dendrogram groupings for various reasons. Aerial imagery from various sources assisted in delineating vegetation unit boundaries, including regional imagery, historical imagery (Landgate, 2021, 2023), and Google Earth imagery (Google Earth, 2023).

Vegetation structure information was used to describe the vegetation unit based on the dominant taxa, foliage cover and height of the three traditional strata (upper, mid and lower/ground). The current nationally adopted classification system for vegetation descriptions is the NVIS (NVIS Technical Working Group, 2017) (definition in Appendix K). The vegetation types in the Survey Area have been described to Level 5 (vegetation association), where possible, in the (NVIS) hierarchical structure (NVIS Technical Working Group, 2017).

2.7.1 Vegetation Condition

Vegetation condition was defined within the Survey Area using the vegetation condition scale for the South-West and Interzone Botanical Province in (EPA, 2016b), which has been adapted from Keighery (1994) and Trudgen (1988) (Appendix L). The vegetation condition was recorded at each quadrat and relevé, while additional notes and observation records (e.g., vegetation

mapping notes) were taken while traversing the Survey Area to broadly map vegetation condition boundaries, where relevant. The vegetation condition mapping was then digitised using GIS software.

2.8 Survey Limitations and Constraints

No major limitations or constraints were identified for the survey. For further detail on how EPA (2016b) technical guidance was met, see Appendix M.

Although, no major limitations or constraints were identified, there certainly were challenges across the survey. The key constraint was the collection, collation and management of data from three separate consultancies, Biologic, Viridis and Umwelt. The three consultancies completed their respective surveys in accordance with EPA guidelines; however, each consultancy collects data differently, which presented challenges in the review, collation and presentation of this data. For example, there are some records of significant flora from within quadrats that did not have number of individuals recorded. Where possible, Umwelt has estimated abundance of significant species post survey that were recorded in their sites. It should be noted these are estimations and not actual counts but may provide further population data. Some records of significant flora have not been estimated post survey due to personnel availability post survey. For these records, it has been assumed one individual was present. This may underestimate the total number of individuals for significant flora within the quadrats.

In addition, the vegetation unit delineation and descriptions were completed by Biologic, based on data collected from all three consultancies, especially the sample site data from Umwelt. Due to the size of the Survey Area and capacity of each team, no one trip or personnel involved in the surveys visited every part of the Survey Area to a satisfactory level to complete the mapping as a stand-alone task. Biologic completed the mapping and descriptions for areas they did not visit using data from another consultancy, which is less than ideal for vegetation mapping. There are also portions of the Survey Area that are under sampled (as they were not priority areas). The majority of the Survey Area incorporated cleared paddocks and highly altered landscapes, with the Development Envelope mostly located in these cleared paddocks. Potential vegetation impacts are isolated to portions of the Survey Area that are degraded to completely degraded. To ensure these areas were adequately surveyed, targeted searches and sampling concentrated on these areas of potential impact.

Although survey efforts concentrated on areas of potential impact, it must be noted that the Development Envelope and the indicative Disturbance Footprint was altered numerous times throughout the survey. As such, there may be some areas that have not been as comprehensively searched as other areas during targeted flora searches, although, this is not considered to be a major limitation or constraint.

3 Results and Discussion

3.1 Survey Effort and Adequacy

A total of 0.012 sites (quadrats and relevés) were sampled per hectare (entire Survey Area, including cleared areas). Survey intensity can vary considerably between different projects and regions, depending on the diversity of the vegetation, heterogeneity within vegetation units, the size of the vegetation units, and overall size of the survey area (EPA, 2016b). The number of sample sites per hectare is expected to be smaller in a large survey area, as time and access constraints tend to increase. The sampling intensity of 0.012 sites per hectare is slightly lower than the flora and vegetation surveys reviewed in the desktop assessment, ranging from 0.013 to 0.252 sites per hectare (Table 3.1). However, if cleared and agricultural areas (Ag, Cl, OW, P, Rd) are removed (4,960.97 ha), the survey intensity increases to 0.042 / ha (based on a total of 1,869.46 ha). The survey intensity is also higher if the 130 vegetation mapping notes are included: 0.112 / ha (Table 3.1).

Table 3.1: Comparison of survey intensity and effort

Survey	Survey Area Size (ha)	Number of Taxa Recorded	Number of Sampling Sites	Sites / ha
Current Survey (quadrats and relevés)	6,830	504	79	0.012
West Erregulla Project Flora and Vegetation Assessment (Woodman, 2013b)	9,543	535	129	0.013
Current Survey (quadrats and relevés in vegetated areas only)	1,869.46	504	79	0.042
An Ecological Survey of the Kwongan South of Eneabba, Western Australia (Hopkins & Hnatiuk, 1981)	2,000	429	87	0.043
Flora and Vegetation Assessment Arrowsmith North Survey Area (Mattiske, 2022)	2,190	305	157	0.071
Current Survey (quadrats, relevés and vegetation mapping notes in vegetated areas only)	1,869.46	504	209	0.112
West Erregulla Pipeline Flora and Fauna Survey (Eco Logical, 2021)	212.2	170	26	0.122
Flora and Vegetation Assessment Arrowsmith North Survey Area (Mattiske, 2021)	448	221	113	0.252

A species accumulation curve for the Survey Area produced a curve that starts to plateau (Figure 3.1). Richness estimators indicated that the survey was approximately 75% (Chao 1) to 87% (Bootstrap) adequate, with an observed value of 337 vascular flora taxa (confirmed native taxa recorded from quadrats) (Table 3.2). This increases to 103% to 120% of the expected native

species richness when the additional taxa not observed from the quadrats are included in the assessment (Table 3.2).

Table 3.2: Expected native species richness for the Survey Area

Treatment	Results	Richness Estimates	
		Based on Species Observed (337)	Based on Total (466)#
Chao 1	452.29 ± 28.4	74.51%	103.03%
Jacknife 1	450.3 ± 26.32	74.84%	103.49%
Bootstrap	388.16 ± 14.25	86.82%	120.06%
SOBS^	337		

^ Species observed: Number of observed confirmed native flora species used in the analysis
# Total flora taxa includes taxa not found in quadrats

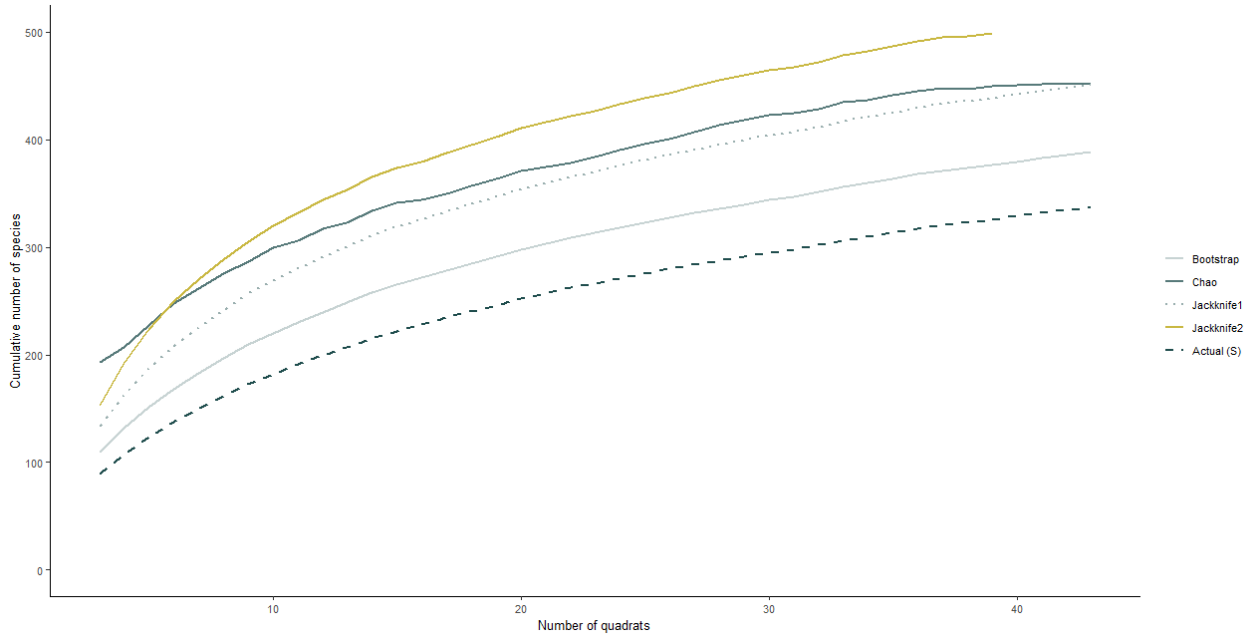


Figure 3.1: Species accumulation curve for the Survey Area

3.2 Flora

A total of 504 confirmed vascular flora taxa, representing 222 genera from 72 families, were recorded within the Survey Area during the field surveys. Within the Development Envelope, 245 confirmed vascular flora taxa, representing 148 genera from 56 families were recorded. The full species list includes 45 indeterminable taxa, 450 confirmed native flora taxa and 54 confirmed introduced taxa (Appendix N).

The dominant families represented 40% (202 taxa) of the total confirmed taxa recorded. The dominant families were Myrtaceae (63 taxa), Fabaceae (49 taxa), Proteaceae (46 taxa), Asteraceae (44 taxa). The dominant genera represented 15% (76 taxa) of the total confirmed taxa recorded. The dominant genera were *Acacia* (19 taxa), *Schoenus* and *Hakea* (15 taxa each), *Banksia* (14 taxa), and *Stylidium* (13 taxa).

Forty-five taxa could not be identified down to species level, as they were lacking in key features necessary for identification (i.e. flowers and/or fruit). Of the 45 indeterminable taxa, one was confirmed to family level (e.g. Poaceae sp. indet), 11 were confirmed to genus only (e.g. *Austrostipa* sp. indet), 25 were unable to be definitely confirmed to species level (e.g. *Caesia ?micrantha*). A further three were tentatively confirmed to a genus (e.g. ?*Melaleuca* sp. indet), and one was tentatively confirmed to a family (?Goodeniaceae sp. indet.). The remaining four taxa were either confirmed to species but not to subspecies level (e.g. *Verticordia densiflora* var. ?*roseostella*) or were tentatively confirmed to a species but could potentially be from a different genus or family (e.g. *Plantago coronopus*).

Of the 45 taxa that could not be confirmed to species level (or lower), all except two are not considered to be analogous with Threatened or Priority listed flora. *Thelymitra* ?*stellata* almost certainly represents the Threatened *Thelymitra stellata*. A *Thelymitra* sp. indet. record may be *Thelymitra stellata* (T), as the individual did not flower, so a positive identification could not be completed. A second *Thelymitra* sp. indet. record may also be *Thelymitra stellata*, however, the young bud was grazed prior to flowering. Both individuals were located adjacent to the confirmed *Thelymitra stellata* record. However, a small distance away, *Thelymitra benthamiana* was observed, so there is a chance that the two individuals of *Thelymitra* sp. indet. could be *T. benthamiana* or *T. stellata*.

3.2.1 Significant Flora

Twenty-nine significant flora taxa were recorded during the field surveys (Figure 3.2, Figure Series 3, Table 3.3, Appendix O). Of the 29 significant flora taxa recorded, one was Threatened (*Thelymitra stellata*), two are listed as P1, four are listed as P2, 16 are listed as P3 and six are listed as P4.

Table 3.3: Summary of Threatened and Priority flora recorded from the Survey Area

Taxon	Number of individuals	Number of point-locations	Number of WAH records^
Threatened			
Thelymitra stellata#	2	2	20
Priority 1			
Malleostemon decipiens	45	2	15
Poranthera asybosca	17	5	2
Priority 2			
Poranthera moorokatta	413	12	19
Schoenus badius	50	1	6
Schoenus sp. Eneabba (F. Obbens & C. Godden I154)	122	9	14
Thysanotus kalbarriensis	2,180	699	14

Taxon	Number of individuals	Number of point-locations	Number of WAH records^
Priority 3			
Acacia isoneura subsp. *isoneura*	2	1	12
Baeckea sp. Walkaway (A.S. George 11249)	10	8	39
Banksia fraseri var. *crebra*	514	176	17
Comesperma rhadinocarpum	184	71	20
Gastrolobium rotundifolium	10 (5*)	1	34
Hopkinsia anoectocolea	1	1	53
Lechenaultia juncea	5,232	119	22
Mesomelaena stygia subsp. *deflexa*	43	20	29
Persoonia rudis	1	1	42
Stylidium drummondianum	165	22	37
Stylidium torticarpum	400	76	52
Styphelia hyalina	10	1	11
Thryptomene nitida	2,912	178	28
Tricoryne soullierae	58	33	10
Verticordia densiflora var. *roseostella*	16	9	46
Verticordia luteola var. *luteola*	1	1	20
Priority 4			
Banksia elegans	2	1	47
Banksia scabrella	344	157	55
Eucalyptus macrocarpa subsp. *elachantha*	1	1	59
Schoenus griffinianus	12	6	45
Stawellia dimorphantha	5,262	1,061	24
Stylidium longitubum	1	1	53

^Individual specimens held at WAH state-wide; #Includes one *Thelymitra* ?*stellata* record *five recently dead mature individuals

3.2.1.1 Review of Assessment of Occurrence

The pre-survey assessment of occurrence was reviewed post-survey (Appendix C). A summary of the review of the Confirmed to Possible pre-survey taxa, and the reasoning for the change (or no change) is presented in Table 3.4.

Following the field surveys, three significant taxa are still considered to be possible to occur within the Survey Area, *Paracaleana dixonii* (T), *Comesperma griffinii* (P2) and *Austrostipa nunaginensis* (P3) (Table 3.4). The key areas where the three significant flora taxa may be possible to occur is the intact remnant vegetation in the west of the Survey Area, which mostly includes vegetation outside of the Development Envelope. This area has also been impacted from recent fires, so as the vegetation recovers, individuals may become more evident.

Following the pre-survey assessment of occurrence, four significant flora taxa were considered unlikely to occur, but were identified during field surveys. This included *Gastrolobium rotundifolium* (P3), *Hopkinsia anoectocolea* (P3), *Lechenaultia juncea* (P3), and *Tricoryne soullierae* (P3). An additional four significant flora taxa were not identified during the desktop assessment but have subsequently been identified from the Survey Area. These species include: *Poranthera asybosca* (P1), *Poranthera moorokatta* (P2), *Thysanotus kalbarriensis* (P2), and *Stylidium longitubum* (P4).

Table 3.4: Assessment of Occurrence review post-survey

Taxon	Likelihood post-survey	Reasoning for change/no change in post-survey likelihood
Pre-survey likelihood – Confirmed		
Malleostemon decipiens (P1)	Confirmed	Two locations adjacent to southern Sandplain creek. Degraded area.
Baeckea sp. Walkaway (A.S. George 11249) (P3)	Confirmed	Scattered individuals recorded in west of Survey Area. More individuals likely beyond targeted search areas.
Banksia fraseri var. *crebra* (P3)	Confirmed	Scattered in several vegetation communities.
Thryptomene nitida (P3)	Confirmed	Dominant in drainage line and one upland vegetation unit.
Verticordia luteola var. *luteola* (P3)	Confirmed	Confirmed at previously recorded location only. Not widespread.
Stawellia dimorphantha (P4)	Confirmed	Widespread species that is a common herb in several habitat types.
Mesomelaena stygia subsp. *deflexa* (P3)	Confirmed	Confirmed at previously recorded location only. Not widespread, but dominant of vegetation in eastern Yandanooka West Road reserve.
Pre-survey likelihood – Highly Likely		
Thelymitra stellata (T)	Confirmed	All suitable habitat within entire Survey Area (along Yandanooka West Road) was targeted on multiple trips by multiple teams throughout the survey period and extensively searched. This area consists of vegetation type Re, surrounded by vegetation types VT07, VT12, VT15. Vegetation condition in this area ranges from Degraded to Very Good. This taxon is considered unlikely to occur elsewhere, due to habitat suitability for this species. At the location of *Thelymitra stellata*, a further two individuals of *Thelymitra* sp. indet. were recorded. One individual was grazed, while the other did not flower, so a positive identification could not be completed. Both individuals were within 5-10m of the confirmed *Thelymitra stellata* record.
Paracaleana dixonii (T)	Possible	Suitable habitat searched with repeated surveys in prime flowering time. There remains a post survey likelihood the species may occur post fire in intact sandplain areas in the western section of the Survey Area in good or better quality vegetation.

Taxon	Likelihood post-survey	Reasoning for change/no change in post-survey likelihood
Lasiopetalum ogilvieanum (P1)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Guichenotia alba (P3)	Unlikely	Suitable habitat searched and not present within Survey Area, despite close proximity of records.
Scholtzia prostrata (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Eucalyptus ebbanoensis subsp. *photina* (P4)	Unlikely	Suitable habitat searched, only non-Priority sub-species recorded. Given extensive searches, it is considered unlikely to occur.
Pre-survey likelihood – Likely		
Schoenus badius (P2)	Confirmed	Dominant in understorey in lower-lying areas.
Schoenus sp. Eneabba (F. Obbens & C. Godden I154) (P2)	Confirmed	Scattered individuals only.
Acacia isoneura subsp. *isoneura* (P3)	Confirmed	One individual recorded post survey, potential to occur as scattered individuals within Sandplain Creek or other minor drainage lines.
Comesperma rhadinocarpum (P3)	Confirmed	Scattered herb in several vegetation types.
Persoonia rudis (P3)	Confirmed	Only one plant recorded post survey. Likely more within the western most intact vegetation.
Stylidium drummondianum (P3)	Confirmed	Dominant in understorey in lateritic areas.
Styphelia hyalina (P3)	Confirmed	Scattered individuals in lower lying areas.
Verticordia densiflora var. *roseostella* (P3)	Confirmed	Scattered individuals in a few vegetation types.
Banksia elegans (P4)	Confirmed	One individual recorded, no further individuals considered likely to occur.
Banksia scabrella (P4)	Confirmed	Scattered to co-dominant in several vegetation communities.
Eucalyptus macrocarpa subsp. *elachantha* (P4)	Confirmed	One individual recorded along Yandanooka West Road.
Comesperma griffinii (P2)	Possible	Inconspicuous annual herb that may have been inadvertently missed during searches. Potential to occur in western section of the Survey Area in vegetation that is intact in good or better condition.
Austrostipa nunaginensis (P3)	Possible	Potential to occur in intact vegetation in the western section of the Survey Area in good or better vegetation.
Daviesia speciosa (T)	Unlikely	No suitable habitat, only small lateritic areas within Survey Area. Distinctive perennial species and would have been discernible during multiple surveys.
Eucalyptus crispata (T)	Unlikely	No extensive lateritic breakaways within the Survey Area and therefore considered unlikely to occur.

Taxon	Likelihood post-survey	Reasoning for change/no change in post-survey likelihood
Eucalyptus leprophloia (T)	Unlikely	Marginal habitat (prefers lower slopes) searched and not found. The species is not considered to occur locally due to the degraded nature of habitat.
Micromyrtus rogeri (P1)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Eucalyptus abdita (P2)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Acacia lanceolata (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Beyeria gardneri (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Eremaea acutifolia (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Eucalyptus macrocarpa x pyriformis (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Haemodorum loratum (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Hemiandra sp. Eneabba (H. Demarz 3687) (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Synaphea oulopha (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Pityrodia viscida (P4)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Pre-survey likelihood – Possible		
Stylidium torticarpum (P3)	Confirmed	Dominant herb in a few vegetation types.
Schoenus griffinianus (P4)	Confirmed	Widespread species that is a common herb in several habitat types.
Conostylis dielsii subsp. *teres* (T)	Unlikely	Suitable habitat ~20 km north and potential habitat within Survey Area based on bioclimatic modelling, searched and not found. No suitable habitat likely within Survey Area.
Diuris eburnea (T)	Unlikely	Marginal habitat (prefers sandy-clay and clay soils) searched and not found. The species is not considered to occur locally due to the degraded nature of habitat.
Grevillea phanerophlebia (T)	Unlikely	Marginal habitat (prefers moister areas) searched and not found. The species is not considered to occur locally due to the degraded nature of habitat.
Wurmbea tubulosa (T)	Unlikely	Marginal habitat (prefers moister areas) searched and not found. The species is not considered to occur locally due to the degraded nature of habitat.
Lepidium sagittulatum (P1)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.

Taxon	Likelihood post-survey	Reasoning for change/no change in post-survey likelihood
Stylidium carnosum subsp. Narrow leaves (J.A. Wege 490) (P1)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Acacia vittata (P2)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Homalocalyx chapmanii (P2)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Stylidium pseudocaespitosum (P2)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Synaphea sparsiflora (P2)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Acacia flabellifolia (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Acacia megacephala (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Acacia telmica (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Allocasuarina grevilleoides (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Dampiera tephrea (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Eucalyptus arachnaea subsp. *arrecta* (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Hibbertia subvillosa (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Lepidium fasciculatum (P3)	Unlikely	Marginal habitat (wetter areas) searched. Given degraded nature of habitat, Occurrence is Unlikely given not seen.
Melaleuca sclerophylla (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Persoonia filiformis (P3)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Rhodanthe collina (P3)	Unlikely	Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.
Thysanotus vernalis (P3)	Unlikely	Suitable habitat searched with repeated surveys in prime flowering time. Occurrence is Unlikely given not seen.
Calytrix chrysantha (P4)	Unlikely	Suitable habitat searched and not recorded. Unlikely to occur despite proximity of records.
Calytrix eneabbensis (P4)	Unlikely	No records in database searches. Whilst Survey Area is within the wider known disjunct distribution, surveys during flowering time would have detected, if present.
Thysanotus glaucus (P4)	Unlikely	Conspicuous perennial taxon. Habitat and range remain relevant for presence. Occurrence is Unlikely given not seen.

Taxon	Likelihood post-survey	Reasoning for change/no change in post-survey likelihood
Verticordia dasystylis subsp. *oestopoia* (P1)	Highly Unlikely	No suitable habitat (granite outcrops) within Survey Area.
Allocasuarina ramosissima (P3)	Highly Unlikely	Suitable habitat searched and not found. Closest record over 22 km east.
Hensmania stoniella (P3)	Highly Unlikely	Marginal habitat (prefers winter-wet) searched and not found. The species is not considered to occur locally due to the degraded nature of habitat.
Persoonia chapmaniana (P3)	Highly Unlikely	No suitable habitat within Survey Area.
Desmocladus elongatus (P4)	Highly Unlikely	Suitable habitat searched and not recorded.
Eucalyptus zopherophloia (P4)	Highly Unlikely	No suitable habitat – coastal species.
Unlikely		
Gastrolobium rotundifolium (P3)	Confirmed	Ten plants recorded in one location in western part of Survey Area. Possibly more individuals within the eastern most intact vegetation, given this section was not closely traversed.
Hopkinsia anoectocolea (P3)	Confirmed	One individual recorded in degraded vegetation along Sand Plain Creek.
Lechenaultia juncea (P3)	Confirmed	Common in the western end of the Survey Area, in Excellent vegetation that was closely traversed.
Tricoryne soullierae (P3)	Confirmed	Common along Yandanooka West Road in a few vegetation types.
Not identified		
Poranthera asybosca (P1)	Confirmed	Recorded mostly in the western end, with one record further east along Yandanooka West Road.
Poranthera moorokatta (P2)	Confirmed	Several records scattered along Yandanooka West Road, and two records further west.
Thysanotus kalbarriensis (P2)	Confirmed	Common in the western end of the Survey Area, in Excellent vegetation that was closely traversed.
Stylidium longitubum (P4)	Confirmed	One individual recorded in degraded vegetation along Sand Plain Creek.

318000 324000 330000 336000 342000

6762000 6756000 6750000

Significant Flora

Threatened

- *Thelymitra stellata*

Priority 1

- *Malleostemon decipiens*
- *Poranthera asybosca*

Priority 2

- *Poranthera moorokatta*
- *Schoenus badius*
- *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154)
- *Thysanotus kalbarriensis*

Priority 3

- *Acacia isoneura* subsp. *isoneura*
- *Baeckea* sp. Walkaway (A.S. George 11249)
- *Banksia fraseri* var. *crebra*
- *Comesperma rhadinocarpum*
- *Gastrolobium rotundifolium*
- *Guichenotia alba*
- *Hopkinsia anoectocolea*
- *Lechenaultia juncea*
- *Mesomelaena stygia* subsp. *deflexa*
- *Persoonia rudis*
- *Stylidium drummondianum*
- *Stylidium torticarpum*
- *Styphelia hyalina*
- *Thryptomene nitida*
- *Tricoryne soulliere*
- *Verticordia densiflora* var. *roseostella*
- *Verticordia luteola* var. *luteola*

Priority 4

- *Banksia elegans*
- *Banksia scabrella*
- *Eucalyptus macrocarpa* subsp. *elachantha*
- *Schoenus griffinianus*
- *Stawellia dimorphantha*
- *Stylidium longitubum*

Warradong Spring Rd

Mooriary Rd

Yandanooka West Rd

Mt Adams Rd

Natta Rd

Metcalfe Rd

Carey Rd

LEGEND

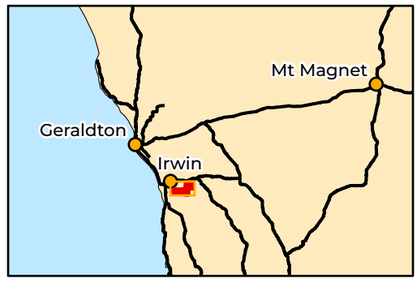
- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



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Figure 3.2: Significant flora recorded in the Survey Area

3.2.2 Flora of 'Other' Significance

A total of 16 flora taxa are considered flora of 'other' significant, including nine range extensions and seven taxa which fill substantial gaps in known distribution (locality holes) (Appendix P). *Poranthera moorokatta* (P2) is the most significant as the records in the Survey Area represent a 130 km extension north of closest southern record (south east of Cervantes). This species is a tiny cryptic annual and it is likely that individuals occur between the Survey Area and Cervantes and the lack of records reflects sufficient sampling intensity in species rich regions.

3.2.3 Introduced Flora

Fifty-four confirmed introduced flora taxa, representing 18 families, were recorded from the Survey Area (Figure 3.3, Table 3.5). One of the introduced flora, **Echium plantagineum*, is listed as a Declared Pest s22 (2) under the *Biosecurity and Agriculture Management Act 2007* (BAM Act). No other introduced taxa are listed as Weeds of National Significance or as or as 'Priority Alert' weeds by the DCBA Parks and Wildlife Service. An additional introduced taxon, **Rumex hypogaeus* (Doublegee), was opportunistically observed in the western portion of the Survey Area but was not recorded as weeds were not the focus of the targeted surveys.

Table 3.5: Introduced flora recorded from the Survey Area

Family	Taxon	Lifeform/Habit
Aizoaceae	**Mesembryanthemum nodiflorum*	Annual
Asteraceae	**Arctotheca calendula*	Annual
	**Centaurea melitensis*	Annual or Biennial
	**Cotula bipinnata*	Annual
	**Cotula coronopifolia*	Annual
	**Hypochaeris glabra*	Annual or Short-lived perennial
	**Monoculus monstrosus*	Annual
	**Sonchus oleraceus*	Annual
	**Urospermum picroides*	Annual
	**Ursinia anthemoides* subsp. *anthemoides*	Annual
Boraginaceae	**Echium plantagineum*	Annual
Brassicaceae	**Brassica barrelieri* subsp. *oxyrrhina*	Annual or Perennial
	**Brassica tournefortii*	Annual
	**Brassica x napus*	Annual or Biennial
	**Raphanus raphanistrum*	Annual
Campanulaceae	**Wahlenbergia capensis*	Annual
Caryophyllaceae	**Petrorhagia dubia*	Annual
	**Silene gallica* var. *gallica*	Annual
Cucurbitaceae	**Cucumis myriocarpus*	Annual
Cyperaceae	**Ficinia marginata*	Annual

Family	Taxon	Lifeform/Habit
Fabaceae	**Chamaecytisus palmensis*	Perennial
	**Lupinus cosentinii*	Annual
	**Ornithopus compressus*	Annual
	**Trifolium arvense*	Annual
	**Trifolium arvense* var. *arvense*	Annual
	**Trifolium subterraneum*	Annual
Geraniaceae	**Erodium botrys*	Annual
Iridaceae	**Romulea rosea* var. *australis*	Perennial
Juncaceae	**Juncus hybridus*	Perennial
Orobanchaceae	**Parentucellia latifolia*	Annual
Plantaginaceae	**Plantago coronopus* subsp. *commutata*	Annual or Perennial
Poaceae	**Aira cupaniana*	Annual
	**Avena barbata*	Annual
	**Briza maxima*	Annual
	**Bromus diandrus*	Annual
	**Cenchrus setaceus*	Perennial
	**Cynodon dactylon*	Perennial
	**Ehrharta brevifolia* var. *cuspidate*	Annual
	**Ehrharta longiflora*	Annual
	**Eragrostis curvula*	Perennial
	**Hordeum leporinum*	Annual
	**Lamarckia aurea*	Annual
	**Lolium perenne*	Perennial
	**Lolium rigidum*	Annual
	**Pentameris airoides* subsp. *airoides*	Annual
	**Polypogon monspeliensis*	Annual
	**Rostraria pumila*	Annual
	**Vulpia bromoides*	Annual
	**Vulpia muralis*	Annual
	**Vulpia myuros*	Annual
Primulaceae	**Lysimachia arvensis*	Annual
	**Lysimachia loeflingii*	Annual
Scrophulariaceae	**Zaluzianskya divaricate*	Annual
Solanaceae	**Solanum nigrum*	Perennial

320000 328000 336000 344000

6760000 6752000

Introduced Flora

- *?Plantago coronopus*
- *Aira cupaniana*
- *Arctotheca calendula*
- *Avena barbata*
- *Brassica barrelieri subsp. oxyrrhina*
- *Brassica tournefortii*
- *Brassica x napus*
- *Briza maxima*
- *Bromus diandrus*
- *Cenchrus setaceus*
- *Chamaecytisus palmensis*
- *Cotula bipinnata*
- *Cotula coronopifolia*
- *Cucumis myriocarpus*
- *Cynodon dactylon*
- *Echium plantagineum*
- *Ehrharta brevifolia var. cuspidata*
- *Ehrharta longiflora*
- *Eragrostis curvula*
- *Erodium botrys*
- *Eucalyptus ?leucoxylon*
- *Ficinia marginata*
- *Hordeum leporinum*
- *Hypochaeris glabra*
- *Juncus hybridus*
- *Lamarckia aurea*
- *Lolium perenne*
- *Lolium rigidum*
- *Lupinus cosentinii*
- *Lysimachia arvensis*
- *Lysimachia loeflingii*
- *Mesembryanthemum nodiflorum*
- *Monoculus monstrosus*
- *Ornithopus compressus*
- *Parentucellia latifolia*
- *Pentameris airoides subsp. airoides*
- *Petrorhagia dubia*
- *Plantago coronopus subsp. commutata*
- *Polypogon monspeliensis*
- *Raphanus raphanistrum*
- *Romulea rosea var. australis*
- *Rostraria pumila*
- *Silene gallica var. gallica*
- *Solanum hoplopetalum*
- *Solanum nigrum*
- *Sonchus oleraceus*
- *Trifolium arvense var. arvense*
- *Trifolium arvense*
- *Trifolium subterraneum*
- *Urospermum picroides*
- *Ursinia anthemoides subsp. anthemoides*
- *Ursinia anthemoides*
- *Vulpia bromoides*
- *Vulpia muralis*
- *Vulpia myuros*
- *Wahlenbergia capensis*
- *Zaluzianskya divaricata*

adong Spring Rd

Mooriary Rd

Yandanooka West Rd

Mt Adams Rd

Natta Rd

Metcalfe Rd

Carey Rd

LEGEND

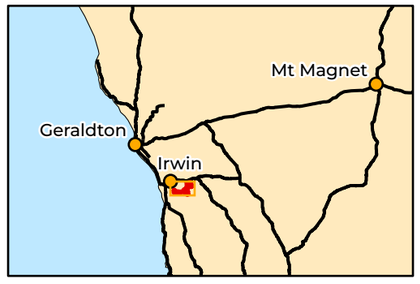
- Survey Area
- Development Envelope
- Local Road
- State Road
- Rail

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 11/03/2026



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Figure 3.3: Introduced flora recorded in the Survey Area

3.3 Vegetation

3.3.1 Broad Landforms

Landform, topography, and geology are major drivers of water and nutrient availability and strongly influence the patterns of vegetation found across the landscape. Furthermore, vegetation is strongly influenced by disturbances, and in a highly altered environment like the Survey Area, vegetation is readily altered through clearing, agricultural practices, herbicide/insecticide spraying, weed invasion and grazing. Four broad landforms supporting 23 intact vegetation types were identified and mapped within the Survey Area (Figure 3.4, Appendix Q):

- Drainage Lines / Floodplains – six vegetation types;
- Undulating Plains – 11 vegetation types;
- Lateritic Uplands and Upper Slopes – three vegetation types; and
- Sandplains – three vegetation types.

The dominant broad landform based on coverage across the Survey Area was Sandplains (4.37% / 298.68 ha), followed by Undulating Plains (4.01% / 273.58 ha), Drainage Lines/ Floodplains (2.78% / 189.70 ha) and Lateritic Uplands and Upper Slopes (0.70% / 47.64 ha), with the remaining area made up of degraded vegetation units and mapping units.

3.3.2 Vegetation Types

A total of 23 vegetation types were described and delineated in the Survey Area based on the four broad landforms (Figure 3.4, Appendix Q). An additional four vegetation units (Re, PCr, PEc, and PEt) were mapped but not described to NVIS Level 5, as they were highly modified with some limited native vegetation. These units together with the 23 vegetation types took up 19.67% (1,343.78 ha) of the Survey Area. The remainder of the Survey Area comprised of five mapping units (Ag, Cl, OW, P, Rd) which did not contain any native vegetation or was not sampled (NS) due to access and distance from the Disturbance Footprint. The total area of these six mapping units was 5,402.14 ha (79.09%). The majority (69.40%/ 4,740.40 ha) of the Survey Area was mapped as paddock and pasture areas (mapping unit 'P').

The most common vegetation type was VT16 (2.84%/ 194.08 ha). Sandplain vegetation type VT16 was mapped at the western edge of the Survey Area, mostly in Excellent condition. The second and third largest vegetation types were from Sandplain and Undulating Plains landforms respectively: VT19 (1.42%/ 97.23 ha) and VT09 (1.02%/ 69.55 ha). Vegetation type descriptions and photographs are provided in Appendix Q.

Per the limitations documented in Appendix M, dendrograms created were not beneficial in delineating vegetation units, due to the large linear extent (~24 km west to east and ~15 km north to south) and weediness of many of the vegetation areas.

320000 328000 336000 344000

6760000 6752000

Vegetation Type

Ag
Cl
NS
OW
P
PCr
PEc
PEt
Rd
Re
VT01
VT02
VT03
VT04
VT05
VT06
VT07
VT08
VT09
VT10
VT11
VT12
VT13
VT14
VT15
VT16
VT17
VT18
VT19
VT20
VT21
VT22
VT23

Ludlow Rd
Milo Rd
Warradong Spring Rd
Mt Adams Rd
Mooriary Rd
Yandanooka West Rd

LEGEND

Survey Area
Development Envelope
Local Road

Biologic Environmental

Scale 1:80,000
0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 13/03/2026

Mt Magnet
Geraldton
Irwin

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Figure 3.4: Vegetation types in the Survey Area

3.3.3 Significant Vegetation

There are no TECs that intersect the Survey Area and none of the vegetation types identified in the Survey Area resemble known TECs from the Geraldton Sandplains. No PECs intersect the Survey Area and none of the vegetation types identified in the Survey Area resemble known PECs from the Geraldton Sandplains.

3.3.3.1 Groundwater Dependent Ecosystems

Six vegetation types were mapped within drainage lines or floodplains, mainly within or associated with Sand Plain Creek (Figure 3.4). *Eucalyptus camaldulensis*, a known facultative phreatophyte, was present in vegetation type VT13 and mapping unit PEc. VT13 occurred along drainage lines and also contained riparian flora *Casuarina obesa*, *Melaleuca viminea* and *Typha domingensis*. The majority (96%) of VT13 was in a Degraded or Completely Degraded condition and lacking an intact understorey. Although VT13 may exhibit a level of groundwater dependence, it is not considered to be locally or regionally significant, furthermore, as *E. camaldulensis* is a facultative phreatophyte, it only uses groundwater when available, and would access water in the vadose, or saturated zone through inflow from surface water flows. The presence of *E. camaldulensis* along the drainage lines represents potential groundwater dependent vegetation. There is also a chance that some of the individuals of *E. camaldulensis* are planted and not naturally occurring.

Mapping unit PEc is not considered to represent a GDE, as it was clear from aerial imagery that *E. camaldulensis* had been planted, and it occurred over introduced grasses and other weeds within degraded paddocks. The remaining drainage line vegetation types likely have low or negligible dependence on groundwater, based on the absence of phreatophytic tree species. The drainage lines are likely to be inflow dependent ecosystems that rely on the seasonal influx of surface water.

3.3.4 Vegetation Condition

Vegetation condition within the Survey Area ranged from Excellent to Completely Degraded and Cleared (Figure 3.5, Appendix R). A total of 79.01% (5,397 ha) of the Survey Area was recorded as Completely Degraded due to clearing for agriculture and other associated disturbances (including areas mapped as Pastoral). Note that many paddocks have been mapped as Completely Degraded due to scattered natives, predominately *Eucalyptus todtiana* or isolated native grasses such as *Aristida holathera* var *holathera*. Therefore, the majority of the PEt or P units are devoid of native vegetation, and in a completely altered state. Vegetation fringing these areas were recorded as Degraded or occasionally Good, due to the proximity of the Survey Area to roads and agriculture, including agricultural weeds encroaching on the vegetation. Where weeds, trampling or tracks were observed in intact remnant vegetation, condition was rated as Good/ Very Good. The majority (77.60% / 628.23 ha) of native vegetation (the 23 intact vegetation types) was in Good or better condition. Most of

this was in the western section of the Survey Area in remnant native vegetation that has been fenced off from grazing and trampling pressures and was in an Excellent condition (36.28% / 293.71 ha). This vegetation has been largely undisturbed, with disturbances associated with fire frequency/intensity and the presence of weeds along the edges of the vegetation.

320000
328000
336000
344000
6760000
6752000
Hunt
Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

- Survey Area
- Development Envelope
- Local Road

Vegetation Condition

- Excellent
- Very Good
- Good
- Degraded
- Completely Degraded
- Cleared
- Not Sampled

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



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Figure 3.5: Vegetation condition in the Survey Area

4 Conclusion

A reconnaissance, detailed, and targeted flora and vegetation survey was undertaken in the Survey Area across ten trips from late July 2025 to late November 2025, totalling 164 person days. A total of 43 quadrats, 36 relevés, and 130 vegetation mapping notes were completed, as well as targeted traverses for significant flora species, and opportunistic sampling. Key results of the survey are as follows:

- A total of 504 confirmed vascular flora taxa, from 222 families and 72 genera, were recorded during the field survey, comprising 450 native flora taxa and 54 introduced flora taxa;
- 29 significant flora taxa have been recorded in the Survey Area:
  - Threatened: *Thelymitra stellata*
  - Priority 1: *Malleostemon decipiens, Poranthera asybosca*
  - Priority 2: *Poranthera moorokatta, Schoenus badius, Schoenus* sp. Eneabba (F. Obbens & C. Godden I154), *Thysanotus kalbarriensis*
  - Priority 3: *Acacia isoneura* subsp. *isoneura, Baeckea* sp. Walkaway (A.S. George 11249), *Banksia fraseri* var. *crebra, Comesperma rhadinocarpum, Gastrolobium rotundifolium, Hopkinsia anoectocolea, Lechenaultia juncea, Mesomelaena stygia* subsp. *deflexa, Persoonia rudis, Stylidium drummondianum, Stylidium torticarpum, Styphelia hyalina, Thryptomene nitida, Tricoryne soullierae, Verticordia densiflora* var. *roseostella, Verticordia luteola* var. *luteola*
  - Priority 4: *Banksia elegans, Banksia scabrella, Eucalyptus macrocarpa* subsp. *elachantha, Schoenus griffinianus, Stawellia dimorphantha, Stylidium longitubum*
- Post-survey review of the likelihood of significant flora occurring in the Survey Area assessed three taxa, *Paracaleana dixonii* (T), *Comesperma griffinii* (P2) and *Austrostipa nunaginensis* (P3), as remaining Possible to occur within the Survey Area, with the remaining taxa assessed as either Confirmed, Unlikely or Highly Unlikely;
- Sixteen taxa recorded in the Survey Area, were considered flora of other significance as they represent range extensions (nine taxa) or locality holes (seven taxa);
- 54 confirmed introduced taxa were recorded within the Survey Area, with **Echium plantagineum* listed as a Declared Pest under the BAM Act;
- 23 vegetation types were described and delineated in the Survey Area based on four broad landforms (Drainage Lines / Floodplains; Undulating Plains; Lateritic Uplands and Upper Slopes; and Sandplains);
- None of the vegetation types recorded represented any of the known TECs or PECs listed under the BC Act or EPBC Act;
- One vegetation type, VT13, contained facultative phreatophyte *Eucalyptus camaldulensis*, has a level of dependence on groundwater and may represent a GDE; and

- Vegetation condition ranged from Excellent to Completely Degraded, with the majority (77.60% / 628.23 ha) of intact native vegetation considered to be in Good or higher condition.

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Figure Series

320000
328000
336000
344000
6760000
6752000

C-WCP
Rr-f-WCP
Rs-l-WCP
A-WCP
X-WCP
E-WCP
Lw-WCP

Hunt Farm Rd
Millo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Natta Rd
Metcalfe Rd
Carey Rd

Surface Geology

- A-WCP; Alluvial/fluvial unit, WCP
- C-WCP; Colluvial unit, WCP
- E-WCP; Eolian unit, WCP
- Lw-WCP; Lacustrine unit, WCP
- Rr-f-WCP; Residual or relict unit, WCP
- Rs-l-WCP; Residual or relict unit, WCP
- X-WCP; Exposed unit, WCP

LEGEND

- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



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Figure Series 1a: Broad geology of the Survey Area

320000
328000
336000
344000
6760000
6752000
Hunt Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

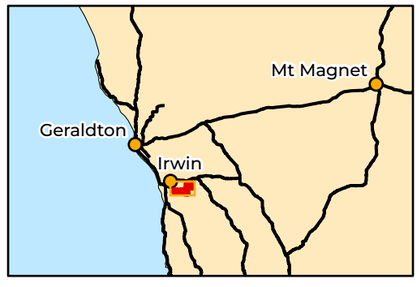
Survey Area
Development Envelope
Local Road

Land System
Beharra System
Eradu System
Greenough Alluvium System
Irwin System
Mount Adams System
Mount Horner System
Tamala South System

Biologic Environmental

Scale 1:80,000
0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



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Belisama Conventional Gas Project

Figure Series 1b: Land systems of the Survey Area

320000
328000
336000
344000
6760000
6752000
Hunt Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

- Survey Area
- Development Envelope
- Local Road

Soil Unit

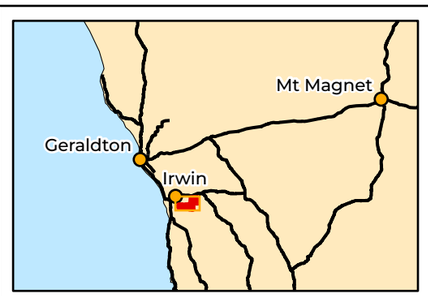
- AC2
- AC3
- CC46
- Ca27
- Oc37
- Wd9
- Xd3

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 1c: Soils of the Survey Area

312000 320000 328000 336000 344000

6768000 6760000 6752000

Millendon Junction Narngulu Railway
Midlands Rd
Irwin River
Milo Rd
Ludlow Rd
Ejarno Spring Rd
Warradong Spring Rd
Mooriary Rd
Mingenew South Rd
Yandanooka West Rd
Mt Adams Rd

Subcatchment
Hunt Gully
Lockier River
Unnamed

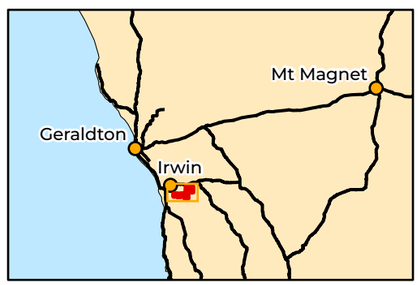
Terrestrial GDE
High potential GDE - from national assessment
Moderate potential GDE - from national assessment
Low potential GDE - from national assessment
Aquatic GDE
High potential GDE - from national assessment
Unclassified potential GDE - from regional studies

LEGEND
Survey Area
Development Envelope
Local Road
State Road
Rail
Surface Hydrology
Minor
Major

Biologic Environmental

Scale 1:100,000
0 2 4 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 1d: Hydrology of the Survey Area

320000
328000
336000
344000
6760000
6752000
Hunt Farm Rd
Milo Rd
Ejarno Spring Rd
Ludlow Rd
Warradong Spring Rd
Mooriary Rd
Yandanooka West Rd
Mt Adams Rd
Natta Rd
Metcalfe Rd
Carey Rd

LEGEND

- Survey Area
- Development Envelope
- Local Road

Pre-European Vegetation

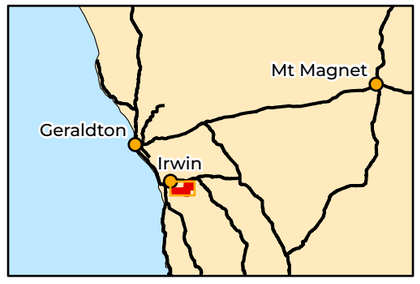
- Eridoon 378
- Eridoon 392
- Eridoon 433
- Irwin 352
- Tathra 352
- Tathra 379
- Tathra 49

Biologic Environmental

Scale 1:80,000

0 1 2 3 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



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Figure Series 1e: Pre-European vegetation associations of the Study Area

332000
334000
336000
338000
6764000
6762000
Mooriary Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note

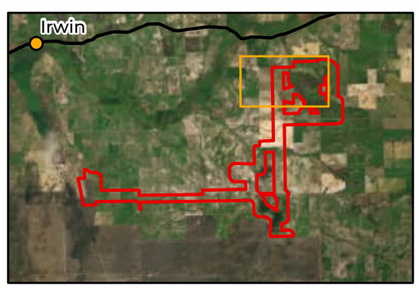
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2a: Flora sample sites and traverses

338000
340000
342000
344000
6764000
6762000
Mooriary Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note

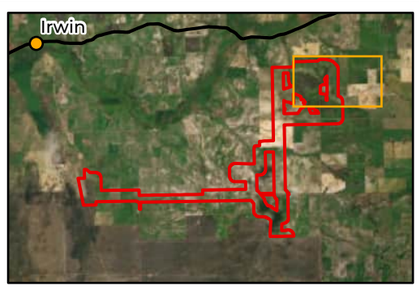
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2b: Flora sample sites and traverses

332000
334000
336000
338000
6760000
6758000
Mooriary Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note

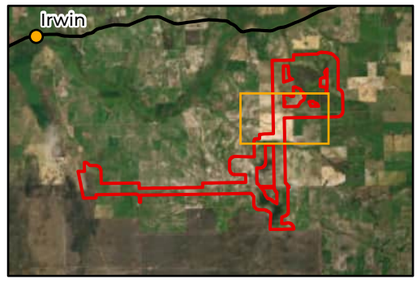
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2c: Flora sample sites and traverses

338000
340000
342000
344000
6760000
6758000
Mooriary Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note

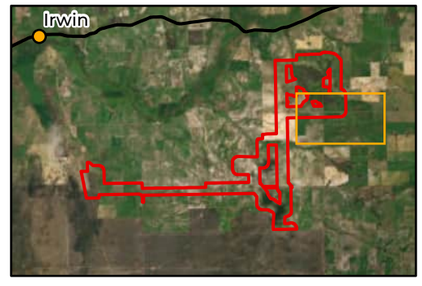
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2d: Flora sample sites and traverses

316000
318000
320000
322000
6754000
6752000
Yandanooka West Rd
Mt Adams Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

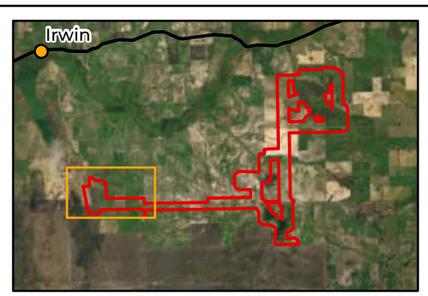
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2e: Flora sample sites and traverses

322000
324000
326000
328000
6754000
6752000
Warradong Spring Rd
Yandanooka West Rd
Mt Adams Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

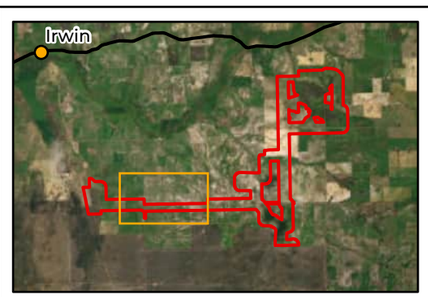
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2f: Flora sample sites and traverses

326000
328000
330000
332000
6754000
6752000
Warradong Spring Rd
Yandanooka West Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

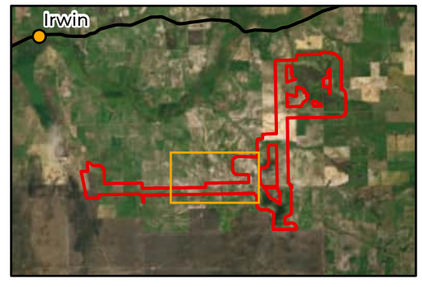
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2g: Flora sample sites and traverses

330000
332000
334000
336000
6756000
6754000
Yandanooka West Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

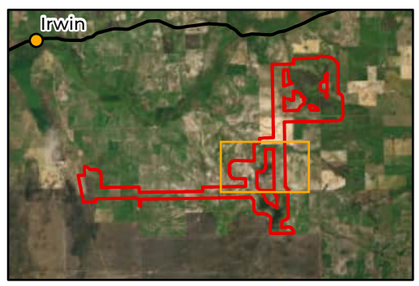
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2h: Flora sample sites and traverses

330000
332000
334000
336000
6752000
6750000
Yandanooka West Rd

LEGEND

Survey Area
Development Envelope
Local Road

Sample Site
Biologic
Vegetation Mapping Note
Viridis
Vegetation Mapping Note

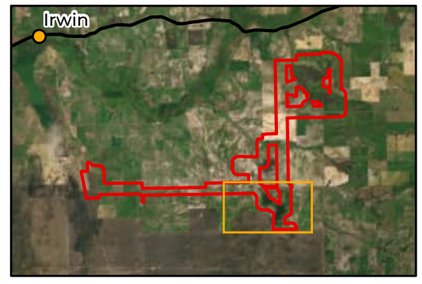
Umwelt
Quadrat
Relevé
Vegetation Mapping Note

Traverse
Biologic
Viridis
Umwelt

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 2i: Flora sample sites and traverses

332000
334000
336000
338000
6764000
6762000
Moorlary Rd

LEGEND

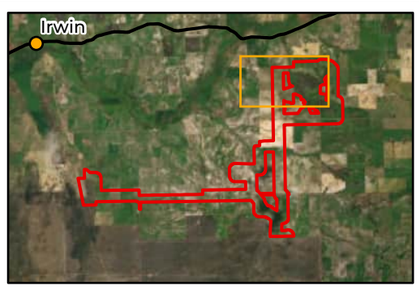
Survey Area
Development Envelope
Local Road

Significant Flora
Priority 3
Banksia fraseri var. *crebra*
Stylidium torticarpum
Thryptomene nitida

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 3a: Significant flora recorded in the Survey Area

338000
340000
342000
344000
6764000
6762000
Moorlary Rd

LEGEND

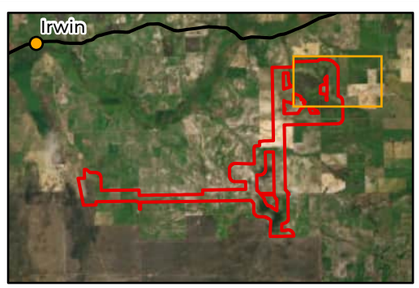
Survey Area
Development Envelope
Local Road

Significant Flora
Priority 3
Gastrolobium rotundifolium
Stylidium torticarpum
Thryptomene nitida

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 3b: Significant flora recorded in the Survey Area

332000
334000
336000
338000
6760000
6758000
Mooriary Rd

LEGEND

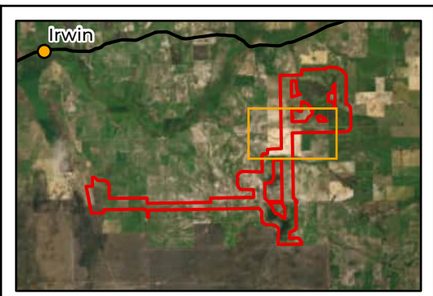
Survey Area
Development Envelope
Local Road

Significant Flora
Priority 3
Banksia fraseri var. *crebra*
Stylidium torticarpum
Thryptomene nitida

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 3c: Significant flora recorded in the Survey Area

338000
340000
342000
344000
6760000
6758000
Mooriary Rd

LEGEND

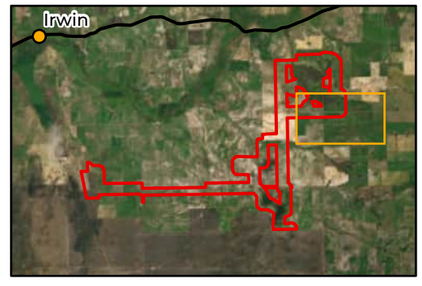
Survey Area
Development Envelope
Local Road

Significant Flora
Priority 3
Gastrolobium rotundifolium
Stylidium torticarpum
Thryptomene nitida

Biologic Environmental

Scale 1:20,000
0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD
Belisama Conventional Gas Project

Figure Series 3d: Significant flora recorded in the Survey Area

316000 318000 320000 322000

6754000 6752000

Significant Flora

Priority 1

- *Poranthera asybosca*

Priority 2

- *Poranthera moorokatta*
- *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154)
- *Thysanotus kalbarriensis*

Priority 3

- *Baeckea* sp. Walkaway (A.S. George 11249)
- *Banksia fraseri* var. *crebra*
- *Comesperma rhadinocarpum*
- *Lechenaultia juncea*
- *Persoonia rudis*

Priority 4

- *Banksia elegans*
- *Banksia scabrella*
- *Schoenus griffinianus*
- *Stawellia dimorphantha*

Yandanooka West Rd

Mt Adams Rd

LEGEND

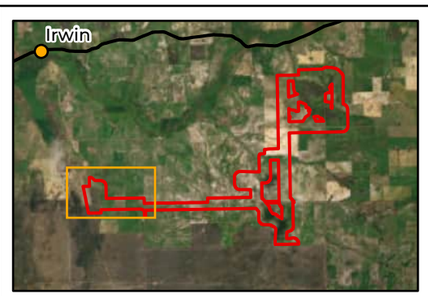
- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:20,000

0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD

Belisama Conventional Gas Project

Figure Series 3e: Significant flora recorded in the Survey Area

322000 324000 326000 328000

6754000

6752000

Significant Flora

Priority 2

- *Poranthera moorokatta*

Priority 3

- *Banksia fraseri* var. *crebra*
- *Comesperma rhadinocarpum*
- *Stylidium drummondianum*
- *Tricoryne soullierae*
- *Verticordia densiflora* var. *roseostella*
- *Verticordia luteola* var. *luteola*

Priority 4

- *Banksia scabrella*
- *Eucalyptus macrocarpa* subsp. *elachantha*

Warradong Spring

Yandanooka West Rd

Mt Adams Rd

LEGEND

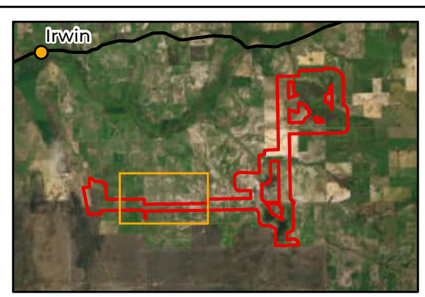
- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:20,000

0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD

Belisama Conventional Gas Project

Figure Series 3f: Significant flora recorded in the Survey Area

326000 328000 330000 332000

6754000

6752000

Warrad

Yandanooka West Rd

Significant Flora

Threatened

- *Thelymitra stellata*

Priority 1

- *Poranthera asybosca*

Priority 2

- *Poranthera moorokatta*
- *Schoenus badius*

Priority 3

- *Banksia fraseri* var. *crebra*
- *Comesperma rhadinocarpum*
- *Stylidium drummondianum*
- *Stylidium torticarpum*
- *Styphelia hyalina*
- *Tricoryne soullierae*
- *Verticordia densiflora* var. *roseostella*
- *Verticordia luteola* var. *luteola*

Priority 4

- *Banksia scabrella*
- *Eucalyptus macrocarpa* subsp. *elachantha*
- *Schoenus griffinianus*

LEGEND

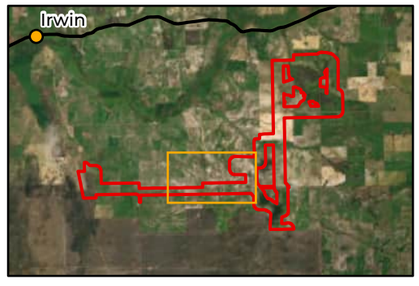
- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:20,000

0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD

Belisama Conventional Gas Project

Figure Series 3g: Significant flora recorded in the Survey Area

330000
332000
334000
336000
6756000
6754000
Yandanooka West Rd

Significant Flora

Threatened

Thelymitra stellata

Priority 1

Poranthera asybosca

Priority 2

Poranthera moorokatta

Schoenus badius

Priority 3

Banksia fraseri var. *crebra*

Comesperma rhadinocarpum

Hopkinsia anoectocolea

Mesomelaena stygia subsp. *deflexa*

Stylidium drummondianum

Stylidium torticarpum

Styphelia hyalina

Thryptomene nitida

Tricoryne soullierae

Verticordia densiflora var. *roseostella*

Priority 4

Banksia scabrella

Schoenus griffinianus

LEGEND

Survey Area

Development Envelope

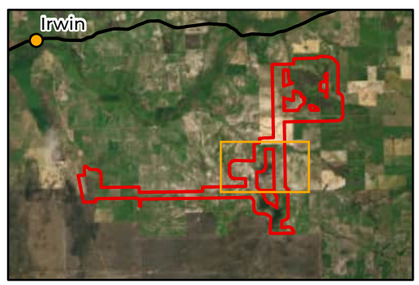
Local Road

Biologic Environmental

Scale 1:20,000

0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD

Belisama Conventional Gas Project

Figure Series 3h: Significant flora recorded in the Survey Area

330000 332000 334000 336000

6752000

6750000

Significant Flora

Threatened

- *Thelymitra stellata*

Priority 1

- *Malleostemon decipiens*
- *Poranthera asybosca*

Priority 2

- *Poranthera moorokatta*
- *Schoenus badius*

Priority 3

- *Acacia isoneura* subsp. *isoneura*
- *Banksia fraseri* var. *crebra*
- *Comesperma rhadinocarpum*
- *Mesomelaena stygia* subsp. *deflexa*
- *Stylidium drummondianum*
- *Stylidium torticarpum*
- *Styphelia hyalina*
- *Thryptomene nitida*
- *Tricoryne soulliereae*

Priority 4

- *Banksia scabrella*
- *Schoenus griffinianus*
- *Stylidium longitubum*

LEGEND

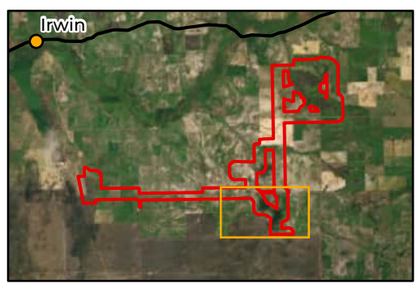
- Survey Area
- Development Envelope
- Local Road

Biologic Environmental

Scale 1:20,000

0 0.2 0.4 0.6 0.8 Km

Coordinate System: GDA2020 MGA Zone 50
Transverse Mercator Created: 16/03/2026



HANCOCK ENERGY PTY LTD

Belisama Conventional Gas Project

Figure Series 3i: Significant flora recorded in the Survey Area

Appendix A: Legislation, compliance and conservation codes

Legislation

Within Western Australia, native flora and vegetation are protected under the *Biodiversity Conservation Act 2016* (BC Act) and at a national level under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Any action that has the potential to impact on native flora and vegetation needs to be approved by relevant state and/or commonwealth departments as dictated by the state *Environmental Protection Act 1986* (EP Act) and EPBC Act. These codes, jurisdiction and level of protection are detailed below.

Compliance

The Environmental Protection Authority (EPA) outline guidance for biological surveys in WA. All aspects of this botanical assessment are compliant with the Environmental Factor Guideline: Flora and Vegetation (EPA, 2016a) and Technical Guidance: Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016b). This extends to preparation, survey design, personnel, data analysis, reporting and client data submission.

Additionally, this survey is consistent with the values presented in the Factor Guidelines for flora and vegetation (EPA, 2016a), intended to protect biological diversity and ecological integrity of WA flora and vegetation during the EIA process. These, and other guidelines followed include:

- EPA (2023) Statement of Environmental Principles, Factors, Objectives and Aims of EIA;
- DoE (2013) Matters of National Environmental Significance: Significant impact guidelines;
- EPA (2016a) Environmental factor guideline: Flora and Vegetation;
- EPA (2016b) Technical guidance: Flora and Vegetation Surveys for Environmental Impact Assessment;
- DoE (2014) Survey Guidelines for Australia's threatened orchids. Guidelines for detecting orchids listed as 'Threatened' under the *Environment Protection and Biodiversity Conservation Act 1999*;
- DBCA (2024) Methods for survey and identification of Western Australian threatened ecological communities.

Conservation codes applicable under the EPBC and BC Acts for Threatened flora and vegetation are detailed in the tables below. Furthermore, any species or ecological community that may be rare but for which there is insufficient information available to allocate a Threatened status under the BC Act, can also be listed as Priority species by the WA Department of Biodiversity, Conservation and Attractions (DBCA).

Conservation codes

Table A1: *Environment Protection and Biodiversity Conservation Act 1999*

Category	Definition
Threatened Flora Species	
Extinct (EX)	A native species is eligible to be included in the Extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.
Extinct in the Wild (EW)	A native species is eligible to be included in the Extinct in the Wild category at a particular time if, at that time: (a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or (b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.
Critically Endangered (CR)	A native species is eligible to be included in the critically endangered category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
Endangered (EN)	A native species is eligible to be included in the endangered category at a particular time if, at that time: (a) it is not critically endangered; and (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
Vulnerable (VU)	A native species is eligible to be included in the vulnerable category at a particular time if, at that time: (a) it is not critically endangered or endangered; and (b) it is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.
Conservation Dependent (CD)	A native species is eligible to be included in the Conservation Dependent category at a particular time if, at that time: (a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming Vulnerable, Endangered or Critically Endangered; or (b) the following subparagraphs are satisfied (i) the species is a species of fish; (ii) the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long-term survival in nature are maximised; (iii) the plan of management is in force under a law of the Commonwealth or of a State or Territory; and (iv) cessation of the plan of management would adversely affect the conservation status of the species.

Category	Definition
Threatened Ecological Communities (TEC)	
Critically Endangered	An ecological community is eligible to be included in the critically endangered category at a particular time if, at that time, it is facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with the prescribed criteria.
Endangered	An ecological community is eligible to be included in the endangered category at a particular time if, at that time: (a) it is not critically endangered; and (b) it is facing a very high risk of extinction in the wild in the near future, as determined in accordance with the prescribed criteria.
Vulnerable	An ecological community is eligible to be included in the vulnerable category at a particular time if, at that time: (a) it is not critically endangered nor endangered; and (b) it is facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with the prescribed criteria.

Table A2: *Biodiversity Conservation Act 2016*

Category	Definition
Threatened Flora Species	
Extinct (EX)	Species where "there is no reasonable doubt that the last member of the species has died", and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act). Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.
Extinct in the Wild (EW)	Species that "is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form", and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act). Currently there are no threatened flora species listed as extinct in the wild.
Critically Endangered (CR)	Threatened species considered to be "facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines". Published under schedule 1 of the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.
Endangered (EN)	Threatened species considered to be "facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines". Published under schedule 2 of the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.
Vulnerable (VU)	Threatened species considered to be "facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines". Published under schedule 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Category	Definition
Threatened Ecological Communities (TEC)	
Critically Endangered	An ecological community is eligible for listing in the category of critically endangered ecological community at a particular time if, at that time — (a) it is facing an extremely high risk of becoming eligible for listing as a collapsed ecological community in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines; and (b) listing in that category is otherwise in accordance with the ministerial guidelines.
Endangered	An ecological community is eligible for listing in the category of endangered ecological community at a particular time if, at that time — (a) it is not a critically endangered ecological community; and (b) it is facing a very high risk of becoming eligible for listing as a collapsed ecological community in the near future, as determined in accordance with criteria set out in the ministerial guidelines; and (c) listing in that category is otherwise in accordance with the ministerial guidelines.
Vulnerable	An ecological community is eligible for listing in the category of vulnerable ecological community at a particular time if, at that time — (a) it is not a critically endangered ecological community or an endangered ecological community; and (b) it is facing a high risk of becoming eligible for listing as a collapsed ecological community in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines; and (c) listing in that category is otherwise in accordance with the ministerial guidelines.
Collapsed	An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time — (a) there is no reasonable doubt that the last occurrence of the ecological community has collapsed; or (b) the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover — (i) its species composition or structure; or (ii) its species composition and structure.

Table A3: Department of Biodiversity, Conservation and Attractions Priority Definitions

Category	Definition
Priority Flora Species	
Priority 1 (P1)	Poorly-known Species Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g., agricultural, or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.
Priority 2 (P2)	Poorly-known Species Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g., national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.
Priority 3 (P3)	Poorly-known Species Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.
Priority 4 (P4)	Rare, Near Threatened and other species in need of monitoring (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands. (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent. (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.
Priority Ecological Communities (PEC)	
Priority 1 (P1)	Poorly-known ecological communities Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤5 occurrences or a total area of ≤ 100ha). Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g., within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Category	Definition
Priority 2 (P2)	Poorly-known Ecological Communities Communities that are known from few occurrences with a restricted distribution (generally ≤10 occurrences or a total area of ≤200ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.
Priority 3 (P3)	Poorly-known Ecological Communities (i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or: (ii) communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), or; (iii) communities made up of large, and/or widespread occurrences, which may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc. Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.
Priority 4 (P4)	Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring. (i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These communities are usually represented on conservation lands. (ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category. (iii) Ecological communities that have been removed from the list of threatened communities during the past five years.
Priority 5 (P5)	Conservation Dependent Ecological Communities Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Flora and ecological communities of other significance

Significant flora may extend beyond the assigned codes and in line with EPA (2016b) may include:

- Being identified as Threatened, Critically Endangered, Endangered, Vulnerable, Extinct or Extinct in the Wild species (State listed BC Act and/or commonwealth listed EPBC Act);
- Being listed as Priority Flora species (DBCA, 2025e);
- Locally endemic or associated with a restricted habitat type (e.g., surface water or groundwater dependent ecosystems);
- New species or anomalous features that indicate a potential new species;
- Range extensions or representative of outer population extent (particularly at the extremes of range, recently discovered range extensions or isolated outliers of the main range);
- Unusual species, restricted subspecies, varieties, naturally occurring hybrids, or complex taxonomic groups; or
- Relictual status, being representative of taxonomic groups that no longer occur widely in the broader landscape.

Significant vegetation may extend beyond the assigned codes and in line with EPA (2016b) may include:

- Being identified as Threatened Ecological Community (TEC), Critically Endangered, Endangered, Vulnerable or Collapsed ecological community (State listed BC Act and/or commonwealth listed EPBC Act);
- Identified as a Priority Ecological Community (PEC) (DBCA, 2023);
- Restricted or endemic distribution;
- Degree of historical impact from threatening processes (such as mining or agricultural);
- A role as a refuge for significant flora; or
- Providing an important function required to maintain ecological integrity of a significant ecosystem.

Introduced flora

Introduced flora can pose a threat to native vegetation and biodiversity. The commonwealth, in collaboration with the states and territories, identified 32 weeds of national significance (WoNS) assessed according to their invasiveness, potential for spread, and environmental, social and economic impacts (DoEE, 2019). A database of declared pests (DPs) is kept by the Department of Primary Industries and Regional Development (DPIRD). This database falls under State jurisdiction, legislated by the *Biosecurity and Agricultural Management Act 2007* (BAM Act). Some introduced flora taxa may be classified within categories that have legal control or management requirements. These requirements must be met by the landholder.

Table A4: Legal Status Definitions of Listed Plants in Western Australia

Legal Status	Definition
Declared Pest, Prohibited – s12	Prohibited organisms are declared pests by virtue of section 22(1) and many only be imported and keep subject to permits
Declared Pest – s22(2)	Declared pests must satisfy any applicable import requirements when imported and may be subject to control keeping requirements
Permitted – s11	Permitted organisms must satisfy applicable import requirements and import permits (where required)
Permitted Requires Permit – r73	Regulation 73 permitted organisms may be subject to restriction under legislation other and the BAM Act (2007)
Unlisted	Unlisted organisms are prohibited in WA
Control Categories	**Definition**
C1 Exclusion	Organisms should be excluded from parts or all of WA
C2 Eradication	Organisms should be eradicated from all or parts of WA
C3 Management	Organisms should have some form of management applied that will alleviate the harmful impact of the organism, reduce the numbers or distribution of the organism or prevent or contain the spread of the organism
Unassigned	Declared pests that are recognised a having a harmful impact under certain circumstances where their subsequent control requirements are determined by a plan or other legislative arrangements under the Act
Keeping Categories	**Definition**
Prohibited Keeping	Can only be kept under a permit or public display, education or scientific purposes
Restricted Keeping	Kept under a permit by private individuals due to low risk of becoming a problem for the environment
Exempt Keeping	No permit or conditions are required for keeping. Organism may be subject to restrictions under the Wildlife Conservation Act (1950)

Appendix B: Groundwater dependent ecosystems definitions

For terrestrial ecosystems there are three key types of GDE (BoM, 2025a):

- Aquatic ecosystems that rely on the surface expression of groundwater, such as rivers, wetlands, and springs;
- Terrestrial ecosystems that rely on the subsurface presence of groundwater – this includes all vegetation ecosystems or Groundwater Dependent Vegetation (GDV); and
- Subterranean ecosystems i.e. cave and aquifer ecosystems.

Aboveground terrestrial GDEs are typically characterised by the presence of flora species that rely on groundwater (i.e., phreatophytes). Phreatophytes may be classified as either obligate or facultative phreatophytes depending on their reliance on groundwater (Eamus *et al.*, 2016):

- Obligate phreatophytes are flora species confined to habitats with access to groundwater;
- Facultative phreatophytes are flora species that can utilise groundwater to satisfy a proportion of their ecological water requirement (EWR) when it is available. However, some individuals may also satisfy their EWR by relying solely on uptake from upper unsaturated soils layers where groundwater is inaccessible.

Obligate phreatophytes are flora species which are completely or highly dependent on groundwater and are therefore confined to habitats with continual, seasonal, or episodic access to groundwater. As they rely on groundwater to satisfy at least some proportion of their EWR (Eamus *et al.*, 2016), obligate phreatophytes are highly sensitive to changes in groundwater regime and respond negatively to rapid groundwater drawdown. As such, obligate phreatophytes are often the best indicator of consistently shallow groundwater tables, or permanent surface water presence. Not all phreatophytic species display the same degree of dependency on groundwater and the dependency within species has been shown to vary both spatially and temporally (Eamus *et al.*, 2016), with the hydrological regime of a particular catchment, creek, or river system, a key factor in presence and dependency of a phreatophyte on groundwater.

Facultative phreatophytes are plants that can access groundwater but are not totally reliant on it, instead using groundwater opportunistically, particularly during times of drought. Some individuals may satisfy their EWR by relying solely on uptake from upper unsaturated soil layers where groundwater is inaccessible (Eamus *et al.*, 2016). Facultative phreatophytes are therefore generally associated with the subsurface presence of groundwater, rather than surface expression of groundwater. Most facultative phreatophytes are large woody trees and shrubs with deep root systems. Vadophytes are plant species that rely on moisture in the soil surface profile, and are independent of groundwater, while xerophytes need very little water (Rio Tinto, 2018).

Specific information on phreatophyte species is not available for the Geraldton Sandplains. Based on knowledge of southwest WA GDEs and known distributions for common phreatophytes, tree species that may indicate groundwater dependence in the Survey Area could include:

- *Eucalyptus camaldulensis*;
- *Eucalyptus rudis;*
- *Melaleuca preissiana; and*
- *Melaleuca rhaphiophylla*

Appendix C: Desktop methods and results

Details of the database search conducted

Purpose	Database	Parameters	Date
To identify flora species and communities previously recorded within the Survey Area and its vicinity, particularly those of significance.	Threatened and Priority Ecological Communities, Species and Communities Branch #58-0424EC (DBCA, 2025b)	30 km radius of the Survey Area	13/08/2025
	Threatened and Priority Flora Database #26-0825FL (DBCA, 2025c)		
	Western Australian Herbarium (WAH) Specimen Database (WAH, 1998 -)		
	Dandjoo – species occurrence search (DBCA, 2025a)	20 km radius of the Survey Area	11/08/2025
	Atlas of Living Australia (ALA) – species occurrence search (ALA, 2025)		
To identify potential species and communities listed under the Commonwealth EPBC Act within the Survey Area	EPBC Act Protected Matters Search Tool (DCCEEW, 2025)	20 km radius of the Survey Area	11/08/2025
To identify declared pests within the Survey Area	Declared Pests Database (Western Australian Organism List) (DPIRD, 2025)	Search of the entire Shire of Irwin	11/08/2025

Native flora of the desktop assessment

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
Aizoaceae	*Carpobrotus virescens*	•							
Amaranthaceae	*Ptilotus manglesii*		•						
	Ptilotus stirlingii	•	•						
Anacardiaceae	*Schinus molle*		•						
Anarthriaceae	*Anarthria polyphylla*	•	•						
	Hopkinsia anoectocolea			•			P3		
	Lyginia barbata		•						
	Lyginia imberbis	•	•						
Apiaceae	*Actinotus leucocephalus*	•	•						
	Homalosciadium homalocarpum	•	•						
	Platysace xerophila	•	•						
Araliaceae	*Hydrocotyle diantha*	•	•						
	Trachymene cyanopetala	•	•						
	Trachymene pilosa	•	•						
Asparagaceae	*Acanthocarpus canaliculatus*	•	•						
	Acanthocarpus preissii		•						
	Acanthocarpus sp. Ajana (C.A. Gardner 8596)	•							
	Chamaescilla corymbosa		•						
	Chamaescilla maculata		•				P1		
	Dichopogon preissii	•	•						
	Laxmannia grandiflora	•	•						
	Laxmannia omnifertilis	•	•						
	Laxmannia sessiliflora		•						
	Laxmannia sessiliflora subsp. *drummondii*	•							
	Lomandra hastilis	•	•						
	Lomandra preissii		•						
	Sowerbaea laxiflora	•	•						
	Thysanotus dichotomus	•	•						
	Thysanotus glaucus				•		P4		
	Thysanotus multiflorus	•	•						
	Thysanotus patersonii		•						
	Thysanotus rectantherus	•	•						
	Thysanotus teretifolius	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Thysanotus vernalis		•	•			P3		
	Actinobole uliginosum	•							
	Bellida graminea	•							
	Blennospora drummondii	•	•						
	Brachyscome iberidifolia	•	•						
	Calotis hispidula		•						
	Feldstonia nitens	•	•						
	Gilberta tenuifolia	•	•						
	Gnephosis angianthoides	•	•						
	Gnephosis tenuissima		•						
	Helipterum craspedioides	•							
	Hyalosperma cotula	•	•						
	Hyalosperma demissum		•						
	Hyalosperma glutinosum		•						
	Hyalosperma glutinosum subsp. *glutinosum*	•							
	Lawrencella rosea	•	•						
	Olearia rudis		•						
Asteraceae	*Podolepis capillaris*		•						
	Podotheca angustifolia		•						
	Podotheca gnaphalioides	•	•						
	Pterochaeta paniculata	•	•						
	Quinetia urvillei		•						
	Rhodanthe collina		•				P3		
	Rhodanthe laevis		•						
	Rhodanthe manglesii	•	•						
	Schoenia cassiniana	•	•						
	Senecio pinnatifolius		•						
	Senecio pinnatifolius var. *latilobus*	•							
	Siemssenia capillaris	•							
	Sondottia connata	•							
	Trichanthodium exilis	•							
	Ursinia anthemoides		•						
	Vittadinia dissecta		•						
	Vittadinia dissecta var. *hirta*	•							
	Waitzia acuminata		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Waitzia acuminata var. *acuminata*	•							
	Waitzia acuminata var. *albicans*	•							
	Waitzia suaveolens		•						
	Waitzia suaveolens var. *suaveolens*	•							
Boraginaceae	*Halgania argyrophylla*	•	•						
	Halgania sp. Wongan Hills (K.F. Kenneally 2393)	•							
Brassicaceae	*Lepidium fasciculatum*		•				P3		
	Lepidium sagittulatum		•				P1		
Campanulaceae	*Isotoma hypocrateriformis*		•						
	Lobelia cleistogamoides	•	•						
	Lobelia rarifolia	•	•						
	Lobelia rhytidosperma	•	•						
	Wahlenbergia gracilenta	•	•						
	Wahlenbergia preissii		•						
Casuarinaceae	*Allocasuarina campestris*	•	•						
	Allocasuarina grevilleoides		•	•			P3		
	Allocasuarina huegeliana		•						
	Allocasuarina humilis		•						
	Allocasuarina lehmanniana	•	•						
	Allocasuarina microstachya	•	•						
	Allocasuarina thuyoides	•	•						
Celastraceae	*Stackhousia dielsii*	•	•						
	Stackhousia pubescens	•	•						
	Tripterococcus brunonis	•	•						
Chenopodiaceae	*Roycea pycnophylloides*					•	T	EN	EN
	Chenopodium gaudichaudianum	•	•						
Colchicaceae	*Burchardia congesta*	•	•						
	Wurmbea dioica		•						
	Wurmbea dioica subsp. *alba*	•							
	Wurmbea tubulosa		•	•	•	•	T	VU	EN
Crassulaceae	*Crassula colorata*		•						
Cupressaceae	*Callitris arenaria*	•	•						
Cyperaceae	*Caustis dioica*	•	•						
	Chorizandra enodis		•						
	Cyperus alterniflorus		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Eleocharis acuta		•						
	Lepidosperma apricola	•							
	Lepidosperma pubisquameum		•						
	Lepidosperma sp. P1 small head (M.D. Tindale 166A)	•							
	Lepidosperma tenue		•						
	Lepidosperma viscidum		•						
	Mesomelaena preissii	•	•						
	Mesomelaena pseudostygia	•	•						
	Mesomelaena stygia		•						
	Mesomelaena stygia subsp. *deflexa*			•			P3		
	Mesomelaena tetragona	•	•						
	Schoenus andrewsii	•	•						
	Schoenus badius		•	•			P2		
	Schoenus clandestinus	•	•						
	Schoenus griffinianus		•	•			P4		
	Schoenus insolitus	•	•						
	Schoenus minutulus	•	•						
	Schoenus odontocarpus	•	•						
	Schoenus pleiostemoneus	•	•						
	Schoenus rigens	•							
	Schoenus sp. Eneabba (F. Obbens & C. Godden 1154)			•			P2		
	Schoenus subflavus		•						
	Schoenus unispiculatus	•	•						
Dasypogonaceae	*Calectasia cyanea*		•				T	CR	CR
	Calectasia hispida	•	•						
	Calectasia narragara	•	•						
	Calectasia valida	•	•						
Dilleniaceae	*Hibbertia acerosa*		•						
	Hibbertia aurea		•						
	Hibbertia conspicua	•	•						
	Hibbertia hypericoides		•						
	Hibbertia hypericoides subsp. *hypericoides*	•							
	Hibbertia lineata	•							
	Hibbertia polystachya	•	•						
	Hibbertia robur	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Hibbertia spicata		•						
	Hibbertia striata		•						
	Hibbertia subvaginata	•	•						
	Hibbertia subvillosa			•			P3		
Dioscoreaceae	*Dioscorea hastifolia*		•						
Droseraceae	*Drosera drummondii*	•	•						
	Drosera eneabba		•						
	Drosera erythrorhiza		•						
	Drosera hirsuta	•	•						
	Drosera leucoblasta		•						
	Drosera macrantha		•						
	Drosera menziesii	•	•						
	Drosera neesii		•						
	Drosera porrecta	•	•						
	Drosera stolonifera		•						
	Drosera thysanosepala		•						
Ecdeiocoleaceae	*Ecdeiocolea monostachya*	•	•						
	Georgeantha hexandra	•	•						
Elaeocarpaceae	*Tetratheca confertifolia*	•	•						
	Tetratheca paucifolia	•	•						
Ericaceae	*Andersonia gracilis*					•	T	VU	EN
	Andersonia heterophylla	•	•						
	Astroloma glaucescens		•						
	Astroloma microdonta		•						
	Astroloma serratifolium		•						
	Astroloma xerophyllum		•						
	Conostephium preissii	•	•						
	Leucopogon glaucifolius		•						
	Leucopogon grammatus		•				P3		
	Leucopogon inflexus	•	•						
	Leucopogon sp. Northern ciliate (R. Davis 3393)	•	•						
	Lissanthe powelliae	•	•						
	Lysinema ciliatum		•						
	Lysinema pentapetalum	•	•						
	Styphelia conostephioides	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Styphelia glaucifolia	•							
	Styphelia hamulosa	•							
	Styphelia hamulosus		•						
	Styphelia hispida	•	•						
	Styphelia hyalina		•	•			P3		
	Styphelia marginata					•	T	EN	EN
	Styphelia microdonta	•							
	Styphelia obtecta					•	T	EN	EN
	Styphelia serratifolia	•							
	Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	•							
	Styphelia speciosa	•							
	Styphelia strongylophyllus		•						
	Styphelia tortifolia	•							
	Styphelia xerophylla	•							
Euphorbiaceae	*Beyeria cinerea* subsp. *cinerea*			•			P3		
	Beyeria gardneri		•	•			P3		
	Monotaxis bracteata	•	•						
	Monotaxis grandiflora		•						
	Stachystemon axillaris	•	•						
Fabaceae	*Acacia acuaria*	•	•						
	Acacia acuminata	•							
	Acacia adnata	•	•						
	Acacia auronitens	•	•						
	Acacia bidentata	•	•						
	Acacia blakelyi	•	•						
	Acacia cavealis	•	•						
	Acacia comans		•						
	Acacia dilatata	•	•						
	Acacia ericifolia	•	•						
	Acacia ericksoniae	•	•						
	Acacia erinacea	•	•						
	Acacia fagonioides	•	•						
	Acacia flabellifolia		•				P3		
	Acacia isoneura		•						
	Acacia isoneura subsp. *isoneura*			•			P3		

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Acacia jacksonioides		•						
	Acacia lanceolata		•	•			P3		
	Acacia lasiocarpa		•						
	Acacia lasiocarpa var. *lasiocarpa*	•							
	Acacia latipes	•	•						
	Acacia latipes subsp. *latipes*	•							
	Acacia leptospermoides		•						
	Acacia leptospermoides subsp. *leptospermoides*	•							
	Acacia megacephala				•		P3		
	Acacia microbotrya	•							
	Acacia multispicata	•	•						
	Acacia pulchella		•						
	Acacia pulchella var. *glaberrima*	•							
	Acacia rostellifera	•	•						
	Acacia saligna	•	•						
	Acacia scirpifolia	•	•						
	Acacia sessilis	•	•						
	Acacia sphacelata		•						
	Acacia sphacelata subsp. sphacelata	•							
	Acacia stenoptera	•	•						
	Acacia telmica		•	•			P3		
	Acacia tetragonophylla	•	•						
	Acacia ulicina	•	•						
	Acacia vittata			•			P2		
	Bossiaea eriocarpa		•						
	Chorizema aciculare		•						
	Chorizema aciculare subsp. *laxum*	•							
	Chorizema humile		•	•			T	CR	EN
	Chorizema racemosum	•	•						
	Cristonia stenophylla	•	•						
	Daviesia angulata	•	•						
	Daviesia benthamii		•						
	Daviesia daphnoides	•	•						
	Daviesia decurrens		•						
	Daviesia decurrens subsp. *decurrens*	•							

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Daviesia divaricata		•						
	Daviesia hakeoides	•	•						
	Daviesia hakeoides subsp. *hakeoides*	•							
	Daviesia hakeoides subsp. *subnuda*	•							
	Daviesia incrassata	•	•						
	Daviesia incrassata subsp. *teres*	•							
	Daviesia nudiflora subsp. *hirtella*	•							
	Daviesia nudiflora subsp. *nudiflora*	•							
	Daviesia oxyclada	•	•						
	Daviesia pedunculata	•	•						
	Daviesia podophylla	•	•						
	Daviesia ramosissima	•	•						
	Daviesia speciosa		•	•	•	•	T	EN	EN
	Daviesia triflora	•	•						
	Gastrolobium callistachys	•	•						
	Gastrolobium obovatum	•	•						
	Gastrolobium oxylobioides	•							
	Gastrolobium plicatum	•	•						
	Gastrolobium rotundifolium		•				P3		
	Gastrolobium spinosum	•	•						
	Gompholobium aristatum		•						
	Gompholobium knightianum	•	•						
	Gompholobium laxum	•							
	Gompholobium muticum	•	•						
	Gompholobium tomentosum	•							
	Hovea stricta		•						
	Isotropis cuneifolia	•	•						
	Isotropis cuneifolia subsp. *cuneifolia*	•							
	Isotropis drummondii	•	•						
	Isotropis sp. Shark Bay (M.E. Trudgen 7170)	•							
	Jacksonia angulata	•	•						
	Jacksonia calcicola		•						
	Jacksonia foliosa	•	•						
	Jacksonia hakeoides	•	•						
	Jacksonia macrocalyx	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Jacksonia nutans	•	•						
	Jacksonia restioides	•	•						
	Jacksonia sternbergiana	•	•						
	Labichea lanceolata		•						
	Labichea lanceolata subsp. *lanceolata*	•							
	Leptosema aphyllum	•	•						
	Lupinus cosentinii		•						
	Medicago polymorpha		•						
	Mirbelia floribunda	•	•						
	Mirbelia spinosa	•	•						
	Sphaerolobium macranthum		•						
	Viminaria juncea		•						
Fabroniaceae	*Fabronia hampeana*		•				P2		
Funariaceae	*Entosthodon subnudus* var. *subnudus*	•							
Gentianaceae	*Schenkia clementii*	•	•						
Geraniaceae	*Erodium cygnorum*	•							
Goodeniaceae	*Dampiera alata*	•	•						
	Dampiera haematotricha		•						
	Dampiera haematotricha subsp. *dura*	•							
	Dampiera juncea	•	•						
	Dampiera lavandulacea		•						
	Dampiera lindleyi	•	•						
	Dampiera linearis		•						
	Dampiera oligophylla	•	•						
	Dampiera spicigera	•	•						
	Dampiera tephrea		•	•			P3		
	Dampiera teres	•	•						
	Dampiera trigona		•						
	Goodenia berardiana	•	•						
	Goodenia caerulea		•						
	Goodenia hassallii	•	•						
	Goodenia trichophylla	•	•						
	Goodenia trinervis	•							
	Lechenaultia biloba	•	•						
	Lechenaultia floribunda	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Lechenaultia hirsuta	•	•						
	Lechenaultia linarioides		•						
	Lechenaultia macrantha	•							
	Scaevola anchusifolia		•						
	Scaevola canescens	•	•						
	Scaevola phlebopetala	•	•						
	Scaevola spinescens	•	•						
	Scaevola virgata		•						
	Velleia trinervis		•						
	Verreauxia reinwardtii		•						
Gyrostemonaceae	*Gyrostemon ramulosus*		•						
	Tersonia cyathiflora	•	•						
Haemodoraceae	*Anigozanthos humilis*	•	•						
	Anigozanthos humilis subsp. *humilis*	•							
	Anigozanthos pulcherrimus		•						
	Conostylis aculeata		•						
	Conostylis aculeata subsp. *breviflora*	•							
	Conostylis androstemma	•	•						
	Conostylis aurea	•	•						
	Conostylis candicans	•	•						
	Conostylis candicans subsp. *candicans*	•							
	Conostylis candicans subsp. *procumbens*	•							
	Conostylis canteriata	•	•						
	Conostylis crassinerva		•						
	Conostylis crassinerva subsp. *absens*	•							
	Conostylis dielsii		•						
	Conostylis dielsii subsp. *dielsii*	•							
	Conostylis dielsii subsp. *teres*					•	T	CR	EN
	Conostylis hiemalis	•	•						
	Conostylis micrantha		•	•		•	T	VU	EN
	Conostylis neocymosa	•	•						
	Conostylis prolifera	•	•						
	Conostylis resinosa	•	•						
	Conostylis robusta	•	•						
	Conostylis teretiuscula	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Haemodorum discolor	•	•						
	Haemodorum loratum		•	•			P3		
	Haemodorum simulans	•	•						
	Haemodorum spicatum	•	•						
	Macropidia fuliginosa	•	•						
	Tribonanthes australis	•	•						
Haloragaceae	*Glischrocaryon aureum*	•	•						
	Haloragis foliosa			•			P3		
Hemerocallidaceae	*Arnocrinum preissii*	•	•						
	Chamaescilla corymbosa var. *corymbosa*	•							
	Chamaescilla versicolor	•							
	Corynotheca micrantha	•	•						
	Dianella revoluta		•						
	Hensmania stoniella		•	•			P3		
	Johnsonia pubescens	•	•						
	Stawellia dimorphantha		•	•	•		P4		
	Tricoryne elatior		•						
	Tricoryne humilis	•	•						
	Tricoryne soullierae		•				P3		
	Tricoryne sp. Eneabba (E.A. Griffin 1200)	•							
	Tricoryne tenella	•	•						
Iridaceae	*Patersonia graminea*	•	•						
	Patersonia occidentalis		•						
	Romulea rosea		•						
Juncaceae	*Juncus radula*	•	•						
Lamiaceae	*Dasymalla axillaris*					•	T	CR	CR
	Hemiandra gardneri					•	T	CR	EN
	Hemiandra glabra		•						
	Hemiandra rubriflora	•	•						
	Hemiandra sp. Eneabba (H. Demarz 3687)			•			P3		
	Hemigenia barbata		•						
	Hemigenia diplanthera		•						
	Hemigenia drummondii	•	•						
	Hemiphora bartlingii	•	•						
	Pityrodia viscida		•	•			P4		

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Prostanthera magnifica	•	•						
	Quoya oldfieldii	•	•						
	Quoya verbascina	•	•						
Lauraceae	*Cassytha filiformis*		•						
	Cassytha pomiformis		•						
Loganiaceae	*Orianthera spermacocea*		•						
	Phyllangium paradoxum	•							
	Phyllangium sulcatum	•							
Loranthaceae	*Amyema fitzgeraldii*	•							
	Amyema miquelii	•	•						
	Amyema preissii	•	•						
	Nuytsia floribunda		•						
Malvaceae	*Alyogyne huegelii*		•						
	Alyogyne pinoniana var. *pinoniana*	•							
	Androcalva luteiflora	•							
	Guichenotia alba		•	•			P3		
	Guichenotia angustifolia	•	•						
	Guichenotia ledifolia	•	•						
	Guichenotia micrantha	•	•						
	Guichenotia sarotes	•	•						
	Lasiopetalum drummondii	•	•						
	Lasiopetalum erectifolium	•	•						
	Lasiopetalum indutum		•						
	Lasiopetalum ogilvieanum		•	•	•		P1		
	Lawrencia diffusa	•	•						
	Seringia hermanniifolia	•							
	Thomasia cognata		•						
	Thomasia rulingioides			•			P2		
Montiaceae	*Calandrinia liniflora*	•	•						
	Calandrinia polyandra	•	•						
Myrtaceae	*Apectospermum spinescens*	•							
	Astus tetragonus	•							
	Babingtonia camphorosmae		•						
	Babingtonia erecta	•	•						
	Babingtonia grandiflora		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Baeckea sp. Walkaway (A.S. George 11249)			•			P3		
	Beaufortia elegans	•	•						
	Calothamnus arcuatus		•				P2		
	Calothamnus blepharospermus		•						
	Calothamnus glaber	•	•						
	Calothamnus hirsutus	•	•						
	Calothamnus longissimus	•	•						
	Calothamnus quadrifidus		•						
	Calothamnus quadrifidus subsp. *angustifolius*	•							
	Calothamnus sanguineus	•	•						
	Calytrix brevifolia		•						
	Calytrix chrysantha		•	•			P4		
	Calytrix cravenii	•	•						
	Calytrix depressa	•	•						
	Calytrix ecalycata		•						
	Calytrix flavescens		•						
	Calytrix fraseri	•	•						
	Calytrix gracilis	•	•						
	Calytrix sapphirina	•	•						
	Calytrix strigosa	•	•						
	Darwinia pauciflora	•	•						
	Darwinia speciosa	•	•						
	Eremaea acutifolia		•	•			P3		
	Eremaea atala	•	•						
	Eremaea beaufortioides	•	•						
	Eremaea beaufortioides var. *beaufortioides*	•							
	Eremaea beaufortioides var. *microphylla*	•							
	Eremaea ectadioclada	•	•						
	Eremaea violacea	•	•						
	Eremaea violacea subsp. *raphiophylla*	•							
	Eremaea violacea subsp. *violacea*	•							
	Eremaea x codonocarpa	•	•						
	Eremaea x phoenicea		•						
	Ericomyrtus serpyllifolia	•	•						
	Ericomyrtus sp. Mt Lesueur (E.A. Griffin 2325)	•							

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Ericomyrtus tenuior	•	•						
	Eucalyptus abdita		•	•			P2		
	Eucalyptus accedens	•	•						
	Eucalyptus arachnaea		•						
	Eucalyptus arachnaea subsp. *arachnaea*	•							
	Eucalyptus arachnaea subsp. arrecta			•			P3		
	Eucalyptus camaldulensis		•						
	Eucalyptus conveniens	•	•						
	Eucalyptus crispata		•	•	•	•	T	VU	VU
	Eucalyptus diminuta	•	•						
	Eucalyptus dolichocera	•	•						
	Eucalyptus drummondii	•	•						
	Eucalyptus ebbanoensis		•						
	Eucalyptus ebbanoensis subsp. *ebbanoensis*	•							
	Eucalyptus ebbanoensis subsp. *photina*			•			P4		
	Eucalyptus eudesmioides		•						
	Eucalyptus falcata	•	•						
	Eucalyptus flocktoniae	•	•						
	Eucalyptus foecunda		•						
	Eucalyptus horistes	•	•						
	Eucalyptus incrassata	•	•						
	Eucalyptus johnsoniana		•				T	EN	EN
	Eucalyptus jucunda	•	•						
	Eucalyptus leprophloia		•	•	•	•	T	EN	EN
	Eucalyptus loxophleba		•						
	Eucalyptus loxophleba subsp. *loxophleba*	•							
	Eucalyptus loxophleba subsp. *supralaevis*	•							
	Eucalyptus macrocarpa	•	•						
	Eucalyptus macrocarpa subsp. *elachantha*			•	•		P4		
	Eucalyptus macrocarpa subsp. *macrocarpa*	•							
	Eucalyptus macrocarpa x pyriformis			•			P3		
	Eucalyptus obtusiflora		•						
	Eucalyptus obtusiflora subsp. *dongarraensis*	•							
	Eucalyptus opimiflora	•	•						
	Eucalyptus pleurocarpa		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Eucalyptus pluricaulis		•						
	Eucalyptus pyriformis	•	•						
	Eucalyptus redunca subsp. *pluricaulis*	•							
	Eucalyptus todtiana	•	•						
	Eucalyptus zopherophloia		•	•	•		P4		
	Homalocalyx chapmanii		•	•			P2		
	Hypocalymma gardneri	•	•						
	Hypocalymma hirsutum	•	•						
	Hypocalymma xanthopetalum	•	•						
	Kunzea micrantha		•						
	Kunzea micrantha subsp. *oligandra*	•							
	Kunzea micrantha subsp. *petiolata*	•							
	Leptospermopsis erubescens	•	•						
	Leptospermopsis oligandra	•							
	Leptospermum oligandrum		•						
	Leptospermum spinescens		•						
	Malleostemon decipiens		•	•			P1		
	Malleostemon hursthousei	•	•						
	Malleostemon roseus	•	•						
	Melaleuca amydra	•							
	Melaleuca aspalathoides	•	•						
	Melaleuca cardiophylla		•						
	Melaleuca carrii	•	•						
	Melaleuca concreta	•	•						
	Melaleuca depressa		•						
	Melaleuca fulgens	•	•						
	Melaleuca hollidayi	•	•						
	Melaleuca holosericea		•						
	Melaleuca leuropoma	•	•						
	Melaleuca longistaminea	•	•						
	Melaleuca marginata	•	•						
	Melaleuca radula	•	•						
	Melaleuca scabra		•						
	Melaleuca sclerophylla		•	•			P3		
	Melaleuca tinkeri	•	•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Melaleuca trichophylla	•	•						
	Melaleuca uncinata	•	•						
	Melaleuca urceolaris	•	•						
	Micromyrtus rogeri		•	•	•		P1		
	Phymatocarpus porphyrocephalus	•	•						
	Pileanthus filifolius		•						
	Pileanthus peduncularis	•							
	Regelia ciliata	•	•						
	Scholtzia calcicola			•			P2		
	Scholtzia capitata	•							
	Scholtzia chapmanii		•						
	Scholtzia laxiflora	•	•						
	Scholtzia oligandra	•							
	Scholtzia parviflora	•							
	Scholtzia prostrata			•			P3		
	Scholtzia sp. Burma Road (A.C.Burns 138)		•						
	Scholtzia sp. Dongara (R.Hart 8401)		•						
	Scholtzia sp. Eneabba (S.Maley 8)		•						
	Scholtzia trilocularis	•							
	Scholtzia umbellifera		•						
	Scholtzia uniovulata	•	•						
	Thryptomene butleri			•			P3		
	Thryptomene hyporhytis	•							
	Thryptomene mucronulata	•							
	Thryptomene nitida		•	•	•		P3		
	Thryptomene racemulosa	•	•						
	Verticordia blepharophylla	•	•						
	Verticordia brownii		•						
	Verticordia centipeda	•							
	Verticordia chrysantha		•						
	Verticordia chrysanthella	•	•						
	Verticordia dasystylis subsp. *oestopoia*			•			P1		
	Verticordia densiflora	•	•						
	Verticordia densiflora var. *cespitosa*	•							
	Verticordia densiflora var. *roseostella*			•			P3		

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Verticordia densiflora var. *stelluligera*	•							
	Verticordia eriocephala	•	•						
	Verticordia grandiflora		•						
	Verticordia grandis	•	•						
	Verticordia huegelii	•	•						
	Verticordia huegelii var. *stylosa*	•							
	Verticordia laciniata	•	•						
	Verticordia luteola		•						
	Verticordia luteola var. *luteola*			•	•		P3		
	Verticordia monadelpha		•						
	Verticordia monadelpha var. *monadelpha*	•							
	Verticordia nobilis	•	•						
	Verticordia ovalifolia	•	•						
	Verticordia picta	•	•						
Olacaceae	*Olax aurantia*	•	•						
	Olax benthamiana	•	•						
	Olax scalariformis	•	•						
Orchidaceae	*Caladenia crebra*	•	•						
	Caladenia denticulata	•	•						
	Caladenia drummondii	•	•						
	Caladenia flava	•	•						
	Caladenia footeana	•	•						
	Caladenia hoffmanii					•	T	EN	EN
	Caladenia latifolia		•						
	Caladenia longicauda		•						
	Caladenia longicauda subsp. *borealis*	•							
	Caladenia nobilis	•	•						
	Caladenia petrensis	•	•						
	Caladenia varians	•							
	Caladenia vulgata		•						
	Cyanicula gemmata	•	•						
	Diuris eburnea		•				T	EN	EN
	Diuris hazeliae	•	•						
	Diuris laxiflora		•						
	Diuris pallescens		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Diuris refracta	•	•						
	Diuris setacea	•	•						
	Elythranthera brunonis		•						
	Paracaleana dixonii		•	•	•	•	T	VU	EN
	Pheladenia deformis	•	•						
	Prasophyllum cyphochilum	•	•						
	Pterostylis exserta	•	•						
	Pterostylis scabra	•	•						
	Pterostylis vittata	•	•						
	Pyrorchis nigricans	•	•						
	Thelymitra benthamiana	•	•						
	Thelymitra campanulata		•						
	Thelymitra stellata		•	•	•	•	T	EN	EN
Phyllanthaceae	*Phyllanthus calycinus*		•						
Pittosporaceae	*Marianthus bicolor*	•	•						
	Marianthus erubescens	•	•						
	Marianthus ringens	•	•						
Poaceae	*Amphipogon caricinus*	•	•						
	Aristida holathera		•						
	Aristida holathera var. *holathera*	•							
	Austrostipa elegantissima	•	•						
	Austrostipa nitida	•	•						
	Austrostipa nunaginensis		•	•			P3		
	Austrostipa tenuifolia		•						
	Eriachne ovata	•							
	Neurachne alopecuroidea	•	•						
	Puccinellia stricta		•						
	Rytidosperma occidentale	•	•						
Polygalaceae	*Comesperma confertum*	•							
	Comesperma drummondii	•	•						
	Comesperma griffinii		•	•			P2		
	Comesperma rhadinocarpum		•	•			P3		
	Comesperma volubile		•						
Polygonaceae	*Muehlenbeckia adpressa*		•						
	Muehlenbeckia polybotrya	•							

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Rumex bucephalophorus		•						
Portulacaceae	*Calandrinia calyptrata*		•						
	Calandrinia remota		•						
Proteaceae	*Adenanthos cygnorum*		•						
	Banksia attenuata	•	•						
	Banksia candolleana		•						
	Banksia carlinoides	•	•						
	Banksia dallanneyi		•						
	Banksia dallanneyi subsp. *media*	•							
	Banksia elegans		•	•			P4		
	Banksia fraseri		•						
	Banksia fraseri var. *ashbyi*	•							
	Banksia fraseri var. *crebra*			•			P3		
	Banksia fraseri var. *fraseri*	•							
	Banksia hookeriana		•						
	Banksia ilicifolia	•							
	Banksia incana	•							
	Banksia lanata	•	•						
	Banksia leptophylla	•	•						
	Banksia leptophylla var. *melletica*	•							
	Banksia menziesii	•	•						
	Banksia prionotes	•	•						
	Banksia scabrella		•	•			P4		
	Banksia sessilis		•						
	Banksia sessilis var. *flabellifolia*	•							
	Banksia shuttleworthiana	•	•						
	Banksia sphaerocarpa		•						
	Banksia sphaerocarpa var. *sphaerocarpa*	•							
	Conospermum boreale	•	•						
	Conospermum boreale subsp. *ascendens*	•							
	Conospermum boreale subsp. *boreale*	•							
	Conospermum brachyphyllum	•	•						
	Conospermum nervosum	•	•						
	Conospermum stoechadis		•						
	Conospermum stoechadis subsp. *stoechadis*	•							

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Conospermum triplinervium		•						
	Conospermum wycherleyi	•	•						
	Conospermum wycherleyi subsp. *glabrum*	•							
	Conospermum wycherleyi subsp. *wycherleyi*	•							
	Grevillea amplexans subsp. *amplexans*	•							
	Grevillea argyrophylla	•							
	Grevillea biformis		•						
	Grevillea biformis subsp. *biformis*	•							
	Grevillea biternata	•	•						
	Grevillea candelabroides	•	•						
	Grevillea erinacea		•				P3		
	Grevillea eriostachya	•	•						
	Grevillea hirtella		•				P3		
	Grevillea leucopteris	•	•						
	Grevillea makinsonii		•				P3		
	Grevillea obliquistigma		•						
	Grevillea obliquistigma subsp. *funicularis*	•							
	Grevillea phanerophlebia		•	•	•		T	CR	CR
	Grevillea polybotrya		•						
	Grevillea shuttleworthiana		•						
	Grevillea shuttleworthiana subsp. *canarina*	•							
	Grevillea spinosissima	•							
	Grevillea teretifolia		•						
	Grevillea umbellulata	•	•						
	Grevillea uncinulata		•						
	Hakea auriculata	•	•						
	Hakea baxteri		•						
	Hakea brachyptera		•				P3		
	Hakea candolleana	•	•						
	Hakea circumalata	•	•						
	Hakea costata	•	•						
	Hakea cygnus		•						
	Hakea cygnus subsp. *cygnus*	•							
	Hakea falcata		•						
	Hakea flabellifolia	•							

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Hakea incrassata	•	•						
	Hakea lissocarpha	•	•						
	Hakea megalosperma					•	T	VU	VU
	Hakea neospathulata	•	•						
	Hakea obliqua		•						
	Hakea orthorrhyncha	•	•						
	Hakea orthorrhyncha var. *filiformis*	•							
	Hakea platysperma	•	•						
	Hakea polyanthema	•	•						
	Hakea prostrata	•	•						
	Hakea pycnoneura	•	•						
	Hakea recurva		•						
	Hakea recurva subsp. *recurva*	•							
	Hakea ruscifolia		•						
	Hakea smilacifolia	•	•						
	Hakea stenocarpa		•						
	Hakea trifurcata	•	•						
	Isopogon adenanthoides		•						
	Isopogon divergens	•	•						
	Isopogon linearis	•	•						
	Isopogon tridens	•	•						
	Lambertia multiflora	•	•						
	Lambertia multiflora var. *multiflora*	•							
	Persoonia acicularis	•	•						
	Persoonia chapmaniana		•	•			P3		
	Persoonia comata	•							
	Persoonia filiformis		•	•			P3		
	Persoonia rudis		•	•	•		P3		
	Petrophile brevifolia	•	•						
	Petrophile brevifolia subsp. *rosea*	•							
	Petrophile chrysantha		•						
	Petrophile drummondii	•	•						
	Petrophile ericifolia		•						
	Petrophile macrostachya	•	•						
	Petrophile media		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Petrophile megalostegia	•	•						
	Petrophile scabriuscula	•	•						
	Petrophile seminuda	•	•						
	Petrophile serruriae	•	•						
	Petrophile shuttleworthiana		•						
	Petrophile striata	•							
	Stirlingia abrotanoides	•	•						
	Stirlingia latifolia	•	•						
	Stirlingia simplex		•						
	Synaphea aephynsa	•	•						
	Synaphea oulopha		•	•			P3		
	Synaphea sparsiflora		•	•	•		P2		
	Synaphea spinulosa	•	•						
	Xylomelum angustifolium		•						
Restionaceae	*Chaetanthus aristatus*	•	•						
	Chordifex sinuosus	•	•						
	Desmocladus asper	•	•						
	Desmocladus fasciculatus		•						
	Desmocladus lateriflorus	•	•						
	Desmocladus lateriticus	•	•						
	Desmocladus myriocladus	•	•						
	Desmocladus parthenicus	•	•						
	Desmocladus semiplanus	•	•						
	Lepidobolus chaetocephalus	•	•						
	Lepidobolus preissianus	•	•						
	Lepidobolus preissianus subsp. *preissianus*	•							
	Lepidobolus preissianus subsp. *volubilis*	•							
	Loxocarya cinerea		•						
Rhamnaceae	*Cryptandra glabriflora*		•				P2		
	Cryptandra intermedia	•	•						
	Cryptandra myriantha	•	•						
	Cryptandra pungens	•	•						
	Polianthion wichurae	•	•						
	Stenanthemum intricatum	•	•						
	Stenanthemum notiale		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Stenanthemum notiale subsp. *notiale*	•							
	Trymalium angustifolium	•	•						
	Trymalium ledifolium		•						
Rubiaceae	*Opercularia spermacocea*		•						
	Boronia coerulescens		•						
	Boronia cymosa	•	•						
	Boronia ramosa		•						
	Cyanothamnus coerulescens	•							
	Cyanothamnus coerulescens subsp. *spinescens*	•							
	Cyanothamnus ramosus subsp. *anethifolius*	•							
Rutaceae	*Diplolaena eneabbensis*	•	•						
	Diplolaena ferruginea	•	•						
	Diplolaena geraldtonensis	•							
	Diplolaena leemaniana	•	•						
	Geleznowia calycina	•							
	Geleznowia uberiflora	•							
	Geleznowia verrucosa	•	•						
Santalaceae	*Leptomeria empetriformis*	•	•						
Sapindaceae	*Diplopeltis huegelii*	•	•						
	Diplopeltis huegelii subsp. *huegelii*	•							
	Diplopeltis huegelii subsp. *subintegra*	•							
	Dodonaea ericoides		•						
	Dodonaea pinifolia	•	•						
Solanaceae	*Solanum lasiophyllum*	•	•						
	Solanum oldfieldii	•	•						
Stylidiaceae	*Levenhookia dubia*		•						
	Levenhookia octomaculata	•	•						
	Levenhookia stipitata	•	•						
	Stylidium adpressum	•	•						
	Stylidium bicolor	•	•						
	Stylidium caricifolium	•	•						
	Stylidium carnosum subsp. Narrow leaves (J.A. Wege 490)			•			P1		
	Stylidium crossocephalum	•	•						
	Stylidium decipiens	•	•						
	Stylidium dichotomum		•						

Family	Taxon	Source					Conservation Code		
		DJ/AVH	ALA	WAH	TPFL	EPBC	DBCA	BC Act	EPBC Act
	Stylidium diuroides	•	•						
	Stylidium diuroides subsp. *paucifoliatum*	•							
	Stylidium drummondianum		•	•			P3		
	Stylidium elongatum	•	•						
	Stylidium eriopodum	•	•						
	Stylidium kalbarriense		•						
	Stylidium leptocalyx		•				P4		
	Stylidium leptophyllum		•						
	Stylidium maitlandianum	•	•						
	Stylidium petiolare	•	•						
	Stylidium ponticulus	•	•						
	Stylidium pseudocaespitosum		•	•			P2		
	Stylidium purpureum	•	•						
	Stylidium repens	•	•						
	Stylidium rigidulum	•	•						
	Stylidium septentrionale	•	•						
	Stylidium sp. Three Springs (J.A. Wege & C. Wilkins JAW 600)			•			P2		
	Stylidium stenosepalum	•	•						
	Stylidium torticarpum		•	•			P3		
Surianaceae	*Stylobasium australe*	•							
Thymelaeaceae	*Pimelea angustifolia*	•	•						
	Pimelea imbricata		•						
	Pimelea leucantha	•	•						
	Pimelea suaveolens		•						
	Pimelea sulphurea	•	•						
Violaceae	*Hybanthus floribundus*		•						
	Pigea floribunda	•							
Vitaceae	*Clematicissus angustissima*	•	•						
Xanthorrhoeaceae	*Xanthorrhoea drummondii*		•						
Zamiaceae	*Macrozamia fraseri*	•	•						
	Macrozamia riedlei		•						

Introduced flora of the desktop assessment

Family	Taxon	Source			WoNS	DP	DBCA Weed Prioritisation	
		ALA	Dandjoo	WAOL			Impact	Invasiveness
Alismataceae	*Sagittaria platyphylla*			•	Yes	Yes	Not Assessed	Not Assessed
Apiaceae	*Carum carvi*		•		No	No	Not Assessed	Not Assessed
Apocynaceae	*Calotropis procera*			•	No	Yes	Not Assessed	Not Assessed
	Cryptostegia madagascariensis			•	No	Yes	Not Assessed	Not Assessed
Araceae	*Pistia stratiotes*			•	No	Yes	Not Assessed	Not Assessed
	Zantedeschia aethiopica			•	No	Yes	Not Assessed	Not Assessed
Araliaceae	*Hydrocotyle ranunculoides*			•	No	Yes	Not Assessed	Not Assessed
Asparagaceae	*Asparagus asparagoides*			•	Yes	Yes	Not Assessed	Not Assessed
Asteraceae	*Chondrilla juncea*			•	No	Yes	Not Assessed	Not Assessed
	Onopordum acaulon			•	No	Yes	Not Assessed	Not Assessed
	Silybum marianum			•	No	Yes	Not Assessed	Not Assessed
	Xanthium spinosum			•	No	Yes	Not Assessed	Not Assessed
	Xanthium strumarium			•	No	Yes	Not Assessed	Not Assessed
Boraginaceae	*Echium plantagineum*		•		No	Yes	Not Assessed	Not Assessed
Cactaceae	*Austrocylindropuntia cylindrica*			•	No	Yes	Not Assessed	Not Assessed
	Austrocylindropuntia subulata			•	No	Yes	Not Assessed	Not Assessed
	Cylindropuntia fulgida			•	No	Yes	High	Slow
	Cylindropuntia imbricata			•	No	Yes	Not Assessed	Not Assessed
	Cylindropuntia kleiniae			•	No	Yes	Not Assessed	Not Assessed
	Cylindropuntia pallida			•	No	Yes	Not Assessed	Not Assessed
	Cylindropuntia tunicata			•	No	Yes	Not Assessed	Not Assessed
	Opuntia elata			•	No	Yes	Not Assessed	Not Assessed

Family	Taxon	Source			WoNS	DP	DBCA Weed Prioritisation	
		ALA	Dandjoo	WAOL			Impact	Invasiveness
	Opuntia elatior			•	No	Yes	Not Assessed	Not Assessed
	Opuntia engelmannii			•	No	Yes	Not Assessed	Not Assessed
	Opuntia microdasys			•	No	Yes	Not Assessed	Not Assessed
	Opuntia monacantha			•	No	Yes	Not Assessed	Not Assessed
	Opuntia polyacantha			•	No	Yes	Not Assessed	Not Assessed
	Opuntia puberula			•	No	Yes	Not Assessed	Not Assessed
	Opuntia stricta			•	No	Yes	Not Assessed	Not Assessed
	Opuntia tomentosa			•	No	Yes	Not Assessed	Not Assessed
Caryophyllaceae	*Corrigiola litoralis*		•		No	No	Not Assessed	Not Assessed
Euphorbiaceae	*Euphorbia terracina*		•		No	No	Not Assessed	Not Assessed
	Jatropha gossypifolia			•	No	Yes	Not Assessed	Not Assessed
Fabaceae	*Alhagi maurorum*			•	No	Yes	Not Assessed	Not Assessed
	Daviesia nudiflora	•			No	No	Not Assessed	Not Assessed
	Lupinus angustifolius		•		No	No	Not Assessed	Not Assessed
	Parkinsonia aculeata			•	Yes	Yes	Not Assessed	Not Assessed
	Prosopis glandulosa x Prosopis velutina			•	No	Yes	Not Assessed	Not Assessed
	Senna alata			•	No	Yes	Not Assessed	Not Assessed
	Senna obtusifolia			•	No	Yes	Not Assessed	Not Assessed
	Ulex europaeus			•	Yes	Yes	Not Assessed	Not Assessed
Gentianaceae	*Centaurium tenuiflorum*		•		No	No	Not Assessed	Not Assessed
Iridaceae	*Moraea flaccida*			•	No	Yes	Not Assessed	Not Assessed
	Moraea miniata			•	No	Yes	Not Assessed	Not Assessed
Myrtaceae	*Verticordia pennigera*		•		No	No	Not Assessed	Not Assessed
Orchidaceae	*Pterostylis setulosa*		•		No	No	Not Assessed	Not Assessed

Family	Taxon	Source			WoNS	DP	DBCA Weed Prioritisation	
		ALA	Dandjoo	WAOL			Impact	Invasiveness
Poaceae	*Eragrostis cilianensis*		•		No	No	Not Assessed	Not Assessed
	Eragrostis curvula		•		No	No	Not Assessed	Not Assessed
Primulaceae	*Lysimachia arvensis*		•		No	No	Low	Rapid
Rhamnaceae	*Ziziphus mauritiana*			•	No	Yes	Not Assessed	Not Assessed
Rosaceae	*Rubus anglocandicans*			•	No	Yes	Not Assessed	Not Assessed
	Rubus laudatus			•	No	Yes	Not Assessed	Not Assessed
	Rubus rugosus			•	No	Yes	Not Assessed	Not Assessed
	Rubus ulmifolius			•	No	Yes	Not Assessed	Not Assessed
Rubiaceae	*Galium aparine*			•	No	Yes	Not Assessed	Not Assessed
	Galium spurium			•	No	Yes	Unknown	Rapid
Scrophulariaceae	*Zaluzianskya divaricata*		•		No	No	Not Assessed	Not Assessed
Solanaceae	*Solanum elaeagnifolium*			•	Yes	Yes	Not Assessed	Not Assessed
	Solanum linnaeanum			•	No	Yes	Not Assessed	Not Assessed
	Solanum nigrum		•		No	No	Not Assessed	Not Assessed
Tamaricaceae	*Tamarix aphylla*			•	Yes	Yes	Not Assessed	Not Assessed
Verbenaceae	*Lantana camara*			•	Yes	Yes	Not Assessed	Not Assessed

Key findings of the desktop assessment

		Flora and Vegetation Survey of Natta 3D Seismic Survey, Survey Area	Detailed flora survey for the Lockyer Development Project	West Erregulla Exploration Program, Targeted Flora Survey
Survey Details	**Reference**	(JBS&G, 2021)	(Phoenix, 2023)	(Woodman, 2020b)
	Type	Reconnaissance and targeted flora and vegetation survey	Detailed flora survey	Targeted flora survey
	Client	Strike Energy LTD	Energy Resources Limited	Strike Energy LTD
	Location	35 km east of Dongara	17km west of Mingenew	300 km north of Perth
	Size (ha)	15,910 ha	36.6 ha	-
	Timing	October/November 2020	September, November 2022	October/ November 2020
Methods	**Desktop Assessment (Yes/No)**	Yes	Yes	Yes
	Quadrat #	-	20	-
	Relevé #		12	-
	Targeted Searching (Yes/No)	Yes	Yes	Yes
	Other Methods	-	-	-
Results	**Taxa**	-	202	-
	Families	-	51	-
	Genera	-	136	-
	Vegetation Types	Five	Eight	-
	Vegetation Condition	Excellent to Pristine	Excellent to Completely Degraded	-
	Weeds #	None recorded	46	None recorded
Significant Findings	**Threatened/ Priority Flora**	• *Daviesia speciosa* (T) • *Banksia fraseri* var. *crebra* (P3) • *Hemiandra* sp. Eneabba (P3) • *Mesomelaena stygia subsp. deflexa* (P3) • *Verticordia luteola var. luteola* (P3) • *Banksia scabrella* (P4) • *Calytrix eneabbensis* (P4)	• *Austrostipa nunaginensis* (P3) • *Baeckea* sp. Walkaway (A.S. George 11249) (P3) • *Eucalyptus arachnaea* subsp. *arrecta* (P3) • *Thryptomene nitida* (P3)	• *Paracaleana dixonii* (T) • *Thelymitra stellata* (T) • *Micromyrtus rogeri* (P1) • *Stylidium carnosum* subsp. *Narrow leaves (J.A. Wege 490)* (P1) • *Comesperma griffinii* (P2) • *Schoenus badius* (P2) • *Stylidium pseudocaespitosum* (P2) • *Comesperma rhadinocarpum* (P3) • *Haemodorum loratum* (P3) • *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) • *Mesomelaena stygia* subsp. *deflexa* (P3) • *Persoonia filiformis* (P3) • *Persoonia rudis* (P3) • *Stylidium drummondianum* (P3) • *Synaphea oulopha* (P3) • *Banksia scabrella* (P4) • *Eucalyptus macrocarpa* subsp. *elachantha* (P4) • *Schoenus griffinianus* (P4)
	TECs/ PECs	None recorded	None recorded	None recorded
	WoNS and DPs	None recorded	One DP found: **Echium plantagineum*	None recorded
	Range Extensions	None recorded	1	None recorded
	Other significant findings	None recorded	None recorded	None recorded
Other	**Limitations of Survey**	None recorded	None recorded	None recorded
	Proximity	Overlaps Survey Area	Overlaps Survey Area	Overlaps Survey Area

		West Erregulla Project Flora and Vegetation Assessment	West Erregulla Project – Survey of Potential Offset Property Vegetation for Threatened Flora	Proposed Xyris Lateral – Flora and Vegetation Assessment	West Erregulla Pipeline: *Paracaleana dixonii* Targeted Flora Survey
Survey Details	**Reference**	(Woodman, 2013b)	(Woodman, 2013a)	(Woodman, 2018)	(Eco Logical, 2023)
	Type	Detailed and targeted flora and vegetation survey	Targeted flora survey	Targeted flora and vegetation assessment	Targeted flora survey
	Client	Warrego Energy Limited	Warrego Energy Limited	AWE Limited	Australian Gas Infrastructure Group
	Location	50 km southeast Dongara	50 km southeast of Dongara	17km south-east of Dongara	50 km southeast of Dongara
	Size (ha)	9,543 ha	-	18.19 ha	-
	Timing	September, October, November 2011 and 2012	14 December 2012 and 11- 13 November 2013	December 2025	December 2022
Methods	**Desktop Assessment (Yes/No)**	Yes	No	Yes	Yes
	Quadrat #	129	-	-	-
	Relevé #	-	-	-	-
	Targeted Searching (Yes/No)	Yes	Yes	Yes	Yes
	Other Methods	-	-	-	-
Results	**Taxa**	535	-	97	-
	Families	64	-	35	-
	Genera	196	-	80	-
	Vegetation Types	14	Six	Three	-
	Vegetation Condition	Pristine	Pristine	Excellent to Degraded	-
	Weeds #	22	-	21	None recorded
Significant Findings	**Threatened/ Priority Flora**	• T: *Eucalyptus crispata, Eucalyptus leprophloia, Paracaleana dixonii, Thelymitra stellata* • P1: *Lasiopetalum ogilvieanum, Malleostemon decipiens, Micromyrtus rogeri, Stylidium carnosum* subsp. Narrow leaves (J.A. Wege 490) • P2: *Eucalyptus abdita*, *Schoenus badius, Stylidium pseudocaespitosum* • P3: *Acacia isoneura* subsp. *Isoneura, Allocasuarina grevilleoides, Banksia fraseri* ?var. *crebra, Beyeria gardneri, Eucalyptus macrocarpa* x *pyriformis, Guichenotia impudica, Haemodorum loratum, Hemiandra* sp. Eneabba (H. Demarz 3687), *Mesomelaena stygia* subsp. *deflexa, Persoonia filiformis, Persoonia rudis, Stylidium drummondianum, Stylidium torticarpum, Synaphea oulopha, Thryptomene nitida, Verticordia luteola* var. *luteola* • P4: *Schoenus griffinianus, Banksia scabrella, Calytrix chrysantha, Eucalyptus macrocarpa* subsp. *elachantha*	• *Daviesia speciosa* (T) • *Paracaleana dixonii* (T) • *Thelymitra stellata* (T) • *Acacia lanceolata* (P2) • *Stylidium drummondianum* (P3) • *Stylidium torticarpum* (P3) • *Synaphea oulopha* (P3) • *Eucalyptus macrocarpa* subsp. *elachantha* (P4)	• *Baeckea* sp. Walkaway (A.S. George 11249) (P3) • *Banksia elegans* (P4)	• *Paracaleana dixonii* (T)
	TECs/ PECs	None recorded	None recorded	None recorded	None recorded
	WoNS and DPs	One DP found: **Echium plantagineum*	None recorded	None recorded	None recorded
	Range Extensions	11	None recorded	None recorded	None recorded
	Other significant findings	• Locally significant VTs (1a - 13a, 14 and potentially regionally significant VTs (5, 8, 9, 11,12) • VTs 7a, 7b, 8, 10, 11, 12 & 13a provide habitat for one or more taxa listed as threatened. • *Cryptandra intermedia* (atypical variant known from 80 km south, further investigation required to determine if it is indeed this species, or an undescribed taxon • *Leucopogon* (*Leucopogon* sp.), has affinities with *Leucopogon* sp. Coomallo (R. J. Cranfield 1457), however may represent an undescribed taxon in its own right.	None recorded	None recorded	None recorded
Other	**Limitations of Survey**	None recorded	None recorded	Two minor limitations	None recorded
	Proximity	Overlaps Survey Area	0.2km S	1.8km NW	3.3km S

		West Erregulla Pipeline Flora and Fauna Survey	Minjiny 3D Seismic Targeted Flora Survey	Flora Survey for the Beharra Springs Clearing Permit (CPS 4607)	Targeted Flora Searches, Beharra Springs 2, Beharra Springs 2 Deep and Associated Tracks – Mount Adams Road, Arrowsmith	Reconnaissance Flora, Vegetation and Basic Fauna Survey Facility Extension December 2020
Survey Details	**Reference**	(Eco Logical, 2021)	(JBS&G, 2022)	(Mattiske, 2018)	(JBS&G, 2023)	(Astron, 2020)
	Type	Detailed flora and fauna survey	Targeted flora survey	Targeted flora survey	Targeted flora survey	Reconnaissance flora, vegetation, and fauna survey
	Client	Australian Gas Infrastructure Group	Strike Energy Pty Ltd	Beach Energy Ltd	Beach Energy Resources Pty Ltd	Refine Energy Pty Ltd
	Location	50 km southeast of Dongara	16 km northeast of Eneabba	30 km southeast of Dongara	30 km southeast of Dongara	11 km southeast of Dongara
	Size (ha)	212.2 ha	119 ha	14.15 ha	44.72 ha	4.7 ha
	Timing	September/ October 2020	November 2021	17 – 24 October 2018	May / June 2022	December 2020
Methods	**Desktop Assessment (Yes/No)**	Yes	Yes	Yes	Yes	Yes
	Quadrat #	26	-	-	-	-
	Relevé #	-	-	-	-	Three
	Targeted Searching (Yes/No)	Yes	Yes	Yes	Yes	Yes
	Other Methods	-	-	-	-	-
Results	**Taxa**	170	-	-	-	22
	Families	39	-	-	-	14
	Genera	93	-	-	-	17
	Vegetation Types	Six	-	-	-	Three
	Vegetation Condition	Excellent or Cleared	-	-	-	Excellent to Very Good
	Weeds #	Two	None recorded	-	None recorded	None recorded
Significant Findings	**Threatened/ Priority Flora**	• *Micromyrtus rogeri* (P1) • *Lasiopetalum ogilvieanum* (P1) • *Guichenotia alba* (P3) • *Mesomelaena stygia subsp. deflexa* (P3) • *Stylidium drummondianum* (P3) • *Banksia scabrella* (P4) • *Eucalyptus macrocarpa* subsp. *elachantha* (P4) • *Stawellia dimorphantha* (P4)	• *Lasiopetalum ogilvieanum* (P1) • *Tricoryne soullierae* (P3) • *Banksia fraseri* var. *crebra* (P3) • *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) • *Mesomelaena stygia* subsp. *deflexa* (P3) • *Persoonia filiformis* (P3) • *Stylidium drummondianum* (P3) • *Verticordia luteola* var. *luteola* (P3) • *Banksia scabrella* (P4) • *Desmocladus elongatus* (P4) • *Eucalyptus macrocarpa* subsp. *elachantha* (P4) • *Schoenus griffinianus* (P4)	• *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) • *Banksia elegans* (P4) • *Schoenus griffinianus* (P4)	• *Tricoryne soullierae* (P3) • *Beyeria gardneri* (P3) • *Banksia elegans* (P4) • *Schoenus griffinianus* (P4)	• No Threatened or Priority taxa found
	TECs/ PECs	None recorded	None recorded	None recorded	None recorded	None recorded
	WoNS and DPs	One DP found: **Echium plantagineum*	None recorded	None recorded	None recorded	None recorded
	Range Extensions	None recorded	None recorded	None recorded	None recorded	None recorded
	Other significant findings	None recorded	None recorded	None recorded	-	None recorded
Other	**Limitations of Survey**	None recorded	None recorded	None recorded	None recorded	None recorded
	Proximity	3.3km S	7.5 km SW	12 km S	12.3 km S	12.5 km W

		Flora and Vegetation Assessment Arrowsmith North Survey Area	Flora and Vegetation Assessment Arrowsmith North Survey Area	Cervantes 1 Conventional Well Spring Targeted Flora Survey	Dongara Lime Sands – M70/311, M70/917, P70/1735, E70/355, E70/5041, M70/642, Flora and Vegetation Survey	Rehabilitation Assessment – Trieste 3D Seismic Project
Survey Details	**Reference**	(Mattiske, 2022)	(Mattiske, 2021)	(Woodman, 2020a)	(PGV, 2020)	(Mattiske, 2023)
	Type	Detailed flora and vegetation survey	Detailed flora and vegetation survey	Targeted flora survey	Detailed flora and vegetation survey	Monitoring survey
	Client	VRX Silica Ltd	VRX Silica Ltd	RCMA Australia PTY LTD	Cockburn Cement	Beach Energy Limited
	Location	Between towns of Eneabba and Dongara	Between towns of Eneabba and Dongara	13 km south of Dongara, 3 km west of Brand Highway	18 km south southeast of Dongara	
	Size (ha)	2,190 ha	448 ha	36.5 ha	-	21,820 ha
	Timing	2018 - 2021	October/ November 2018 & 2019, October 2020	3 – 4 September 2020	8 – 10 September 2020 and 26 November	October 2022
Methods	**Desktop Assessment (Yes/No)**	Yes	Yes	Yes	Yes	No
	Quadrat #	157	113	-	34	-
	Relevé #	-	-	Nine	One	-
	Targeted Searching (Yes/No)	Yes	Yes	Yes	Yes	-
	Other Methods	-	-	-	-	Analogue and Rehabilitation Transects
Results	**Taxa**	305	221	51	105	323
	Families	52	44	-	-	49
	Genera	136	113	-	-	127
	Vegetation Types	17	Eight	Four	18	-
	Vegetation Condition	Pristine to Excellent	Pristine to Excellent	Excellent to Good	Excellent to Very Good	-
	Weeds #	11	Six	20	26	Nine
Significant Findings	**Threatened/ Priority Flora**	• *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154) (P2) • *Beyeria gardneri* (P3) • *Comesperma rhadinocarpum* (P3) • *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) • *Hopkinsia anoectocolea* (P3) • *Hypocalymma gardneri* (P3) • *Leschenaultia juncea* (P3) • *Persoonia rudis* (P3) • *Banksia elegans* (P4) • *Schoenus griffinianus* (P4) • *Stawellia dimorphantha* (P4)	• *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154) (P2) • *Comesperma rhadinocarpum* (P3) • *Hemiandra* sp. Eneabba (H. Demarz 3687) (P3) • *Leschenaultia juncea* (P3) • *Persoonia rudis* (P3) • *Banksia elegans* (P4) • *Schoenus griffinianus* (P4) • *Stawellia dimorphantha* (P4)	• *Eucalyptus zopherophloia* (P3) • *Thryptomene* sp. Lancelin (M.E. Trudgen 14000) (P4)^	• *Anthocercis intricata* (P3) • *Haloragis foliosa* (P3)	• *Tricoryne soullierae* (P3) • *Banksia fraseri var. crebra* (P3) • *Hemiandra sp. Eneabba (H. Demarz 3687)* (P3) • *Hypocalymma gardneri* (P3) • *Mesomelaena stygia subsp. deflexa* (P3) • *Persoonia filiformis* (P3) • *Stylidium drummondianum* (P3) • *Banksia scabrella* (P4) • *Conostephium magnum* (P4) • *Schoenus griffinianus* (P4)
	TECs/ PECs	None recorded	None recorded	'Coastal sands dominated by *Acacia rostellifera, Eucalyptus oraria* and *Eucalyptus obtusiflora*' (P1)	None recorded	None recorded
	WoNS and DPs	None recorded	None recorded	None recorded	None recorded	None recorded
	Range Extensions	None recorded	None recorded	None recorded	None recorded	None recorded
	Other significant findings	*Comesperma rhadinocarpum* (P3) and *Leschenaultia juncea* (P3) have a restricted distribution in the regional area	*Comesperma rhadinocarpum* (P3) and *Leschenaultia juncea* (P3) have a restricted distribution in the regional area	VT W1 considered to represent the above PEC	None recorded	-
Other	**Limitations of Survey**	None recorded	None recorded	None recorded	None recorded	None recorded
	Proximity	12.5 km SW	12.5 km SW	12.7 km W	16 km W	16.5 km S

		Targeted Flora, Vegetation and Black Cockatoo habitat assessment of Yandanooka North-East Road	EP3 Study Area – Eneabba; Flora and Vegetation Desktop Assessment	An ecological survey of the Kwongan south of Eneabba, Western Australia	Targeted Flora and Black Cockatoo Foraging Habitat Assessment - Lake Indoon / Eneabba-Coolimba Road Intersection	Targeted Flora Assessment E70/5001 & E70/5323
Survey Details	**Reference**	(Terratree, 2021)	(Woodman, 2021)	(Hopkins & Hnatiuk, 1981)	(Focused Vision, 2023)	(Spectrum, 2020)
	Type	Targeted Flora, Vegetation and Black Cockatoo habitat assessment	Desktop assessment	Detailed Flora and Vegetation Survey	Targeted Flora and Black Cockatoo Foraging Habitat Assessment	Targeted flora survey
	Client	Shire of Mingenew	Iluka Resources Limited	n/a	Main Roads Western Australia	Suvo Strategic Minerals
	Location	20 km east of Mingenew in Yandanooka	Eneabba	South of Eneabba	12 km west of Eneabba	7 km southwest of Eneabba
	Size (ha)	22.6 ha	14,624 ha	~ 2,000 ha	0.114 ha	-
	Timing	16 – 17 September 2021	2021	September and October 1977	-	19 – 28 October 2020
Methods	**Desktop Assessment (Yes/No)**	Yes	Yes	-	Yes	Yes
	Quadrat #	-	-	87 (4m x 4m)	-	-
	Relevé #	-	-	-	-	-
	Targeted Searching (Yes/No)	Yes	-	Yes	-	Yes
	Other Methods	-	-	-	-	-
Results	**Taxa**	31	-	429	50	-
	Families	16	-	50	28	-
	Genera	17	-	162	42	-
	Vegetation Types	-	22 Floristic community types (FCTs) in study area	Three major groups and two sub-groups	-	-
	Vegetation Condition	Degraded to Completely Degraded	-	-	-	-
	Weeds #	18	-	-	-	-
Significant Findings	**Threatened/ Priority Flora**	No Threatened/Priority flora found	158 significant flora taxa (19 Threatened and 139 Priority) recorded within and in the vicinity of the study area	• *Styphelia obtecta* (T) • *Calytrix superba* (P4)	• *Banksia elegans* (P4)	• T: *Eucalyptus johnsoniana, Paracaleana dixonii* • P2: *Cristonia biloba* subsp. *pubescens, Verticordia argentea* • *P3: Allocasuarina ramosissima, Banksia fraseri* var. *crebra, Drosera prophylla, Haemodorum loratum, Hemiandra* sp. Eneabba (H. Demarz 3687), *Jacksonia anthoclada, Stylidium drummondianum, Styphelia filamentosa, Verticordia amphigia* • P4: *Banksia chamaephyton, Eucalyptus macrocarpa* subsp. *elachantha, Grevillea rudis, Verticordia aurea*
	TECs/ PECs	None recorded	Two TECs and one PEC within 20 km of study area	-	None recorded	None recorded
	WoNS and DPs	One DP found: **Echium plantagineum*	Five DPs and WoNS within the Desktop study area	-	None recorded	None recorded
	Range Extensions	None recorded	-	-	None recorded	None recorded
	Other significant findings	None recorded	Two DBCA conservation reserves within/bordering, One nationally important wetland system, 21 FCTs of high conservation significance	43 taxa that can be classified as either rare or poorly known, and are all endemic to Western Australia	None recorded	None recorded
Other	**Limitations of Survey**	None recorded	None	Drought conditions at the time of the survey	None recorded	None recorded
	Proximity	20 km E	~45 km S	~50 km S	56 km S	56 km S

Likelihood of occurrence assessment

Likelihood rankings were assigned using the following definitions presented in the decision matrix below. Interpretation of likelihood criteria may vary between species due to several factors influencing species occurrence, including known distribution, known range, preferred habitat, ecology, and/or dispersal capabilities. The assessment of occurrence also considered how well distributed a species was within known localities. Likelihood rankings were re-assessed post field survey, taking ground truthing into consideration.

Table C5: Assessment of Occurrence decision matrix (South West and Interzone Botanical Province)

		Habitat categories (within the Survey Area)			
		Core/ critical habitat present	Suitable habitat present/ within known distribution	Marginal habitat present/ adjacent to known distribution	No suitable habitat present/ outside of known distribution
Species records / Occurrence Categories	Recorded in the Survey Area	Confirmed	Confirmed	Confirmed	Confirmed
	Recorded within <2 km	Highly Likely	Likely	Possible	Possible
	Recorded within 2–5 km	Likely	Possible	Possible	Unlikely
	Recorded within 5–20 km	Possible	Possible	Unlikely	Unlikely
	Recorded >20 km	Possible	Unlikely	Unlikely	Highly Unlikely
	Species considered locally/regionally extinct	Unlikely	Unlikely	Highly Unlikely	Highly Unlikely

Assessment of Occurrence

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Pre-survey likelihood – Confirmed									
Malleostemon decipiens	P1			Shrub 0.6 m high. Fl. August to October.	Yes	Yes	Within	A, G	Confirmed
Baeckea sp. Walkaway (A.S. George 11249)	P3			Dense, multi-stemmed shrub, 0.5-2 m high. Fl. white, Dec or Jan. Yellow/brown or white sand. Undulating plains, hillslopes.	Yes	Yes	Within	A, Q, R	Confirmed
Banksia fraseri var. *crebra*^	P3			Shrub, 4 m, Sprawling shrub with lignotuber; leaves glaucous; flowers cream.	Yes	Yes	Within	A, D, E, I, O	Confirmed
Mesomelaena stygia subsp. *deflexa*^	P3			Tufted perennial, grass-like or herb (sedge), 0.1-0.5 m high. Fl. brown-black, Mar to Oct. White, grey or lateritic sand, clay, gravel.	Yes	Yes	Within	A, C, D, E, F, G, I	Confirmed
Verticordia luteola var. *luteola*	P3			Slender shrub, 0.5-1.4 m high. Fl. white-yellow, Nov to Dec. Grey sand over gravel. Flats.	Yes	Yes	Within	A, D, E	Confirmed
Stawellia dimorphantha	P4			Stilt-rooted perennial, herb, 0.05-0.2 m high. Fl. purple/cream, Jun to Nov. White, grey, yellow sand.	Yes	Yes	Within	A, C, J, K	Confirmed
Pre-survey likelihood – Highly Likely									
Thelymitra stellata	T	EN	EN	Tuberous, perennial, herb, 0.15-0.25 m high. Fl. yellow & brown, Oct to Nov. Sand, gravel, lateritic loam.	Yes	Yes	1.6km S	A, F, G, M	Confirmed
Thryptomene nitida	P3			Erect to spreading shrub 0.3 m high x 0.1-0.3 m wide. Flowers pink.	Yes	Yes	0.5km NE	A, Q	Confirmed
Paracaleana dixonii	T	VU	EN	Tuberous, perennial, herb, 0.09-0.2 m high. Fl. yellow-brown, Oct to Dec or Jan. Grey sand over granite.	Yes	Yes	0.9km ESE	A, B, F, G, M, O	Possible
Lasiopetalum ogilvieanum	P1			Shrub, 0.45-1.5 m high. Fl. pink-white, Jul to Oct. White/grey or yellow sand, stony loam. Undulating plains, lateritic rises.	Yes	Yes	1km S	A, C, D, G	Unlikely
Guichenotia alba	P3			Slender, lax, few-branched shrub, 0.1-0.45 m high. Fl. white, Jul to Aug. Sandy & gravelly soils. Low-lying flats, depressions.	Yes	Yes	0.5km S	A, C	Unlikely
Scholtzia prostrata	P3			Prostrate shrub 10 cm high x 1 m wide. Valley and slopes	Yes	Yes	0.9km N	A	Unlikely
Eucalyptus ebbanoensis subsp. *photina*	P4			(Mallee), 2-6 m high, adult leaves glossy. Fl. white-cream, Sep to Dec or Jan to Mar. Sandy clay, red sand. Lateritic breakaways, sandplains.	Yes	Yes	1.7km W	A	Unlikely
Pre-survey likelihood – Likely									
Schoenus badius	P2			Slender annual, grass-like or herb (sedge), 0.05-0.12 m high. Fl. brown-green, Sep to Oct. Grey sand. Moist areas.	Yes	Yes	4.1km SW	A, F, G	Confirmed
Schoenus sp. Eneabba (F. Obbens & C. Godden 1154)	P2			Erect, clumped rhizomatous, perennial, grass-like or herb (sedge), to 0.75 m high. Grey, yellow or white sand. Undulating sandplains, mid slopes, tops of rises.	Yes	Possible	2.4km WSW	A, J, K	Confirmed
Acacia isoneura subsp. *isoneura*	P3			Erect, open shrub, 0.5-3 m high. Fl. yellow, Aug to Sep. Yellow/brown sand. Flats, low rises.	Yes	Yes	3.2km N	A, G	Confirmed
Comesperma rhadinocarpum	P3			Perennial, herb. Fl. blue, Oct to Nov. Sandy soils.	Yes	Yes	3.4km SSE	A, F, J, K	Confirmed
Persoonia rudis	P3			Erect, often spreading shrub, 0.2-1 m high. Fl. yellow, Sep to Dec or Jan. White, grey or yellow sand, often over laterite.	Yes	Yes	3.3km SE	A, F, J, K	Confirmed

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Stylidium drummondianum	P3			Rosetted perennial, herb, 0.05-0.22 m high, Leaves narrowly oblanceolate, 0.5-3 cm long, 0.8-2 mm wide, apex mucronate, margin hyaline and serrulate, glabrous. Scape hoary. Inflorescence paniculate. Fl. pink, Aug to Oct. Sand or clayey sand over laterite. Upper hillslopes, breakaways. Low heath, mallee shrubland.	Yes	Yes	2.9km E	A, C, D, F, I, M, O	Confirmed
Styphelia hyalina	P3			Low shrub, corolla tube red. Hairs white.	Yes	Yes	4.2km SW	A	Confirmed
Verticordia densiflora var. *roseostella*	P3			Open shrub, 0.4-1.3 m high. Fl. pink-white, Sep to Dec. Sandy gravelly soils.	Yes	Yes	4.6km N	A	Confirmed
Banksia elegans	P4			Shrub (with fire-tolerant rootstock, often suckering), 1-4 m high. Fl. yellow/green-yellow, Oct to Nov. Yellow, white or red sand. Sandplains, low consolidated dunes.	Yes	Yes	2.3km WSW	A, H, J, K, L, R, S	Confirmed
Banksia scabrella	P4			Much-branched, lignotuberous shrub, 0.6-2 m high. Fl. yellow & cream & purple, Sep to Dec or Jan. White, grey or yellow sand, sometimes with lateritic gravel. Sandplains, lateritic ridges.	Yes	Yes	4km E	A, C, D, E, F, I	Confirmed
Eucalyptus macrocarpa subsp. *elachantha*	P4			(Spreading or sprawling mallee), 0.8-4 m high, bark smooth, grey over salmon pink. Fl. red-pink, Aug to Sep or Nov to Dec. White or grey sand over laterite. Hillslopes, ridges, sandplains.	Yes	Yes	4.1km S	A, C, D, F, O	Confirmed
Comesperma griffinii	P2			Annual or perennial, herb, to 0.15 m high. Fl. white, Oct. Yellow or grey sand. Plains.	Yes	Yes	2km W	A, F	Possible
Austrostipa nunaginensis	P3			Perennial grass to 0.5m. Sandy or light clay soils, gentle slopes.	Yes	Yes	2km WSW	A, Q	Possible
Eucalyptus crispata	T	VU	VU	(Mallee), 3-7 m high, bark rough on the trunk, in partly decorticated curls. Fl. yellow-cream, Mar to Jun. Sand, loam with lateritic gravel. Lateritic breakaways.	Yes	Yes	0.7km SW	A, G	Unlikely
Eucalyptus leprophloia	T	EN	EN	(Mallee), 2-5(-8) m high, bark rough loose & flaky to 1 m. Fl. cream-white, Aug to Oct. White or grey sand over laterite. Valley slopes.	Yes	Yes	2.8km WSW	A, G	Unlikely
Micromyrtus rogeri	P1			Shrub, 0.2-0.4 m high. Fl. white, Jul to Oct. Yellow-brown sandy soils, gravel, laterite. Breakaways.	Yes	Yes	3km SSE	A, C, F, G	Unlikely
Eucalyptus abdita	P2			(Mallee) or shrub, 2-3 m high, bark smooth, grey. Laterite, sandy clay with gravel over laterite. Slopes, breakaways.	Yes	Yes	4.8km SE	A, G	Unlikely
Acacia lanceolata	P3			Open, pungent shrub, 0.3-1.2(-1.5) m high. Fl. Yellow, Jul to Aug. Lateritic hills & breakaways.	Yes	Yes	3.2km S	A, M	Unlikely
Beyeria gardneri	P3			Shrub, 0.25-0.5 m high. Fl. yellow, Aug to Sep. Yellow sand.	Yes	Yes	3.1km SSW	A, G, H, J	Unlikely
Eremaea acutifolia	P3			Spreading, dense shrub, 0.4-0.7(-1) m high. Fl. orange/pink, Aug to Nov. Grey or yellow sand. Sandplains.	Yes	Yes	2.6km WNW	A	Unlikely
Eucalyptus macrocarpa x pyriformis	P3			Erect, open mallee tree, 1.2-6 m high. Fl. red, Apr or Aug to Oct. Sand, lateritic sandy soils. Hills, rocky ironstone ridges, sandplains.	Yes	Yes	3.9km S	A, G	Unlikely
Haemodorum loratum	P3			Bulbaceous, perennial, herb, 0.45-1.2(-2) m high. Fl. black/brown-black/green, Nov. Grey or yellow sand, gravel.	Yes	Yes	4.4km S	A, F, G, O	Unlikely
Hemiandra sp. Eneabba (H. Demarz 3687)	P3			Straggly, erect shrub, 0.5-0.9 m high, to 0.4 m wide. Fl. blue/violet, Feb. Sand. Disturbed sites.	Yes	Yes	4.7km S	A, D, E, F, G, I, J, K, L, O	Unlikely

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Synaphea oulopha	P3			Compact shrub, ca 0.2 m high. Fl. yellow, Jul to Oct. Grey sand, gravelly loam, clay. Lateritic breakaways & rises.	Yes	Yes	2.9km ESE	A, F, G, M	Unlikely
Pityrodia viscida	P4			Viscid shrub, 0.3-0.6(-1) m high. Fl. white, Sep to Dec or Jan to Feb. Lateritic sand.	Yes	Yes	4.4km E	A	Unlikely
Daviesia speciosa	T	EN	EN	Many-stemmed shrub, 0.3-0.8 m high. Fl. red, Apr to May. Gravelly lateritic soils. Undulating plains, rises.	Yes	Yes	1.8km W	A, E, M	Unlikely
Pre-survey likelihood – Possible									
Stylidium torticarpum	P3			Caespitose perennial, herb, 0.12-0.27 m high, Leaves tufted, broadly linear, (2-) 5-13 cm long, 0.6-1.5 mm wide, apex mucronate, margin hyaline and serrulate, glabrous. Scape glandular throughout. Inflorescence paniculate. Capsule twisted. Fl. pink, Sep to Nov. Sandy clay and clay loam over laterite. Adjacent to creeklines, depressions, and beneath breakaways. Heath or mallee shrubland	Yes	Yes	5.6km SE	A, M	Confirmed
Schoenus griffinianus	P4			Small, tufted perennial, grass-like or herb (sedge), to 0.1 m high. Fl. Sep to Oct. White sand.	Yes	Possible	6.9km S	A, D, F, H, I, J, K, L	Confirmed
Conostylis dielsii subsp. *teres*	T	CR	EN	Shortly rhizomatous, tufted perennial, grass-like or herb, 0.13-0.33 m high, leaves terete. Fl. cream-yellow, Jul to Aug. White, grey or yellow sand, gravel. Low open woodland.	Yes	Possible	15.8km NW	A	Unlikely
Diuris eburnea	T	EN	EN	Tuberous, perennial herb with between four and six linear leaves 120–200 mm (5–8 in) long, 1–3 mm (0.04–0.1 in) wide and folded lengthwise. Up to eight pale yellow to cream-coloured flowers with reddish markings. Grows in sandy-clay and clay soils.	Yes	Possible	12.1km SE	A	Unlikely
Grevillea phanerophlebia	T	CR	CR	Shrub, 0.9-1.5 m high. Fl. white, Sep. Sand.	Yes	Possible	7.7km NNE	A	Unlikely
Wurmbea tubulosa	T	VU	EN	Cormous, perennial, herb, 0.01-0.03 m high, dioecious or sometimes andromonoecious. Fl. white-pink, Jun to Aug. Clay, loam. River banks, seasonally-wet places.	Yes	Yes	6.4km NW	A	Unlikely
Lepidium sagittulatum	P1			Erect annual, herb, 0.2-0.3(-0.6) m high.	Yes	Possible	7km NE	A	Unlikely
Stylidium carnosum subsp. Narrow leaves (J.A. Wege 490)	P1			Erect perennial herb to 60 cm high, occurs on grey sand	Yes	Yes	16.3km S	A, F, G	Unlikely
Acacia vittata	P2			Dense, rounded shrub, 1-4 m high. Fl. yellow, Aug. Grey sand, sandy clay. Margins of seasonal lakes.	Yes	Yes	13.6km SSW	A	Unlikely
Homalocalyx chapmanii	P2			Shrub, 0.2-0.5 m high. Fl. red-pink-purple, Sep to Oct. Yellow or grey/brown sand. Undulating plains, weathered granite.	Yes	Yes	10km SSE	A	Unlikely
Stylidium pseudocaespitosum	P2			Rosetted perennial, herb, 0.1-0.3 m high, leaves tufted, linear, 2-7 cm long, 0.5-2 mm wide, apex subacute, margin entire, scabrous. Scape glabrous. Inflorescence racemose. Fl. yellow, Sep to Nov. White, grey or yellow sand over laterite. Breakaways and hillslopes.	Yes	Yes	5km S	A, F, G	Unlikely
Synaphea sparsiflora	P2			Shrub, to 0.6 m high, to 1 m wide. Fl. yellow, Aug to Sep. Sandy loam over laterite.	Yes	Yes	4km S	A	Unlikely
Acacia flabellifolia	P3			Erect, spreading, pungent shrub, 0.4-1 m high. Rocky loam, lateritic gravelly soils. Low hills & ridges.	Yes	Possible	15km NE	A	Unlikely
Acacia megacephala	P3			Erect, often spindly, spinose shrub, 0.9-2 m high. Fl. yellow, Jul to Sep. White/yellow sand. Sandplains.	Yes	Yes	8.7km SE	A	Unlikely
Acacia telmica	P3			Dense, rounded shrub, 1-3 m high, 1.5-5 m wide. Fl. yellow, Jul to Sep. Sand, loam or loamy clay. Low-lying seasonally moist areas.	Yes	Yes	6.1km NNE	A	Unlikely

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Allocasuarina grevilleoides	P3			Dioecious, lignotuberous shrub, 0.15-0.4 m high. Sand over laterite, gravel.	Yes	Yes	8.4km SSE	A, G	Unlikely
Dampiera tephrea	P3			Ascending to erect perennial, herb or shrub, 0.3-0.6 m high, with grey or yellowish hairs on abaxial surface of leaves. Fl. blue, Jul. Sand, gravelly loam.	Yes	No	17.3km NE	A	Unlikely
Eucalyptus arachnaea subsp. *arrecta*	P3			Tree, 5-10(-15) m high, bark rough. Fl. white-cream. Clay loam on granite, gravelly loam. Breakaway slopes, gullies.	Yes	Yes	8.6km NW	A, Q	Unlikely
Hibbertia subvillosa	P3			single-stemmed at the base and are obligate re-seeders after fire	Yes	Yes	5km W	A	Unlikely
Lepidium fasciculatum	P3			Erect annual, herb, (0.1-)0.3-0.6 m high. Wetter areas, clay	Yes	Possible	6.9km NE	A	Unlikely
Melaleuca sclerophylla	P3			Erect-spreading to prostrate shrub, 0.15-0.9 m high. Fl. purple-pink, Jun to Sep. Gravelly sand, clayey sand. Granite outcrops, rises.	Yes	Yes	10.5km SE	A	Unlikely
Persoonia filiformis	P3			Erect, spreading, lignotuberous shrub, 0.07-0.4 m high. Fl. yellow, Nov to Dec. Yellow or white sand over laterite.	Yes	Yes	5.1km SSE	A, D, F, G, I	Unlikely
Rhodanthe collina	P3			Erect, bushy annual, herb, 0.1-0.25 m high. Fl. white & yellow, Aug to Oct. Loam. Rocky hills.	Yes	Possible	8km NE	A	Unlikely
Thysanotus vernalis	P3			Perennial, herb (with tuberous roots), to 0.3 m high. Fl. purple, Sep to Oct. Sandy loam.	Yes	Yes	7.6km E	A	Unlikely
Calytrix chrysantha	P4			Shrub, 0.3-1.3 m high. Fl. yellow, Dec or Jan to Feb. White, grey or yellow/brown sand. Flats.	Yes	Yes	10.3km S	A	Unlikely
Calytrix eneabbensis	P4			Shrub, 0.3-1 m high. Fl. purple & pink & yellow, Jul to Oct. White, grey or yellow sand over laterite. Sandplains.	Yes	Yes	15km N	E	Unlikely
Thysanotus glaucus	P4			Caespitose, glaucose perennial, herb, 0.1-0.2 m high. Fl. purple, Oct to Dec or Jan to Mar. White, grey or yellow sand, sandy gravel.	Yes	Possible	7.3km S	A	Unlikely
Verticordia dasystylis subsp. *oestopoia*	P1			Spreading shrub, 0.1-0.4 m high. Fl. cream-yellow, Oct. Gritty soils over granite. Outcrops.	Yes	Yes	14.5km SSE	A	Highly Unlikely
Allocasuarina ramosissima	P3			Dioecious, somewhat divaricate shrub, 0.3-1.2 m high. Lateritic soils, gravel.	Yes	Yes	22.3km E	O	Highly Unlikely
Hensmania stoniella	P3			Tufted, stilt-rooted perennial, herb, 0.1-0.2 m high. Fl. yellow-cream-white, Sep to Nov. White, grey or lateritic sand, often winter-wet.	Yes	Yes	10.3km SSE	A	Highly Unlikely
Persoonia chapmaniana	P3			Erect, spreading shrub, 1-2 m high. Fl. yellow, Sep to Nov. White sandy clay, yellow sand. Vicinity of salt lakes.	Yes	Yes	13.8km SSW	A	Highly Unlikely
Eucalyptus zopherophloia	P4			(Spreading mallee), 2.5-4(-6) m high, bark rough, fibrous. Fl. cream-white, Oct to Dec or Jan. Grey/white sand with limestone rubble. Coastal areas.	Yes	Possible	8.9km SSW	A, P	Highly Unlikely
Pre-survey likelihood – Unlikely									
Gastrolobium rotundifolium	P3			Erect, bushy shrub, to 0.8 m high. Fl. orange&yellow&red, Aug to Sep. Heavy clay or loam soils, granite, sandstone, quartzite. Low rises, breakaways.	Yes	Possible	9.2km NE	A	Confirmed
Hopkinsia anoectocolea	P3			Rhizomatous, tufted perennial, herb, 0.5-1 m high, to 1 m in diameter. Fl. brown, Sep to Dec. White or grey sand, often saline. Winter-wet depressions, floodplains, salt lakes	Yes	No	16.9km SSW	A, J	Confirmed
Lechenaultia juncea	P3			Grass-like, erect perennial, herb or shrub, to 0.5 m high. Fl. blue, Nov to Dec. White, grey or yellow sand, sandy gravel.	Yes	Possible	31km E	J, K	Confirmed

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Tricoryne soullierae	P3			Plants forming dense leafy clumps with numerous shoots. Occurs in yellow sandplain in the understorey of species-rich medium to tall shrubland dominated by Banksia and Callitris.	No	No	23.4km S	A, D, I, H	Confirmed
Calothamnus arcuatus	P2			Domed shrub to 1 m tall. Leaves confined to end 10 cm of stem.	Yes	Possible	10.9km SW	A	Unlikely
Scholtzia calcicola	P2			Perennial shrub. Height: to 1.0 m. Width: to 1.1 m. Flowers: white.	Yes	No	9.7km NW	A	Unlikely
Stylidium sp. Three Springs (J.A. Wege & C. Wilkins JAW 600)	P2			Creeping perennial herb to 15 cm high; corolla lobes paired laterally, bright to medium pink, darker towards throat; throat bare, white.	Yes	No	12km WSW	A	Unlikely
Thryptomene butleri	P3			Shrubs low and spreading in exposed sites, more erect in sheltered sites, 0.15–1.1(–1.6) m high, 0.71.5 m wide, when prostrate then sometimes with adventitious roots.	Yes	No	17km WSW	A, P	Unlikely
Conostylis micrantha	T	VU	EN	Rhizomatous, tufted perennial, grass-like or herb, 0.13-0.24 m high. Fl. yellow-cream/red, Jul to Aug. White or grey sand. Sandplains.	Yes	Possible	9.3km NE	A	Unlikely
Chorizema humile	T	CR	EN	Sprawling, prostrate or decumbent shrub. Fl. yellow & red/brown, Jul to Sep. Sandy clay or loam. Plains.	Yes	Yes	6.9km NW	A	Highly Unlikely
Styphelia marginata	T	EN	EN	dwarf shrub that typically grows to a height of 40–60 cm (16–24in) and has glabrous new growth. The leaves are lance-shaped, 4–6 mm (0.16–0.24 in) long with a short petiole and are sharply pointed. White, pale yellow or grey-brown sand over laterite	No	No	27km SE	A	Highly Unlikely
Styphelia obtecta	T	EN	EN	shrub that typically grows to a height of 1–2 ft (0.30–0.61 m) or more. Its leaves are rigid, broadly heart-shaped to round, and 8.5–12.5 mm (0.33–0.49 in) long and overlap each other with a small point on the tip. The flowers are arranged singly or in pairs in leaf axils and are shorter than the leaves. Crests and upper slopes of kwongan heath dunes.	No	No	38.3km S	A, T	Highly Unlikely
Thomasia rulingioides	P2			Erect, open shrub, 0.15-0.45 m high. Fl. pink-purple, May to Oct. White/grey sand over limestone.	Yes	No	13.3km WSW	A	Highly Unlikely
Verticordia argentea	P2			Erect, open shrub, 0.9-2 m high. Fl. pink & white, Nov to Dec or Jan to Apr. White, grey or yellow sand. Sand ridges, undulating plains.	Yes	Possible	25km SW	O	Highly Unlikely
Anthocercis intricata	P3			Dense, spinescent shrub, 0.9-3 m high. Fl. white-cream, Jun to Sep. Sand or loam over limestone. Consolidated sand dunes.	Yes	Possible	11.6km NW	N	Highly Unlikely
Grevillea erinacea	P3			Spindly, prickly, sparingly branched shrub, (0.3-)0.6-1.8 m high. Fl. green-white-cream, Jul to Dec. White, grey or yellow sand, often with lateritic gravel.	Yes	Possible	16.9km S	A	Highly Unlikely
Grevillea hirtella	P3			Spreading shrub, 0.3-0.9 m high. Fl. red/red-pink, Aug to Oct. Sand or loam over laterite, often with gravel.	Yes	Possible	15.6km N	A	Highly Unlikely
Grevillea makinsonii	P3			Erect shrub, 0.6-1.6 m high. Fl. yellow/cream-yellow, Jul or Sep to Oct. White, grey or yellow sand over laterite, loam, gravel, clay. Rocky hills, sandplains.	Yes	Possible	10km E	A	Highly Unlikely
Haloragis foliosa	P3			Perennial, herb or shrub, 0.2-0.5 m high. White/grey sand over limestone.	Yes	No	14.9km SW	A, N	Highly Unlikely
Leucopogon grammatus	P3			Erect shrub, 1m high. Fl. White, June to August. Sand over laterite, sometimes occurs on breakaways.	Yes	Possible	20km NE	A	Highly Unlikely

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Banksia chamaephyton	P4			Low, lignotuberous shrub, to 0.4 m high, up to 2 m wide. Fl. cream & brown, Oct to Dec. Grey or white sand over laterite.	Yes	Possible	39km SE	O	Highly Unlikely
Calytrix superba	P4			Shrub, 0.2-1 m high. Fl. pink-red, Dec or Jan to Feb. Sand over laterite. Flats.	Yes	Possible	27km S	T	Highly Unlikely
Conostephium magnum	P4			Erect, compact, many-stemmed shrub, to 2 m high. Fl. pink-purple, Jul to Sep. White-grey sands sometimes associated with laterite gravels. Sand dunes, swampland, disturbed roadside, drainage channels, open woodland.	Yes	Possible	45km SE	I	Highly Unlikely
Desmocladus elongatus	P4			Rhizomatous, perennial, herb (sedge-like), 0.25-0.5 m high. Fl. Aug to Dec. White or grey sand. Dry kwongan.	Yes	Possible	37km SW	D	Highly Unlikely
Grevillea rudis	P4			Loose, spreading to erect shrub, 0.2-1.2 m high. Fl. white-cream/cream-yellow, Jan or Apr or Jun to Sep or Nov to Dec. White, grey, yellow or red sand, often with gravel & over laterite.	Yes	Possible	30km SE	O	Highly Unlikely
Verticordia aurea	P4			Shrub, 0.6-1.5 m high. Fl. yellow-orange, Sep to Dec. Deep sand. Sandplains.	Yes	Possible	49km S	O	Highly Unlikely
Pre-survey likelihood – Highly Unlikely									
Andersonia gracilis	T	VU	EN	Slender erect or open straggly shrub, 0.1-0.5(-1) m high. Fl. white-pink-purple, Sep to Nov. White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.	No	No	131km SW	A	Highly Unlikely
Caladenia hoffmanii	T	EN	EN	Tuberous, perennial, herb, 0.13-0.3 m high. Fl. green & yellow & red, Aug to Oct. Clay, loam, laterite, granite. Rocky outcrops and hillsides, ridges, swamps and gullies.	No	No	72.5km NW	A	Highly Unlikely
Calectasia cyanea	T	CR	CR	Rhizomatous, clump forming, woody perennial, herb, 0.1-0.6 m high, to 0.3 m wide. Fl. blue/purple, Jun to Oct. White, grey or yellow sand, gravel.	No	No	594km SE	A	Highly Unlikely
Dasymalla axillaris	T	CR	CR	Diffuse shrub, 0.15-0.3 m high. Fl. red-pink, Jul to Dec. Sandy soils, ironstone gravel. Sandplains.	No	No	98.2km E	A	Highly Unlikely
Eucalyptus johnsoniana	T	EN	EN	(Mallee, forming dense clumps), 1-3.5 m high, bark flaky to 0.5 m then smooth. Fl. white-cream, Jul to Aug or Oct to Dec or Jan to May. White/grey sand with lateritic gravel. Sandplains, lateritic breakaways.	No	No	56.5km S	A, O	Highly Unlikely
Hakea megalosperma	T		VU	Spreading, lignotuberous shrub, 1-2 m high. Fl. white-cream/pink, May to Jun. Grey sand, loam. Lateritic hills & rocks.	No	No	36km S	A	Highly Unlikely
Hemiandra gardneri	T	CR	EN	Prostrate, pungent shrub, 0.1-0.2 m high, to 1 m wide. Fl. red/pink-red, Aug to Oct. Grey or yellow sand, clayey sand. Sandplains.	No	No	60.8km SE	A	Highly Unlikely
Roycea pycnophylloides	T	EN	EN	Perennial, herb, forming densely branched, silvery mats to 1 m wide. Fl. Sep. Sandy soils, clay. Saline flats	No	No	217km SE	A	Highly Unlikely
Chamaescilla maculata	P1			Small, tuberous, perennial herb growing to 7 cm high	No	No	90.6km S	A	Highly Unlikely
Cristonia biloba subsp. *pubescens*	P2			Form erect. Habit shrub, spindly shrub (broom-like).	No	No	57km SW	O	Highly Unlikely
Cryptandra glabriflora	P2			Low shrub, (0.05-)0.1-0.5 m high. Fl. white/pink, May to Aug. Yellow or grey sand, gravelly soils. Plains.	No	No	173km NW	A	Highly Unlikely
Arnocrinum gracillimum	P3			Rhizomatous, perennial, herb, 0.2-0.4 m high. Fl. purple, Oct to Nov. White, grey, yellow or lateritic sand.	No	No	66km S	R	Highly Unlikely

Taxon	Conservation Code			Habit and Habitat	Habitat within Survey Area	Within Current Known Distribution	Proximity from Survey Area	Source	Post-Survey Likelihood
	DBCA	BC Act	EPBC Act						
Beyeria cinerea subsp. *cinerea*	P3			Many stemmed shrub, low spreading to 30 cm high. Fl. yellowish green, Jan, Jul-Nov. Male and female plants. Brown-grey-yellow sand over limestone. Depression, flats, limestone ridge, hilltop, slopes.	Yes	No	19.1km SSW	A	Highly Unlikely
Grevillea uniformis	P3			Shrub, (0.3-)0.8-1.8 m high. Fl. white-cream, Jul or Sep to Nov. Sand or sandy loam on sandstone, lateritic gravel. Sandstone outcrops, creeklines.	Yes	Possible	50km S	R	Highly Unlikely
Guichenotia impudica	P3			Shrub, 0.25-1 m high. Fl. pink-purple, Aug to Oct. Laterite.	No	No	135km NW	G	Highly Unlikely
Hakea brachyptera	P3			Low, intricately branched shrub, 0.4-2.5 m high. Fl. white. Sand, loam, clay.	No	No	289km S	A	Highly Unlikely
Jacksonia anthoclada	P3			Erect shrub, 1.5-2.5 m high. Fl. yellow & red, Apr. White or grey sand. Sandplains.	No	No	55km S	O	Highly Unlikely
Styphelia filamentosa	P3			Low, compact, spreading shrub with egg-shaped to narrowly elliptic leaves, and white, tube-shaped flowers arranged singly, or in groups of up to four in leaf axils.	No	No	57km S	O	Highly Unlikely
Verticordia amphigia	P3			Shrub, 0.6-1.3 m high. Fl. yellow, Oct to Nov. Sandy loam, clay & rocky loam. Winter-wet depressions.	No	No	57km S	O	Highly Unlikely
Stylidium leptocalyx	P4			Rosetted perennial, herb, 0.08-0.4 m high, Leaves tufted, linear, 3.5-16 cm long, 1.1-2.2 mm wide, apex acute, margin involute, scabrous. Membranous scale leaves present at base of mature leaves. Scape glandular throughout, pilose at base. Inflorescence racemose. Fl. pink, Oct to Nov. Laterite soils. Upland, breakaways. Eucalypt woodland or shrubland.	No	No	314km SW	A	Highly Unlikely
Not identified									
Poranthera asybosca (P1)	P1			Erect annual herb up to 0.05m tall. Fl. yellow-green, Oct. White sand in Banksia woodland/ open shrubland.	n/a	No	29.1km S	n/a	Confirmed
Poranthera moorokatta (P2)	P2			Annual herb up to 0.05m tall. Fl. white-green/red, Sept-Nov. White-grey sand, loamy sand in Banksia woodland or shrubland, damplands.	n/a	No	130km S	n/a	Confirmed
Thysanotus kalbarriensis (P2)	P2			Short-lived perennial herb, erect or ascending up to 0.4m. Fl. purple with darker mid-stripe, Sept-Nov. Sand, limestone. Plains.	n/a	Yes	5.4km SSW[#]	n/a	Confirmed
Stylidium longitubum (P4)	P4			Erect annual (ephemeral), herb, 0.05-0.12 m high. Fl. pink, Oct to Dec. Sandy clay, clay. Seasonal wetlands.	n/a	No	27km SSW	n/a	Confirmed

^ Confirmed pre-survey by JBS&G (2021)

[#] The closest WAH record/specimen was collected in November 2024 and likely had not been vouchered and incorporated into the collection at the time database searches were conducted.

Source key: A = Database searches (DBCA, Dandjoo, Atlas of Living Australia), B = (Eco Logical, 2023), C = (Eco Logical, 2021), D = (JBS&G, 2022), E = (JBS&G, 2021), F = (Woodman, 2020b), G = (Woodman, 2013b), H = (JBS&G, 2023), I = (Mattiske, 2023). J = (Mattiske, 2022), K = (Mattiske, 2021), L = (Mattiske, 2018), M = (Woodman, 2013a), N = (PGV, 2020), O = (Spectrum, 2020), P = Woodman (2020a), Q = (Phoenix, 2023), R = (Woodman, 2018), S = (Focused Vision, 2023), T = (Hopkins & Hnatiuk, 1981)

Significant vegetation identified in the desktop assessment

Significant Vegetation	DBCA	Description	Proximity to Survey Area
Assemblages of organic mound springs of the Three Springs area	BCA Critically Endangered	The community occurs in the Three Springs area. The mound spring habitat is characterised by continuous discharge of groundwater in raised areas of peat. The vegetation component of the community contains many moisture-loving species including an overstorey of *Melaleuca preissiana* trees. *Eucalyptus camaldulensis* and *Eucalyptus rudis* are also found in a number of the mound springs. The shrub layer often includes *Hypocalymma angustifolium* and *Acacia saligna* over *Machaerina vaginalis* and other sedges. The herbaceous *Patersonia occidentalis* has been recorded at several occurrences.	17.3 km SE
Coastal sands dominated by Acacia rostellifera, Eucalyptus oraria and Eucalyptus obtusiflora (Geraldton area)	Priority 1	Floristically, this community is similar to other *Acacia rostellifera* communities but is differentiated on structure, being dominated by mallee eucalypts. The community occurs on limestone ridges, in some swales in the coastal dunes between Cape Burney and Dongara, on the Greenough Alluvial Flats on limestone soil and near Tarcoola Beach. Some very small occurrences have also been recorded on the limestone scarp north of the Buller River.	11.6 km W
Eucalypt woodlands of the Western Australian Wheatbelt	Priority 3 (Critically Endangered)	The community occurs in the IBRA Avon Wheatbelt 1 and 2 and Western Mallee subregions. The structure of the ecological community is a woodland in which the minimum crown cover of the tree canopy in a mature woodland is 10%. The key dominant or co-dominant species of the tree canopy are species of *Eucalyptus* trees that typically have a single trunk. Native understorey is present but is of variable composition, being a combination of grasses, other herbs and shrubs.	27.3 km NE
Ferricrete floristic community (Rocky Springs type)	BCA Critically Endangered	The community comprises tall shrubland and has been recorded between Arrino and Eneabba, on irregularly inundated red brown sandy loams over ferricrete. It is generally dominated by *Acacia blakelyi*, *Allocasuarina campestris* and *Labichea lanceolata* subsp. *lanceolata.*	21.5 km SE
Subtropical and Temperate Coastal Saltmarsh	Priority 3 (Vulnerable)	It occurs on the coastal margin, along estuaries and coastal embayments and on low wave energy coast in places with at least some tidal connection, including rarely-inundated supratidal areas, intermittently opened or closed lagoons, and groundwater tidal influences. It can occur where the proportional cover by tree canopy such as mangroves, *Melaleucas* or *Casuarinas* or seagrass is not greater than 50%.	20.3 km WNW

Appendix D: Field survey techniques

Standard field techniques

Site Type	Description
Quadrat	A comprehensive and replicable survey technique for gathering information during the single-season detailed flora and vegetation survey. A clearly defined area of set proportions, giving a consistent assessment of flora and vegetation across the Survey Area. Each quadrat represents a vegetation type. Vegetation types are represented by a minimum of three quadrat sites where practicable. • Information collected at each quadrat includes: • Site code, date, location, botanist • One photograph (as a minimum), from the NW corner of the site • Vegetation condition and disturbances (including fire) • Landform including slope, soil, rock type; aspect • Flora and vegetation information; dominant cover, structure and species count where necessary • Comprehensive recording of every species within the quadrat boundary (10 x 10 m for a South West botanical survey).
Relevé	Relevé sites were used to support the vegetation mapping and survey effort. They are a lower intensity survey technique or sampled where quadrats are too dangerous to set up (such as steep slopes), or too small/disturbed to sample effectively (i.e. roadsides). Information collected at each relevé is the same as that of a quadrat site, excluding the comprehensive collection of every species.
Vegetation Mapping Note	Vegetation mapping notes were used to ground-truth existing vegetation mapping and significant flora locations. They are a lower intensity, unbounded survey technique. Information collected at each mapping note may vary in detail depending upon what is present and needed for that site. The following was recorded as a minimum: location co-ordinates, representative photograph and brief description of the vegetation mapping note focus.
Traverse/ Meandering Traverse	A traverse is an unmarked route along which data is collected. Traverses are useful for identifying the boundaries and characteristics of vegetation types, selecting sites for detailed survey, and targeting significant flora or vegetation. Information recorded along a traverse during this assessment was the same as a mapping note, with the addition of noting vegetation changes and relationships between vegetation and substrate. Primary method for Targeted Flora surveys and the species and population count was noted at each location.
Opportunistic (Supplementary) Sampling	Flora and vegetation not recorded through other sampling methods were opportunistically sampled as encountered in the survey. Opportunistic sampling also included recording locations of significant, introduced (weed) and unknown species.

If a significant taxon was identified, a GPS coordinate of the individual was taken when occurring in isolation, or a central GPS coordinate was taken for a small population (central coordinate with an approximate 20 m radius). Information collected at each location comprised:

- Number of individuals, for a small population
- Condition and reproductive status of the plants in each population
- Photographs and description of vegetation habitat
- Broad information on vegetation type and condition
- Coordinates of each plant (if few) or the extent of the population (if many) using a GPS.

Threatened and Priority Flora Report Forms will be provided to the Parks and Wildlife Service (Parks and Wildlife) of DBCA, as required under the flora collecting permits. Significant flora specimens will be vouchered with the Western Australian Herbarium (WAH), where required and appropriate.

Whilst completing the field survey, any observations of introduced flora taxa were recorded, with a particular focus on substantial infestations and significant environmental weeds. Significant environmental weeds refer to any plant listed as WoNS or DPs listed under Section 12 and Section 22 of the BAM Act. When introduced flora taxa were identified, a GPS coordinate of the individual was taken when occurring in isolation, or a central GPS coordinate was taken for an infestation (central coordinate with an approximate 20 m radius). Weed classification definitions are provided in Appendix A. Information collected at each location comprised:

- Number of individuals (count or estimate), including an approximate area of infestation (if applicable)
- Photographs
- Any comments regarding vegetation condition.

Appendix E: Survey personnel and licensing

Personnel	Consultant	Project Involvement	Licencing	Experience
Project management				
Catherine Godden	Umwelt	Project coordination, data review	-	>20 years
Clinton van den Bergh	Biologic	Project management support, reviewer for quality assurance, field survey (T1, T6, T8)	FB62000860 TFL 2526-0040	18 years
Freea Itzstein-Davey	Viridis	Project lead for Viridis, reporting and review, field survey (T2, T5, T7, T9, T10)	FB62000475 TFL 2223-0059 – valid till 30/9/2025, TFL 2526-0021, TFL 2526-0021b – valid till 30/9/2028	18 years
Marlee Starcevich	Umwelt	Project coordination, data review	-	10 years
Field Survey				
Ryonen Butcher	Biologic	Field survey (T8)	FB62000809 TFL 2425-0148	28 years
David Coultas	Umwelt	Field survey (T3, T4) Plant identification and review	FB62000051-3 TFL 2425-0092	>18 years
Cielito Marbus	Umwelt	Field survey (T3, T4)	FB62000066-3 TFL 2223-0136	11 years
Jean Dorrington	Umwelt	Field survey (T3, T4)	FB62000901 TFL 2526-0051	7 years
Diana Barrie	Umwelt	Field survey (T3, T4)	FB62000443-2 TFL 2223-0143	5 years
Monika Hrubanova	Viridis	Field survey (T5, T7, T10)	FB62000375-3 TFL 2425-0077	5 years
Harris Rojahn	Biologic	Field survey (T1)	-	3.5 years
Lee White	Viridis	Data management, field survey (T2, T5, T7, T9, T10)	FB62000694	3 years
Melissa White	Umwelt	Field survey (T3, T4)	FB62000612 TFL 2425-0078	2.5 years
Zachary Borthwick	Umwelt	Field survey (T3, T4), data entry	FB62000575	2 years
Beth Curtin	Biologic	Reporting, field survey (T6)	FB2000859	2 years
Jake Dempsey	Viridis	Field survey (T5, T7, T9, T10)	-	1 year
Will Pettenon	Umwelt	Field survey (T3, T4), data entry	FB62000848	<1 year
Monique Rossi	Umwelt	Field survey (T3, T4), data entry	FB62000849	<1 year

Personnel	Consultant	Project Involvement	Licencing	Experience
Reporting				
Clare Whyte	Biologic	Reporting	-	8 years
Robyn Chesney	Biologic	Reporting	-	15 years
Heather White	Biologic	Desktop Assessment	-	5 years
Data Entry				
Shannon Gethin	Umwelt	Data entry	-	<1 year
Hannah Jackson	Umwelt	Data entry	-	<1 year
Sarah Van Rijn	Umwelt	Data entry	-	<1 year
Specimen Identifications				
Dr. Rachel Meissner	Biologic	Specimen identification	-	27 years
Beth Loudon	Subcontractor	Specimen identification	-	17 years
Kyler Rowson	Umwelt	Data processing, plant identification	-	4.5 years

Appendix F: Sample site data

Site Name:	DLQ01
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA94 Zone 50 322241.89E 6752718.49N
Orientation:	90,180
Aspect:	SSW
Soil Type:	Sand
Soil Colour:	white (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Fire:	5-10 years
Comments:	Low forb and sedgeland.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata	0.2	0.1
Allocasuarina microstachya	0.6	0.2
**Arctotheca calendula*	0.1	0.3
Babingtonia erecta	0.3	0.2
Banksia shuttleworthiana	0.3	0.1
Boronia cymosa	0.3	0.1
**Brassica tournefortii*	0.4	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.1
Caustis dioica	0.3	0.2
Chordifex sinuosus	0.2	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Crassula colorata var. *colorata*	0.1	0.1
Dampiera oligophylla	0.3	0.1
Daviesia incrassata subsp. *teres*	0.4	0.1
Daviesia nudiflora subsp. *hirtella*	0.5	0.25
Drosera erythrorhiza	0.1	0.2
Drosera menziesii		0.1
Drosera porrecta	0.2	0.1
Ecdeiocolea monostachya	0.5	12
Eremaea beaufortioides var. *microphylla*	0.6	0.2
Eucalyptus todtiana		
Geleznowia calycina		
Hakea candolleana	0.2	0.1
Hakea lissocarpha	0.3	0.2
Hakea neospathulata	0.4	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.5
**Hypochaeris glabra*	0.1	0.3
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Jacksonia hakeoides	0.4	0.2
Jacksonia nutans	0.5	0.3

Lepidosperma scabrum	0.6	0.1
**Lolium rigidum*	0.3	0.1
**Lupinus cosentinii*	0.2	0.1
Melaleuca leuropoma	0.5	12
Mesomelaena pseudostygia	0.5	0.2
Monotaxis bracteata	0.2	0.1
Opercularia vaginata	0.3	0.1
Podotheca gnaphalioides	0.1	0.1
Poranthera moorokatta (P2)	0.1	0.1
Pterostylis ?sanguinea	0.2	0.1
Scaevola canescens	0.1	0.1
Schoenus latitans	0.1	0.3
Schoenus nanus	0.1	0.1
Stylidium repens	0.1	0.1
Thryptomene racemulosa	0.2	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.5

PHOTOS



Site Name:	DLQ02
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA94 Zone 50 322362.56E 6752660.41N
Orientation:	90,180
Landform Type:	Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	White grey (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 4 - Good
Disturbance:	Grazing, Weeds, Animal - Diggings (rabbit/fox), Fox sighted.
Comments:	Low open shrubland over annual herbs.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata	0.3	0.1
Acacia pulchella var. *glaberrima*	0.5	0.3
Allocasuarina microstachya	0.3	0.2
Amphipogon turbinatus	0.3	0.1
**Arctotheca calendula*	0.1	0.1
Aristida holathera var. *holathera*	0.3	0.1
Austrostipa elegantissima	0.6	0.2
Austrostipa ?nitida	0.4	0.2
**Brassica tournefortii*	0.3	0.2
**Bromus diandrus*	0.2	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calectasia hispida	0.2	0.1
Cassytha flava		0.1
Caustis dioica	0.2	0.1
Drosera erythrorhiza	0.1	0.1
Dysphania melanocarpa forma *melanocarpa*	0.1	0.1
**Ehrharta brevifolia* var. *cuspidata*	0.2	0.1
**Ehrharta longiflora*	0.3	0.1
Eremaea beaufortioides var. *microphylla*	0.4	0.1
Eucalyptus todtiana		
**Ficinia marginata*	0.1	0.1
Hakea lissocarpha	0.5	0.3
Hakea neospathulata	0.5	0.5
Hibbertia hypericoides subsp. *hypericoides*	0.9	7
**Hypochaeris glabra*	0.1	3
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Laxmannia sessiliflora	0.1	0.1
**Lolium perenne*	0.3	0.1

Melaleuca aff. leuropoma	1	15
Melaleuca leuropoma	0.8	1
Opercularia vaginata	0.1	0.1
**Ornithopus compressus*	0.1	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.5
Podotheca gnaphalioides	0.1	0.2
Pterostylis ?sanguinea	0.1	0.1
Ptilotus polystachyus	0.4	0.1
Rhodanthe laevis	0.1	0.1
Schoenus latitans	0.2	0.2
Scholtzia laxiflora	0.4	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.1
**Trifolium subterraneum*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
Verticordia pennigera	0.2	0.1
**Vulpia muralis*	0.1	1
**Zaluzianskya divaricata*	0.1	0.1

PHOTOS



Site Name:	DLQ03
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	21/08/2025
GPS Location:	GDA94 Zone 50 335203.78E 6756837.18N
Landform Type:	Lower Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sandy Loam
Soil Colour:	Brown
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 5 - Degraded
Disturbance:	Weeds, (other) - Significant mortality of upper to lower shrub layers. Drought? Spray carry? (adjacent cropping)
Fire:	>10 years
Comments:	*Allocasuarina campestris* tall open shrubland over *Ecdeiocolea monostachya*, isolated clumps of rushes, over closed tussock grassland/forbland of invasive weeds.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Aira cupaniana*	0.1	3
Allocasuarina campestris	2.5	35
**Arctotheca calendula*	0.1	3
**Avena barbata*	0.4	30
Caladenia longicauda subsp. *borealis*		
Calandrinia ?baccata	0.1	0.1
Calandrinia ?corrigioloides	0.1	0.1
Centrolepis drummondiana	0.1	0.1
Chamaescilla versicolor	0.2	0.1
Cheilanthes adiantoides	0.2	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Drosera glanduligera	0.1	0.1
Drosera menziesii		0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.8	3
Gonocarpus nodulosus	0.1	0.1
**Hypochaeris glabra*	0.1	0.1
**Monoculus monstrosus*	0.3	0.5
Panaetia lessonii	0.1	0.1
Schoenus nanus	0.1	3
Siloxerus multiflorus	0.1	0.1
Trachymene cyanopetala	0.1	0.1
Trachymene ornata	0.1	0.1
**Trifolium subterraneum*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.2

Waitzia acuminata	0.2	0.1
Waitzia acuminata var. *acuminata*	0.1	0.1
Wurmbea tenella	0.2	0.1

PHOTOS



Site Name:	DLQ04
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	21/08/2025
GPS Location:	GDA94 Zone 50 334867.71E 6756845.16N
Landform Type:	Lower Slope
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sandy Loam
Soil Colour:	White brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	>15 years
Comments:	*Hakea orthorrhyncha* var. *filiformis* and *Allocasuarina campestris* tall open shrubland over pasture weeds.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Actinobole uliginosum	0.1	0.2
**Aira cupaniana*	0.1	0.1
Allocasuarina campestris	4	20
**Arctotheca calendula*	0.3	6
**Avena barbata*	0.4	15
Blennospora drummondii	0.1	0.1
Burchardia congesta	0.4	0.1
Caesia ?micrantha	0.5	0.1
Caladenia longicauda subsp. *borealis*	0.3	0.1
Calandrinia ?baccata	0.1	0.1
Chamaescilla versicolor	0.2	0.1
Cheilanthes adiantoides	0.1	0.1
Clematicissus angustissima	0.2	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Drosera erythrorhiza	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.2
Gonocarpus nodulosus	0.1	2
Goodenia berardiana	0.1	0.1
Hakea orthorrhyncha var. *filiformis*	3	1.5
**Hypochaeris glabra*	0.1	3
Panaetia lessonii	0.1	0.1
**Petrorhagia dubia*	0.2	0.1
**?Plantago coronopus*	0.1	0.1
Podotheca gnaphalioides	0.2	1
Rhodanthe laevis	0.1	0.1
Schoenus nanus	0.1	8
Siloxerus multiflorus	0.1	0.5
**Sonchus oleraceus*	0.2	0.1
Thryptomene nitida (P3)	0.7	0.5

Trachymene cyanopetala	0.5	0.2
Trachymene ornata	0.1	6
**Vulpia bromoides*	0.1	0.2
**Vulpia myuros*	0.1	0.1
Waitzia acuminata var. *acuminata*	0.1	0.1
Waitzia acuminata var. *albicans*	0.1	0.1

PHOTOS



Site Name:	DLQ05
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	22/08/2025
GPS Location:	GDA94 Zone 50 318363.17E 6751741.07N
Landform Type:	Mid Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	NNW
Soil Type:	Sand
Soil Colour:	White brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Disturbance:	Weeds
Fire:	< 5 years
Comments:	Pre burn: Tall open *Banksia prionotes* woodland over myrtaceous shrubs and *Hibbertia hypericoides* subsp. *hypericoides*. Post burn: Mid isolated clumps of *Banksia prionotes*, *Grevillea eriostachya*, *Calothamnus glaber* and *Eremaea beaufortioides* var. *beaufortioides* low sparse shrubland over small myrt shrubs and *Ecdeiocolea monostachya* isolated sedges.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.4	1
Amphipogon caricinus var. *caricinus*	0.3	0.1
**Arctotheca calendula*	0.1	0.1
Austrostipa macalpinei	0.1	0.1
Baeckea sp. Walkaway (A.S. George 11249) (P3)	0.1	0.1
Banksia prionotes	1.5	3
**Brassica tournefortii*	0.3	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calothamnus glaber	1.2	3
Caustis dioica	0.3	0.1
Centrolepis drummondiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.2
Dampiera oligophylla	0.2	0.1
Darwinia pauciflora	0.4	0.1
Daviesia nudiflora subsp. *hirtella*	0.3	0.1
Drosera erythrorhiza	0.1	0.1
Drosera porrecta	0.2	0.2
Ecdeiocolea monostachya	0.6	0.2
Eremaea beaufortioides var. *beaufortioides*	1.2	4
Geleznowia calycina	0.2	0.1
Grevillea leucopteris	1.2	0.4
Hakea prostrata	0.3	0.2

Hibbertia hypericoides subsp. *hypericoides*	0.4	0.5
**Hypochaeris glabra*	0.1	1
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
**Lamarckia aurea*	0.1	0.1
Laxmannia sessiliflora	0.1	0.1
Lepidobolus preissianus subsp. *preissianus*	0.4	1
Leporella fimbriata	0.1	0.1
**Lolium perenne*	0.2	0.1
Lomandra micrantha subsp. *micrantha*	0.3	0.1
Macarthuria australis		
Melaleuca leuropoma	0.5	4
Mesomelaena pseudostygia	0.6	2
**Monoculus monstrosus*	0.3	0.2
Morelotia microcarpa	0.2	0.2
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Persoonia acicularis	0.4	5
Pileanthus filifolius	0.6	1.5
Podotheca gnaphalioides	0.2	0.2
Pterostylis ?sanguinea	0.2	0.1
Quinetia urvillei	0.1	0.1
Scaevola sp. (aff. canescens)		
Schoenus latitans	0.1	0.1
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Stylidium rigidulum	0.1	0.1
Thysanotus patersonii		0.1
Thysanotus teretifolius	0.2	0.1
Trachymene ?pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.1
Verticordia grandis	0.6	0.1
Verticordia pennigera	0.3	0.1

PHOTOS



Site Name:	DLQ06
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	22/08/2025
GPS Location:	GDA94 Zone 50 317908.01E 6751743.75N
Orientation:	90/180
Landform Type:	Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	White yellow (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Fire:	<5 years
Comments:	Preburn: No *Banksia prionotes* overstorey. Post burn: *Calothamnus glaber*, *Banksia attenuata*, *Conospermum wycherleyi*, low open shrubland over *Mesomelaena pseudostygia* isolated clumps of rushes with *Glischrocaryon aureum*, *Acanthocarpus* sp. Ajana (C.A. Gardner 8596), *Verticordia pennigera*, low isolated individuals.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia cavealis	0.4	0.1
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.3	0.3
Amphipogon caricinus var. *caricinus*	0.2	0.1
Anigozanthos humilis subsp. *humilis*	0.2	0.1
Baeckea sp. Walkaway (A.S. George 11249) (P3)	0.4	0.3
Banksia attenuata	0.8	1
Banksia dallanneyi subsp. *media*	0.2	0.1
Burchardia congesta	0.3	0.1
Calothamnus glaber	1	4
Conospermum wycherleyi	0.8	0.4
Conostylis canteriata	0.1	0.1
Corynotheca dichotoma	0.3	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Cyanothamnus coerulescens subsp. *spinescens*		
Dampiera oligophylla	0.6	2.5
Daviesia divaricata subsp. *divaricata*	0.3	0.2
Drosera humilis	0.1	0.1
Drosera minutiflora	0.1	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.3	1
Eremaea beaufortioides var. *beaufortioides*	0.4	0.5
Glischrocaryon aureum	0.3	0.3
Haemodorum simulans	0.6	0.1
Hakea costata		
Hypocalymma xanthopetalum		
**Hypochaeris glabra*	0.1	0.1

Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Lasiopetalum drummondii		
Laxmannia sessiliflora	0.1	0.1
Lepidobolus preissianus subsp. *preissianus*	0.2	0.2
Lepidosperma aff. humile	0.2	0.1
Leporella fimbriata	0.2	0.2
Melaleuca leuropoma	0.6	1.5
Mesomelaena pseudostygia	0.3	3
Monotaxis bracteata	0.2	0.1
Morelotia microcarpa	0.3	0.2
Persoonia acicularis	0.2	0.5
Petrophile megalostegia	0.4	0.1
Pileanthus filifolius	0.3	0.2
Podotheca gnaphalioides	0.1	0.1
Scaevola sp. (aff. canescens)	0.3	1.5
Schoenus latitans	0.1	0.1
Schoenus sp. Eneabba (F. Obbens & C. Godden I154) (P2)		
Stawellia dimorphantha (P4)	0.1	0.1
Stylidium rigidulum	0.1	0.1
Tersonia cyathiflora	0.3	0.5
Thysanotus kalbarriensis (P2)	0.2	0.1
Tripterococcus brunonis		

PHOTOS



Site Name:	DLQ07
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	23/08/2025
GPS Location:	GDA94 Zone 50 317706.23E 6752641.99N
Orientation:	90/180
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	SW
Soil Type:	Sand
Soil Colour:	Yellow cream (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 2 - Excellent
Fire:	> 8 years
Comments:	Note - quadrat moved into adjacent unburnt area to capture mature vegetation.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia cavealis	0.5	4
Acacia lasiocarpa var. *lasiocarpa*	0.7	0.2
Acacia scirpifolia		
Allocasuarina humilis	0.4	0.5
Banksia attenuata	1.3	5
Banksia dallanneyi subsp. *media*	0.2	0.4
Banksia hookeriana	1.3	0.5
**Brassica tournefortii*	0.3	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.1
Calandrinia ?brevipedata	0.1	0.1
Calothamnus glaber	0.6	0.2
Calothamnus quadrifidus subsp. *angustifolius*	0.8	0.2
Calytrix ?flavescens	0.2	0.2
Cassytha flava		0.1
Dampiera oligophylla	0.5	0.5
Darwinia pauciflora	0.8	0.1
Daviesia divaricata subsp. *divaricata*	0.8	2
Daviesia nudiflora subsp. *hirtella*	0.2	0.1
Drosera erythrorhiza	0.1	0.1
Drosera humilis	0.1	0.1
Drosera porrecta	0.2	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.6	3
Eremaea beaufortioides var. *microphylla*	1.4	7
Grevillea candelabroides	2	1.5
Hakea polyanthema	1.2	0.5
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.5

**Hypochaeris glabra*	0.1	0.1
Jacksonia hakeoides	0.4	0.2
Lepidobolus preissianus subsp. *preissianus*	0.3	0.2
Mesomelaena pseudostygia	0.4	0.2
Persoonia acicularis	0.3	0.1
Petrophile macrostachya	0.7	0.1
Pileanthus filifolius	0.3	0.1
Pterostylis ?sanguinea	0.1	0.1
Scaevola sp. (aff. canescens)	0.2	0.2
Schoenus latitans	0.1	0.1
Scholtzia laxiflora	0.2	0.1
Thysanotus ?patersonii		0.1
Thysanotus teretifolius	0.2	0.1
Trachymene ?pilosa	0.1	0.1
Verticordia grandis	0.6	0.1

PHOTOS



Site Name:	DLQ08
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	23/08/2025
GPS Location:	GDA94 Zone 50 317488.78E 6753425.8N
Orientation:	90/180
Landform Type:	Upper Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sand
Soil Colour:	Grey yellow (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 2 - Excellent
Fire:	5-10 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia sphacelata subsp. *sphacelata*	1.2	0.5
Babingtonia erecta	0.5	0.1
Baeckea sp. Walkaway (A.S. George 11249) (P3)	1	0.5
Banksia attenuata	1.1	5
Banksia dallanneyi subsp. *media*	0.2	0.5
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calothamnus glaber	0.7	4
Calytrix ?flavescens	0.2	0.1
Centrolepis drummondiana	0.1	0.1
Conospermum wycherleyi	0.8	4
Dampiera oligophylla	0.4	0.2
Daviesia nudiflora subsp. *hirtella*	0.8	0.5
Drosera erythrorhiza	0.1	0.1
Drosera humilis	0.1	0.1
Drosera minutiflora	0.1	0.1
Ecdeiocolea monostachya	0.8	8
Eremaea beaufortioides var. *microphylla*	1	3
**Ficinia marginata*	0.1	0.1
Grevillea candelabroides	2.5	2
Grevillea leucopteris	2.5	2.5
Hakea candolleana	0.3	0.1
Hakea polyanthema	0.8	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	1
Hypocalymma xanthopetalum	0.3	0.1
**Hypochaeris glabra*	0.1	0.1
Lepidobolus preissianus subsp. *preissianus*	0.2	0.5
Leporella fimbriata	0.1	0.1
Melaleuca leuropoma	0.3	12
Mesomelaena pseudostygia	0.4	7

Monotaxis bracteata	0.3	0.1
Morelotia microcarpa	0.2	0.1
Persoonia acicularis	0.2	0.1
Pileanthus filifolius	0.4	0.3
Poranthera moorokatta (P2)	0.1	0.1
Scholtzia laxiflora	0.6	0.2
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.1

PHOTOS



Site Name:	DLQ09
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	24/08/2025
GPS Location:	GDA94 Zone 50 317869.11E 6753296.11N
Orientation:	90/180
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sand
Soil Colour:	Grey brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Fire:	> 5 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia scirpifolia	0.8	0.5
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.3	0.2
**Brassica tournefortii*	0.5	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Caladenia longicauda subsp. *borealis*	0.4	0.1
Calandrinia corrigioloides	0.1	0.1
Calothamnus quadrifidus subsp. *angustifolius*	0.4	0.2
Centrolepis pilosa	0.1	0.1
Conospermum wycherleyi	0.5	0.5
Conostylis candicans	0.3	0.1
Dioscorea hastifolia		0.1
Drosera erythrorhiza	0.1	0.2
Drosera humilis	0.1	0.1
Drosera menziesii		0.1
Ecdeiocolea monostachya	0.4	0.1
**Ficinia marginata*	0.1	0.1
Glischrocaryon aureum	0.3	0.1
Grevillea leucopteris	0.5	0.2
Hyalosperma cotula	0.1	0.1
**Hypochaeris glabra*	0.1	0.6
Jacksonia hakeoides	0.4	0.5
Lechenaultia linarioides	0.7	2
Lepidobolus preissianus subsp. *preissianus*	0.2	0.1
**Lupinus cosentinii*	0.2	0.1
Macrozamia fraseri		
Melaleuca leuropoma	0.2	0.1
Mesomelaena pseudostygia	0.4	0.1
Opercularia spermacocea	0.2	0.3
Persoonia acicularis	0.2	0.1

Pileanthus filifolius	0.3	0.1
Podotheca gnaphalioides	0.2	0.1
Ptilotus polystachyus	0.3	0.1
Quinetia urvillei	0.1	0.1
Rhodanthe laevis	0.1	0.1
Schoenus latitans	0.1	0.1
Seringia hermanniifolia	0.4	22
Seringia integrifolia		
Stawellia dimorphantha (P4)	0.1	0.1
Thysanotus ?patersonii		0.1
Thysanotus teretifolius	0.2	0.1
Trachymene ?pilosa	0.1	0.2
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
Waitzia acuminata var. *albicans*	0.2	0.2
Waitzia suaveolens var. *suaveolens*	0.1	0.1

PHOTOS



Site Name:	DLQ10
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	24/08/2025
GPS Location:	GDA94 Zone 50 317986.58E 6753845.07N
Orientation:	90/180
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	Grey yellow white (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Disturbance:	Weeds
Fire:	<5 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia cavealis	0.2	0.1
Acacia lasiocarpa var. *lasiocarpa*	0.2	8
Apectospermum spinescens	0.1	0.1
Banksia attenuata	1.2	2
**Brassica tournefortii*	0.1	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calothamnus glaber	0.8	4
Calytrix ?flavescens	0.2	0.1
Cassytha aurea var. *hirta*		0.1
Conospermum wycherleyi	0.8	0.3
Conostylis canteriata	0.2	0.1
Corynotheca dichotoma	0.5	0.2
Crassula colorata var. *acuminata*	0.1	0.1
Dampiera oligophylla	0.1	0.1
Daviesia divaricata subsp. *divaricata*	0.6	0.5
Drosera erythrorhiza	0.1	0.1
Drosera humilis	0.1	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.3	0.5
Eremaea beaufortioides var. *microphylla*	1.1	3
Hibbertia hypericoides subsp. *hypericoides*	0.5	4
**Hypochaeris glabra*	0.1	0.2
Isotropis cuneifolia subsp. *cuneifolia*	0.1	0.1
Laxmannia sessiliflora	0.1	0.1
Lepidobolus preissianus subsp. *preissianus*	0.2	0.1
Melaleuca leuropoma	0.5	0.3
Mesomelaena pseudostygia	0.4	0.2
**Monoculus monstrosus*	0.1	0.1

Monotaxis bracteata	0.2	0.1
Morelotia microcarpa	0.2	0.1
Opercularia spermacocea	0.1	0.1
Opercularia vaginata	0.2	0.1
Persoonia acicularis	0.4	1
Petrophile macrostachya	0.7	0.1
Pileanthus filifolius	0.3	0.1
Podotheca gnaphalioides	0.2	0.2
Ptilotus polystachyus	0.1	0.1
Scaevola sp. (aff. canescens)	0.2	0.2
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Stylidium rigidulum	0.1	0.1
Synaphea spinulosa subsp. *spinulosa*		
Thysanotus ?patersonii		0.1
Thysanotus teretifolius	0.2	0.1
Trachymene ?pilosa	0.1	0.2
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.5
Waitzia suaveolens var. *suaveolens*	0.1	0.1

PHOTOS



Site Name:	DLQ11
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	24/08/2025
GPS Location:	GDA94 Zone 50 318214.5E 6753588.44N
Orientation:	90/180
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	White yellow (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Fire:	<5 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.2	0.2
Austrostipa macalpinei	0.1	0.1
Baeckea sp. Walkaway (A.S. George 11249) (P3)	0.5	1.3
**Brassica tournefortii*	0.2	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calothamnus glaber	0.8	0.5
Cassytha aurea var. *hirta*		5
Corynotheca dichotoma	0.2	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Dampiera oligophylla	0.4	0.2
Daviesia divaricata subsp. *divaricata*		
Drosera humilis	0.1	0.1
Drosera menziesii		0.1
Ecdeiocolea monostachya	0.9	0.5
Eremaea beaufortioides var. *microphylla*	1.3	2
Grevillea leucopteris	0.2	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.9	0.1
**Hypochaeris glabra*	0.1	0.1
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Lepidobolus preissianus subsp. *preissianus*	0.2	0.1
Melaleuca leuropoma	0.3	1
Mesomelaena pseudostygia	0.3	0.1
Monotaxis bracteata	0.2	0.1
Persoonia acicularis	0.3	0.5
Pileanthus filifolius	0.3	0.1
Podotheca gnaphalioides	0.1	0.1
Pterostylis ?sanguinea	0.1	0.1
Scaevola sp. (aff. canescens)	0.2	0.1
Schoenus latitans	0.1	0.1

Stawellia dimorphantha (P4)	0.2	0.1
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Synaphea spinulosa subsp. *spinulosa*	0.3	1.5
Tersonia cyathiflora	0.3	1.5
Thysanotus kalbarriensis (P2)	0.2	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.1
Tricoryne sp.	0.2	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
**Vulpia muralis*	0.1	0.2
Waitzia acuminata var. *albicans*	0.2	0.1
Waitzia suaveolens var. *suaveolens*	0.1	0.1

PHOTOS



Site Name:	DLQ13
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	25/08/2025
GPS Location:	GDA94 Zone 50 334929E 6750921.22N
Orientation:	90/180
Slope Class:	Very Gently Inclined (1°)
Aspect:	E
Soil Type:	Sandy Clay Loam
Soil Colour:	Black brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 4 - Good
Disturbance:	Grazing, Weeds
Fire:	>10 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	2.5	60
**Arctotheca calendula*	0.2	0.2
**Avena barbata*	0.2	0.1
**Brassica tournefortii*	0.2	0.1
Burchardia congesta	0.2	0.1
Caladenia flava subsp. *flava*	0.1	0.2
Centrolepis pilosa	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Drosera glanduligera	0.1	0.1
Ecdeiocolea monostachya	2	0.4
Gonocarpus nodulosus	0.1	0.1
**Hypochaeris glabra*	0.1	8
Lepidosperma tenue	0.3	0.1
Patersonia graminea	0.3	0.1
**Petrorhagia dubia*	0.1	0.1
Podotheca gnaphalioides	0.2	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.5
**Trifolium subterraneum*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.1
**Vulpia muralis*	0.1	25

PHOTOS



Site Name:	DLQ14
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	27/08/2025
GPS Location:	GDA94 Zone 50 326398.77E 6752509.82N
Orientation:	90/180
Landform Type:	Mid Slope
Slope Class:	Gently Inclined (3º)
Aspect:	W
Soil Type:	Sandy Loam
Soil Colour:	White brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Fire:	>10 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina humilis		
**Arctotheca calendula*	0.1	0.1
Austrostipa elegantissima	0.6	0.1
**Avena barbata*	0.3	0.2
Babingtonia grandiflora		
Banksia attenuata		
Banksia scabrella (P4)	1	1.5
Banksia shuttleworthiana	0.4	0.2
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.5
Calandrinia corrigioloides	0.1	0.1
Calothamnus sanguineus	0.5	0.1
Cassytha glabella forma *casuarinae*		0.1
Chordifex sinuosus	0.3	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Drosera menziesii		0.1
Drosera porrecta	0.3	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	1	17
Eremaea beaufortioides var. *microphylla*	1	1
Glischrocaryon aureum	0.3	0.1
Hakea candolleana	0.3	0.2
Hakea lissocarpha	0.8	1
Hibbertia hypericoides subsp. *hypericoides*	0.8	4
Hypocalymma xanthopetalum	0.4	0.2
**Hypochaeris glabra*	0.1	20
Jacksonia nutans	0.5	4
Lasiopetalum drummondii	0.4	0.2
Leptospermopsis oligandra	1.5	2
Melaleuca aff. leuropoma	0.8	0.2

Melaleuca leuropoma	0.6	4
Mesomelaena pseudostygia	0.4	0.1
Monotaxis bracteata		
Opercularia vaginata	0.2	0.1
**Ornithopus compressus*	0.1	0.1
Patersonia graminea	0.2	0.1
Podotheca gnaphalioides	0.2	0.1
Quinetia urvillei	0.1	0.1
Rhodanthe laevis	0.1	0.1
Schoenus latitans	0.1	0.1
Scholtzia laxiflora	1.5	4
**Sonchus oleraceus*	0.1	0.1
Thysanotus ?patersonii		0.1
Thysanotus teretifolius	0.2	0.1
Trachymene ?pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	8
Verticordia grandis		
**Vulpia muralis*	0.1	3

PHOTOS



Site Name:	DLQ15
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	27/08/2025
GPS Location:	GDA94 Zone 50 327171.84E 6752510.87N
Orientation:	90/180
Landform Type:	Mid Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sandy Loam
Soil Colour:	White grey (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds
Fire:	>20 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina humilis	1.5	3
Amphipogon turbinatus	0.3	0.1
Anigozanthos humilis subsp. *humilis*	0.2	0.1
Austrostipa elegantissima	1.5	0.5
**Avena barbata*	0.3	7
Banksia shuttleworthiana	0.5	0.5
**Brassica tournefortii*	0.1	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Cassytha flava		0.1
Centrolepis drummondiana	0.1	0.1
Centrolepis pilosa	0.1	0.1
Conospermum canaliculatum		
Crassula colorata var. *acuminata*	0.1	0.1
Dianella revoluta		
Diplolaena leemaniana	0.4	0.1
Drosera erythrorhiza	0.1	0.2
Drosera menziesii		0.1
Drosera porrecta	0.2	0.2
Eremaea beaufortioides var. *microphylla*	0.9	1
Eucalyptus todtiana	7	6
Hakea candolleana	0.3	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.8
**Hypochaeris glabra*	0.1	6
Lasiopetalum drummondii	0.3	0.1
Leptospermopsis oligandra	1.6	7
Melaleuca leuropoma	0.5	16
Mesomelaena pseudostygia	0.3	0.1
Nuytsia floribunda		

Opercularia vaginata	0.2	0.1
Petrophile macrostachya	0.4	0.1
Petrophile megalostegia	0.4	0.2
Podotheca gnaphalioides	0.1	0.1
Quinetia urvillei	0.1	0.1
**Sonchus oleraceus*	0.1	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.1	2
Verticordia grandis	1	1
**Vulpia muralis*	0.1	6

PHOTOS



Site Name:	DLR01
Site Type:	RELEVE
Survey Date:	19/08/2025
GPS Location:	GDA94 Zone 50 319847.11E 6752485.51N
Landform Type:	Other, Paddock (other)
Slope Class:	Level (0°)
Soil Type:	Sand
Soil Colour:	Grey white (other)
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Combined Vegetation Condition - CD - Completely Degraded
Fire:	NA

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.2	0.5
**Brassica tournefortii*	0.3	2
Eucalyptus camaldulensis subsp. *obtusa*	12	43
**Eucalyptus* sp.	12	2
**Hordeum leporinum*	0.2	20
**Lupinus cosentinii*	0.3	0.2

PHOTOS



Site Name:	DLR02
Site Type:	RELEVE
Survey Date:	19/08/2025
GPS Location:	GDA94 Zone 50 321422.73E 6752409.32N
Landform Type:	Other, Paddock (other)
Slope Class:	Gently Inclined (3°)
Soil Type:	Sand
Soil Colour:	Grey white (other)
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Combined Vegetation Condition - CD - Completely Degraded
Fire:	NA

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.1	0.1
**Brassica barrelieri* subsp. *oxyrrhina*	0.2	0.1
**Brassica tournefortii*	0.4	4
**Bromus diandrus*	0.2	0.2
**Hypochaeris glabra*	0.1	0.1
**Lolium perenne*	0.2	0.1
**Lupinus cosentinii*	0.4	45
Rhagodia preissii subsp. *obovata*	2.2	3

PHOTOS



Site Name:	DLR03
Site Type:	RELEVE
Survey Date:	19/08/2025
GPS Location:	GDA94 Zone 50 321745.35E 6752553.4N
Landform Type:	Other, Paddock (other)
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	Grey white (other)
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Combined Vegetation Condition - CD - Completely Degraded
Fire:	NA

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.2	0.1
**Brassica tournefortii*	0.3	0.1
**Ehrharta brevifolia* var. *cuspidata*	0.1	0.1
Eucalyptus todtiana	6	8
**Hordeum leporinum*	0.1	5
**Lupinus cosentinii*	0.2	0.1
**Vulpia muralis*	0.1	0.2

PHOTOS



Site Name:	DLR04
Site Type:	RELEVE
Survey Date:	19/08/2025
GPS Location:	GDA94 Zone 50 321837.49E 6752282.81N
Landform Type:	Other, Paddock (other)
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sand
Soil Colour:	Grey white (other)
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Fire:	NA

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.1	5
**Brassica tournefortii*	0.3	0.1
**Bromus diandrus*	0.4	2.5
**Cucumis myriocarpus*		0.1
Eucalyptus todtiana	8	5
**Hordeum leporinum*	0.2	30
**Lupinus cosentinii*	0.2	0.2
Macrozamia fraseri	3	1

PHOTOS



Site Name:	DLR05
Site Type:	RELEVE
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 335157.42E 6756838.5N
Landform Type:	Lower Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sandy Clay Loam
Soil Colour:	Brown white (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 5 - Degraded
Disturbance:	Severe drought stress, runoff weed chemicals (other)
Fire:	10-20 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Actinobole uliginosum	0.1	0.1
Allocasuarina campestris	1.5	2
**Arctotheca calendula*	0.2	5
Borya sphaerocephala	0.1	0.1
Chamaescilla versicolor	0.3	0.1
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Hyalosperma glutinosum subsp. *glutinosum*	0.2	3
**Monoculus monstrosus*	0.2	0.1
**Petrorhagia dubia*	0.2	0.1
Thryptomene nitida (P3)	0.3	2
Tribonanthes variabilis	0.2	0.1
**Trifolium subterraneum*	0.1	0.2

PHOTOS



Site Name:	DLR06
Site Type:	RELEVE
Survey Date:	25/08/2025
GPS Location:	GDA94 Zone 50 334780.3E 6750703.46N
Landform Type:	Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sandy Loam
Soil Colour:	Black grey (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - CD - Completely Degraded
Disturbance:	Grazing, Weeds, Animal - Cattle droppings
Fire:	10-20 years
Comments:	Small flow line (adjacent) to the SW and major drainage line to the NE flowing rapidly by.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	2.5	1.5
Allocasuarina campestris	0.2	4
**Arctotheca calendula*	0.1	7
**Brassica tournefortii*		
Conostylis candicans	0.2	1.5
**Hypochaeris glabra*	0.1	60
**Ursinia anthemoides* subsp. *anthemoides*		

PHOTOS



Site Name:	DLR07
Site Type:	RELEVE
Survey Date:	27/08/2025
GPS Location:	GDA94 Zone 50 326101.18E 6752237.56N
Landform Type:	Mid Slope
Slope Class:	Gently Inclined (3°)
Aspect:	N
Soil Type:	Sand
Soil Colour:	White and Grey (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - CD - Completely Degraded
Disturbance:	Weeds
Fire:	1-5 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.1	0.1
Aristida holathera var. *holathera*	0.3	5
**Brassica tournefortii*	0.2	0.5
**Chamaecytisus palmensis*	2.5	2
**Eragrostis curvula*	0.4	2
**Hypochaeris glabra*	0.2	9
Jacksonia hakeoides	0.2	0.5
**Lolium perenne*	0.2	0.2

PHOTOS



Site Name:	DLR08
Site Type:	RELEVE
Survey Date:	27/08/2025
GPS Location:	GDA94 Zone 50 325801.02E 6752494.23N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Soil Type:	Sandy Clay Loam
Soil Colour:	Brown
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Combined Vegetation Condition - G - Good
Fire:	5-10 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	1.7	1.5
Acacia latipes subsp. *latipes*	0.5	2.5
Acacia scirpifolia		
Allocasuarina campestris	1.7	1
Austrostipa elegantissima	0.5	0.1
**Avena barbata*	1.2	45
Boronia cymosa	0.2	0.1
**Brassica tournefortii*		
Burchardia congesta	0.4	0.1
Calothamnus quadrifidus subsp. *angustifolius*	1.2	0.5
Comesperma integerrimum		2
Dampiera lindleyi	0.3	0.5
Desmocladus asper	0.2	0.1
Ecdeiocolea monostachya	0.6	4
Glischrocaryon aureum	0.3	0.5
Hakea lissocarpha	0.5	4
Hakea trifurcata	0.6	2
Hibbertia hypericoides subsp. *hypericoides*	0.4	1
**Hypochaeris glabra*	0.1	5
**Lupinus cosentinii*		
Melaleuca leuropoma	0.8	2
Mesomelaena pseudostygia	0.4	1
**Monoculus monstrosus*		
Opercularia vaginata	0.2	0.1
Scholtzia laxiflora	1.4	0.5
**Trifolium arvense*		
**Ursinia anthemoides* subsp. *anthemoides*	0.1	1
**Vulpia muralis*	0.1	15

PHOTOS



Site Name:	DLR09
Site Type:	RELEVE
Survey Date:	25/08/2025
GPS Location:	GDA2020 Zone 50 334700.61E 6750621.49N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sandy Clay Loam
Soil Colour:	Grey black (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Animal - Sheep
Fire:	10-20 years

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia acuminata	2.5	12
**Arctotheca calendula*	0.1	20
**Avena barbata*	0.1	15
**Hypochaeris glabra*	0.1	15
**Vulpia muralis*	0.1	10

PHOTOS



Site Name:	LGCQ01
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 334221E 6751283.4N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sand
Soil Colour:	Grey
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334221	6751283	
Corner 2	334222	6751274	
Corner 3	334229	6751274	
Corner 4	334232	6751284	

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia blakelyi*, *Acacia saligna*, *Allocasuarina campestris*
Mid Stratum 1:	*Grevillea biternata*, *Labichea lanceolata* subsp. *lanceolata*, *Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628), *Stylobasium australe*
Lower Stratum 1:	**Aira cupaniana*, **Avena barbata*, **Briza maxima*
Lower Stratum 2:	*Hydrocotyle callicarpa*, **Hypochaeris glabra*, *Poranthera microphylla*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	2.5	3
Acacia saligna	3	60
**Aira cupaniana*	0.15	40
Allocasuarina campestris	2.5	6
Amyema preissii		1
**Arctotheca calendula*	0.2	2
**Avena barbata*	0.4	30
**Briza maxima*	0.3	2
Caesia micrantha	0.3	5
Caladenia flava subsp. *flava*	0.15	0.1
Chamaescilla versicolor	0.3	1
Crassula colorata var. *acuminata*	0.05	0.1

Drosera magna	0.01	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
**Echium plantagineum*	0.2	0.1
**Erodium botrys*	0.1	5
Glischrocaryon aureum	0.6	0.5
Grevillea biternata	1.4	4
Guichenotia micrantha	0.6	3
Hydrocotyle callicarpa	0.03	2
**Hypochaeris glabra*	0.1	65
Jacksonia hakeoides	0.6	2
Labichea lanceolata subsp. *lanceolata*	1.6	2
**Lysimachia loeflingii*	0.1	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.8	3
**Petrorhagia dubia*	0.2	0.5
Podotheca gnaphalioides	0.2	0.1
Poranthera microphylla	0.1	4
Quinetia urvillei	0.1	0.1
**Romulea rosea* var. *australis*		
Scholtzia laxiflora	1.8	0.1
Sowerbaea laxiflora		
Stylobasium australe	1.5	6
Trachymene pilosa	0.1	0.5
**Trifolium subterraneum*	0.1	1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	1
Wahlenbergia preissii	0.03	0.1

PHOTOS



Site Name:	LGCQ02
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 334134.2E 6751277.5N
Landform Type:	Low Rise
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334134	6751278	
Corner 2	334135	6751267	
Corner 3	334144	6751270	
Corner 4	334143	6751278	

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia neurophylla* subsp. *neurophylla*, *Acacia saligna*
Mid Stratum 1:	*Allocasuarina campestris*, *Grevillea biternata*
Mid Stratum 2:	*Cryptandra pungens*, *Jacksonia hakeoides*, *Thryptomene racemulosa*, *Verticordia densiflora* var. ?*roseostella*
Lower Stratum 1:	**Hypochaeris glabra*, *Podotheca gnaphalioides*, *Trachymene pilosa*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia neurophylla subsp. *neurophylla*	1.6	1
Acacia saligna	1.7	1
**Aira cupaniana*	0.05	0.1
Allocasuarina campestris	1.3	6
**Arctotheca calendula*	0.2	1
Austrostipa macalpinei	0.1	0.1
Blennospora drummondii	0.07	0.1
Borya sphaerocephala	0.1	0.5
**Brassica barrelieri* subsp. *oxyrrhina*		
Burchardia congesta		
Caladenia flava subsp. *flava*	0.2	0.1
Calandrinia corrigioloides	0.03	0.2
Centrolepis aristata	0.05	0.1
Centrolepis pilosa	0.03	0.2
Crassula colorata var. *acuminata*	0.03	0.1

Cryptandra pungens	0.8	3
Drosera glanduligera	0.03	0.1
Drosera magna	0.02	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
**Ficinia marginata*	0.04	0.1
Geleznowia calycina		
Gonocarpus nodulosus	0.1	0.1
Grevillea biternata	1.4	2
Hyalosperma demissum	0.01	0.1
**Hypochaeris glabra*	0.15	35
Jacksonia hakeoides	0.9	3
Lepidobolus preissianus subsp. *volubilis*		
Levenhookia murfetii	0.03	0.1
**Lolium rigidum*	0.15	0.1
Morelotia microcarpa	0.2	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.2	1
**Ornithopus compressus*	0.1	0.1
Podotheca gnaphalioides	0.25	6
Poranthera microphylla	0.03	0.1
Quinetia urvillei	0.1	0.1
Schoenus nanus	0.05	0.5
Thryptomene racemulosa	0.8	7
Trachymene pilosa	0.1	2
Verticordia densiflora var. ?*roseostella*	0.7	5
**Vulpia muralis*	0.1	2
Waitzia acuminata var. *acuminata*	0.2	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGCQ03
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 334181.9E 6751119.7N
Landform Type:	Low Rise
Slope Class:	Gently Inclined (3°)
Aspect:	SW
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds
Fire:	5-10 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334182	6751120	
Corner 2	334183	6751110	
Corner 3	334193	6751110	
Corner 4	334192	6751118	

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Allocasuarina campestris*
Mid Stratum 1:	*Melaleuca concreta*, *Melaleuca radula*, *Verticordia monadelpha* var. *monadelpha*
Mid Stratum 2:	*Dampiera lavandulacea*, *Dodonaea pinifolia*, *Hibbertia hypericoides* subsp. *hypericoides*, *Thryptomene racemulosa*
Lower Stratum 1:	*Ecdeiocolea monostachya*, *Lepidobolus preissianus* subsp. *preissianus*, *Lepidosperma tenue*
Lower Stratum 2:	**Vulpia muralis*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia neurophylla subsp. *neurophylla*		
Allocasuarina campestris	2.5	7
**Arctotheca calendula*	0.25	2
Blennospora drummondii	0.1	0.5
Borya sphaerocephala	0.06	0.2
Caesia micrantha	0.4	0.1
Caladenia ?dimidia	0.15	0.1
Caladenia flava subsp. *flava*	0.1	0.2
Caladenia radialis	0.15	0.1
Centrolepis aristata	0.02	0.1
Centrolepis drummondiana	0.05	0.1

Centrolepis pilosa	0.05	1
Chamaescilla versicolor	0.2	2
Conostylis dielsii subsp. *dielsii*	0.25	0.2
Crassula closiana	0.01	0.1
Crassula colorata var. *acuminata*	0.03	0.1
Dampiera lavandulacea	0.3	0.2
Desmocladus asper	0.2	0.2
Dodonaea pinifolia	0.4	1
Drosera glanduligera	0.05	1
Drosera magna	0.01	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.4	1
Hakea circumalata	0.4	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.4	2
Hyalosperma demissum	0.02	5
Hyalosperma glutinosum subsp. *glutinosum*	0.3	0.2
Hydrocotyle callicarpa	0.03	0.1
**Hypochaeris glabra*	0.1	10
Isolepis congrua	0.05	0.1
Lepidobolus preissianus subsp. *preissianus*	0.3	0.2
Lepidosperma tenue	0.4	1
Levenhookia dubia	0.03	0.1
Melaleuca concreta	1.6	5
Melaleuca radula	1.5	2
Millotia tenuifolia var. *tenuifolia*	0.05	0.1
Neurachne alopecuroidea	0.2	0.1
**Ornithopus compressus*	0.1	0.1
**Parentucellia latifolia*	0.1	2
Patersonia graminea	0.3	0.2
Petrophile seminuda		
Podotheca gnaphalioides	0.2	0.2
Pterostylis ?sanguinea	0.1	0.1
Quinetia urvillei	0.1	1
Schoenus clandestinus	0.1	0.1
Schoenus nanus	0	0.1
Siloxerus multiflorus	0.03	0.5
Thryptomene racemulosa	0.4	1
Thysanotus ?manglesianus		0.1
Trachymene pilosa	0.1	0.1
**Trifolium subterraneum*	0.1	0.1
Triodia danthonioides		
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
Verticordia monadelpha var. *monadelpha*	1.3	3
**Vulpia muralis*	0.1	65
Wahlenbergia preissii	0.05	0.1
Wurmbea dioica subsp. *alba*	0.1	0.1

PHOTOS



Site Name:	LGCQ04
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	17/09/2025
GPS Location:	WGS84 Zone 50 335174E 6750801.9N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	SW
Soil Type:	Sand
Soil Colour:	White
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Animal, Weeds, Grazing
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335174	6750802	
Corner 2	335175	6750793	
Corner 3	335184	6750791	
Corner 4	335182	6750801	

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia blakelyi*, *Acacia saligna*, *Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Mid Stratum 1:	*Hakea lissocarpha*, *Hibbertia hypericoides* subsp. *hypericoides*, *Melaleuca leuropoma*, *Scholtzia laxiflora*, *Thryptomene racemulosa*
Lower Stratum 1:	**Avena barbata*, **Vulpia muralis*
Lower Stratum 2:	**Arctotheca calendula*, **Hypochaeris glabra*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	2.5	4
Acacia saligna	3	2
Acanthocarpus preissii	0.4	0.5
Anigozanthos humilis subsp. *humilis*		
**Arctotheca calendula*	0.2	10
**Avena barbata*	0.4	0.2
**Brassica barrelieri* subsp. *oxyrrhina*	0.4	0.1
**Bromus diandrus*		
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.2
Calandrinia corrigioloides	0.01	0.1

Calandrinia eremaea	0.1	0.2
Caustis dioica		
Centrolepis drummondiana	0.03	0.1
Centrolepis pilosa	0.03	0.2
Crassula colorata var. *acuminata*	0.03	0.1
Dampiera spicigera	0.3	0.1
Drosera magna	0.01	0.1
Drosera menziesii		0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.7	0.1
**Ehrharta longiflora*	0.1	0.1
Erodium cygnorum	0.3	0.1
Hakea lissocarpha	0.5	1
Hibbertia hypericoides subsp. *hypericoides*	0.6	3
**Hypochaeris glabra*	0.15	30
Isotropis cuneifolia subsp. *cuneifolia*	0.3	0.1
Lepidobolus preissianus subsp. *preissianus*	0.4	0.1
**Lupinus cosentinii*		
Melaleuca leuropoma	0.6	18
Mesomelaena pseudostygia	0.4	0.1
**Monoculus monstrosus*	0.3	0.2
Morelotia microcarpa	0.2	0.1
Neurachne alopecuroidea		
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.8	2
Opercularia vaginata	0.2	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Podotheca gnaphalioides	0.2	1
Ptilotus polystachyus	0.4	0.1
**Romulea rosea* var. *australis*	0.1	0.1
Schoenus nanus	0.05	0.1
Scholtzia laxiflora	0.6	1
Siemssenia capillaris	0.2	0.1
Thryptomene racemulosa	0.4	2
Thysanotus patersonii		0.1
Trachymene pilosa	0.1	0.1
**Trifolium subterraneum*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.2
**Vulpia muralis*	0.15	40
Waitzia acuminata var. *acuminata*	0.2	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

Site Name:	LGCQ05
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 333005.2E 6752371.3N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	E
Soil Type:	Sand
Soil Colour:	White
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Grazing, Animal
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	333005	6752371	
Corner 2	333008	6752362	
Corner 3	333017	6752364	
Corner 4	333015	6752373	

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Allocasuarina campestris*, *Scholtzia laxiflora*
Mid Stratum 1:	*Hibbertia hypericoides* subsp. *hypericoides*, *Melaleuca leuropoma*, *Thryptomene racemulosa*
Mid Stratum 2:	*Ecdeiocolea monostachya*, *Mesomelaena pseudostygia*
Lower Stratum 1:	**Avena barbata*, **Ehrharta longiflora*, **Vulpia muralis*
Lower Stratum 2:	**Hypochaeris glabra*, *Podotheca gnaphalioides*, **Ursinia anthemoides* subsp. *anthemoides*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata	0.4	0.2
Allocasuarina campestris	1.8	0.5
**Arctotheca calendula*	0.2	0.5
Austrostipa macalpinei	0.1	0.1
**Avena barbata*	0.4	0.5
Banksia shuttleworthiana	0.4	0.1
**Brassica barrelieri* subsp. *oxyrrhina*	0.4	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.15	0.1
Calandrinia eremaea	0.1	0.1
Calytrix strigosa	0.3	0.1

Centrolepis drummondiana	0.03	0.1
Centrolepis pilosa	0.05	0.1
Crassula colorata var. *acuminata*	0.03	0.1
Dampiera oligophylla	0.4	0.5
Dampiera spicigera	0.4	0.1
Drosera glanduligera	0.03	0.1
Drosera humilis	0.1	0.1
Drosera magna	0.01	0.1
Drosera menziesii		0.1
Ecdeiocolea monostachya	0.6	4
**Ehrharta longiflora*	0.3	0.2
Eremaea beaufortioides var. *microphylla*	0.6	0.5
Hakea lissocarpha	0.4	1
Hibbertia hypericoides subsp. *hypericoides*	0.4	3
**Hypochaeris glabra*	0.1	45
Lepidobolus preissianus subsp. *preissianus*	0.4	0.2
Lomandra micrantha subsp. ?*micrantha*	0.3	0.1
Melaleuca leuropoma	0.4	3
Mesomelaena pseudostygia	0.5	2
Neurachne alopecuroidea	0.2	0.1
**Ornithopus compressus*	0.1	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Podotheca gnaphalioides	0.2	1
Scholtzia laxiflora	1.8	0.5
Thryptomene racemulosa	0.4	2
Trachymene pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	6
**Vulpia muralis*	0.1	10
Waitzia acuminata var. *acuminata*	0.2	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGCR06
Site Type:	RELEVE
Survey Date:	17/09/2025
GPS Location:	WGS84 Zone 50 335293.2E 6750534.3N
Landform Type:	Low Rise
Slope Class:	Gently Inclined (3°)
Aspect:	NNE
Soil Type:	Sand
Soil Colour:	Grey
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Grazing, Weeds, Animal, Clearing
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335293	6750534	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia neurophylla* subsp. *neurophylla*, *Allocasuarina campestris*, *Melaleuca concreta*
Mid Stratum 1:	*Grevillea biternata*, *Jacksonia hakeoides*
Lower Stratum 1:	**Avena barbata*, **Briza maxima*, **Vulpia muralis*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia neurophylla subsp. *neurophylla*	1.9	4
Allocasuarina campestris	1.5	5
**Arctotheca calendula*	0.2	2
**Avena barbata*	0.4	20
Blennospora drummondii	0.05	0.5
**Briza maxima*	0.3	1
Caladenia flava subsp. *flava*	0.2	0.1
Centrolepis aristata	0.03	1
Chamaescilla versicolor	0.3	0.1
Conostylis prolifera	0.3	0.1
Crassula colorata var. *acuminata*	0.05	1
Desmocladus asper	0.2	0.1
Drosera glanduligera	0.05	1
Drosera menziesii	0.2	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1

Grevillea biternata	0.8	7
Hyalosperma demissum	0.01	0.5
**Hypochaeris glabra*	0.1	45
Isolepis congrua	0.05	0.1
Jacksonia hakeoides	0.8	2
Lepidosperma tenue	0.4	0.1
Melaleuca concreta	1.8	2
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.2	1
**Romulea rosea* var. *australis*	0.05	1
Schoenus nanus	0.05	2
Siemssenia capillaris	0.15	1
Siloxerus multiflorus	0.05	2
Sowerbaea laxiflora	0.3	0.1
Thryptomene nitida (P3)	0.4	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
**Vulpia muralis*	0.15	40

Site Name:	LGCR07
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 334703.8E 6749110N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	NE
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Animal, Grazing, Clearing
Fire:	> 20 Years
Comments:	Sheep.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334704	6749110	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia saligna*, *Grevillea candelabroides*
Mid Stratum 1:	*Hakea circumalata*
Mid Stratum 2:	*Acacia auronitens*, *Daviesia divaricata* subsp. *divaricata*, *Daviesia nudiflora* subsp. *hirtella*
Lower Stratum 1:	**Arctotheca calendula*, **Hypochaeris glabra*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia auronitens	0.4	1
Acacia saligna	2.5	1
**Arctotheca calendula*	0.2	30
**Avena barbata*	0.4	15
Crassula colorata var. *acuminata*	0.05	2
Dampiera oligophylla	0.4	0.5
Daviesia divaricata subsp. *divaricata*	0.8	7
Daviesia nudiflora subsp. *hirtella*	0.8	2
Ecdeiocolea monostachya	0.6	1
Grevillea candelabroides	2.5	4
Hakea circumalata	1.3	8
**Hypochaeris glabra*	0.1	40
Lepidobolus preissianus subsp. *preissianus*	0.4	0.1
Lepidosperma ?calcicola	0.4	0.1

Mesomelaena pseudostygia	0.4	1
Mirbelia trichocalyx	0.4	0.5
Podotheca gnaphalioides	0.2	0.5
**Raphanus raphanistrum*	0.6	2

PHOTOS



Site Name:	LGCR08
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 334627.8E 6750646.6N
Landform Type:	Plain
Slope Class:	Gently Inclined (3°)
Aspect:	NE
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Animal, Grazing, Clearing
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334628	6750647	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia acuminata*
Mid Stratum 1:	*Acacia saligna*, *Jacksonia sternbergiana*
Lower Stratum 1:	**Avena barbata*, **Vulpia muralis*
Lower Stratum 2:	**Arctotheca calendula*, **Hypochaeris glabra*, **Trifolium subterraneum*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia acuminata	10	3
Acacia blakelyi		
Acacia saligna	2.5	6
Amyema fitzgeraldii		
Amyema preissii		
**Arctotheca calendula*	0.2	12
**Avena barbata*	0.4	12
**Echium plantagineum*	0.2	0.1
Hakea lissocarpha	0.7	1
**Hypochaeris glabra*	0.1	70
Jacksonia hakeoides	0.6	1
Jacksonia sternbergiana	2.5	3
**Lupinus cosentinii*	0.1	0.1
Neurachne alopecuroidea	0.2	0.1
**Ornithopus compressus*	0.1	0.1
**Trifolium arvense* var. *arvense*	0.1	0.1

**Trifolium subterraneum*	0.1	2
**Vulpia muralis*	0.1	70

PHOTOS



Site Name:	LGCR09
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 334467.3E 6750754.8N
Landform Type:	Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	E
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Animal, Weeds, Clearing, Grazing
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334467	6750755	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia saligna*
Lower Stratum 1:	**Avena barbata*, **Vulpia muralis*
Lower Stratum 2:	**Arctotheca calendula*, **Hypochaeris glabra*, **Trifolium arvense* var. *arvense*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna	2.5	35
**Arctotheca calendula*	0.2	0.2
**Avena barbata*	0.6	10
Crassula colorata var. *acuminata*	0.05	0.1
**Echium plantagineum*	0.2	0.1
**Hypochaeris glabra*		25
Jacksonia hakeoides	0.7	1
**Lupinus cosentinii*	0.2	0.1
**Petrorhagia dubia*	0.4	0.1
**Raphanus raphanistrum*	0.3	0.1
**Trifolium arvense* var. *arvense*	0.1	6
**Trifolium subterraneum*	0.1	4
**Vulpia muralis*	0.1	45

PHOTOS





Site Name:	LGCR10
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 335348.9E 6750706.4N
Landform Type:	Simple Slope
Slope Class:	Moderately Inclined (10°)
Aspect:	SSW
Soil Type:	Sand
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335349	6750706	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia blakelyi*, *Acacia saligna*, *Santalum acuminatum*
Lower Stratum 1:	**Avena barbata*, **Bromus diandrus*
Lower Stratum 2:	**Arctotheca calendula*, **Hypochaeris glabra*, *Podotheca gnaphalioides*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	2.5	5
Acacia saligna	2.5	55
Allocasuarina campestris	2	1
**Arctotheca calendula*	0.25	8
**Avena barbata*	0.4	15
**Bromus diandrus*	0.4	5
Crassula colorata var. *acuminata*	0.05	0.1
**Hypochaeris glabra*	0.2	35
Jacksonia hakeoides	0.6	1
Podotheca gnaphalioides	0.2	3
**Raphanus raphanistrum*	0.4	5
Santalum acuminatum	2.5	1
**Trifolium arvense* var. *arvense*	0.1	1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.2

PHOTOS



Site Name:	LGCR11
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 335336.4E 6750665.1N
Landform Type:	Drainage Line
Slope Class:	Gently Inclined (3°)
Aspect:	SW
Soil Type:	Sand
Soil Colour:	Grey
Soil Condition:	Inundated
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335336	6750665	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia saligna*, *Melaleuca viminea* subsp. *viminea*
Mid Stratum 1:	*Alyogyne hakeifolia*, *Grevillea biternata*, *Jacksonia hakeoides*, *Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Lower Stratum 1:	**Avena barbata*, **Vulpia muralis*
Lower Stratum 2:	**Arctotheca calendula*, **Cotula coronopifolia*, **Echium plantagineum*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna	4	6
Alyogyne hakeifolia	1.5	1
**Arctotheca calendula*	0.2	20
**Avena barbata*	0.6	20
Cheilanthes adiantoides	0.1	0.1
**Cotula coronopifolia*	0.2	4
Desmocladus asper	0.2	0.1
**Echium plantagineum*	0.2	3
Grevillea biternata	1	1
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.3
Jacksonia hakeoides	1.1	2
**Lysimachia loeflingii*	0.1	1
Melaleuca viminea subsp. *viminea*	3	25

Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.5	2
**Raphanus raphanistrum*	0.4	3
**Romulea rosea* var. *australis*	0.15	0.5
**Trifolium subterraneum*	0.1	2
**Vulpia muralis*	0.1	8

PHOTOS



Site Name:	LGCR12
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 333083.9E 6752387N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sand
Soil Colour:	Yellow
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Animal
Fire:	> 20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	333084	6752387	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Allocasuarina campestris*
Mid Stratum 1:	*Ecdeiocolea monostachya*
Lower Stratum 1:	**Avena barbata*, **Ehrharta longiflora*, **Vulpia muralis*
Lower Stratum 2:	**Arctotheca calendula*, *Hyalosperma demissum*, **Hypochaeris glabra*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia isoneura subsp. *isoneura* (P3)	1.8	1
Allocasuarina campestris	3	50
**Arctotheca calendula*	0.2	2
**Avena barbata*	0.4	1
Blennospora drummondii	0.1	0.1
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.1
Chamaescilla versicolor	0.25	0.1
Drosera magna		
Ecdeiocolea monostachya	0.6	3
**Ehrharta longiflora*	0.4	1
Hyalosperma demissum	0.03	4
**Hypochaeris glabra*	0.2	25
Neurachne alopecuroidea	0.2	0.1
**Ornithopus compressus*		
Scholtzia laxiflora	2.1	3

Thysanotus patersonii		
Trachymene pilosa	0.1	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.2	1
**Vulpia muralis*	0.15	20
Waitzia acuminata var. *acuminata*	0.2	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGCR14
Site Type:	RELEVE
Survey Date:	23/09/2025
GPS Location:	WGS84 Zone 50 335087.1E 6752613.4N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sand
Soil Colour:	Yellow
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Clearing
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335087	6752613	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Allocasuarina campestris*
Mid Stratum 1:	*Daviesia divaricata* subsp. *divaricata*, *Hibbertia hypericoides* subsp. *hypericoides*, *Melaleuca leuropoma*
Lower Stratum 1:	*Ecdeiocolea monostachya*, *Mesomelaena pseudostygia*
Lower Stratum 2:	**Briza maxima*, **Bromus diandrus*, **Vulpia muralis*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	2.7	5
**Arctotheca calendula*	0.2	0.2
Austrostipa elegantissima	0.9	0.1
Banksia shuttleworthiana	0.4	0.2
**Briza maxima*	0.3	16
**Bromus diandrus*	0.4	4
Burchardia congesta	0.4	0.1
Caladenia flava subsp. *flava*	0.2	0.1
Daviesia divaricata subsp. *divaricata*	0.9	0.5
Drosera magna	0.1	0.1
Drosera menziesii	0.3	0.1
Ecdeiocolea monostachya	0.9	6
**Ehrharta longiflora*	1.2	3
Haemodorum discolor	0.9	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.3

Lepidobolus preissianus subsp. *preissianus*	0.3	0.1
Melaleuca leuropoma	0.3	0.3
Mesomelaena pseudostygia	0.4	0.2
**Monoculus monstrosus*	0.4	0.1
Neurachne alopecuroidea	0.3	0.1
Podotheca gnaphalioides	0.2	0.1
Ptilotus polystachyus	0.4	0.2
Trachymene cyanopetala	0.1	2
**Ursinia anthemoides* subsp. *anthemoides*	0.3	2
**Vulpia muralis*	0.15	45
Waitzia acuminata var. *acuminata*	0.2	1
Waitzia acuminata var. *albicans*	0.2	2

PHOTOS



Site Name:	LGCR15
Site Type:	RELEVE
Survey Date:	23/09/2025
GPS Location:	WGS84 Zone 50 335114.8E 6752668.7N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sandy Loam
Soil Colour:	Brown
Rock Outcrop:	Laterite, <2% bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Clearing
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335115	6752669	
Corner 2			
Corner 3			
Corner 4			

DOMINANT TAXA IN VEGETATION STRATA

Upper Stratum 1:	*Acacia saligna*
Mid Stratum 1:	*Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Lower Stratum 1:	*Banksia fraseri* var. *crebra*, **Briza maxima*, **Bromus diandrus*, **Ehrharta longiflora*
Lower Stratum 2:	*Banksia shuttleworthiana*

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna		
**Arctotheca calendula*	0.2	3
Banksia fraseri var. *crebra* (P3)	0.4	0.2
Banksia shuttleworthiana	0.4	0.2
**Briza maxima*	0.4	1
**Bromus diandrus*	0.4	2
Ecdeiocolea monostachya	0.8	1
**Ehrharta longiflora*	1.2	80
Hakea incrassata	0.4	0.1
**Monoculus monstrosus*	0.4	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.2	2
**Raphanus raphanistrum*	0.8	3
Trachymene cyanopetala	0.1	1
Waitzia acuminata var. *acuminata*	0.2	0.2

PHOTOS



Site Name:	LGD01
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	15/09/2025
GPS Location:	WGS84 Zone 50 317891.3E 6752391.7N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sand
Soil Colour:	Yellow
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds
Fire:	1-5 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	317891	6752392	
Corner 2	317891	6752381	
Corner 3	317900	6752384	
Corner 4	317900	6752392	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia scirpifolia		
Alexgeorgea nitens	0.1	0.1
Apectospermum spinescens	0.7	1
Arnocrinum preissii	0.2	0.1
Austrostipa macalpinei	0.1	0.1
Banksia attenuata	1.5	2
Banksia dallanneyi subsp. *media*	0.2	0.1
Banksia prionotes	0.5	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calothamnus glaber	1.5	0.2
Calytrix strigosa	0.2	0.1
Cassytha flava		0.1
Chordifex sinuosus	0.1	0.1
Conospermum wycherleyi	1	2
Conostylis canteriata	0.2	0.1
Conostylis resinosa	0.2	0.1
Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Dampiera oligophylla	0.3	0.5

Daviesia divaricata subsp. *divaricata*	0.5	2
Daviesia nudiflora subsp. *hirtella*	0.3	0.2
Drosera erythrorhiza	0.1	0.1
Drosera humilis	0.1	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.3	2
Eremaea beaufortioides var. *beaufortioides*	0.8	2
Eremaea violacea subsp. *violacea*	0.2	0.2
Grevillea leucopteris	0.8	1
Hakea candolleana	0.3	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.5
Hypocalymma xanthopetalum	0.2	0.1
**Hypochaeris glabra*	0.1	0.2
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Laxmannia ramosa subsp. *ramosa*	0.1	0.1
Lepidobolus preissianus	0.3	0.5
Leporella fimbriata	0.1	0.1
Levenhookia murfetii	0.1	0.1
Lyginia imberbis	0.3	0.2
Melaleuca leuropoma	0.5	2
Mesomelaena pseudostygia	0.3	0.5
Neurachne alopecuroidea	0.2	0.1
Opercularia vaginata	0.1	0.3
Persoonia acicularis	0.3	0.5
Petrophile megalostegia		
Pileanthus filifolius	0.5	0.5
Podotheca gnaphalioides	0.2	0.1
Rhodanthe citrina	0.1	0.1
Scaevola sp. (aff. canescens)	0.3	0.5
Schoenus latitans	0.1	0.1
Schoenus nanus	0.1	0.1
Schoenus sp. Eneabba (F. Obbens & C. Godden I154) (P2)	0.5	0.2
Scholtzia laxiflora	0.8	2
Stenanthemum notiale subsp. *notiale*	0.1	0.2
Stylidium repens	0.1	0.1
Stylidium rigidulum	0.1	0.1
Tersonia cyathiflora		
Thysanotus sparteus	0.5	0.1
Thysanotus teretifolius	0.2	0.2
Trachymene ?pilosa	0.1	0.2
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
Verticordia grandis	0.3	0.2
**Wahlenbergia capensis*	0.2	0.1

PHOTOS



Site Name:	LGD02
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 328538.7E 6752537.9N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	E
Soil Type:	Sand
Soil Colour:	Yellow
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds
Fire:	10-20 Years
Comments:	Rabbits

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	328539	6752538	
Corner 2	328548	6752539	
Corner 3	328549	6752530	
Corner 4	328540	6752529	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	0.3	0.1
Anigozanthos humilis subsp. *humilis*	0.3	0.2
Apectospermum spinescens	0.2	0.1
Arnocrinum preissii	0.2	0.1
Austrostipa elegantissima	0.4	1
Austrostipa macalpinei	0.1	0.1
Banksia attenuata	1.5	0.5
Banksia prionotes	3.5	1
Banksia scabrella (P4)	1.5	1
Blennospora drummondii	0.1	0.1
**Brassica barrelieri* subsp. *oxyrrhina*	0.1	0.1
Burchardia congesta	0.2	0.2
Caladenia flava subsp. *flava*	0.2	0.1
Calandrinia corrigioloides	0.1	0.1
Cassytha flava		0.1
Centrolepis drummondiana	0.1	0.1
Comesperma rhadinocarpum (P3)	0.2	0.1
Conospermum unilaterale	0.2	0.1
Conostylis canteriata	0.1	0.1

Conostylis resinosa	0.3	0.1
Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Daviesia divaricata subsp. *divaricata*	0.8	3
Drosera erythrorhiza	0.1	0.1
Drosera humilis	0.1	0.1
Drosera menziesii		0.1
Drosera minutiflora	0.1	0.1
Drosera porrecta		
Eucalyptus todtiana		
Gompholobium tomentosum	0.3	0.1
Goodenia reinwardtii	0.2	0.1
Haemodorum simulans	0.6	0.1
Haemodorum spicatum	0.9	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.5	6
Hyalosperma demissum	0.1	0.1
**Hypochaeris glabra*	0.1	0.3
Laxmannia ramosa subsp. *ramosa*	0.1	0.1
Lepidobolus preissianus	0.3	4
Levenhookia murfetii	0.1	0.1
Melaleuca leuropoma	0.7	10
Mesomelaena pseudostygia	0.3	0.2
Millotia tenuifolia var. *tenuifolia*	0.1	0.1
Neurachne alopecuroidea	0.1	0.2
Nuytsia floribunda		
Opercularia vaginata	0.2	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Phyllangium divergens	0.1	0.1
Podotheca gnaphalioides	0.1	0.5
Poranthera microphylla	0.1	0.1
Poranthera moorokatta (P2)	0.1	0.1
Pterostylis ?sanguinea	0.2	0.1
Quinetia urvillei	0.1	0.1
Quoya verbascina	0.1	0.1
Schoenus latitans	0.1	0.1
Schoenus nanus	0.1	0.1
Stylidium crossocephalum	0.1	0.1
Stylidium purpureum	0.1	0.1
Stylidium repens	0.1	0.1
Stylidium rigidulum	0.1	0.1
Tersonia cyathiflora	0.2	0.1
Thysanotus patersonii		0.1
Trachymene cyanopetala	0.1	0.1
Trachymene pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.3
Verticordia densiflora	0.8	0.8
**Vulpia myuros*	0.2	0.1
Waitzia acuminata var. *acuminata*	0.3	0.1
Waitzia acuminata var. *albicans*	0.2	0.1
Xanthosia huegelii	0.3	0.1

PHOTOS



Site Name:	LGD03
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 330417.3E 6752546.9N
Landform Type:	Lower Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist - Sandy clay
Rock Outcrop:	No bedrock exposed
CF Abundance:	2-10%
CF Sizes:	20-60mm, 60-200mm, 6-20mm, 2-6mm
CF Types:	Saprolite (other)
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	330417	6752547	
Corner 2	330426	6752543	
Corner 3	330421	6752534	
Corner 4	330413	6752539	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Aira cupaniana*	0.1	0.2
Allocasuarina campestris	1.5	0.3
Amphipogon caricinus var. *caricinus*	0.2	0.5
**Arctotheca calendula*	0.1	0.1
Austrostipa elegantissima	0.8	0.3
**Avena barbata*	0.4	0.1
Banksia fraseri var. *crebra* (P3)		
Blennospora drummondii	0.1	0.2
Boronia cymosa		
Borya sphaerocephala	0.1	2
Brachyscome perpusilla	0.1	0.1
**Briza maxima*	0.1	0.1
Burchardia congesta	0.3	0.2
Caladenia longicauda subsp. *borealis*		
Calytrix gracilis	0.4	0.2
Centrolepis aristata	0.1	0.1
Chamaescilla versicolor	0.2	0.3
Comesperma volubile		0.1

Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Cyanicula gemmata	0.2	0.1
Dampiera spicigera		
Dodonaea ericoides	0.4	0.3
Drosera eneabba	0.1	0.1
Drosera erythrorhiza	0.1	0.1
Drosera glanduligera	0.1	0.1
Drosera menziesii		0.1
Ecdeiocolea monostachya		
Elythranthera brunonis	0.2	0.1
Glischrocaryon aureum		
Gonocarpus nodulosus	0.1	0.1
Hakea lissocarpha	0.3	0.2
Hakea neospathulata		
Hyalosperma demissum	0.1	0.1
Hydrocotyle callicarpa	0.1	0.1
**Hypochaeris glabra*	0.1	0.2
Jacksonia angulata	0.5	0.3
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)	0.5	1
Leporella fimbriata	0.1	0.1
Levenhookia murfetii	0.1	0.1
Lomandra micrantha subsp. *micrantha*	0.3	0.1
Melaleuca aspalathoides		
Melaleuca marginata	0.8	8
Melaleuca radula	0.8	3
Melaleuca tinkeri	0.5	5
Mirbelia floribunda	0.3	0.2
Neurachne alopecuroidea	0.1	0.5
Opercularia vaginata	0.2	2
Patersonia graminea	0.3	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Platysace cirrosa		0.1
Podotheca gnaphalioides	0.2	0.1
Rhodanthe laevis	0.1	0.1
Schoenus andrewsii		
Schoenus badius (P2)	0.1	0.1
Schoenus latitans	0.1	0.5
Schoenus nanus	0.1	0.1
Schoenus unispiculatus		
Siloxerus multiflorus	0.1	0.2
Stylidium androsaceum	0.1	0.1
Stylidium decipiens	0.1	0.2
Stylidium emarginatum	0.1	0.4
Stylidium petiolare		
Styphelia hyalina (P3)	0.5	0.3
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0.5	0.3
Thelymitra antennifera	0.2	0.1
Thryptomene racemulosa	0.3	0.1
Thysanotus manglesianus		0.1
Trachymene cyanopetala	0.1	0.1

Trachymene pilosa	0.1	0.1
Tribonanthes variabilis	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
Verticordia huegelii var. *huegelii*	0.3	0.1
**Vulpia bromoides*	0.1	0.2
Waitzia acuminata var. *acuminata*	0.2	0.1

PHOTOS



Site Name:	LGD04
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 339519E 6760688.5N
Landform Type:	Upper Slope
Slope Class:	Gently Inclined (3°)
Aspect:	E
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Dry
Rock Outcrop:	Laterite, <2% bedrock exposed
CF Abundance:	10-20%
CF Sizes:	2-6mm, 6-20mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Grazing
Fire:	10-20 Years
Comments:	Historical grazing

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339519	6760688	
Corner 2	339528	6760693	
Corner 3	339532	6760685	
Corner 4	339524	6760680	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia daphnifolia		
Actinobole uliginosum	0.1	0.1
Allocasuarina campestris	1.2	1
Amphipogon caricinus var. *caricinus*	0.2	0.1
**Arctotheca calendula*	0.1	0.1
Arthropodium dyeri	0.5	0.1
Austrostipa elegantissima	0.6	0.5
**Avena barbata*	0.2	0.1
Blennospora drummondii	0.1	0.2
Borya sphaerocephala	0.1	0.1
Brachyscome perpusilla	0.1	0.1
Brachyscome pusilla	0.1	0.1
Burchardia congesta	0.2	0.1
Calandrinia baccata	0.1	0.1
Calandrinia granulifera	0.1	0.1
Centrolepis drummondiana	0.1	0.1
Ceratogyne obionoides	0.1	0.1

Chamaescilla versicolor	0.2	0.3
Conospermum stoechadis		
**Cotula coronopifolia*	0.1	0.1
Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Crassula decumbens var. *decumbens*	0.1	0.1
Cyanicula gemmata	0.2	0.1
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
**Ehrharta longiflora*	0.3	0.1
Eucalyptus horistes		
**Ficinia marginata*	0.1	0.1
Gastrolobium rotundifolium (P3)	0.4	0.1
Gnephosis angianthoides	0.1	0.1
Gnephosis drummondii	0.1	0.1
Goodenia cycnopotamica	0.1	0.1
Hyalosperma demissum	0.1	0.1
Hydrocotyle callicarpa	0.1	0.1
**Hypochaeris glabra*	0.1	0.5
**Lamarckia aurea*	0.1	0.1
Lomandra micrantha subsp. *micrantha*	0.2	0.1
Melaleuca concreta	1.5	1
Melaleuca marginata	1	10
Melaleuca tinkeri	0.5	22
**Mesembryanthemum nodiflorum*	0.1	0.1
**Monoculus monstrosus*	0.2	0.1
Neurachne alopecuroidea	0.2	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.2
Phyllangium divergens	0.1	0.1
Podotheca gnaphalioides	0.1	0.1
Rhodanthe laevis	0.1	0.1
**Romulea rosea* var. *australis*	0.2	0.1
Rytidosperma ?setaceum	0.2	0.1
Schoenus nanus	0.1	0.1
Siemssenia capillaris	0.1	0.1
**Sonchus oleraceus*	0.1	0.1
Stylidium decipiens	0.1	0.1
Thryptomene nitida (P3)	0.5	3
Thysanotus manglesianus		0.1
Trachymene cyanopetala	0.1	1
Triglochin isingiana	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.1
**Vulpia bromoides*	0.1	0.2
**Vulpia myuros*	0.2	0.3
Wahlenbergia preissii	0.1	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGD10
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 339556.2E 6760549.5N
Landform Type:	Mid Slope
Slope Class:	Gently Inclined (3°)
Aspect:	S
Soil Type:	Sandy Clay
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	<2%
CF Sizes:	6-20mm, 2-6mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	10-20 years
Habitat:	Minor drainage line, historical grazing. Tall open shrubland, Melaleuca concreta, Calathamnus quadrifidus subsp. angustifolium, Acacia saligna, Desmocladus hands asper over agriculture weeds. Very narrow ecotonal with adjacent communities.
Comments:	Historical grazing maybe

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339556	6760550	
Corner 2	339548	6760545	
Corner 3	339542	6760553	
Corner 4	339552	6760558	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia ?lasiocarpa	0.1	0.1
**Aira cupaniana*	0.1	0.5
Allocasuarina campestris	3	30
Amphipogon caricinus var. *caricinus*	0.1	0.2
Amyema miraculosa subsp. *miraculosa*		
**Arctotheca calendula*	0.2	0.1
Arthropodium dyeri	0.4	0.3
Austrostipa elegantissima	0.4	0.1
**Avena barbata*	0.8	0.2
Blennospora drummondii	0.1	0.1
Borya sphaerocephala	0.1	0.1
Brachyscome perpusilla	0.1	0.1
Brachyscome pusilla	0.1	0.1
**Briza maxima*	0.3	0.2

Burchardia congesta	0.3	0.1
Calandrinia baccata	0.1	0.1
Centrolepis aristata	0.1	0.1
Centrolepis drummondiana	0.1	0.1
Centrolepis polygyna	0.1	0.1
Ceratogyne obionoides	0.1	0.1
Chamaescilla versicolor	0.2	0.6
Cheilanthes adiantoides		
Comesperma volubile		0.1
Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Crassula decumbens var. *decumbens*	0.1	0.1
Cyanicula gemmata	0.2	0.1
Desmocladus asper	0.2	0.5
Drosera erythrorhiza	0.1	0.1
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ericomyrtus tenuior		
**Ficinia marginata*	0.1	0.1
Gnephosis angianthoides	0.1	0.1
Guichenotia angustifolia		
Hakea lissocarpha	0.4	0.5
Hyalosperma demissum	0.1	0.1
Hydrocotyle callicarpa	0.1	0.1
**Hypochaeris glabra*	0.1	0.5
**Lamarckia aurea*	0.1	0.1
Lawrencella rosea	0.1	0.1
Lepidosperma tenue	0.3	0.6
Levenhookia dubia	0.1	0.1
Levenhookia murfetii	0.1	0.1
**Lolium rigidum*	0.1	0.1
**Lysimachia arvensis*	0.1	0.1
Melaleuca radula	1	2
Melaleuca tinkeri	0.4	0.5
**Monoculus monstrosus*	0.1	0.1
Neurachne alopecuroidea	0.2	0.2
Olearia ?sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1	0.2
Patersonia graminea	0.3	0.2
**Pentameris airoides* subsp. *airoides*	0.1	0.2
**Petrorhagia dubia*	0.1	0.1
Phyllangium divergens	0.1	0.1
**Plantago coronopus* subsp. *commutata*	0.1	0.1
Podotheca gnaphalioides	0.1	0.1
Pterostylis setulosa	0.1	0.1
Rhodanthe laevis	0.2	0.2
**Rostraria pumila*	0.1	0.1
Santalum acuminatum		
Schoenus latitans	0.1	0.2
Schoenus nanus	0.1	0.1
**Silene gallica* var. *gallica*	0.1	0.1
**Sonchus oleraceus*	0.1	0.1
Sowerbaea laxiflora		

Stylidium androsaceum	0.1	0.1
Stylidium torticarpum (P3)	0.1	0.1
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0.3	0.2
Thryptomene nitida (P3)	0.4	5
Thysanotus manglesianus		0.1
Trachymene cyanopetala	0.1	0.1
Trachymene ornata	0.1	0.3
Triglochin nana	0.1	0.1
**Urospermum picroides*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
**Vulpia myuros*	0.1	3
Wahlenbergia preissii	0.1	0.1

PHOTOS



Site Name:	LGD11
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	23/09/2025
GPS Location:	WGS84 Zone 50 339591.4E 6760764.7N
Landform Type:	Lower Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	E
Soil Type:	Sand
Soil Colour:	Grey
Soil Condition:	Dry
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Grazing
Fire:	10-20 Years
Comments:	Historical grazing.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339591	6760765	
Corner 2	339587	6760755	
Corner 3	339595	6760751	
Corner 4	339602	6760760	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	1	0.5
Allocasuarina campestris	1.5	3
Allocasuarina huegeliana	4	3.5
Anigozanthos humilis subsp. *humilis*	0.2	0.1
**Arctotheca calendula*	0.2	0.1
Austrostipa elegantissima	0.6	0.3
Austrostipa macalpinei	0.1	0.1
**Avena barbata*	0.5	0.2
Banksia attenuata	2	5
Borya sphaerocephala	0.1	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia baccata	0.2	0.1
Calandrinia corrigioloides	0.1	0.1
Calandrinia eremaea	0.1	0.1
Calandrinia granulifera	0.1	0.1
Calothamnus quadrifidus subsp. *angustifolius*	1.4	1.3
Calytrix strigosa	0.2	0.1
Chordifex sinuosus	0.2	2

Conostylis candicans subsp. *candicans*	0.3	0.3
Crassula colorata var. *acuminata*	0.1	0.1
Drosera erythrorhiza	0.1	0.1
Drosera menziesii		0.1
**Ehrharta longiflora*	0.3	0.5
Eremaea beaufortioides	0.4	0.3
**Ficinia marginata*	0.1	0.1
Hakea lissocarpha	0.5	2
Hibbertia hypericoides subsp. *hypericoides*	0.6	4
**Hypochaeris glabra*	0.1	0.5
Jacksonia hakeoides	0.7	1
Leptospermopsis oligandra	1.3	2
Lyginia imberbis	0.4	2
Macrozamia fraseri		
Melaleuca leuropoma	0.6	4
Mesomelaena pseudostygia	0.3	0.2
**Monoculus monstrosus*	0.2	0.1
Neurachne alopecuroidea	0.2	0.1
Patersonia occidentalis	0.4	0.2
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Petrophile macrostachya	0.7	0.4
Pileanthus peduncularis subsp. *peduncularis*		
Podotheca gnaphalioides	0.2	2
Scholtzia uniovulata		
Siemssenia capillaris	0.2	0.2
Stylobasium australe		
Thryptomene racemulosa	0.4	0.2
Trachymene pilosa	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.5
**Vulpia myuros*	0.1	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGD12
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	24/09/2025
GPS Location:	WGS84 Zone 50 330734.3E 6752558.2N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sandy Clay Loam
Soil Colour:	Grey
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	330734	6752558	
Corner 2	330725	6752558	
Corner 3	330726	6752547	
Corner 4	330736	6752548	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi	0.3	0.1
Allocasuarina microstachya	0.4	3
Amphipogon turbinatus	0.2	0.2
**Arctotheca calendula*	0.1	0.1
Austrostipa elegantissima	0.4	0.2
Babingtonia camphorosmae	0.3	0.1
Banksia fraseri var. *crebra* (P3)	0.4	0.3
Banksia shuttleworthiana	0.5	1
Boronia cymosa	0.3	0.2
Burchardia congesta	0.3	0.1
Cassytha glabella forma *casuarinae*		0.1
Caustis dioica	0.2	0.1
Chorizema aciculare subsp. *laxum*	0.2	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Cristonia stenophylla	0.3	0.1
Dampiera oligophylla	0.4	0.2
Dampiera spicigera	0.4	0.2
Drosera erythrorhiza	0.1	0.1
Drosera porrecta	0.2	0.1
Ecdeiocolea monostachya	0.5	10
Gastrolobium plicatum	0.3	0.2

Hakea incrassata	0.4	0.3
Hakea lissocarpha	0.4	0.5
Hakea neospathulata	0.4	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	10
Hibbertia robur	0.4	0.5
Hyalosperma demissum	0.1	0.1
**Hypochaeris glabra*	0.1	0.5
Lepidosperma scabrum	0.3	0.2
Levenhookia murfetii	0.1	0.1
Melaleuca aspalathoides	0.4	5
Melaleuca leuropoma	0.4	2
Mesomelaena pseudostygia	0.3	1
Neurachne alopecuroidea	0.3	0.2
Opercularia vaginata	0.2	0.2
**Pentameris airoides* subsp. *airoides*	0.1	0.3
Pileanthus filifolius	0.3	0.3
Podotheca angustifolia	0.1	0.1
Podotheca gnaphalioides	0.2	0.1
Poranthera moorokatta (P2)	0.1	0.1
Rhodanthe laevis	0.1	0.1
Schoenus brevisetis	0.2	0.2
Schoenus latitans	0.1	0.1
Schoenus nanus	0.1	0.1
Schoenus pleiostemoneus	0.2	0.1
Stylidium crossocephalum	0.1	0.1
Stylidium repens	0.1	0.1
Trachymene cyanopetala	0.1	0.1
Trachymene pilosa	0.1	0.2
Tricoryne soullierae (P3)	0.2	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.5
**Vulpia myuros*	0.1	1
**Wahlenbergia capensis*	0.1	0.1
Waitzia acuminata var. *acuminata*	0.1	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGD13
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	24/09/2025
GPS Location:	WGS84 Zone 50 324361.9E 6752482.5N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	E
Soil Type:	Sandy Clay Loam
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	2-10%
CF Sizes:	2-6mm, 6-20mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	324362	6752482	
Corner 2	324352	6752483	
Corner 3	324353	6752473	
Corner 4	324363	6752473	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata	0.3	0.2
Allocasuarina campestris	1.2	0.6
Allocasuarina microstachya	0.4	2
Amphipogon caricinus var. *caricinus*	0.2	0.1
Apectospermum spinescens	0.3	0.1
Austrostipa elegantissima	0.5	0.5
Banksia fraseri var. *crebra* (P3)	0.8	1
Banksia shuttleworthiana	0.4	0.5
Boronia cymosa	0.3	0.2
Burchardia congesta	0.2	0.2
Caladenia flava subsp. *flava*	0.1	0.1
Calectasia hispida		
Caustis dioica	0.1	0.1
Centrolepis drummondiana	0.1	0.1
Chamaescilla versicolor	0.2	0.1
Conospermum wycherleyi	1	0.3
Conostylis androstemma	0.2	0.3
Crassula colorata var. *acuminata*	0.1	0.1
Cristonia stenophylla	0.3	0.1

Dampiera oligophylla	0.3	0.1
Daviesia nudiflora subsp. *hirtella*	0.4	0.2
Daviesia oxyclada	0.1	0.1
Daviesia pedunculata	0.5	0.5
Drosera erythrorhiza	0.1	0.1
Ecdeiocolea monostachya	0.6	10
Geleznowia calycina	0.2	0.1
Goodenia caerulea	0.2	0.1
Haemodorum simulans		
Hakea auriculata	0.8	2
Hakea candolleana	0.4	0.3
Hakea incrassata	0.3	0.3
Hibbertia hypericoides subsp. *hypericoides*	0.4	2
**Hypochaeris glabra*	0.1	0.2
Isopogon divergens	1	0.8
Isotropis cuneifolia subsp. *cuneifolia*		
Jacksonia restioides	0.5	0.3
Levenhookia murfetii	0.1	0.1
Lomandra micrantha subsp. *micrantha*	0.3	0.1
Melaleuca aspalathoides	0.4	12
Mesomelaena pseudostygia	0.4	1
Millotia tenuifolia var. *tenuifolia*	0.1	0.1
Neurachne alopecuroidea	0.2	0.1
Olearia ?sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	0.1	0.1
Opercularia vaginata	0.2	0.1
Pileanthus filifolius	0.3	0.3
Platysace teres	0.2	0.1
Podotheca angustifolia	0.1	0.1
Podotheca gnaphalioides	0.1	0.1
Scaevola canescens	0.3	0.1
Schoenus brevisetis	0.2	0.1
Schoenus nanus	0.1	0.1
Scholtzia laxiflora	0.6	0.1
Trachymene pilosa	0.1	0.2
**Ursinia anthemoides* subsp. *anthemoides*	0.1	1
**Vulpia myuros*	0.1	0.3
Waitzia acuminata var. *acuminata*	0.1	0.1
Waitzia acuminata var. *albicans*	0.2	0.1

PHOTOS



Site Name:	LGDR01
Site Type:	RELEVE
Survey Date:	16/09/2025
GPS Location:	WGS84 Zone 50 330479.5E 6752555.1N
Landform Type:	Upper Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sandy Clay
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	50-90%
CF Sizes:	2-6mm, 6-20mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, (other)
Fire:	10-20 Years
Comments:	Gravel pit nearby.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	330480	6752555	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	2	5
Banksia carlinoides	0.6	0.2
Banksia fraseri var. *crebra* (P3)	0.4	0.1
Borya sphaerocephala	0.1	0.2
Calytrix gracilis	0.2	
Chamaescilla versicolor	0.3	
Dodonaea ericoides	0.5	0.5
Ecdeiocolea monostachya	0.5	2
Gastrolobium plicatum	0.8	0.2
Hakea auriculata	0.5	1
Hakea incrassata	0.4	0.2
Hakea lissocarpha	0.6	1
Hibbertia hypericoides subsp. *hypericoides*	0.5	0.5
Hibbertia robur	0.4	0.3
Melaleuca aspalathoides	0.4	10
Opercularia vaginata	0.1	0.3
Podotheca gnaphalioides	0.1	0.1
Stylidium drummondianum (P3)	0.1	0.1
Styphelia leptantha	0.3	0.1

Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0.5	0.5
Thelymitra sp. indet	0.1	0.1

PHOTOS



Site Name:	LGDR02
Site Type:	RELEVE
Survey Date:	17/09/2025
GPS Location:	WGS84 Zone 50 333000.7E 6754783.8N
Landform Type:	Flat
Slope Class:	Level (0°)
Aspect:	None
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	5-10 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	333001	6754784	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.3	0.1
Allocasuarina campestris	2	3
**Arctotheca calendula*	0.1	2
Burchardia congesta	0.3	0.1
Calothamnus quadrifidus subsp. *angustifolius*	2	1
Chamaescilla versicolor	0.2	0.1
Dampiera lavandulacea	0.4	0.2
Dodonaea pinifolia	0.6	0.1
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.5	1
Grevillea biternata	1	2
Hakea circumalata	1	0.5
Hakea neospathulata	0.3	0.2
**Hypochaeris glabra*	0.1	2
Lepidobolus preissianus	0.3	0.5
Leptosema aphyllum	0.3	0.1
LGDR02-02 mel concreta	1.2	2
Melaleuca radula	1.5	2
Scholtzia laxiflora	2	1
Stylidium torticarpum (P3)	0.1	0.1
Thelymitra antennifera	0.1	0.1

Thryptomene nitida (P3)	1	3
Triodia danthonioides	0.5	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.3	1

PHOTOS



Site Name:	LGDR03
Site Type:	RELEVE
Survey Date:	18/09/2025
GPS Location:	WGS84 Zone 50 335988.3E 6763810.8N
Landform Type:	Lower Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Waterlogged
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	10-20 Years
Comments:	Lots of agricultural weeds.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335988	6763811	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia acuminata	3.5	2
Allocasuarina campestris	2.5	20
Blennospora drummondii	0.1	0.1
Borya sphaerocephala	0.1	0.2
Brachyscome perpusilla	0.1	0.1
Brachyscome pusilla	0.1	0.5
Centrolepis aristata	0.1	0.1
Cheilanthes adiantoides	0.1	0.2
Chthonocephalus pseudevax	0.1	0.1
Clematicissus angustissima		0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.5	0.1
Gilberta tenuifolia	0.1	0.1
Goodenia cycnopotamica	0.1	0.1
Hyalosperma glutinosum subsp. *glutinosum*	0.2	0.1
Isolepis congrua	0.1	0.1
Lawrencella rosea	0.1	0.1
Lepidosperma costale	0.5	0.3
LGDR02-02 mel concreta	2	8
**Plantago coronopus* subsp. *commutata*	0.1	0.1
Plantago debilis	0.1	0.1

Schoenus odontocarpus	0.2	0.1
Schoenus sculptus	0.1	0.1
Thelymitra antennifera	0.2	0.1
Trachymene cyanopetala	0.1	0.1
Trachymene ornata	0.1	0.1
Tribonanthes variabilis	0.2	0.1
Triglochin isingiana	0.1	0.1

PHOTOS



Site Name:	LGDR06
Site Type:	RELEVE
Survey Date:	23/09/2025
GPS Location:	WGS84 Zone 50 339484.3E 6760147.3N
Landform Type:	Wetland
Slope Class:	Level (0°)
Aspect:	None
Soil Type:	Light Clay
Soil Colour:	Brown
Soil Condition:	Waterlogged
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, (other)
Fire:	10-20 Years
Comments:	Changed hydrology.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339484	6760147	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna	2.5	5
Apium ?prostratum	0.1	0.3
Comesperma integerrimum		0.2
Cotula cotuloides	0.1	0.1
Eucalyptus camaldulensis	6	1
Gahnia trifida	1.3	3
Isolepis cernua var. *cernua*	0.2	0.2
LGDR02-02 mel concreta	3	3
Machaerina rubiginosa	1	4
Melaleuca viminea subsp. *viminea*	3	1
**Polypogon monspeliensis*	1.2	0.2
Rhagodia drummondii	1.1	0.1
Schoenus subfascicularis	1.2	10
**Solanum nigrum*	0.8	0.1
Triglochin mucronata	0.1	0.1
Typha domingensis	1.5	10

PHOTOS



Site Name:	LGDR07
Site Type:	RELEVE
Survey Date:	23/09/2025
GPS Location:	WGS84 Zone 50 339401.4E 6760261.7N
Landform Type:	Lower Slope
Slope Class:	Very Gently Inclined (1°)
Aspect:	S
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist - Dark brown
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds
Fire:	10-20 Years
Comments:	Historical grazing.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339401	6760262	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna	2.5	0.5
Allocasuarina huegeliana	6	0.2
Amyema preissii		0.1
Brachyscome pusilla	0.1	3
Centrolepis pilosa	0.1	0.1
Centrolepis polygyna	0.1	0.1
Cotula cotuloides	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Gnephosis tenuissima	0.1	0.1
Gnephosis tridens	0.1	0.1
Gonocarpus nodulosus	0.1	0.1
Labichea lanceolata subsp. *lanceolata*	2	1
LGDR02-02 mel concreta	2	5
**Lolium rigidum*	0.3	0.5
Quinetia urvillei	0.1	0.1
Rhagodia drummondii	1	1
Schoenus odontocarpus	0.1	2
Schoenus sculptus	0.1	0.1
Schoenus subfascicularis	0.6	1
Stylobasium australe	1	0.5
**Vulpia bromoides*	0.1	10

PHOTOS



Site Name:	LGJ01
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	18/08/2025
GPS Location:	GDA2020 Zone 50 339435.15E 6764021.41N
Landform Type:	Low Rise
Slope Class:	Gently Inclined (3°)
Aspect:	SSE
Soil Type:	Clayey Sand
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	Laterite, 10-20% bedrock exposed
CF Abundance:	2-10%
CF Sizes:	2-6mm, 6-20mm, 20-60mm
CF Types:	Quartz, Laterite
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, Animal
Fire:	10-20 Years
Comments:	Cattle activity present. *Diuris refracta* present. Revisited 26/09/25 by CM, ZB.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339435	6764021	
Corner 2	339438	6764012	
Corner 3	339446	6764014	
Corner 4	339447	6764023	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Actinobole uliginosum	0.01	0.3
**Arctotheca calendula*	0.15	4.5
Blennospora drummondii		
Borya sphaerocephala	0.05	2
Caesia ?micrantha	0.2	0.2
Calandrinia corrigioloides		
Cephalosorus carpesioides	0.1	0.1
Chamaescilla versicolor	0.2	0.2
Cheilanthes adiantoides	0.03	3
Chorizema racemosum		
**Cotula bipinnata*		
Crassula colorata var. *acuminata*	0.03	0.2
Crassula decumbens var. *decumbens*		
Diuris refracta	0.1	0.1
Drosera glanduligera	0.01	0.1
Drosera sp.	0.05	0.2
Drosera sp. Branched styles (S.C. Coffey 193)		1

Ericomyrtus tenuior	0.4	10
Guichenotia angustifolia	0.5	0.3
Hyalosperma glutinosum subsp. *glutinosum*		
Melaleuca marginata	0.3	25
Melaleuca tinkeri	0.4	26
**Monoculus monstrosus*	0.1	0.5
**Pentameris airoides* subsp. *airoides*		
Pheladenia deformis	0.2	0.1
**Plantago coronopus* subsp. *commutata*		
Poaceae sp.	0.2	1
Rhodanthe laevis		
**Sonchus oleraceus*	0.05	0.1
Stylidium torticarpum (P3)	0.05	0.1
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0.2	0.1
Thryptomene nitida (P3)	0.3	10
Thysanotus ?patersonii		0.1
Trachymene ?cyanopetala	0.04	2
Trachymene cyanopetala		
**Trifolium subterraneum*	0.1	0.5
Waitzia acuminata	0.02	0.1
Waitzia acuminata var. *acuminata*		
Waitzia acuminata var. *albicans*		
**Zaluzianskya divaricata*	0.05	0.1

PHOTOS



Site Name:	LGJ02
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	19/08/2025
GPS Location:	GDA2020 Zone 50 322518.43E 6751633.21N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sand
Soil Colour:	Grey
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, (other)
Fire:	10-20 Years
Comments:	Roadside and cattle pasture adjacent.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	322518	6751633	
Corner 2	322528	6751634	
Corner 3	322528	6751624	
Corner 4	322517	6751624	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia scirpifolia		
Acacia stenoptera	0.3	0.5
Allocasuarina humilis	0.7	9
**Arctotheca calendula*	0.01	5
Austrostipa elegantissima	0.7	3
**Avena barbata*	0.2	0.5
Banksia shuttleworthiana	0.6	9
Boronia cymosa		
**Brassica tournefortii*	0.2	0.2
Burchardia congesta	0.4	0.2
Chamaescilla versicolor	0.3	0.1
Conospermum wycherleyi		
Cyanothamnus coerulescens subsp. *spinescens*		
Dampiera oligophylla	0.4	3
Dampiera spicigera	0.4	1
Daviesia pedunculata	0.5	3
Drosera erythrorhiza	0.01	2
Drosera menziesii		0.1
Drosera porrecta		0.2

Ecdeiocolea monostachya	0.5	4
Eremaea beaufortioides var. *microphylla*		
Hakea candolleana	0.4	0.5
Hakea lissocarpha	0.3	7
Hakea neospathulata	0.3	4
Hibbertia hypericoides subsp. *hypericoides*	0.3	1.3
Lepidobolus preissianus subsp. *preissianus*		
Melaleuca leuropoma	0.3	2.8
Mesomelaena pseudostygia	0.3	0.5
**Monoculus monstrosus*	0.15	3
Petrophile megalostegia		
Podotheca angustifolia	0.2	0.5
Ptilotus polystachyus	0.3	0.5
Scaevola canescens		
Scholtzia laxiflora	0.2	2
**Sonchus oleraceus*	0.01	0.1
Trachymene ?cyanopetala	0.01	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.3	1.3
Verticordia grandis	1	1
Waitzia acuminata	0.01	0.1

PHOTOS



Site Name:	LGJ03
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA2020 Zone 50 339216.07E 6763715.91N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sandy Clay Loam
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	10-20%
CF Sizes:	2-6mm, 6-20mm, 20-60mm, 60-200mm
CF Types:	Laterite, Granite
Vegetation Condition:	Combined Vegetation Condition - E - Excellent
Fire:	5-10 Years
Comments:	Nearby clearing/paddock. Close proximity to track. Caladenia varians present here. Revisited on 26/09/25 by CM, ZB.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339216	6763716	
Corner 2	339226	6763715	
Corner 3	339226	6763715	
Corner 4	339225	6763706	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia acuminata	1.7	0.5
Allocasuarina campestris	2.2	23
**Arctotheca calendula*	0.1	0.1
Austrostipa elegantissima	1	0.7
**Avena barbata*		
Blennospora drummondii		
Caesia ?micrantha	0.3	0.1
Caladenia varians	0.2	0.1
Calandrinia baccata		
Cheilanthes adiantoides	0.1	5
Clematicissus angustissima	0.1	0.1
Comesperma integerrimum		0.1
Dioscorea hastifolia		0.1
Drosera sp. Branched styles (S.C. Coffey 193)	0.1	0.1
Erodium cygnorum	0.1	0.2
Gilberta tenuifolia	0.1	2
Gonocarpus nodulosus		

Goodenia berardiana		
Goodenia cycnopotamica		
Hakea recurva subsp. *recurva*	0.2	0.2
Hyalosperma cotula		
Hyalosperma demissum		
**Hypochaeris glabra*	0.1	0.1
Lawrencella rosea	0.15	1
**Monoculus monstrosus*	0.1	0.1
Neurachne alopecuroidea	0.3	0.1
?*Olearia* sp.	0.1	0.1
Poaceae sp.	0.2	0.1
Podotheca angustifolia	0.1	0.1
Rhodanthe manglesii		
Schoenus nanus		
Stylidium torticarpum (P3)	0.1	0.1
Thysanotus sp.		0.1
Trachymene ?cyanopetala	0.1	0.5
Trachymene cyanopetala		
Trachymene ornata		
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
**Zaluzianskya divaricata*	0.1	0.2

PHOTOS



Site Name:	LGJ04
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 339186.75E 6763940.67N
Landform Type:	Simple Slope
Slope Class:	Gently Inclined (3°)
Aspect:	SE
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Animal, Weeds, (other)
Fire:	10-20 Years
Comments:	Possible fox scat, weedy herbs, adjacent to roadside. Hakea recurva subsp. recurva present. Revisited on the 26/09/25 by CM, ZB.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339187	6763941	
Corner 2	339196	6763940	
Corner 3	339196	6763931	
Corner 4	339186	6763932	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia saligna		
Acacia stenoptera	0.8	0.2
Acacia tetragonophylla	0.3	0.1
Actinobole uliginosum	0.01	0.2
Austrostipa elegantissima	0.4	0.1
**Avena barbata*	0.6	1
Borya sphaerocephala	0.01	0.3
Caladenia varians	0.1	0.1
Chamaescilla versicolor	0.1	0.1
Cheilanthes adiantoides		
Chthonocephalus pseudevax		
Comesperma integerrimum		0.1
Crassula colorata var. *acuminata*		
Dampiera lavandulacea	0.4	
Drosera erythrorhiza	0.01	0.3
Drosera macrantha	0.4	0.1
Ecdeiocolea monostachya	0.5	3
Erodium cygnorum	0.1	3.5

Hakea recurva subsp. *recurva*	3.1	8
Hyalosperma demissum		
Hyalosperma glutinosum subsp. *glutinosum*		
**Hypochaeris glabra*	0.1	0.2
Lepidobolus preissianus subsp. *preissianus*		
Mesomelaena preissii		
**Monoculus monstrosus*	0.2	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.25	2.5
Patersonia graminea	0.2	0.1
**Pentameris airoides* subsp. *airoides*		
Podotheca angustifolia	0.2	0.3
Ptilotus polystachyus	0.4	0.1
Rhagodia drummondii	0.5	2
Scholtzia uniovulata	0.5	0.5
Siemssenia capillaris	0.2	0.3
Trachymene ?cyanopetala	0.3	0.1
Trachymene cyanopetala		
Trachymene ornata		
Trachymene pilosa		
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
Waitzia acuminata var. *albicans*		
Wurmbea dilatata	0.2	0.1
**Zaluzianskya divaricata*	0.2	0.1

PHOTOS



Site Name:	LGJ05
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	22/08/2025
GPS Location:	GDA2020 Zone 50 330602.13E 6754867.13N
Landform Type:	Lower Slope
Slope Class:	Moderately Inclined (10°)
Aspect:	S
Soil Type:	Sandy Loam
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	2-10%
CF Sizes:	60-200mm, 2-6mm, 20-60mm, 200-600mm, 6-20mm
CF Types:	Limestone, Granite, See photo jean phone (other)
Vegetation Condition:	Combined Vegetation Condition - E - Excellent
Fire:	5-10 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	330602	6754867	
Corner 2	330613	6754868	
Corner 3	330613	6754858	
Corner 4	330604	6754858	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	1.1	3
Allocasuarina campestris	1.2	9
Banksia fraseri var. *crebra* (P3)	0.4	1.25
Blennospora drummondii	0.1	0.1
**Brassica x napus*	0.2	0.1
Cassytha glabella forma *dispar*		0.1
Chamaescilla versicolor	0.2	0.1
Cryptandra pungens	0.4	0.1
Dampiera lindleyi	0.2	0.1
Drosera erythrorhiza	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		1.5
Ecdeiocolea monostachya	0.6	0.1
?*Enchylaena tomentosa* var. *tomentosa*	0.01	0.1
Glischrocaryon aureum	0.3	0.1
Hakea lissocarpha	0.5	3
Hakea neospathulata	0.2	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.3	0.1
**Hypochaeris glabra*	0.1	0.1
Lepidosperma tenue	0.3	0.1

Melaleuca marginata	0.8	3
Melaleuca tinkeri	0.3	2
Mirbelia floribunda	0.3	0.5
**Monoculus monstrosus*	0.1	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.1	1.5
**Ornithopus compressus*	0.1	0.1
Patersonia graminea	0.2	0.1
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0.3	0.1
**Trifolium subterraneum*	0.1	0.2
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1

PHOTOS



Site Name:	LGJ06
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	27/08/2025
GPS Location:	GDA2020 Zone 50 331630.46E 6752583.79N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	None
Soil Type:	Sand
Soil Colour:	White
Soil Condition:	Moist - white over layer, brown underneath
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds
Fire:	5-10 Years
Comments:	Close proximity to road and paddocks.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	331630	6752584	
Corner 2	331640	6752588	
Corner 3	331639	6752577	
Corner 4	331629	6752577	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Arnocrinum preissii	0.1	0.1
Austrostipa elegantissima	1.1	0.2
**Avena barbata*	0.1	3
Banksia attenuata	1.6	15
**Brassica barrelieri* subsp. *oxyrrhina*	0.1	0.1
Burchardia congesta	0.2	0.1
Caladenia ?flava	0.1	0.1
Caladenia flava subsp. *flava*		
Calandrinia corrigioloides	0.1	0.1
Calothamnus quadrifidus subsp. *angustifolius*	1.4	2
Calothamnus sanguineus	1.5	1.5
Conospermum wycherleyi	1.1	2
Conostylis candicans subsp. *procumbens*	0.2	0.1
Corynotheca micrantha	0.9	0.1
Crassula colorata var. *colorata*	0.1	0.1
Daviesia divaricata subsp. *divaricata*	1.2	1.2
Drosera humilis	0.1	0.1
Drosera menziesii		0.1
Eucalyptus todtiana	4	2

Goodenia reinwardtii		
Hibbertia hypericoides subsp. *hypericoides*	0.6	0.1
Isotropis cuneifolia subsp. *cuneifolia*	0.1	0.1
Lyginia imberbis	0.4	0.5
Melaleuca aff. leuropoma	0.6	0.5
Melaleuca leuropoma	0.6	0.2
Mesomelaena pseudostygia	0.3	0.5
Opercularia vaginata	0.1	0.1
Petrophile macrostachya		
Pileanthus filifolius	0.3	0.25
Podotheca angustifolia	0.1	0.1
Pterostylis ?sanguinea	0.1	0.1
**Raphanus raphanistrum*	0.1	0.1
Scaevola canescens	0.1	0.1
Scholtzia laxiflora	0.9	4
Trachymene ?cyanopetala	0.1	0.1
Tricoryne elatior	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	3
Verticordia grandis	0.6	1

PHOTOS



Site Name:	LGJ07
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	28/08/2025
GPS Location:	GDA2020 Zone 50 329478.45E 6752543.92N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	None
Soil Type:	Sandy Loam
Soil Colour:	Brown
Soil Condition:	Moist - white layer covering brown substrate
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Animal
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	329478	6752544	
Corner 2	329488	6752541	
Corner 3	329487	6752532	
Corner 4	329478	6752535	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	0.7	0.5
Allocasuarina microstachya	0.2	0.1
Amphipogon caricinus	0.1	0.1
Austrostipa elegantissima	0.5	0.5
**Avena barbata*	0.2	0.5
Babingtonia erecta	0.2	0.1
Burchardia congesta	0.3	0.1
Calothamnus sanguineus	0.4	0.3
Cassytha racemosa forma ?*pilosa*	0.3	0.2
Chamaescilla versicolor	0.2	0.1
Dampiera lindleyi		
Daviesia divaricata subsp. *divaricata*	0.9	3
Drosera erythrorhiza	0.1	0.1
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)	0.1	0.1
Eremaea beaufortioides var. *microphylla*	0.8	1.5
Eucalyptus todtiana		
Gastrolobium plicatum		
Hakea incrassata		
Hakea neospathulata	0.2	0.2
Hibbertia hypericoides subsp. *hypericoides*	0.4	1.5

Hypocalymma hirsutum		
**Hypochaeris glabra*	0.1	0.2
Isotropis cuneifolia subsp. *cuneifolia*		
Lepidobolus preissianus subsp. *preissianus*	0.3	0.2
Melaleuca aspalathoides	0.35	3.5
Melaleuca leuropoma	0.5	1
Mesomelaena pseudostygia	0.4	0.75
Mesomelaena tetragona	0.5	0.75
Opercularia vaginata	0.1	0.1
Poaceae sp.	0.02	0.5
Podotheca angustifolia	0.1	0.1
Pterostylis ?vittata	0.1	0.1
Ptilotus manglesii	0.1	0.1
Trachymene ?cyanopetala	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
Waitzia acuminata	0.1	0.1
Xanthorrhoea drummondii		

PHOTOS



Site Name:	LGJR01
Site Type:	RELEVE
Survey Date:	20/08/2025
GPS Location:	GDA2020 Zone 50 339358.65E 6764067.16N
Landform Type:	Mid Slope
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Clayey Sand
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds
Fire:	5-10 Years
Comments:	Next to road.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339359	6764067	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	2.5	11
**Avena barbata*	0.6	2
Caladenia varians	0.2	0.1
Comesperma integerrimum		0.5
Ecdeiocolea monostachya	0.6	25
Melaleuca concreta	1.7	2
Melaleuca radula	1.4	11
**Monoculus monstrosus*	1	0.1
**Sonchus oleraceus*	0.1	0.2
Thryptomene nitida (P3)	0.5	5
**Ursinia anthemoides* subsp. *anthemoides*	0.1	2
**Zaluzianskya divaricata*	0.1	0.1

PHOTOS









Site Name:	LGJR02
Site Type:	RELEVE
Survey Date:	22/08/2025
GPS Location:	GDA2020 Zone 50 335952.81E 6763788.36N
Landform Type:	Drainage Line
Slope Class:	Gently Inclined (3°)
Aspect:	W
Soil Type:	Clay Loam
Soil Colour:	Brown
Soil Condition:	Waterlogged
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Animal, Weeds
Fire:	10-20 Years
Comments:	Cattle tracks.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335953	6763788	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia acuminata		
**Avena barbata*	0.2	0.5
Casuarina obesa	7	2
Comesperma integerrimum		0.1
Cycnogeton lineare	0.3	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		
Enchylaena tomentosa var. *tomentosa*	0.4	1.5
Eucalyptus camaldulensis subsp. *arida*	8	4
Hakea recurva subsp. *recurva*		
**Hypochaeris glabra*	0.2	0.1
Melaleuca viminea subsp. *viminea*	3.5	8
Poaceae sp.	0.1	30
Rhagodia drummondii	0.4	2
**Sonchus oleraceus*	0.1	0.1
Trachymene ?cyanopetala	0.1	0.2
**Trifolium subterraneum*		
Triglochin mucronata	0.1	0.1

PHOTOS



Site Name:	LGJR03
Site Type:	RELEVE
Survey Date:	25/08/2025
GPS Location:	GDA2020 Zone 50 330590.76E 6754726.36N
Landform Type:	Low Rise
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	<2%
CF Sizes:	2-6mm
CF Types:	Granite, Laterite
Vegetation Condition:	Combined Vegetation Condition - D - Degraded
Disturbance:	Weeds, Animal, Grazing
Fire:	10-20 Years
Comments:	Adjacent to paddock and tractor tracks.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	330591	6754726	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	1.4	1.5
**Avena barbata*	0.2	50
Banksia fraseri var. *crebra* (P3)	0.3	1
**Brassica x napus*	0.4	1.5
Chamaescilla versicolor	0.1	0.1
Dampiera lindleyi	0.1	0.1
Daviesia oxyclada	0.5	0.5
Ecdeiocolea monostachya	0.2	1
Hakea auriculata	0.5	1.5
Jacksonia angulata	0.3	0.1
Lepidosperma tenue	0.2	0.2
Melaleuca radula	0.7	0.1
Mirbelia floribunda	0.3	0.1
**Trifolium subterraneum*	0.1	25

PHOTOS



Site Name:	LGJR05
Site Type:	RELEVE
Survey Date:	27/08/2025
GPS Location:	GDA2020 Zone 50 332081.34E 6752695.19N
Landform Type:	Crest
Slope Class:	Gently Inclined (3°)
Aspect:	NNE
Soil Type:	Sand
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	Calcrete, Limestone (other), 2-10% bedrock exposed
CF Abundance:	2-10%
CF Sizes:	2-6mm, 6-20mm, 20-60mm, 60-200mm
CF Types:	Granite, Limestone, Calcrete
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Animal, Grazing, Weeds
Fire:	5-10 Years
Comments:	Hillock in sheep paddock, clearly grazed but shrub story relatively intact.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	332081	6752695	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0.2	0.5
Allocasuarina campestris	2.5	0.5
Banksia fraseri var. *crebra* (P3)	0.6	14
Crassula colorata var. *colorata*	0.1	0.1
Cryptandra pungens	0.2	0.1
Ecdeiocolea monostachya	0.2	1
Hakea lissocarpha	0.6	4
Hakea neospathulata	0.6	6
**Hypochaeris glabra*	0.1	
Isotropis cuneifolia subsp. *cuneifolia*	0.1	0.1
**Petrorhagia dubia*	0.1	0.1
Ptilotus polystachyus	0.4	0.1
Rhagodia preissii subsp. *preissii*		
Schoenus armeria	0.2	0.1
**Sonchus oleraceus*	0.1	
**Trifolium subterraneum*	0.1	

PHOTOS





Site Name:	LGJR06
Site Type:	RELEVE
Survey Date:	27/08/2025
GPS Location:	GDA2020 Zone 50 331009.77E 6752449.18N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	N
Soil Type:	Sand
Soil Colour:	White
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Animal, Grazing
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	331010	6752449	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia barbinervis subsp. *borealis*	0.2	0.1
Acacia lasiocarpa var. *lasiocarpa*	0.1	0.1
Apectospermum spinescens	0.9	0.2
Banksia dallanneyi subsp. *media*	0.1	0.5
**Brassica x napus*	0.5	0.1
Conostylis aurea	0.2	0.2
Crassula colorata var. *colorata*	0.1	0.1
Dampiera oligophylla	0.1	0.1
Darwinia speciosa	0.1	0.1
Daviesia divaricata subsp. *divaricata*	0.5	1
Daviesia nudiflora subsp. *hirtella*	0.4	0.2
Drosera erythrorhiza	0.01	0.1
Drosera sp. Branched styles (S.C. Coffey 193)	0.1	0.1
Ecdeiocolea monostachya	0.5	2.5
Eremaea beaufortioides var. *microphylla*	0.9	0.5
Eremaea ectadioclada	0.7	3
Eucalyptus todtiana		
Hakea polyanthema	1.1	0.5
Hibbertia robur	0.9	0.6
Hypocalymma hirsutum	0.1	0.1
**Hypochaeris glabra*	0.1	0.5
Melaleuca leuropoma	0.4	3

Mesomelaena pseudostygia	0.6	1
Podotheca angustifolia	0.1	0.1
Trachymene ?cyanopetala	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.5
Verticordia grandis		

PHOTOS



Site Name:	LGJR07
Site Type:	RELEVE
Dimensions:	10m x 10m
Survey Date:	28/08/2025
GPS Location:	GDA2020 Zone 50 328208.02E 6752511.5N
Landform Type:	Upper Slope
Slope Class:	Gently Inclined (3°)
Aspect:	NE
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, (other)
Fire:	10-20 Years
Comments:	Roadside.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	328208	6752512	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina huegeliana	4.1	9
**Arctotheca calendula*	0.1	0.2
Banksia shuttleworthiana	0.7	0.5
Daviesia divaricata subsp. *divaricata*	0.4	0.3
Drosera erythrorhiza	0.01	0.2
Drosera porrecta		
Drosera sp.	0.1	0.1
Grevillea candelabroides		
Hibbertia hypericoides subsp. *hypericoides*	0.4	1
Hibbertia robur	0.4	0.5
**Hypochaeris glabra*	0.1	0.2
Leptospermopsis oligandra	1.4	1
Mesomelaena pseudostygia	0.4	0.5
Scholtzia laxiflora	1.3	1

PHOTOS



Site Name:	LGJR08
Site Type:	RELEVE
Survey Date:	28/08/2025
GPS Location:	GDA2020 Zone 50 328067.42E 6752514.21N
Landform Type:	Other
Slope Class:	Very Gently Inclined (1°)
Aspect:	None
Soil Type:	Sandy Clay
Soil Colour:	Orange
Soil Condition:	Waterlogged
Rock Outcrop:	Laterite, 10-20% bedrock exposed
CF Abundance:	20-50%
CF Sizes:	20-60mm, 6-20mm, 2-6mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Fire:	5-10 Years
Comments:	Established top, middle and lower stories. Some weed presence but not abundant. Possibly altered landscape - otherwise inclined to rate excellent. Downgraded to Good as spotted some grazing.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1			
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata	0.6	0.1
Allocasuarina huegeliana	3.5	1
**Avena barbata*		0.1
Babingtonia erecta		
Banksia sessilis var. *flabellifolia*	1.7	2
Boronia cymosa	0.2	0.1
Caladenia flava subsp. *flava*		
Chamaescilla versicolor	0.2	0.1
Cristonia stenophylla	0.2	0.1
Dampiera lindleyi	0.3	0.1
Dampiera oligophylla	0.2	0.1
Daviesia daphnoides	0.5	0.5
Daviesia incrassata subsp. *teres*	0.3	0.1
Diplolaena eneabbensis		
Drosera erythrorhiza	0.1	0.1
Eremaea beaufortioides var. *microphylla*	0.6	0.1
Geleznowia calycina	0.2	0.1

?*Goodeniaceae* sp.	0.2	0.1
Grevillea candelabroides	1.4	15
Hakea lissocarpha	0.3	0.5
Hakea trifurcata	0.7	8
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.1
Hibbertia robur	0.4	0.1
Hibbertia subvaginata	0.3	0.2
Hypocalymma hirsutum	0.1	0.1
**Hypochaeris glabra*	0.1	0.1
Leucopogon inflexus		
Melaleuca aspalathoides	0.1	0.1
Melaleuca radula	0.1	0.1
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.2	1.9
Opercularia vaginata		
Scholtzia uniovulata	1.3	0.1
Stylidium drummondianum (P3)	0.1	0.1
Styphelia tortifolia		
Synaphea spinulosa subsp. *spinulosa*		
Trachymene ?cyanopetala	0.1	0.1
**Zaluzianskya divaricata*	0.1	0.1

PHOTOS





Site Name:	LGM01
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	18/08/2025
GPS Location:	GDA2020 Zone 50 339012.634906218E 6763062.91691921N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sandy Clay
Soil Colour:	White
Soil Condition:	Moist
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Grazing
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	339013	6763063	
Corner 2	339021	6763064	
Corner 3	339022	6763054	
Corner 4	339013	6763054	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Actinobole uliginosum	0.1	0.1
**Aira cupaniana*		
Allocasuarina campestris	2.5	8
**Arctotheca calendula*	0.1	1.5
Arthropodium dyeri	0.3	0.1
Austrostipa elegantissima	0.3	0.3
**Avena barbata*	0.3	5
Blennospora drummondii	0.2	0.1
Borya sphaerocephala	0.1	0.1
Brachyscome iberidifolia	0.1	0.2
**Briza maxima*	0.3	0.5
Burchardia congesta	0.3	0.1
Calandrinia ?baccata	0.1	0.1
Centrolepis aristata		
Centrolepis drummondiana		
Crassula closiana		
Crassula colorata var. *acuminata*	0.1	0.1
Desmocladus asper	0.3	0.1
Drosera erythrorhiza	0.1	0.3
Drosera glanduligera	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1

Gilberta tenuifolia		
Gnephosis tenuissima	0.1	0.4
Gonocarpus nodulosus	0.1	0.1
Hakea orthorrhyncha var. *filiformis*	1	0.2
Hyalosperma demissum		
**Hypochaeris glabra*	0.1	0.5
Melaleuca concreta	2	6.5
Melaleuca radula	1	1
**Monoculus monstrosus*	0.1	0.2
Neurachne alopecuroidea	0.1	0.1
Panaetia lessonii	0.1	0.1
**Pentameris airoides* subsp. *airoides*		
**Petrorhagia dubia*	0.2	0.1
Poaceae sp.	0.1	0.4
Podotheca gnaphalioides	0.1	0.3
Quinetia urvillei	0.1	0.3
Schoenus nanus		
Siemssenia capillaris	0.2	0.3
Stylidium androsaceum		
Thryptomene nitida (P3)	0.4	3.5
Thysanotus ?patersonii		0.1
Trachymene cyanopetala		
Trachymene pilosa		
Trachymene ?pilosa	0.1	0.5
**Urospermum picroides*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.1
Waitzia acuminata	0.1	0.3
Waitzia acuminata var. *acuminata*		
Waitzia acuminata var. *albicans*		

PHOTOS



Site Name:	LGM02
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	19/08/2025
GPS Location:	GDA2020 Zone 50 318086.76E 6752706.08N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	NE
Soil Type:	Sand
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, Animal
Fire:	1-5 Years
Comments:	Kangaroos.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	318087	6752706	
Corner 2	318097	6752707	
Corner 3	318096	6752697	
Corner 4	318087	6752697	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	0.3	0.1
Acanthocarpus ?sp. Ajana (C.A. Gardner 8596)	0.3	0.2
Anigozanthos humilis subsp. *humilis*	0.1	0.1
Anthocercis ilicifolia subsp. *ilicifolia*		
Banksia attenuata	0.1	0.1
Banksia prionotes	0.3	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calothamnus glaber	0.7	2
Dampiera oligophylla	0.3	0.2
Daviesia divaricata subsp. *divaricata*		
Daviesia nudiflora subsp. *hirtella*	0.1	0.1
Drosera erythrorhiza	0.1	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.3	0.1
Eremaea beaufortioides var. *microphylla*	0.3	0.3
Hibbertia hypericoides subsp. *hypericoides*	0.5	2.5
**Hypochaeris glabra*	0.1	0.3
Isotropis cuneifolia subsp. *cuneifolia*	0.1	0.1
Laxmannia ?omnifertilis	0.1	0.1
Lepidobolus preissianus subsp. *volubilis*	0.3	0.1
Lepidosperma aff. humile	0.3	0.3

Leporella fimbriata	0.1	0.1
Leptospermopsis oligandra	0.3	0.1
Melaleuca leuropoma		
Mesomelaena pseudostygia	0.3	0.4
Neurachne alopecuroidea	0.1	0.1
Opercularia vaginata	0.1	0.2
Persoonia acicularis	0.3	2
Pileanthus filifolius	0.3	0.1
Quinetia urvillei	0.1	0.1
Scaevola sp. (aff. canescens)	0.2	0.2
Schoenus latitans	0.1	0.1
Stawellia dimorphantha (P4)	0.1	0.1
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Tersonia cyathiflora	0.3	2.3
Trachymene ?pilosa	0.1	0.3
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.2
Verticordia grandis	0.3	0.1
Waitzia acuminata	0.1	0.2

PHOTOS



Site Name:	LGM03
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	19/08/2025
GPS Location:	GDA2020 Zone 50 318314.40303219E 6752298.32133611N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	NW
Soil Type:	Sand
Soil Colour:	Yellow
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - E - Excellent
Disturbance:	Weeds
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	318314	6752298	
Corner 2	318323	6752300	
Corner 3	318324	6752289	
Corner 4	318315	6752288	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia cavealis	0.4	0.2
Acanthocarpus ?sp. Ajana (C.A. Gardner 8596)	0.2	0.1
Allocasuarina campestris	1.8	1
Apectospermum spinescens	0.2	0.1
**Avena barbata*	0.2	0.1
Baeckea sp. Walkaway (A.S. George 11249) (P3)	0.4	1
Banksia attenuata		
**Brassica tournefortii*	0.2	0.1
Burchardia congesta	0.2	0.1
Calothamnus glaber	1.4	5.5
Conospermum wycherleyi	0.7	2
Daviesia divaricata subsp. *divaricata*	0.3	0.3
Drosera humilis	0.1	0.1
Drosera minutiflora	0.1	0.1
Drosera thysanosepala		0.1
Ecdeiocolea monostachya	0.6	4
Eremaea beaufortioides var. *microphylla*	0.7	0.7
Grevillea ?obliquistigma	0.2	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.3	0.8
**Hypochaeris glabra*	0.1	0.1
Isotropis cuneifolia subsp. *cuneifolia*	0.1	0.1
Laxmannia sessiliflora subsp. *drummondii*	0.1	0.1

Leptospermopsis oligandra	0.6	0.1
Melaleuca leuropoma	0.5	3
Mesomelaena pseudostygia	0.3	0.4
Morelotia microcarpa	0.1	0.1
Persoonia acicularis	0.3	0.3
Petrophile macrostachya	0.4	0.2
Phymatocarpus porphyrocephalus	0.8	2
Pileanthus filifolius	0.3	0.2
Scaevola repens	0.1	0.1
Schoenus griffinianus (P4)	0.1	0.1
Schoenus latitans	0.1	0.1
**Sonchus oleraceus*	0.1	0.1
Stawellia dimorphantha (P4)	0.1	0.1
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Stirlingia latifolia	0.2	0.1
Trachymene ?pilosa	0.1	0.1
?*Tricoryne* sp.	0.1	0.1
**Trifolium subterraneum*	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
Verticordia grandis	1.1	0.2
Waitzia acuminata	0.1	0.1

PHOTOS



Site Name:	LGM04
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA2020 Zone 50 322711.41E 6752461.67N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sandy Clay
Soil Colour:	White
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, Animal
Fire:	10-20 Years
Comments:	Nearby paddocks -run off.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	322711	6752462	
Corner 2	322722	6752461	
Corner 3	322724	6752451	
Corner 4	322714	6752449	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Arctotheca calendula*	0.1	0.1
Austrostipa elegantissima		
**Avena barbata*	0.1	0.1
Babingtonia erecta	0.8	0.1
Banksia shuttleworthiana	0.3	0.1
Boronia cymosa		
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Cassytha flava		0.2
Caustis dioica	0.3	0.1
Centrolepis drummondiana	0.1	0.1
Conospermum wycherleyi	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Daviesia nudiflora subsp. *hirtella*	0.4	0.1
Drosera erythrorhiza	0.1	0.1
Drosera menziesii		0.1
Drosera porrecta	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.6	4.5
Geleznowia calycina		
Hibbertia hypericoides subsp. *hypericoides*	0.3	2.5

**Hypochaeris glabra*	0.1	0.1
Lepidosperma sp.	0.3	0.1
Leporella fimbriata	0.1	0.1
Leptospermopsis oligandra	0.7	0.2
Melaleuca leuropoma	0.5	3.5
Mesomelaena pseudostygia	0.3	3
Neurachne alopecuroidea	0.1	0.1
Olearia ?sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	0.2	0.1
Opercularia vaginata	0.1	0.1
Pileanthus filifolius	0.3	1.5
Ptilotus polystachyus	0.1	0.1
Scholtzia laxiflora	0.6	1
**Sonchus oleraceus*	0.3	0.1
Stenanthemum notiale subsp. *notiale*	0.1	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	0.1
?Tricoryne sp.	0.2	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.5
Verticordia grandis	0.9	1
**Vulpia bromoides*	0.1	0.2
Waitzia acuminata	0.1	0.2

PHOTOS



Site Name:	LGM05
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA2020 Zone 50 323620.71E 6752454.71N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	NW
Soil Type:	Sandy Clay
Soil Colour:	White
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, (other)
Fire:	10-20 Years
Comments:	Run off from nearby paddocks.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	323621	6752455	
Corner 2	323632	6752455	
Corner 3	323633	6752445	
Corner 4	323623	6752444	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina humilis		
Amphipogon turbinatus	0.2	0.1
**Arctotheca calendula*	0.1	0.4
Austrostipa elegantissima	0.6	3
**Avena barbata*	0.1	1
Banksia shuttleworthiana	0.6	0.3
**Brassica barrelieri* subsp. *oxyrrhina*	0.1	0.1
**Brassica tournefortii*	0.2	0.1
Burchardia congesta	0.3	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calandrinia corrigioloides	0.1	0.1
Calectasia hispida		
Calothamnus sanguineus		
Cassytha flava		0.1
Cassytha glabella forma *casuarinae*		0.1
Crassula colorata var. *acuminata*	1.1	0.1
Daviesia divaricata subsp. *divaricata*		
Daviesia pedunculata	0.3	0.1
Dianella revoluta		
Drosera erythrorhiza	0.1	1
Drosera menziesii		0.1

Drosera porrecta	0.2	0.1
Eremaea beaufortioides var. *microphylla*	0.4	0.3
Eucalyptus todtiana		
Hakea candolleana	0.3	0.1
Hakea lissocarpha	0.3	0.1
Hakea neospathulata	0.4	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.6	3.5
**Hypochaeris glabra*	0.1	7
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Leptospermopsis oligandra	0.4	0.1
Melaleuca leuropoma	0.7	6.5
Mesomelaena pseudostygia	0.3	0.4
Neurachne alopecuroidea	0.1	0.1
Pileanthus filifolius	0.3	0.2
Podotheca angustifolia	0.1	2
**Raphanus raphanistrum*	0.1	0.1
**Sonchus oleraceus*	0.1	0.1
Thryptomene racemulosa	0.3	0.1
Trachymene ?pilosa	0.1	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.1	2
Verticordia grandis		
**Vulpia bromoides*	0.1	7
**Wahlenbergia capensis*	0.2	0.1

Site Name:	LGM06
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	20/08/2025
GPS Location:	GDA2020 Zone 50 324027.26E 6752464.23N
Orientation:	90,180
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sandy Clay
Soil Colour:	grey (other)
Rock Outcrop:	No bedrock exposed
Vegetation Condition:	Southern Vegetation Condition - 3 - Very Good
Disturbance:	Weeds, (other) - Run off from paddocks
Fire:	10-20 years
Comments:	Run off from paddocks.

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	0.2	0.1
Acacia stenoptera	0.2	0.1
Amphipogon turbinatus	0.2	0.1
Anigozanthos humilis subsp. *humilis*	0.2	0.1
**Avena barbata*	0.3	0.5
Banksia shuttleworthiana	0.5	0.2
**Brassica tournefortii*	0.2	0.1
Burchardia congesta	0.2	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calectasia hispida	0.3	0.1
Cassytha flava		0.1
Caustis dioica	0.4	0.2
Conostylis candicans subsp. *procumbens*	0.2	0.2
Crassula colorata var. *acuminata*	0.1	0.1
Dampiera oligophylla	0.3	2.5
Daviesia pedunculata	0.3	0.2
Desmocladus parthenicus	0.3	0.1
Drosera erythrorhiza	0.1	0.2
Drosera menziesii		0.1
Drosera porrecta	0.1	0.1
Eremaea beaufortioides var. *microphylla*	0.5	1
Eucalyptus todtiana		
Goodenia caerulea	0.2	0.1
Hibbertia hypericoides subsp. *hypericoides*	0.4	2.5
**Hypochaeris glabra*	0.1	1.5
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Jacksonia hakeoides	0.6	3
Lechenaultia hirsuta	0.3	0.1

Lyginia imberbis	0.3	0.2
Melaleuca leuropoma	0.4	3.5
Mesomelaena pseudostygia	0.3	0.3
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	1.7	0.1
Patersonia occidentalis	0.3	0.1
Pileanthus filifolius	0.3	0.2
Podotheca angustifolia	0.1	0.5
Ptilotus polystachyus	0.2	0.1
Scaevola sp. (aff. canescens)	0.1	0.1
Thryptomene racemulosa	0.3	0.1
Thysanotus ?patersonii		0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	3.5
**Vulpia bromoides*	0.1	0.5

PHOTOS





Site Name:	LGM07
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 335017.55E 6761662.62N
Landform Type:	Hillock
Slope Class:	Gently Inclined (3°)
Aspect:	N
Soil Type:	Sandy Clay Loam
Soil Colour:	Brown
Soil Condition:	Waterlogged in places, possible outcrop close to the surface?
Rock Outcrop:	No bedrock exposed
CF Abundance:	<2%
CF Sizes:	60-200mm, 20-60mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Clearing, Animal
Fire:	10-20 Years
Comments:	Possible grazing,cattle in the area in the past, clearing nearby.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335018	6761663	
Corner 2	335028	6761663	
Corner 3	335029	6761653	
Corner 4	335022	6761650	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Actinobole uliginosum	0.1	0.1
**Aira cupaniana*		
**Arctotheca calendula*	0.1	0.1
Arthropodium dyeri		
Austrostipa elegantissima	1	0.1
**Avena barbata*	0.3	0.2
Borya sphaerocephala	0.1	1.5
Brachyscome perpusilla	0.1	0.1
Burchardia congesta	0.2	0.1
Caesia ?micrantha	0.2	0.1
Centrolepis drummondiana	0.1	0.1
Chamaescilla versicolor		
Cheilanthes adiantoides	0.1	0.5
Crassula closiana	0.1	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Daucus glochidiatus	0.1	1.5
Drosera glanduligera	0.1	0.1

Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Erymophyllum tenellum	0.1	0.1
Eucalyptus eudesmioides		
Gnephosis tenuissima	0.1	0.1
Goodenia cycnopotamica	0.1	0.1
Hakea preissii		
Hyalosperma demissum	0.1	0.1
Hyalosperma glutinosum subsp. *glutinosum*	0.1	0.1
**Hypochaeris glabra*	0.1	0.4
Isoetopsis graminifolia	0.1	0.3
Isolepis congrua		
**Lysimachia arvensis*	0.1	0.1
Melaleuca acutifolia	2.2	6
Melaleuca concreta	1.5	2
**Monoculus monstrosus*		
**Pentameris airoides* subsp. *airoides*	0.1	1.5
**Plantago coronopus* subsp. *commutata*	0.1	0.1
Rhodanthe laevis	0.1	0.1
Schoenus odontocarpus	0.1	0.1
Siemssenia capillaris		
Siloxerus multiflorus	0.1	15
**Sonchus oleraceus*	0.1	0.1
Thryptomene nitida (P3)	0.8	
Thysanotus sp.		0.1
Trachymene cyanopetala		
Trachymene ornata		
Trachymene pilosa	0.1	0.1
Trachymene ?pilosa	0.1	0.1
**Trifolium subterraneum*	0.1	0.3
**Vulpia bromoides*	0.1	1.5
Wahlenbergia ?preissii	0.1	0.1
Waitzia acuminata	0.1	0.3
Waitzia acuminata var. *acuminata*		
Waitzia acuminata var. *albicans*		

PHOTOS



Site Name:	LGM08
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	22/08/2025
GPS Location:	GDA2020 Zone 50 332372.72E 6752572.86N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	E
Soil Type:	Sandy Clay
Soil Colour:	Brown
Rock Outcrop:	No bedrock exposed
CF Abundance:	2-10%
CF Sizes:	6-20mm, 20-60mm, 2-6mm
CF Types:	Granite, Laterite
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Animal, Weeds, (other)
Fire:	10-20 Years
Comments:	Mechanical disturbance adjacent to site.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	332373	6752573	
Corner 2	332383	6752573	
Corner 3	332384	6752564	
Corner 4	332374	6752563	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	0.8	0.1
Austrostipa elegantissima	0.3	0.2
Austrostipa macalpinei	0.1	0.1
**Avena barbata*	0.3	0.2
Banksia fraseri var. *crebra* (P3)	0.4	0.5
Banksia shuttleworthiana	0.7	0.5
Blennospora drummondii	0.1	0.1
Boronia cymosa	0.3	0.3
Borya sphaerocephala	0.1	0.1
**Brassica tournefortii*	0.2	0.1
**Bromus diandrus*	0.3	0.5
Burchardia congesta	0.2	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calothamnus quadrifidus subsp. *angustifolius*	1.3	8
Centrolepis aristata	0.1	0.1
Chorizema aciculare subsp. *laxum*	0.4	0.1
Crassula colorata var. *acuminata*	0.1	0.1
Cryptandra pungens		

Cyanothamnus coerulescens subsp. *spinescens*	0.4	0.2
Daviesia hakeoides subsp. *hakeoides*	0.5	2
Diplopeltis huegelii subsp. *subintegra*	1.1	0.2
Drosera erythrorhiza	0.1	0.1
Drosera glanduligera	0.1	0.1
Drosera menziesii		0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.5	5
**Ficinia marginata*	0.1	0.1
Gonocarpus nodulosus	0.1	0.1
Haemodorum discolor	1.2	0.3
Hakea auriculata		
Hakea lissocarpha	1	7
Hibbertia hypericoides subsp. *hypericoides*	0.4	0.5
Hyalosperma demissum	0.1	2
Hydrocotyle callicarpa	0.1	0.1
**Hypochaeris glabra*	0.1	0.2
Isotropis cuneifolia subsp. *cuneifolia*	0.2	0.1
Lepidobolus preissianus subsp. *preissianus*	0.2	0.2
Lepidosperma tenue	0.2	0.1
Melaleuca aspalathoides	0.3	0.4
Melaleuca leuropoma	0.5	0.2
Mesomelaena preissii	0.3	0.7
Mirbelia trichocalyx	0.3	0.2
**Monoculus monstrosus*	0.2	0.1
Opercularia vaginata	0.1	0.1
Patersonia graminea	0.3	0.1
Prasophyllum sp.	0.5	0.1
Rhodanthe laevis	0.1	0.1
Scaevola sp. (aff. canescens)	0.3	0.1
Schoenus armeria	0.2	0.1
Siloxerus multiflorus	0.1	2.1
**Sonchus oleraceus*	0.1	0.1
Thryptomene racemulosa	0.4	0.1
Thysanotus ?patersonii		0.1
Trachymene ?pilosa	0.1	1
Tripterococcus brunonis	0.1	0.1
**Ursinia anthemoides* subsp. *anthemoides*	0.1	0.1
**Vulpia bromoides*	0.1	2
Waitzia acuminata	0.2	0.1

PHOTOS



Site Name:	LGM09
Site Type:	QUADRAT
Dimensions:	10m x 10m
Survey Date:	25/08/2025
GPS Location:	GDA2020 Zone 50 324950.22E 6752490.47N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	None
Soil Type:	Sandy Clay
Soil Colour:	White
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - VG - Very Good
Disturbance:	Weeds, (other), Animal
Fire:	10-20 Years
Comments:	Run-off from adjacent paddock.

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	324950	6752490	
Corner 2	324961	6752490	
Corner 3	324960	6752480	
Corner 4	324950	6752480	

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia dilatata		
Acacia scirpifolia	0.3	0.1
Adenanthos cygnorum subsp. *cygnorum*	0.1	0.1
Allocasuarina humilis	0.2	0.1
Austrostipa elegantissima	0.4	0.1
Austrostipa macalpinei	0.1	0.1
**Avena barbata*	0.2	0.5
Banksia shuttleworthiana	0.4	0.1
Blennospora drummondii	0.1	0.1
Burchardia congesta	0.2	0.1
Caladenia flava subsp. *flava*	0.1	0.1
Calothamnus quadrifidus subsp. *angustifolius*	0.8	0.7
Cassytha glabella forma *casuarinae*		0.1
Conospermum wycherleyi	0.8	0.3
Crassula colorata var. *acuminata*	0.1	0.1
Dampiera oligophylla	0.3	0.1
Daviesia divaricata subsp. *divaricata*	0.4	0.5
Daviesia pedunculata		
Dianella revoluta		
Drosera erythrorhiza	0.1	0.1
Drosera menziesii		0.1

Drosera porrecta	0.1	0.1
Drosera sp. Branched styles (S.C. Coffey 193)		0.1
Ecdeiocolea monostachya	0.3	1
Eremaea beaufortioides var. *microphylla*	0.4	0.3
Eucalyptus todtiana	3.5	17
Goodenia reinwardtii		
Hibbertia hypericoides subsp. *hypericoides*	0.3	2
**Hypochaeris glabra*	0.1	1
Lepidobolus preissianus subsp. *preissianus*	0.3	2.5
Lepidobolus preissianus subsp. *volubilis*	0.3	0.5
Leptospermopsis oligandra	0.3	0.1
Melaleuca leuropoma	0.3	3.5
Mesomelaena pseudostygia	0.3	2.5
Millotia tenuifolia var. *tenuifolia*	0.1	0.1
**Pentameris airoides* subsp. *airoides*	0.1	0.1
Pileanthus filifolius	0.3	0.4
Poaceae sp.	0.1	0.5
Podotheca angustifolia	0.1	0.5
Scaevola sp. (aff. canescens)	0.2	0.1
**Sonchus oleraceus*	0.1	0.1
Thysanotus patersonii		0.1
Trachymene ?pilosa	0.1	0.5
**Ursinia anthemoides* subsp. *anthemoides*	0.1	1
Verticordia grandis	1.3	0.4
Waitzia acuminata	0.1	0.2

PHOTOS



Site Name:	LGMR01
Site Type:	RELEVE
Survey Date:	19/08/2025
GPS Location:	GDA2020 Zone 50 339038.67E 6763150.97N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	SE
Soil Type:	Sandy Clay
Soil Colour:	White brown (other)
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Southern Vegetation Condition - 4 - Good
Disturbance:	Grazing, Weeds
Fire:	10-20 years
Comments:	Low isolated trees over tall open shrubland over low open shrubland over grassland (weeds)

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	4	3.5
Arthropodium dyeri	0.3	0.2
**Avena barbata*	0.3	5
Brachyscome iberidifolia	0.1	9
Cheilanthes adiantoides	0.1	6
Clematis linearifolia		
Drosera sp. Branched styles (S.C. Coffey 193)		
Ericomyrtus tenuior	0.8	0.3
Eucalyptus loxophleba subsp. *loxophleba*	4.5	3
Lepidosperma costale		
Melaleuca radula	1.7	1
**Monoculus monstrosus*		
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)		
Trachymene ?pilosa		
Waitzia acuminata		

Site Name:	LGMR02
Site Type:	RELEVE
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 335413.298903978E 6761897.23734013N
Landform Type:	Hillock
Slope Class:	Very Gently Inclined (1°)
Aspect:	NW
Soil Type:	Sandy Clay Loam
Soil Colour:	Brown
Rock Outcrop:	Laterite, <2% bedrock exposed
CF Abundance:	2-10%
CF Sizes:	6-20mm, 20-60mm, 60-200mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Grazing, (other)
Fire:	10-20 Years
Comments:	Possibly grazing in the past, fertilizers from the field?

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	335413	6761897	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris		
**Arctotheca calendula*		
**Avena barbata*	0.4	15
Banksia fraseri var. *crebra* (P3)	0.3	1
Burchardia congesta		
Chamaescilla versicolor		
Crassula colorata var. *acuminata*		
Dampiera oligophylla		
Drosera erythrorhiza		
Ecdeiocolea monostachya	0.5	5
Hakea auriculata	0.7	1
**Hypochaeris glabra*	0.1	2
Melaleuca aspalathoides		
Mesomelaena pseudostygia	0.3	1
Neurachne alopecuroidea		
**Plantago coronopus* subsp. *commutata*		
Podotheca gnaphalioides		
Ptilotus polystachyus		
Schoenus latitans		

Trachymene pilosa		
**Ursinia anthemoides* subsp. *anthemoides*	0.2	0.5

PHOTOS



Site Name:	LGMR03
Site Type:	RELEVE
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 334842.694756887E 6758390.18575904N
Landform Type:	Drainage Line
Slope Class:	Very Gently Inclined (1°)
Aspect:	SSW
Soil Type:	Clay Loam
Soil Colour:	Brown
Rock Outcrop:	No bedrock exposed
CF Abundance:	<2%
CF Sizes:	20-60mm
CF Types:	Laterite
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Clearing, Animal
Fire:	10-20 Years

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334843	6758390	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
**Avena barbata*	1.2	15
Enchylaena tomentosa var. *tomentosa*		
Eucalyptus camaldulensis subsp. *obtusa*	13	15
Melaleuca viminea subsp. *viminea*	1.5	20
Poaceae sp.	0.1	50
Typha domingensis	1.5	5

PHOTOS



Site Name:	LGMR04
Site Type:	RELEVE
Survey Date:	21/08/2025
GPS Location:	GDA2020 Zone 50 334481.505368967E 6756839.95685009N
Landform Type:	Undulating Plain
Slope Class:	Level (0°)
Aspect:	None
Soil Type:	Sandy Clay
Soil Colour:	Brown
Soil Condition:	White sand scattered on top
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Animal
Fire:	10-20 Years
Comments:	Rabbits, kangaroos and historically cattle

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	334482	6756840	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Allocasuarina campestris	3	6
**Arctotheca calendula*	0.2	2
**Avena barbata*	0.4	0.5
Caladenia flava subsp. *flava*		
Cheilanthes adiantoides	0.1	1
Chthonocephalus pseudevax		
Drosera erythrorhiza		
Drosera sp. Branched styles (S.C. Coffey 193)		
Ecdeiocolea monostachya	0.6	5
Gnephosis tenuissima		
Hyalosperma glutinosum subsp. *glutinosum*		
**Hypochaeris glabra*	0.1	0.5
**Monoculus monstrosus*		
Trachymene pilosa		
**Ursinia anthemoides* subsp. *anthemoides*		
Waitzia acuminata		

PHOTOS



Site Name:	LGMR06
Site Type:	RELEVE
Survey Date:	22/08/2025
GPS Location:	GDA2020 Zone 50 333223.84E 6756905.96N
Landform Type:	Undulating Plain
Slope Class:	Very Gently Inclined (1°)
Aspect:	W
Soil Type:	Sandy Clay
Soil Colour:	White
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Animal, (other)
Fire:	5-10 Years
Comments:	Run-off from adjacent farming field

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	333224	6756906	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia lasiocarpa var. *lasiocarpa*	1	0.5
Acacia latipes subsp. *latipes*	1	0.5
Allocasuarina campestris		
**Avena barbata*		
Caladenia radialis		
Conospermum wycherleyi		
Crassula colorata var. *acuminata*		
Dampiera spicigera		
Grevillea biternata		
Hibbertia hypericoides subsp. *hypericoides*		
**Hypochaeris glabra*	0.1	15
Jacksonia hakeoides	0.8	4
Leptospermopsis oligandra		
Lyginia imberbis	0.3	2
Melaleuca leuropoma	0.4	6
Mesomelaena pseudostygia	0.3	0.5
**Monoculus monstrosus*		
Pileanthus filifolius	0.5	4
Podotheca angustifolia		
**Raphanus raphanistrum*	0.2	3
**Ursinia anthemoides* subsp. *anthemoides*		
**Vulpia bromoides*	0.1	7

PHOTOS



Site Name:	LGMR07
Site Type:	RELEVE
Survey Date:	22/08/2025
GPS Location:	GDA2020 Zone 50 332986.07E 6752565.98N
Landform Type:	Undulating Plain
Slope Class:	Gently Inclined (3°)
Aspect:	NE
Soil Type:	Sandy Clay
Soil Colour:	Grey
Rock Outcrop:	No bedrock exposed
CF Abundance:	0%
Vegetation Condition:	Combined Vegetation Condition - G - Good
Disturbance:	Weeds, Animal, (other)
Fire:	10-20 Years
Comments:	Run-off from adjacent farming field

SITE POINTS

Label	Easting	Northing	Comments
Corner 1	332986	6752566	
Corner 2			
Corner 3			
Corner 4			

SPECIES LIST

Taxon Name	Avg. Height	Cover Alive
Acacia blakelyi		
Acacia saligna		
**Arctotheca calendula*		
Austrostipa elegantissima		
**Avena barbata*		
Conostylis candicans subsp. *procumbens*		
Desmocladus asper		
Grevillea biternata		
**Hypochaeris glabra*		
Labichea lanceolata subsp. *lanceolata*		
**Monoculus monstrosus*		
Muehlenbeckia adpressa		
Ptilotus polystachyus		
Scholtzia laxiflora		
**Ursinia anthemoides* subsp. *anthemoides*		

PHOTOS



Appendix G: WAH formal identification

WAH Accession no.	Coll #	Consultant ID	WA Herbarium ID
TR 0007	HANop.03	*Banksia fraseri* var. *crebra*	*Banksia fraseri* var. *crebra*
	HAN05.01	*Thryptomene nitida*	*Thryptomene nitida*
TR 0214	BELCV.038	*Baeckea* sp. Walkaway (A.S. George 11249)	*Baeckea* sp. Walkaway (A.S. George 11249)
	FID026	*Banksia elegans*	*Banksia elegans*
	MID01	*Banksia fraseri* var. *crebra*	*Banksia fraseri* var. *crebra*
	BELCV.030	*Comesperma rhadinocarpum*	*Comesperma rhadinocarpum*
	BELCV.011	*Hopkinsia anoectocolea*	*Hopkinsia anoectocolea*
	MID011	**Juncus hybridus*	**Juncus hybridus*
	MID12	*Lechenaultia juncea*	*Lechenaultia juncea*
	BELCV.014	*Malleostemon decipiens*	*Malleostemon decipiens*
	MID013	*Persoonia rudis*	*Persoonia rudis*
	BELBC.032	*Poranthera asybosca*	*Poranthera asybosca*
	MH03	*Poranthera moorokatta*	*Poranthera moorokatta*
	MID06	*Poranthera moorokatta*	*Poranthera moorokatta*
	BELCV.035	*Poranthera sp.*	*Poranthera asybosca*
	FID04	*Schoenus griffinianus*	*Schoenus griffinianus*
	BELCV.024	*Schoenus* sp. Eneabba (F. Obbens & C. Godden I154)	*Schoenus* sp. Eneabba (F. Obbens & C. Godden I154)
	BELCV.015	*Schoenus variicellae*	*Schoenus variicellae*
	BELBC.027	*Stawellia dimorphantha*	*Stawellia dimorphantha*
	BEL.006	*Stylidium drummondianum*	*Stylidium drummondianum*
	BELCV.018	*Stylidium longitubum*	*Stylidium longitubum*
	BELCV.002	*Stylidium torticarpum*	*Stylidium torticarpum*
	BELBC.008	*Thryptomene nitida*	*Thryptomene nitida*
	BELCV.032	*Thysanotus kalbarriensis*	*Thysanotus kalbarriensis*
	MID07	*Tricoryne soullierae*	*Tricoryne soullierae*
	BELCV.012	*Verticordia densiflora* var. *roseostella*	*Verticordia densiflora* var. *roseostella*
TR 0253	CVT3.01	*Calytrix chrysantha*	*Calytrix flavescens*
	FID033	*Mesomelaena stygia* subsp. *deflexa*	*Mesomelaena stygia* subsp. *deflexa*
	MID16	*Tricoryne* sp. Eneabba (E.A. Griffin 1200)	*Tricoryne* sp. Eneabba (E.A. Griffin 1200)
	FID032	*Verticordia luteola* var. *luteola*	*Verticordia luteola* var. *luteola*

Appendix H: Reconciled species list

Non-Reconciled Taxon	Reconciled Taxon
*?*Plantago coronopus*	Removed
**Aira cupaniana*	**Aira cupaniana*
**Arctotheca calendula*	**Arctotheca calendula*
**Avena barbata*	**Avena barbata*
**Brassica barrelieri* subsp. *oxyrrhina*	**Brassica barrelieri* subsp. *oxyrrhina*
**Brassica tournefortii*	**Brassica tournefortii*
**Brassica x napus*	**Brassica x napus*
**Briza maxima*	**Briza maxima*
**Bromus diandrus*	**Bromus diandrus*
**Cotula bipinnata*	**Cotula bipinnata*
**Cotula coronopifolia*	**Cotula coronopifolia*
**Echium plantagineum*	**Echium plantagineum*
**Ehrharta brevifolia* var. *cuspidata*	**Ehrharta brevifolia* var. *cuspidata*
**Ehrharta longiflora*	**Ehrharta longiflora*
**Erodium botrys*	**Erodium botrys*
**Ficinia marginata*	**Ficinia marginata*
**Hypochaeris glabra*	**Hypochaeris glabra*
**Lamarckia aurea*	**Lamarckia aurea*
**Lolium perenne*	**Lolium perenne*
**Lolium rigidum*	**Lolium rigidum*
**Lupinus cosentinii*	**Lupinus cosentinii*
**Lysimachia arvensis*	**Lysimachia arvensis*
**Lysimachia loeflingii*	**Lysimachia loeflingii*
**Mesembryanthemum nodiflorum*	**Mesembryanthemum nodiflorum*
**Monoculus monstrosus*	**Monoculus monstrosus*
**Ornithopus compressus*	**Ornithopus compressus*
**Parentucellia latifolia*	**Parentucellia latifolia*
**Pentameris airoides* subsp. *airoides*	**Pentameris airoides* subsp. *airoides*
**Petrorhagia dubia*	**Petrorhagia dubia*
**Plantago coronopus* subsp. *commutata*	**Plantago coronopus* subsp. *commutata*
**Raphanus raphanistrum*	**Raphanus raphanistrum*
**Romulea rosea* var. *australis*	**Romulea rosea* var. *australis*
**Rostraria pumila*	**Rostraria pumila*
**Silene gallica* var. *gallica*	**Silene gallica* var. *gallica*
**Sonchus oleraceus*	**Sonchus oleraceus*
**Trifolium subterraneum*	**Trifolium subterraneum*
**Urospermum picroides*	**Urospermum picroides*
**Ursinia anthemoides* subsp. *anthemoides*	**Ursinia anthemoides* subsp. *anthemoides*
**Vulpia bromoides*	**Vulpia bromoides*
**Vulpia muralis*	**Vulpia muralis*

Non-Reconciled Taxon	Reconciled Taxon
**Vulpia myuros*	**Vulpia myuros*
**Wahlenbergia capensis*	**Wahlenbergia capensis*
**Zaluzianskya divaricata*	**Zaluzianskya divaricata*
?Enchylaena tomentosa var. *tomentosa*	Removed
?Olearia sp.	Removed
?Tricoryne sp.	Removed
Acacia ?lasiocarpa	*Acacia lasiocarpa*
Acacia acuminata	*Acacia acuminata*
Acacia blakelyi	*Acacia blakelyi*
Acacia cavealis	*Acacia cavealis*
Acacia daphnifolia	*Acacia daphnifolia*
Acacia dilatata	*Acacia dilatata*
Acacia lasiocarpa var. *lasiocarpa*	*Acacia lasiocarpa*
Acacia neurophylla subsp. *neurophylla*	*Acacia neurophylla* subsp. *neurophylla*
Acacia pulchella var. *glaberrima*	*Acacia pulchella* var. *glaberrima*
Acacia saligna	*Acacia saligna*
Acacia scirpifolia	*Acacia scirpifolia*
Acacia sphacelata subsp. *sphacelata*	*Acacia sphacelata* subsp. *sphacelata*
Acacia stenoptera	*Acacia stenoptera*
Acacia tetragonophylla	*Acacia tetragonophylla*
*Acanthocarpus ?*sp. Ajana (C.A. Gardner 8596)	*Acanthocarpus* sp. Ajana (C.A. Gardner 8596)
Acanthocarpus preissii	*Acanthocarpus preissii*
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	*Acanthocarpus* sp. Ajana (C.A. Gardner 8596)
Actinobole uliginosum	*Actinobole uliginosum*
Adenanthos cygnorum subsp. *cygnorum*	*Adenanthos cygnorum* subsp. *cygnorum*
Alexgeorgea nitens	*Alexgeorgea nitens*
Allocasuarina campestris	*Allocasuarina campestris*
Allocasuarina huegeliana	*Allocasuarina huegeliana*
Allocasuarina humilis	*Allocasuarina humilis*
Allocasuarina microstachya	*Allocasuarina microstachya*
Amphipogon caricinus	*Amphipogon caricinus*
Amphipogon caricinus var. caricinus	*Amphipogon caricinus*
Amphipogon turbinatus	*Amphipogon turbinatus*
Amyema miraculosa subsp. *miraculosa*	*Amyema miraculosa* subsp. *miraculosa*
Amyema preissii	*Amyema preissii*
Anigozanthos humilis subsp. *humilis*	*Anigozanthos humilis* subsp. *humilis*
Anthocercis ilicifolia subsp. *ilicifolia*	*Anthocercis ilicifolia* subsp. *ilicifolia*
Apectospermum spinescens	*Apectospermum spinescens*
Aristida holathera var. *holathera*	*Aristida holathera* var. *holathera*
Arnocrinum preissii	*Arnocrinum preissii*

Non-Reconciled Taxon	Reconciled Taxon
Arthropodium dyeri	*Arthropodium dyeri*
Austrostipa ?nitida	*Removed*
Austrostipa elegantissima	*Austrostipa elegantissima*
Austrostipa macalpinei	*Austrostipa macalpinei*
Babingtonia camphorosmae	*Babingtonia camphorosmae*
Babingtonia erecta	*Babingtonia erecta*
Babingtonia grandiflora	*Babingtonia grandiflora*
Baeckea sp. Walkaway (A.S. George 11249)	*Baeckea* sp. Walkaway (A.S. George 11249)
Banksia attenuata	*Banksia attenuata*
Banksia dallanneyi subsp. *media*	*Banksia dallanneyi* subsp. *media*
Banksia fraseri var. *crebra*	*Banksia fraseri* var. *crebra*
Banksia hookeriana	*Banksia hookeriana*
Banksia prionotes	*Banksia prionotes*
Banksia scabrella	*Banksia scabrella*
Banksia shuttleworthiana	*Banksia shuttleworthiana*
Blennospora drummondii	*Blennospora drummondii*
Boronia cymosa	*Boronia cymosa*
Borya sphaerocephala	*Borya sphaerocephala*
Brachyscome iberidifolia	*Brachyscome iberidifolia*
Brachyscome perpusilla	*Brachyscome perpusilla*
Brachyscome pusilla	*Brachyscome pusilla*
Burchardia congesta	*Burchardia congesta*
Caesia ?micrantha	*Caesia micrantha*
Caesia micrantha	*Caesia micrantha*
Caladenia ?dimidia	Removed
Caladenia ?flava	*Caladenia flava*
Caladenia flava subsp. *flava*	*Caladenia flava*
Caladenia longicauda subsp. *borealis*	*Caladenia longicauda* subsp. *borealis*
Caladenia radialis	*Caladenia radialis*
Caladenia varians	*Caladenia varians*
Calandrinia ?baccata	*Calandrinia baccata*
Calandrinia ?brevipedata	Removed
Calandrinia ?corrigioloides	*Calandrinia corrigioloides*
Calandrinia baccata	*Calandrinia baccata*
Calandrinia corrigioloides	*Calandrinia corrigioloides*
Calandrinia eremaea	*Calandrinia eremaea*
Calandrinia granulifera	*Calandrinia granulifera*
Calectasia hispida	*Calectasia hispida*
Calothamnus glaber	*Calothamnus glaber*
Calothamnus quadrifidus subsp. *angustifolius*	*Calothamnus quadrifidus* subsp. *angustifolius*

Non-Reconciled Taxon	Reconciled Taxon
Calothamnus sanguineus	*Calothamnus sanguineus*
Calytrix ?flavescens	Removed
Calytrix gracilis	*Calytrix gracilis*
Calytrix strigosa	*Calytrix strigosa*
Cassytha aurea var. *hirta*	*Cassytha aurea* var. *hirta*
Cassytha flava	*Cassytha flava*
Cassytha glabella forma *casuarinae*	*Cassytha glabella*
Cassytha glabella forma *dispar*	*Cassytha glabella*
Cassytha racemosa forma *?pilosa*	Removed
Caustis dioica	*Caustis dioica*
Centrolepis aristata	*Centrolepis aristata*
Centrolepis drummondiana	*Centrolepis drummondiana*
Centrolepis pilosa	*Centrolepis pilosa*
Centrolepis polygyna	*Centrolepis polygyna*
Cephalosorus carpesioides	*Cephalosorus carpesioides*
Ceratogyne obionoides	*Ceratogyne obionoides*
Chamaescilla versicolor	*Chamaescilla versicolor*
Cheilanthes adiantoides	*Cheilanthes adiantoides*
Chordifex sinuosus	*Chordifex sinuosus*
Chorizema aciculare subsp. *laxum*	*Chorizema aciculare* subsp. *laxum*
Chorizema racemosum	*Chorizema racemosum*
Chthonocephalus pseudevax	*Chthonocephalus pseudevax*
Clematicissus angustissima	*Clematicissus angustissima*
Comesperma integerrimum	*Comesperma integerrimum*
Comesperma rhadinocarpum	*Comesperma rhadinocarpum*
Comesperma volubile	*Comesperma volubile*
Conospermum canaliculatum	*Conospermum canaliculatum*
Conospermum stoechadis	*Conospermum stoechadis*
Conospermum unilaterale	*Conospermum unilaterale*
Conospermum wycherleyi	*Conospermum wycherleyi*
Conostylis androstemma	*Conostylis androstemma*
Conostylis candicans	*Conostylis candicans*
Conostylis candicans subsp. *candicans*	*Conostylis candicans*
Conostylis candicans subsp. *procumbens*	*Conostylis candicans*
Conostylis canteriata	*Conostylis canteriata*
Conostylis dielsii subsp. dielsii	*Conostylis dielsii* subsp. *dielsii*
Conostylis resinosa	*Conostylis resinosa*
Corynotheca dichotoma	*Corynotheca dichotoma*
Corynotheca micrantha	*Corynotheca micrantha*
Crassula closiana	*Crassula closiana*

Non-Reconciled Taxon	Reconciled Taxon
Crassula colorata var. *acuminata*	*Crassula colorata*
Crassula colorata var. *colorata*	*Crassula colorata*
Crassula decumbens var. *decumbens*	*Crassula decumbens* var. *decumbens*
Cristonia stenophylla	*Cristonia stenophylla*
Cryptandra pungens	*Cryptandra pungens*
Cyanicula gemmata	*Cyanicula gemmata*
Cyanothamnus coerulescens subsp. *spinescens*	*Cyanothamnus coerulescens* subsp. *spinescens*
Dampiera lavandulacea	*Dampiera lavandulacea*
Dampiera lindleyi	*Dampiera lindleyi*
Dampiera oligophylla	*Dampiera oligophylla*
Dampiera spicigera	*Dampiera spicigera*
Darwinia pauciflora	*Darwinia pauciflora*
Daucus glochidiatus	*Daucus glochidiatus*
Daviesia divaricata subsp. *divaricata*	*Daviesia divaricata* subsp. *divaricata*
Daviesia hakeoides subsp. *hakeoides*	*Daviesia hakeoides* subsp. *hakeoides*
Daviesia incrassata subsp. *teres*	*Daviesia incrassata* subsp. *teres*
Daviesia nudiflora subsp. *hirtella*	*Daviesia nudiflora* subsp. *hirtella*
Daviesia oxyclada	*Daviesia oxyclada*
Daviesia pedunculata	*Daviesia pedunculata*
Desmocladus asper	*Desmocladus asper*
Desmocladus parthenicus	*Desmocladus parthenicus*
Dianella revoluta	*Dianella revoluta*
Dioscorea hastifolia	*Dioscorea hastifolia*
Diplolaena leemaniana	*Diplolaena leemaniana*
Diplopeltis huegelii subsp. *subintegra*	*Diplopeltis huegelii* subsp. *subintegra*
Diuris refracta	*Diuris refracta*
Dodonaea ericoides	*Dodonaea ericoides*
Dodonaea pinifolia	*Dodonaea pinifolia*
Drosera eneabba	*Drosera eneabba*
Drosera erythrorhiza	*Drosera erythrorhiza*
Drosera glanduligera	*Drosera glanduligera*
Drosera humilis	*Drosera humilis*
Drosera macrantha	*Drosera macrantha*
Drosera magna	*Drosera magna*
Drosera menziesii	*Drosera menziesii*
Drosera minutiflora	*Drosera minutiflora*
Drosera porrecta	*Drosera porrecta*
Drosera sp.	Removed
Drosera sp. Branched styles (S.C. Coffey 193)	*Drosera* sp. Branched styles (S.C. Coffey 193)
Drosera thysanosepala	*Drosera thysanosepala*

Non-Reconciled Taxon	Reconciled Taxon
Dysphania melanocarpa forma *melanocarpa*	*Dysphania melanocarpa forma melanocarpa*
Ecdeiocolea monostachya	*Ecdeiocolea monostachya*
Elythranthera brunonis	*Elythranthera brunonis*
Eremaea beaufortioides	*Eremaea beaufortioides*
Eremaea beaufortioides var. *beaufortioides*	*Eremaea beaufortioides*
Eremaea beaufortioides var. *microphylla*	*Eremaea beaufortioides*
Eremaea violacea subsp. *violacea*	*Eremaea violacea* subsp. *violacea*
Ericomyrtus tenuior	*Ericomyrtus tenuior*
Erodium cygnorum	*Erodium cygnorum*
Erymophyllum tenellum	*Erymophyllum tenellum*
Eucalyptus eudesmioides	*Eucalyptus eudesmioides*
Eucalyptus horistes	*Eucalyptus horistes*
Eucalyptus todtiana	*Eucalyptus todtiana*
Gastrolobium plicatum	*Gastrolobium plicatum*
Gastrolobium rotundifolium	*Gastrolobium rotundifolium*
Geleznowia calycina	*Geleznowia calycina*
Gilberta tenuifolia	*Gilberta tenuifolia*
Glischrocaryon aureum	*Glischrocaryon aureum*
Gnephosis angianthoides	*Gnephosis angianthoides*
Gnephosis drummondii	*Gnephosis drummondii*
Gnephosis tenuissima	*Gnephosis tenuissima*
Gompholobium tomentosum	*Gompholobium tomentosum*
Gonocarpus nodulosus	*Gonocarpus nodulosus*
Goodenia berardiana	*Goodenia berardiana*
Goodenia caerulea	*Goodenia caerulea*
Goodenia cycnopotamica	*Goodenia cycnopotamica*
Goodenia reinwardtii	*Goodenia reinwardtii*
Grevillea ?obliquistigma	Removed
Grevillea biternata	*Grevillea biternata*
Grevillea candelabroides	*Grevillea candelabroides*
Grevillea leucopteris	*Grevillea leucopteris*
Guichenotia angustifolia	*Guichenotia angustifolia*
Guichenotia micrantha	*Guichenotia micrantha*
Haemodorum discolor	*Haemodorum discolor*
Haemodorum simulans	*Haemodorum simulans*
Haemodorum spicatum	*Haemodorum spicatum*
Hakea auriculata	*Hakea auriculata*
Hakea candolleana	*Hakea candolleana*
Hakea circumalata	*Hakea circumalata*
Hakea costata	*Hakea costata*

Non-Reconciled Taxon	Reconciled Taxon
Hakea incrassata	*Hakea incrassata*
Hakea lissocarpha	*Hakea lissocarpha*
Hakea neospathulata	*Hakea neospathulata*
Hakea orthorrhyncha var. *filiformis*	*Hakea orthorrhyncha* var. *filiformis*
Hakea polyanthema	*Hakea polyanthema*
Hakea preissii	*Hakea preissii*
Hakea prostrata	*Hakea prostrata*
Hakea recurva subsp. *recurva*	*Hakea recurva* subsp. *recurva*
Hibbertia hypericoides subsp. *hypericoides*	*Hibbertia hypericoides* subsp. *hypericoides*
Hibbertia robur	*Hibbertia robur*
Hyalosperma cotula	*Hyalosperma cotula*
Hyalosperma demissum	*Hyalosperma demissum*
Hyalosperma glutinosum subsp. *glutinosum*	*Hyalosperma glutinosum* subsp. *glutinosum*
Hydrocotyle callicarpa	*Hydrocotyle callicarpa*
Hypocalymma hirsutum	*Hypocalymma hirsutum*
Hypocalymma xanthopetalum	*Hypocalymma xanthopetalum*
Isoetopsis graminifolia	*Isoetopsis graminifolia*
Isolepis congrua	*Isolepis congrua*
Isopogon divergens	*Isopogon divergens*
Isotropis cuneifolia subsp. *cuneifolia*	*Isotropis cuneifolia* subsp. *cuneifolia*
Jacksonia angulata	*Jacksonia angulata*
Jacksonia hakeoides	*Jacksonia hakeoides*
Jacksonia nutans	*Jacksonia nutans*
Jacksonia restioides	*Jacksonia restioides*
Labichea lanceolata subsp. *lanceolata*	*Labichea lanceolata* subsp. *lanceolata*
Lasiopetalum drummondii	*Lasiopetalum drummondii*
Lawrencella rosea	*Lawrencella rosea*
Laxmannia ?omnifertilis	*Removed*
Laxmannia ramosa subsp. *ramosa*	*Laxmannia ramosa* subsp. *ramosa*
Laxmannia sessiliflora	*Laxmannia sessiliflora*
Laxmannia sessiliflora subsp. drummondii	*Laxmannia sessiliflora*
Lechenaultia hirsuta	*Lechenaultia hirsuta*
Lechenaultia linarioides	*Lechenaultia linarioides*
Lepidobolus preissianus	*Lepidobolus preissianus*
Lepidobolus preissianus subsp. *preissianus*	*Lepidobolus preissianus*
Lepidobolus preissianus subsp. *volubilis*	*Lepidobolus preissianus*
Lepidosperma aff. humile	*Lepidosperma aff. humile*
Lepidosperma scabrum	*Lepidosperma scabrum*
Lepidosperma sp.	*Removed*

Non-Reconciled Taxon	Reconciled Taxon
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)	*Lepidosperma* sp. Bandalup Scabrid (N. Evelegh 10798)
Lepidosperma tenue	*Lepidosperma tenue*
Leporella fimbriata	*Leporella fimbriata*
Leptospermopsis oligandra	*Leptospermopsis oligandra*
Levenhookia dubia	*Levenhookia dubia*
Levenhookia murfetii	*Levenhookia murfetii*
Lomandra micrantha subsp. *?micrantha*	*Lomandra micrantha* subsp. *micrantha*
Lomandra micrantha subsp. *micrantha*	*Lomandra micrantha* subsp. *micrantha*
Lyginia imberbis	*Lyginia imberbis*
Macarthuria australis	*Macarthuria australis*
Macrozamia fraseri	*Macrozamia fraseri*
Melaleuca acutifolia	*Melaleuca acutifolia*
Melaleuca aff. leuropoma	*Melaleuca aff. leuropoma*
Melaleuca aspalathoides	*Melaleuca aspalathoides*
Melaleuca concreta	*Melaleuca concreta*
Melaleuca leuropoma	*Melaleuca leuropoma*
Melaleuca marginata	*Melaleuca marginata*
Melaleuca radula	*Melaleuca radula*
Melaleuca tinkeri	*Melaleuca tinkeri*
Mesomelaena preissii	*Mesomelaena preissii*
Mesomelaena pseudostygia	*Mesomelaena pseudostygia*
Mesomelaena tetragona	*Mesomelaena tetragona*
Millotia tenuifolia var. *tenuifolia*	*Millotia tenuifolia* var. *tenuifolia*
Mirbelia floribunda	*Mirbelia floribunda*
Mirbelia trichocalyx	*Mirbelia trichocalyx*
Monotaxis bracteata	*Monotaxis bracteata*
Morelotia microcarpa	*Morelotia microcarpa*
Neurachne alopecuroidea	*Neurachne alopecuroidea*
Nuytsia floribunda	*Nuytsia floribunda*
*Olearia ?*sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	*Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	*Olearia sp.* Eremicola (Diels & Pritzel s.n. PERTH 00449628)
Opercularia spermacocea	*Opercularia spermacocea*
Opercularia vaginata	*Opercularia vaginata*
Panaetia lessonii	*Panaetia lessonii*
Patersonia graminea	*Patersonia graminea*
Patersonia occidentalis	*Patersonia occidentalis*
Persoonia acicularis	*Persoonia acicularis*
Petrophile macrostachya	*Petrophile macrostachya*

Non-Reconciled Taxon	Reconciled Taxon
Petrophile megalostegia	*Petrophile megalostegia*
Petrophile seminuda	*Petrophile seminuda*
Pheladenia deformis	*Pheladenia deformis*
Phyllangium divergens	*Phyllangium divergens*
Phymatocarpus porphyrocephalus	*Phymatocarpus porphyrocephalus*
Pileanthus filifolius	*Pileanthus filifolius*
Pileanthus peduncularis subsp. *peduncularis*	*Pileanthus peduncularis* subsp. *peduncularis*
Platysace cirrosa	*Platysace cirrosa*
Platysace teres	*Platysace teres*
Poaceae sp.	Removed
Podotheca angustifolia	*Podotheca angustifolia*
Podotheca gnaphalioides	*Podotheca gnaphalioides*
Poranthera microphylla	*Poranthera microphylla*
Poranthera moorokatta	*Poranthera moorokatta*
Prasophyllum sp.	Removed
Pterostylis ?sanguinea	Removed
Pterostylis ?vittata	Removed
Pterostylis setulosa	*Pterostylis setulosa*
Ptilotus manglesii	*Ptilotus manglesii*
Ptilotus polystachyus	*Ptilotus polystachyus*
Quinetia urvillei	*Quinetia urvillei*
Quoya verbascina	*Quoya verbascina*
Rhagodia drummondii	*Rhagodia drummondii*
Rhodanthe citrina	*Rhodanthe citrina*
Rhodanthe laevis	*Rhodanthe laevis*
Rhodanthe manglesii	*Rhodanthe manglesii*
Rytidosperma ?setaceum	Removed
Santalum acuminatum	*Santalum acuminatum*
Scaevola canescens	*Scaevola canescens*
Scaevola repens	*Scaevola repens*
Scaevola sp. (aff. canescens)	*Scaevola* sp. (aff. canescens)
Schoenus andrewsii	*Schoenus andrewsii*
Schoenus armeria	*Schoenus armeria*
Schoenus badius	*Schoenus badius*
Schoenus brevisetis	*Schoenus brevisetis*
Schoenus clandestinus	*Schoenus clandestinus*
Schoenus griffinianus	*Schoenus griffinianus*
Schoenus latitans	*Schoenus latitans*
Schoenus nanus	*Schoenus nanus*
Schoenus odontocarpus	*Schoenus odontocarpus*

Non-Reconciled Taxon	Reconciled Taxon
Schoenus pleiostemoneus	*Schoenus pleiostemoneus*
Schoenus sp. Eneabba (F. Obbens & C. Godden I154)	*Schoenus* sp. Eneabba (F. Obbens & C. Godden I154)
Schoenus unispiculatus	*Schoenus unispiculatus*
Scholtzia laxiflora	*Scholtzia laxiflora*
Scholtzia uniovulata	*Scholtzia uniovulata*
Seringia hermanniifolia	*Seringia hermanniifolia*
Seringia integrifolia	*Seringia integrifolia*
Siemssenia capillaris	*Siemssenia capillaris*
Siloxerus multiflorus	*Siloxerus multiflorus*
Sowerbaea laxiflora	*Sowerbaea laxiflora*
Stawellia dimorphantha	*Stawellia dimorphantha*
Stenanthemum notiale subsp. *notiale*	*Stenanthemum notiale* subsp. *notiale*
Stirlingia latifolia	*Stirlingia latifolia*
Stylidium androsaceum	*Stylidium androsaceum*
Stylidium crossocephalum	*Stylidium crossocephalum*
Stylidium decipiens	*Stylidium decipiens*
Stylidium emarginatum	*Stylidium emarginatum*
Stylidium petiolare	*Stylidium petiolare*
Stylidium purpureum	*Stylidium purpureum*
Stylidium repens	*Stylidium repens*
Stylidium rigidulum	*Stylidium rigidulum*
Stylidium torticarpum	*Stylidium torticarpum*
Stylobasium australe	*Stylobasium australe*
Styphelia hyalina	*Styphelia hyalina*
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	*Styphelia* sp. Eneabba (N. Marchant s.n. PERTH 01291777)
Synaphea spinulosa subsp. *spinulosa*	*Synaphea spinulosa* subsp. *spinulosa*
Tersonia cyathiflora	*Tersonia cyathiflora*
Thelymitra antennifera	*Thelymitra antennifera*
Thryptomene nitida	*Thryptomene nitida*
Thryptomene racemulosa	*Thryptomene racemulosa*
Thysanotus ?manglesianus	*Thysanotus manglesianus*
Thysanotus ?patersonii	*Thysanotus patersonii*
Thysanotus kalbarriensis	*Thysanotus kalbarriensis*
Thysanotus manglesianus	*Thysanotus manglesianus*
Thysanotus patersonii	*Thysanotus patersonii*
Thysanotus sp.	Removed
Thysanotus sparteus	*Thysanotus sparteus*
Thysanotus teretifolius	*Thysanotus teretifolius*
Trachymene ?cyanopetala	*Trachymene cyanopetala*

Non-Reconciled Taxon	Reconciled Taxon
Trachymene ?pilosa	*Trachymene pilosa*
Trachymene cyanopetala	*Trachymene cyanopetala*
Trachymene ornata	*Trachymene ornata*
Trachymene pilosa	*Trachymene pilosa*
Tribonanthes variabilis	*Tribonanthes variabilis*
Tricoryne elatior	*Tricoryne elatior*
Tricoryne soullierae	*Tricoryne soullierae*
Tricoryne sp.	Removed
Triglochin isingiana	*Triglochin isingiana*
Triglochin nana	*Triglochin nana*
Triodia danthonioides	*Triodia danthonioides*
Tripterococcus brunonis	*Tripterococcus brunonis*
Verticordia densiflora	*Verticordia densiflora*
Verticordia densiflora var. *?roseostella*	*Verticordia densiflora*
Verticordia grandis	*Verticordia grandis*
Verticordia huegelii var. *huegelii*	*Verticordia huegelii* var. *huegelii*
Verticordia monadelpha var. *monadelpha*	*Verticordia monadelpha* var. *monadelpha*
Verticordia pennigera	*Verticordia pennigera*
Wahlenbergia ?preissii	*Wahlenbergia preissii*
Wahlenbergia preissii	*Wahlenbergia preissii*
Waitzia acuminata	*Waitzia acuminata*
Waitzia acuminata var. *acuminata*	*Waitzia acuminata*
Waitzia acuminata var. *albicans*	*Waitzia acuminata*
Waitzia suaveolens var. *suaveolens*	*Waitzia suaveolens* var. *suaveolens*
Wurmbea dilatata	*Wurmbea dilatata*
Wurmbea dioica subsp. *alba*	*Wurmbea dioica* subsp. *alba*
Wurmbea tenella	*Wurmbea tenella*
Xanthorrhoea drummondii	*Xanthorrhoea drummondii*
Xanthosia huegelii	*Xanthosia huegelii*

Appendix I: Site by species matrix

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Acacia acuminata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia blakelyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia cavealis	0	0	0	0	0	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Acacia daphnifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia dilatata	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Acacia lasiocarpa	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	1	0	1	0	0	0	1	0	1	0
Acacia neurophylla subsp. neurophylla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia pulchella var. glaberrima	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia saligna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Acacia scirpifolia	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Acacia sphacelata subsp. sphacelata	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acacia stenoptera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0
Acacia tetragonophylla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Acanthocarpus preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Acanthocarpus sp. Ajana (C.A. Gardner 8596)	0	0	0	0	1	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Actinobole uliginosum	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0
Adenanthos cygnorum subsp. cygnorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Alexgeorgea nitens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Allocasuarina campestris	0	0	1	1	0	0	0	0	0	0	0	1	0	0	1	1	1	0	1	0	0	1	1	1	1	0	1	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	0
Allocasuarina huegeliana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Allocasuarina humilis	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1
Allocasuarina microstachya	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Amphipogon caricinus	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Amphipogon turbinatus	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Amyema miraculosa subsp. miraculosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Amyema preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Anigozanthos humilis subsp. humilis	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0
Anthocercis ilicifolia subsp. ilicifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Apectospermum spinescens	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Aristida holathera var. holathera	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Arnocrinum preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Arthropodium dyeri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Austrostipa elegantissima	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	1	1	1	1	1	1	0	1	1	1	0	1	1	1	0	0	1	1	0	1	1
Austrostipa macalpinei	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1	0	0	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
Babingtonia camphorosmae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Babingtonia erecta	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0
Babingtonia grandiflora	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Baeckea sp. Walkaway (A.S. George 11249)	0	0	0	0	1	1	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Banksia attenuata	0	0	0	0	0	1	1	1	0	1	0	0	1	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	0	0
Banksia dallanneyi subsp. media	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banksia fraseri var. crebra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0
Banksia hookeriana	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banksia prionotes	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Banksia scabrella	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Banksia shuttleworthiana	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	1	1	0	1	1	
Blennospora drummondii	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0	0	0	1	0	1	0	1	0	0	1	0	0	0	0	0	0	1	1	
Boronia cymosa	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Borya sphaerocephala	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	1	1	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	1	1	0
Brachyscome iberidifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Brachyscome perpusilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Brachyscome pusilla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Burchardia congesta	1	1	0	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	0	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1
Caesia micrantha	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0
Caladenia flava	1	1	0	0	1	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	1	0	1	0	0	0	0	0	1	0	0	1	0	1	1	1	0	1	1
Caladenia longicauda subsp. borealis	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caladenia radialis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Caladenia varians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Calandrinia baccata	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Calandrinia corrigioloides	0	1	1	0	1	0	0	0	1	1	1	0	1	0	0	1	0	1	0	1	1	0	0	0	1	0	0	1	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Calandrinia eremaea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calandrinia granulifera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calectasia hispida	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0
Calothamnus glaber	0	0	0	0	1	1	1	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Calothamnus quadrifidus subsp. angustifolius	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	1
Calothamnus sanguineus	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0
Calytrix gracilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Calytrix strigosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cassytha aurea var. hirta	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cassytha flava	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0
Cassytha glabella	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	1
Caustis dioica	1	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0
Centrolepis aristata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
Centrolepis drummondiana	0	0	1	0	1	0	0	1	0	0	0	0	0	1	0	0	1	1	1	0	1	0	1	1	0	0	1	0	0	0	0	0	0	0	1	0	0	1	0	0	1	0	0
Centrolepis pilosa	0	0	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Centrolepis polygyna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cephalosorus carpesioides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ceratogyne obionoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chamaescilla versicolor	0	0	1	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	1	0	0	1	1	1	0	1	1	0	1	0	0	0	0	0	0	1	0	0
Cheilanthes adiantoides	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0
Chordifex sinuosus	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chorizema aciculare subsp. laxum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Chorizema racemosum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Chthonocephalus pseudevax	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Clematicissus angustissima	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Comesperma integerrimum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0
Comesperma rhadinocarpum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Comesperma volubile	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conospermum canaliculatum	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conospermum stoechadis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conospermum unilaterale	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conospermum wycherleyi	0	0	0	0	0	1	0	1	1	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	1	1	0	0	0	0	1
Conostylis androstemma	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conostylis candicans	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Conostylis canteriata	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Conostylis dielsii subsp. dielsii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Conostylis resinosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corynotheca dichotoma	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Corynotheca micrantha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Crassula closiana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Crassula colorata	1	0	1	1	1	1	0	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	1	0	1	0	0	1	1	1	1	1	1
Crassula decumbens var. decumbens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cristonia stenophylla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cryptandra pungens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Cyanicula gemmata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cyanothamnus coerulescens subsp. spinescens	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Dampiera lavandulacea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Dampiera lindleyi	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0
Dampiera oligophylla	1	0	0	0	1	1	1	1	0	1	1	0	0	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	1
Dampiera spicigera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	1	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Darwinia pauciflora	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daucus glochidiatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Daviesia divaricata subsp. divaricata	0	0	0	0	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	0	1	0	0	0	1
Daviesia hakeoides subsp. hakeoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Daviesia incrassata subsp. teres	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daviesia nudiflora subsp. hirtella	1	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Daviesia oxyclada	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Daviesia pedunculata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	1
Desmocladus asper	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Desmocladus parthenicus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Dianella revoluta	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Dioscorea hastifolia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Diplolaena leemaniana	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Diplopeltis huegelii subsp. subintegra	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Diuris refracta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dodonaea ericoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Dodonaea pinifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drosera eneabba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drosera erythrorhiza	1	1	0	1	1	0	1	1	1	1	0	0	0	1	0	0	0	0	0	1	1	1	0	1	1	1	1	0	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1
Drosera glanduligera	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	1	0	0	1	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	1	0
Drosera humilis	0	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
Drosera macrantha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Drosera magna	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Drosera menziesii	1	0	1	0	0	0	0	0	1	0	1	0	1	1	0	0	0	1	1	0	1	1	0	0	1	0	0	0	1	0	0	0	1	0	0	0	0	1	1	1	0	1	1
Drosera minutiflora	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Drosera porrecta	1	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	0	1
Drosera sp. Branched styles (S.C. Coffey 193)	0	0	1	1	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	0	0	1	1	0	0	0	1	0	1	0	1	0	1	1	0	0	1	0	0	1	1	1
Drosera thysanosepala	0	0	0	0	0	1	1	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Dysphania melanocarpa forma melanocarpa	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ecdeiocolea monostachya	1	0	1	0	1	1	1	1	1	1	1	1	1	0	0	0	1	1	1	1	0	1	0	0	0	1	1	0	1	0	1	1	0	0	0	1	1	1	0	0	0	1	1
Elythranthera brunonis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eremaea beaufortioides	1	1	0	0	1	1	1	1	0	1	1	0	1	1	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	1	0	1	1	0	1	1	0	0	1

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Eremaea violacea subsp. violacea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ericomyrtus tenuior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Erodium cygnorum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Erymophyllum tenellum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Eucalyptus eudesmioides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Eucalyptus horistes	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Eucalyptus todtiana	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	1	0	0	1
Gastrolobium plicatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Gastrolobium rotundifolium	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Geleznowia calycina	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Gilberta tenuifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Glischrocaryon aureum	0	0	0	0	0	1	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Gnephosis angianthoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gnephosis drummondii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gnephosis tenuissima	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0
Gompholobium tomentosum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Gonocarpus nodulosus	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0
Goodenia berardiana	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Goodenia caerulea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Goodenia cycnopotamica	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Goodenia reinwardtii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1
Grevillea biternata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grevillea candelabroides	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Grevillea leucopteris	0	0	0	0	1	0	0	1	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guichenotia angustifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Guichenotia micrantha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haemodorum discolor	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Haemodorum simulans	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Haemodorum spicatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hakea auriculata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Hakea candolleana	1	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
Hakea circumalata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hakea costata	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hakea incrassata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Hakea lissocarpha	1	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	0	0	1	0	1	1	1	0	0	1	0	0	1	0	0	0	0	0	1	0	0	1	0	0	1
Hakea neospathulata	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0
Hakea orthorrhyncha var. filiformis	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Hakea polyanthema	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hakea preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Hakea prostrata	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hakea recurva subsp. recurva	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Hibbertia hypericoides subsp. hypericoides	1	1	0	0	1	0	1	1	0	1	1	0	1	1	0	0	1	1	1	1	1	0	0	0	1	1	1	0	1	0	0	1	1	1	0	1	1	1	1	1	0	1	1	1
Hibbertia robur	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalosperma cotula	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hyalosperma demissum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	1	1	1	0	1	0	0	0	1	1	0	0	0	1	0	0	0	0	0	1	1	0	0	0
Hyalosperma glutinosum subsp. glutinosum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0
Hydrocotyle callicarpa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Hypocalymma hirsutum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Hypocalymma xanthopetalum	0	0	0	0	0	1	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isoetopsis graminifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Isolepis congrua	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Isopogon divergens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Isotropis cuneifolia subsp. cuneifolia	1	1	0	0	1	1	0	0	0	1	1	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	1	1	0	1	1	0	1	0
Jacksonia angulata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jacksonia hakeoides	1	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Jacksonia nutans	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jacksonia restioides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labichea lanceolata subsp. lanceolata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lasiopetalum drummondii	0	0	0	0	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lawrencella rosea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Laxmannia ramosa subsp. ramosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Laxmannia sessiliflora	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Lechenaultia hirsuta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Lechenaultia linarioides	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lepidobolus preissianus	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	1	1	1	1	1	1	0	0	0	0	0	0	0	1	0	1	0	0	1	0	1	0	0	0	0	0	1	1
Lepidosperma aff. humile	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Lepidosperma scabrum	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lepidosperma tenue	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
Leporella fimbriata	0	0	0	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0
Leptospermopsis oligandra	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	0	1
Levenhookia dubia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Levenhookia murfetii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	1	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lomandra micrantha subsp. micrantha	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Lyginia imberbis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0
Macarthuria australis	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Macrozamia fraseri	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Melaleuca acutifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Melaleuca aff. leuropoma	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Melaleuca aspalathoides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
Melaleuca concreta	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0
Melaleuca leuropoma	1	1	0	0	1	1	0	1	1	1	1	0	1	1	0	0	0	1	1	1	1	0	0	0	1	1	0	0	1	0	0	0	1	1	0	1	1	1	1	1	0	1	1
Melaleuca marginata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Melaleuca radula	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Melaleuca tinkeri	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Mesomelaena preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
Mesomelaena pseudostygia	1	0	0	0	1	1	1	1	1	1	1	0	1	1	0	0	0	1	1	1	1	0	0	0	1	1	1	0	1	0	0	0	1	1	0	1	1	1	1	1	0	0	1
Mesomelaena tetragona	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Millotia tenuifolia var. tenuifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Mirbelia floribunda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Mirbelia trichocalyx	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Monotaxis bracteata	1	0	0	0	0	1	0	1	0	1	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Morelotia microcarpa	0	0	0	0	1	1	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Neurachne alopecuroidea	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	1	1	1	1	1	1	1	0	0	1	0	0	0	0	1	1	0	1	1	0	0	0	0

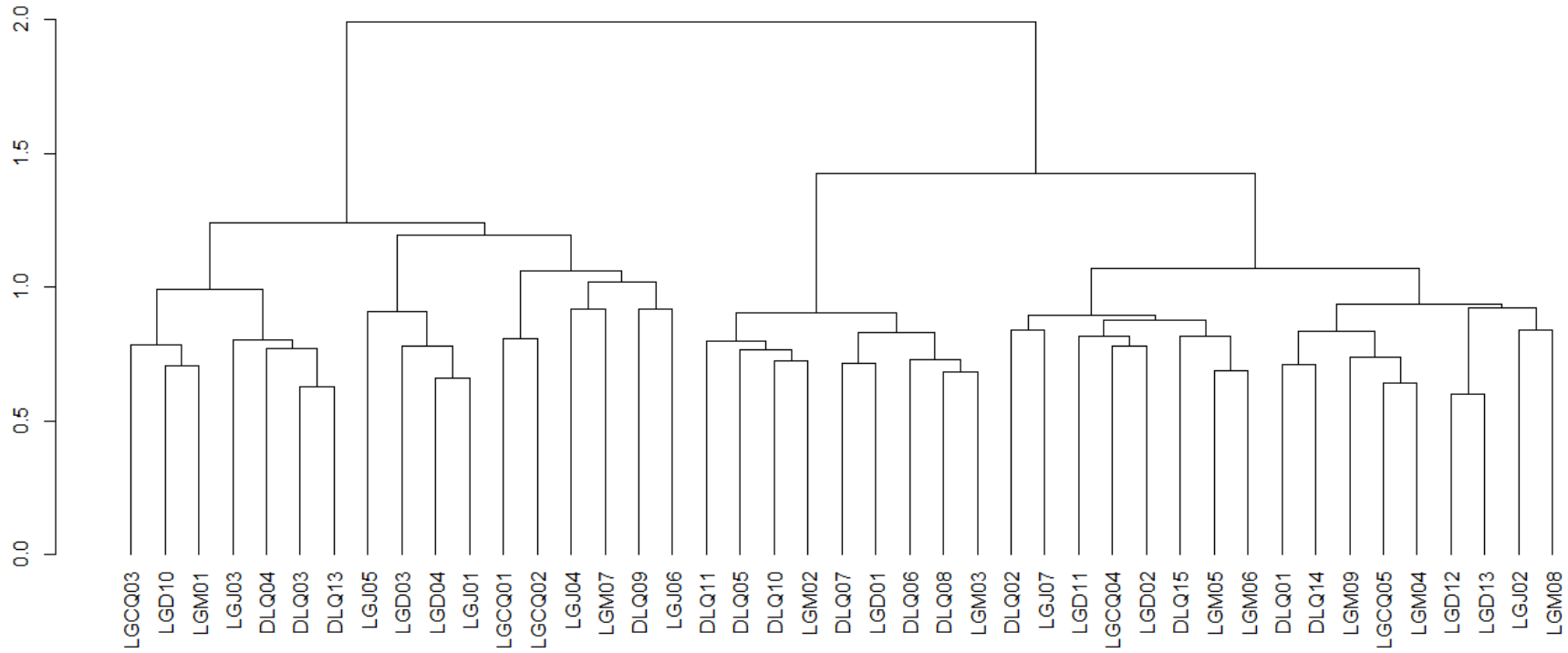
Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Nuytsia floribunda	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	0	0	1	0	0	1	0	0	0	1	1	0	0	0	0	0	1	0	1	0	0	0
Opercularia spermacocea	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Opercularia vaginata	1	1	0	0	0	0	0	0	0	1	0	0	1	1	0	0	0	1	0	1	1	1	0	0	0	1	1	0	0	0	0	0	1	1	0	1	0	1	0	0	0	1	0
Panaetia lessonii	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Patersonia graminea	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0
Patersonia occidentalis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
Persoonia acicularis	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Petrophile macrostachya	0	0	0	0	0	0	1	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0
Petrophile megalostegia	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petrophile seminuda	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pheladenia deformis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phyllangium divergens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Phymatocarpus porphyrocephalus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Pileanthus filifolius	0	0	0	0	1	1	1	1	1	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	1	1	1	1	1	0	0	1
Pileanthus peduncularis subsp. peduncularis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Platysace cirrosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Platysace teres	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Podotheca angustifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	1	1	0	1	1	0	0	0	0	1	1	0	0	1
Podotheca gnaphalioides	1	1	0	1	1	1	0	0	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Poranthera microphylla	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Poranthera moorokatta	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pterostylis setulosa	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Ptilotus manglesii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Ptilotus polystachyus	0	1	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	0	1	0	0	0	0
Quinetia urvillei	0	0	0	0	1	0	0	0	1	0	0	0	1	1	1	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Quoya verbascina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhagodia drummondii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Rhodanthe citrina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rhodanthe laevis	0	1	0	1	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Rhodanthe manglesii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Santalum acuminatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Scaevola canescens	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Scaevola repens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Scaevola sp. (aff. canescens)	0	0	0	0	1	1	1	0	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	1
Schoenus andrewsii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus armeria	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Schoenus badius	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus brevisetis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus clandestinus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus griffinianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Schoenus latitans	1	1	0	0	1	1	1	0	1	0	1	0	1	0	0	0	0	0	0	1	1	1	0	1	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Schoenus nanus	1	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	1	1	1	1	1	0	1	1	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0
Schoenus odontocarpus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Schoenus pleiostemoneus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus sp. Eneabba (F. Obbens & C. Godden 1154)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Schoenus unispiculatus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Scholtzia laxiflora	0	1	0	0	0	0	1	1	0	0	0	0	1	0	1	0	0	1	1	1	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	0	1	0	0	0	0	0
Scholtzia uniovulata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Seringia hermanniifolia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Seringia integrifolia	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Siemssenia capillaris	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	1	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	1	0	0
Siloxerus multiflorus	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0
Sowerbaea laxiflora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stawellia dimorphantha	0	0	0	0	0	1	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0
Stenanthemum notiale subsp. notiale	0	0	0	0	1	0	0	1	0	1	1	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0
Stirlingia latifolia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Stylidium androsaceum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
Stylidium crossocephalum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium decipiens	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium emarginatum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium petiolare	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium purpureum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium repens	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium rigidulum	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylidium torticarpum	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
Stylobasium australe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Styphelia hyalina	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
Synaphea spinulosa subsp. spinulosa	0	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tersonia cyathiflora	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
Thelymitra antennifera	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thryptomene nitida	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	1	0	0
Thryptomene racemulosa	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	1	0	1	0	
Thysanotus kalbarriensis	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thysanotus manglesianus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thysanotus patersonii	1	1	0	0	1	0	1	1	1	1	1	1	1	0	0	0	0	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0	0	1	0	1	0	1	1
Thysanotus sparteus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thysanotus teretifolius	0	0	0	0	1	0	1	0	1	1	0	0	1	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Trachymene cyanopetala	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1	1	1	0	1	0	1	1	1	1	0	1	1	1	0	0	0	0	0	1	0	0
Trachymene ornata	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	1	0	0
Trachymene pilosa	1	1	0	0	1	0	1	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1	0	0	1	1	1	0	0	0	1	0	0	0	1	1	1	1	1	0	1	1	1
Tribonanthes variabilis	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tricoryne elatior	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
Tricoryne soullierae	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Triglochin isingiana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Triglochin nana	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Triodia danthonioides	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Tripterococcus brunonis	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
Verticordia densiflora	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Verticordia grandis	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	1	0	0	1	1	1	1	0	0	0	1
Verticordia huegelii var. huegelii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Verticordia monadelpha var. monadelpha	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Verticordia pennigera	0	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Taxon	DLQ01	DLQ02	DLQ03	DLQ04	DLQ05	DLQ06	DLQ07	DLQ08	DLQ09	DLQ10	DLQ11	DLQ13	DLQ14	DLQ15	LGCQ01	LGCQ02	LGCQ03	LGCQ04	LGCQ05	LGD01	LGD02	LGD03	LGD04	LGD10	LGD11	LGD12	LGD13	LGJ01	LGJ02	LGJ03	LGJ04	LGJ05	LGJ06	LGJ07	LGM01	LGM02	LGM03	LGM04	LGM05	LGM06	LGM07	LGM08	LGM09
Wahlenbergia preissii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
Waitzia acuminata	0	0	1	1	0	0	0	0	1	0	1	0	0	0	0	1	0	1	1	0	1	1	1	0	1	1	1	1	1	0	1	0	0	1	1	1	1	1	0	0	1	1	1
Waitzia suaveolens var. suaveolens	0	0	0	0	0	0	0	0	1	1	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wurmbea dilatata	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
Wurmbea dioica subsp. alba	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wurmbea tenella	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Xanthorrhoea drummondii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
Xanthosia huegelii	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Appendix J: Dendrogram

Weeds and singletons removed, log transformed, square root transformed



Appendix K: Vegetation structural classification

NVIS Vegetation Structural Classifications

Cover Characteristics							
Foliage cover *	70-100	30-70	10-30	<10	≈0	0-5	unknown
Crown cover **	>80	50-80	20-50	0.25-20	<0.25	0-5	unknown
% Crown cover ***	>80	50-80	20-50	0.25-20	<0.25	0-5	unknown
Cover code	d	c	i	r	bi	bc	unknown

Growth Form	Height Ranges (m)	Structural Formation Classes					
tree, palm	>30 Tall	closed forest	open forest	woodland	open woodland	isolated trees	isolated clumps of trees
	10-30 Mid						
	<10 Low						
tree mallee	10-30 Tall	closed mallee forest	open mallee forest	mallee woodland	open mallee woodland	isolated mallee trees	isolated clumps of mallee trees
	<10 Mid						
	<3 Low						
shrub, cycad, grasstree, fern	>2 Tall	closed shrubland	shrubland	open shrubland	sparse shrubland	isolated shrubs	isolated clumps of shrubs
	1-2 Mid						
	<1 Low						
mallee shrub	10-30 Tall	closed mallee shrubland	mallee shrubland	open mallee shrubland	sparse mallee shrubland	isolated mallee shrubs	isolated clumps of mallee shrubs
	<10 Mid						
	<3 Low						
heath shrub	>2 Tall	closed heathland	heathland	open heathland	sparse heathland	isolated heath shrubs	isolated clumps of heath shrubs
	1-2 Mid						
	<1 Low						

Growth Form	Height Ranges (m)	Structural Formation Classes					
chenopod shrub	>2 Tall	closed chenopod shrubland	chenopod shrubland	open chenopod shrubland	sparse chenopod shrubland	isolated chenopod shrubs	isolated clumps of chenopod shrubs
	1-2 Mid						
	<1 Low						
samphire shrub	>0.5 Low	closed samphire shrubland	samphire shrubland	open samphire shrubland	sparse samphire shrubland	isolated samphire shrubs	isolated clumps of samphire shrubs
	<0.5 Mid						
hummock grass	>2 Tall	closed hummock grassland	hummock grassland	open hummock grassland	sparse hummock grassland	isolated hummock grasses	isolated clumps of hummock grasses
	<2 Mid						
tussock grass	>0.5 Mid	closed tussock grassland	tussock grassland	open tussock grassland	sparse tussock grassland	isolated tussock grasses	isolated clumps of tussock grasses
	<0.5 Low						
other grass	>0.5 Mid	closed grassland	grassland	open grassland	sparse grassland	isolated grasses	isolated clumps of grasses
	<0.5 Low						
sedge	>0.5 Mid	closed sedgeland	sedgeland	open sedgeland	sparse sedgeland	isolated sedges	isolated clumps of sedges
	<0.5 Low						
rush	>0.5 Mid	closed rushland	rushland	open rushland	sparse rushland	isolated rushes	isolated clumps of rushes
	<0.5 Low						
forb	>0.5 Mid	closed forbland	forbland	open forbland	sparse forbland	isolated forbs	isolated clumps of forbs
	<0.5 Low						
fern	>2 Tall	closed fernland	fernland	open fernland	sparse fernland	isolated ferns	isolated clumps of ferns
	1-2 Mid						
	<1 Low						
bryophyte	<0.5	closed bryophyte land	bryophyte land	open bryophyte land	sparse bryophyte land	isolated bryophytes	isolated clumps of bryophytes
lichen	<0.5	closed lichenland	lichenland	open lichenland	sparse lichenland	isolated lichens	isolated clumps of lichens

Growth Form	Height Ranges (m)	Structural Formation Classes					
vine	<0.5	closed vineland	vineland	open vineland	sparse vineland	isolated vines	isolated clumps of vines
	>30 Tall						
	10-30 Med						
aquatic	<10 Low	closed aquatic bed	aquatic bed	open aquatic bed	sparse aquatics	isolated aquatics	isolated clumps of aquatics
	<1 Tall						
seagrass	0-0.5 Low	closed seagrass bed	seagrass bed	open seagrass bed	sparse seagrass bed	isolated seagrasses	isolated clumps of seagrasses
	<1 Tall						

From: NVIS Structural Formation Terminology (Australian Vegetation Attribute Manual Version 7.0 November 2017 https://www.environment.gov.au/land/publications/australian-vegetation-attribute-manual-version-7)

* Foliage Cover is defined for each stratum as 'the proportion of the ground, which would be shaded if sunshine came from directly overhead'. It includes branches and leaves and is obtained by multiplying Crown Cover with Crown type (Hnatiuk *et al.*, 2009). It is applied to a stratum in a plot, rather than an individual crown, with the NVIS measure for a vegetation type ideally being a summary of several plots. Foliage Projective Cover, which considers only the vertical projection of photosynthetic components (generally leaves), can be measured by line interception methods for tree, shrub and ground layer vegetation (Specht & Specht, 1999).

** Crown Cover (canopy cover) as per Hnatiuk *et al.* (2009). Although relationships between this attribute and Foliage Cover are dependent on season, species, species age etc., the crown cover category classes have been adopted as the defining measure.

*** The percentage cover is defined as the percentage of a strictly defined plot area, covered by vegetation. This can be an estimate and is a less precise measure than using, for example, a point intercept transect method on ground layer, or overstorey vegetative cover. That is, for precisely measured values (e.g., crown densitometer or point intercept transects) the value measured would be 'foliage' cover. Where less precise or qualitative measures are used these will most probably be recorded as 'percentage' cover.

Appendix L: Vegetation condition rating scale

Vegetation Condition Rating Scale (EPA, 2016b)

Vegetation Condition	South West and Interzone Botanical Provinces
Pristine	Pristine or nearly so, no obvious signs of disturbance or damage caused by human activities since European settlement.
Excellent	Vegetation structure intact, disturbance affecting individual species and weeds are non-aggressive species. Damage to trees caused by fire, the presence of non-aggressive weeds and occasional vehicle tracks.
Very Good	Vegetation structure altered, obvious signs of disturbance. Disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.
Poor	N/A
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. Disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds at high density, partial clearing, dieback and grazing.
Completely Degraded	The structure of the vegetation is no longer intact and the area is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora comprising weed or crop species with isolated native trees and shrubs.

Appendix M: Limitations and constraints

Limitation	Constraint	Comment
Availability of contextual information at a regional and local scale	No	Sufficient contextual information was available for the Survey Area, including broad information on land systems and vegetation associations. A list of significant flora within and in the vicinity of the Survey Area was also collated from database searches and previous surveys in the local area.
Competency/ experience of the survey team, including experience in the bioregion surveyed	No	Each field survey was led by Principal Botanists botanist with over ten years' experience, and several team members have extensive experience in the Northern Sandplains. The lead botanist met the minimum requirements of the EPA (2016b) to manage a flora and vegetation field survey in the Geraldton sandplains bioregion (i.e., five years field experience the bioregion).
Proportion of flora recorded/ collected and any identification issues	No	The survey intensity (targeted and detailed) was designed to capture a high percentage of the flora within the Survey Area. Approximately 8.2% (45) of the 549 taxa observed or collected from the field were difficult to confidently identify to species or infraspecies level. Most of these unconfirmed taxa (73%) are represented by confirmed species or confirmed genera/families. Two of the unconfirmed taxa are likely to be significant flora (*Thelymitra* ?*stellata* and *Thelymitra* ?sp. indet.). Population counts of some significant flora are estimated post survey based on either not knowing the species were significant in field surveys or recorded as part of the baseline detailed vegetation assessment and those sites were not revisited during the targeted assessments, i.e. in most cases cover was recorded not population size.
Survey timing, weather and season	No	The field survey was conducted over 10 trips, seven in spring (September to November) and three in winter (July/August). The EPA recommends the primary survey/s to occur in spring (September to November) for the south-west botanical province, with supplementary surveys conducted after autumn rains (EPA, 2016b). Mingenew Station (number 8088), which is located 9.8km north-east of the most north-easterly point of the Survey Area, recorded 49% more rainfall than the long term mean for Winter 2025. The detailed surveys were conducted in Winter (August 2025) and early Spring (September 2025). The targeted surveys were conducted from August through to late November 2025 and flowering was prolific following the wetter than average winter. The EPA recommends that in periods of below average rainfall, supplementary sampling in succeeding years (with suitable rainfall) may be necessary to compensate for low diversity recorded during a survey (EPA, 2016b). The species richness assessment indicates up to 87% of native flora taxa have been captured by the field survey, indicating that further survey effort would yield more species. This is not unexpected given the linear nature of the survey and the long expanse (~24 km west to east and ~15 km north to south). An additional 129 confirmed flora taxa were found outside of quadrats and were not part of the species accumulation curve. Taking this into account, the survey effort is deemed adequate.

Limitation	Constraint	Comment
Disturbance that may have affected results, e.g., fire, flood	Moderate	Disturbances within the Survey Area were mainly associated with fire in the western Forsyth area and edge effects from agricultural land use. This includes grazing and possibly spray drift on a *Thryptomene nitida* location in isolated remnants. There was also some influence from drought from the October 2023 to April 2024 summer that was the longest dry spell recorded in south-western Australia in around 150 years. Also, due to high winter rainfall, agricultural weeds were particularly thick, and it was difficult traversing some of the area. Small annuals and species may have been difficult to fully characterise in areas with high weed loads. These disturbances are not unique to this survey and the generally degraded condition of the majority of the Survey Area was expected given the long linear nature of the majority of the survey and the local area in which it is situated.
Appropriate area fully surveyed (effort and extent)	Moderate	The Survey Area was traversed and surveyed on foot with all major vegetation intact units visited. A total of 23 intact vegetation units were characterised, with an additional four units that were highly modified and contained some limited native vegetation. Some disturbed areas in the north east of the Survey Area were not adequately sampled for vegetation and were outside of targeted search areas and are not considered a constraint for this survey. A total of 43 quadrats, 36 relevés and 130 vegetation mapping notes were sampled across the Survey Area. Where possible, a minimum of three quadrats were established and sampled within each vegetation type, with additional quadrats assigned to larger units or to ensure spatial coverage. However, 14 intact vegetation types only had one or two quadrats installed and four vegetation types were only sampled with relevés and vegetation mapping notes (Table 2.2), which presents a minor limitation to a Detailed Flora and Vegetation Survey effort. A total of 0.012 sites (quadrats and relevés) were sampled per hectare (entire Survey Area, including cleared areas). The survey intensity and coverage (related to quadrat sampling) was slightly less than other surveys with similar survey area sizes in the bioregion. If the agricultural and cleared parts of the Survey Area are removed, the intensity increases to 0.042/ha and aligns with EPA guidance for a detailed survey. A large portion of vegetation in the north of the Survey Area was not sampled or surveyed (mapped as NS). These areas were located a substantial distance from the development envelope and following further correspondence from the client, it was determined that impacts would not occur in close proximity to this area, therefore, survey effort was placed in other locations of the Survey Area.
Access restrictions within the Survey Area	No	The Survey Area was accessed via vehicles along existing roads or approved access to private farm tracks which provided adequate access across most of the Survey Area. The Survey Area was extensively traversed on foot during targeted flora searches.

Limitation	Constraint	Comment
Problems with data and analysis, including sampling bias	Minor	Coordination of data and information between consultancies was challenging. For example, data was recorded in different formats for each consultancy, as well as population numbers for some significant taxon records were not documented. If a count was not provided for a significant flora record, a count of '1' was assumed. This may underestimate the total number of individuals present. Vegetation unit delineation and description was conducted by Biologic but was based on data across the three consultancies. None of the personnel involved visited every part of the Survey Area and thus mapping in some under-sampled parts was based on only a few sample sites. Furthermore, the data collection and descriptions across the three consultancies meant that some of the descriptions are broader than others. Dendrograms were created but were not beneficial in delineating vegetation units, due to the large linear extent (~24 km west to east and ~15 km north to south) and weediness of many of the vegetation areas.

Appendix N: Species list

Aizoaceae

**Mesembryanthemum nodiflorum*

Amaranthaceae

Ptilotus manglesii

Ptilotus polystachyus

Anarthriaceae

Hopkinsia anoectocolea (P3)

Lyginia imberbis

Apiaceae

Apium ?prostratum

Daucus glochidiatus

Platysace cirrosa

Platysace teres

Xanthosia huegelii

Araliaceae

Hydrocotyle callicarpa

Trachymene ?cyanopetala

Trachymene ?pilosa

Trachymene cyanopetala

Trachymene ornata

Trachymene pilosa

Asparagaceae

*Acanthocarpus ?*sp. Ajana (C.A. Gardner 8596)

Acanthocarpus preissii

Acanthocarpus sp. Ajana (C.A. Gardner 8596)

Arthropodium dyeri

Laxmannia ?omnifertilis

Laxmannia ramosa subsp. *ramosa*

Laxmannia sessiliflora

Laxmannia sessiliflora subsp. *drummondii*

Lomandra micrantha subsp. *?micrantha*

Lomandra micrantha subsp. *micrantha*

Sowerbaea laxiflora

Thysanotus ?manglesianus

Thysanotus ?patersonii

Thysanotus kalbarriensis

Thysanotus manglesianus

Thysanotus patersonii

Thysanotus sp. indet.

Thysanotus sparteus

Thysanotus teretifolius

Asteraceae

?Olearia sp. indet.

Actinobole uliginosum

**Arctotheca calendula*

Blennospora drummondii

Brachyscome iberidifolia

Brachyscome perpusilla

Brachyscome pusilla

Cephalosorus carpesioides

Ceratogyne obionoides

Chthonocephalus pseudevax

**Cotula bipinnata*

**Cotula coronopifolia*

Cotula cotuloides

Erymophyllum tenellum

Gilberta tenuifolia

Gnephosis angianthoides

Gnephosis drummondii

Gnephosis tenuissima

Gnephosis tridens

Hyalosperma cotula

Hyalosperma demissum

Hyalosperma glutinosum subsp. *glutinosum*

**Hypochaeris glabra*

Isoetopsis graminifolia

Lawrencella rosea

Millotia tenuifolia var. *tenuifolia*

**Monoculus monstrosus*

*Olearia ?*sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)

Olearia sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628)

Panaetia lessonii

Podotheca angustifolia

Podotheca gnaphalioides

Quinetia urvillei

Rhodanthe citrina

Rhodanthe laevis

Rhodanthe manglesii

Siemssenia capillaris

Siloxerus multiflorus

**Sonchus oleraceus*

**Urospermum picroides*

**Ursinia anthemoides* subsp. *anthemoides*

Waitzia acuminata

Waitzia acuminata var. *acuminata*

Waitzia acuminata var. *albicans*

Waitzia sp. indet.

Waitzia suaveolens var. *suaveolens*

Boraginaceae

**Echium plantagineum*

Boryaceae

Borya sphaerocephala

Brassicaceae

**Brassica barrelieri* subsp. *oxyrrhina*

**Brassica tournefortii*

**Brassica x napus*

**Raphanus raphanistrum*

Campanulaceae

Wahlenbergia ?preissii

**Wahlenbergia capensis*

Wahlenbergia preissii

Caryophyllaceae

**Petrorhagia dubia*

**Silene gallica* var. *gallica*

Casuarinaceae

Allocasuarina campestris

Allocasuarina huegeliana

Allocasuarina humilis

Allocasuarina microstachya

Casuarina obesa

Celastraceae

Tripterococcus brunonis

Centrolepidaceae

Centrolepis aristata

Centrolepis drummondiana

Centrolepis pilosa

Centrolepis polygyna

Chenopodiaceae

?Enchylaena tomentosa var. *tomentosa*

Dysphania melanocarpa forma *melanocarpa*

Enchylaena tomentosa var. *tomentosa*

Rhagodia drummondii

Rhagodia preissii subsp. *obovata*

Rhagodia preissii subsp. *preissii*

Rhagodia sp. indet.

Colchicaceae

Burchardia congesta

Wurmbea dilatata

Wurmbea dioica subsp. *alba*

Wurmbea tenella

Crassulaceae

Crassula closiana

Crassula colorata var. *acuminata*

Crassula colorata var. *colorata*

Crassula decumbens var. *decumbens*

Cucurbitaceae

**Cucumis myriocarpus*

Cyperaceae

Caustis dioica

**Ficinia marginata*

Gahnia trifida

Isolepis cernua var. *cernua*

Isolepis congrua

Lepidosperma ?calcicola

Lepidosperma aff. *humile*

Lepidosperma costale

Lepidosperma scabrum

Lepidosperma sp. Bandalup Scabrid (N. Evelegh 10798)

Lepidosperma sp. indet.

Lepidosperma tenue

Machaerina rubiginosa

Mesomelaena preissii

Mesomelaena pseudostygia

Mesomelaena stygia subsp. *Deflexa* (P3)

Mesomelaena tetragona

Morelotia microcarpa

Schoenus andrewsii

Schoenus armeria

Schoenus badius (P2)

Schoenus brevisetis

Schoenus clandestinus

Schoenus griffinianus (P4)

Schoenus latitans

Schoenus nanus

Schoenus odontocarpus

Schoenus pleiostemoneus

Schoenus sculptus

Schoenus sp. Eneabba (F. Obbens & C. Godden I154) (P2)

Schoenus subfascicularis

Schoenus unispiculatus

Schoenus variicellae

Dasypogonaceae

Calectasia hispida

Dilleniaceae

Hibbertia hypericoides

Hibbertia hypericoides subsp. *hypericoides*

Hibbertia robur

Hibbertia subvaginata

Dioscoreaceae

Dioscorea hastifolia

Droseraceae

Drosera eneabba

Drosera erythrorhiza

Drosera glanduligera

Drosera humilis

Drosera macrantha

Drosera magna

Drosera menziesii

Drosera minutiflora

Drosera porrecta

Drosera sp. Branched styles (S.C. Coffey 193)

Drosera sp. indet.

Drosera stricticaulis

Drosera thysanosepala

Ecdeiocoleaceae

Ecdeiocolea monostachya

Ericaceae

Leucopogon inflexus

Styphelia hyalina (P3)

Styphelia leptantha

Styphelia sp. Eneabba (N. Marchant s.n. PERTH 01291777)

Styphelia tortifolia

Euphorbiaceae

Monotaxis bracteata

Fabaceae

Acacia ?lasiocarpa

Acacia acuminata

Acacia auronitens

Acacia barbinervis subsp. *borealis*

Acacia blakelyi

Acacia cavealis

Acacia daphnifolia

Acacia dilatata

Acacia ericifolia

Acacia isoneura subsp. *Isoneura* (P3)

Acacia lasiocarpa var. *lasiocarpa*

Acacia latipes subsp. *latipes*

Acacia neurophylla subsp. *neurophylla*

Acacia pulchella var. *glaberrima*

Acacia rostellifera

Acacia saligna

Acacia scirpifolia

Acacia sphacelata subsp. *sphacelata*

Acacia stenoptera

Acacia tetragonophylla

Chamaecytisus palmensis

Chorizema aciculare subsp. *laxum*

Chorizema racemosum

Cristonia stenophylla

Daviesia daphnoides

Daviesia divaricata subsp. *divaricata*

Daviesia hakeoides subsp. *hakeoides*

Daviesia incrassata subsp. *teres*

Daviesia nudiflora subsp. *hirtella*

Daviesia oxyclada

Daviesia pedunculata

Gastrolobium plicatum

Gastrolobium rotundifolium (P3)

Gompholobium tomentosum

Isotropis cuneifolia subsp. *cuneifolia*

Jacksonia angulata

Jacksonia hakeoides

Jacksonia nutans

Jacksonia restioides

Jacksonia sternbergiana

Labichea lanceolata

Labichea lanceolata subsp. *lanceolata*

Leptosema aphyllum

**Lupinus cosentinii*

Mirbelia floribunda

Mirbelia trichocalyx

**Ornithopus compressus*

**Trifolium arvense*

**Trifolium arvense* var. *arvense*

**Trifolium subterraneum*

Geraniaceae

**Erodium botrys*

Erodium cygnorum

Goodeniaceae

?Goodeniaceae sp. indet.

Dampiera lavandulacea

Dampiera lindleyi

Dampiera oligophylla

Dampiera spicigera

Goodenia berardiana

Goodenia caerulea

Goodenia cycnopotamica

Goodenia reinwardtii

Lechenaultia hirsuta

Lechenaultia juncea (P3)

Lechenaultia linarioides

Scaevola aff. *canescens*

Scaevola canescens

Scaevola repens

Scaevola virgata

Gyrostemonaceae

Tersonia cyathiflora

Haemodoraceae

Anigozanthos humilis subsp. humilis

Conostylis androstemma

Conostylis aurea

Conostylis candicans

Conostylis candicans subsp. *candicans*

Conostylis candicans subsp. *procumbens*

Conostylis canteriata

Conostylis dielsii subsp. *dielsii*

Conostylis prolifera

Conostylis resinosa

Haemodorum discolor

Haemodorum simulans

Haemodorum spicatum

Tribonanthes variabilis

Haloragaceae

Glischrocaryon aureum

Gonocarpus nodulosus

Hemerocallidaceae

?Tricoryne sp. indet.

Arnocrinum preissii

Caesia ?micrantha

Caesia micrantha

Caesia sp. Wongan (K.F. Kenneally 8820)

Chamaescilla versicolor

Corynotheca dichotoma

Corynotheca micrantha

Dianella revoluta

Stawellia dimorphantha (P4)

Tricoryne elatior

Tricoryne soullierae (P1)

Tricoryne sp. Eneabba (E.A. Griffin 1200)

Tricoryne sp. indet.

Iridaceae

Patersonia graminea

Patersonia occidentalis

**Romulea rosea* var. *australis*

Juncaceae

**Juncus hybridus*

Juncaginaceae

Cycnogeton lineare

Triglochin isingiana

Triglochin mucronata

Triglochin nana

Lamiaceae

Hemigenia drummondii

Quoya verbascina

Lauraceae

Cassytha aurea var. *hirta*

Cassytha flava

Cassytha glabella forma *casuarinae*

Cassytha glabella forma *dispar*

Cassytha racemosa forma *?pilosa*

Loganiaceae

Phyllangium divergens

Loranthaceae

Amyema fitzgeraldii

Amyema miraculosa subsp. *miraculosa*

Amyema preissii

Nuytsia floribunda

Macarthuriaceae

Macarthuria australis

Malvaceae

Alyogyne hakeifolia

Alyogyne huegelii

Guichenotia angustifolia

Guichenotia micrantha

Hibiscus drummondii

Lasiopetalum drummondii

Seringia hermanniifolia

Seringia integrifolia

Montiaceae

Calandrinia ?baccata

Calandrinia ?brevipedata

Calandrinia ?corrigioloides

Calandrinia baccata

Calandrinia corrigioloides

Calandrinia eremaea

Calandrinia granulifera

Myrtaceae

?Melaleuca sp. indet.

Apectospermum spinescens

Babingtonia camphorosmae

Babingtonia erecta

Babingtonia grandiflora

Baeckea sp. Walkaway (A.S. George 11249) (P3)

Calothamnus glaber

Calothamnus quadrifidus subsp. *angustifolius*

Calothamnus sanguineus

Calytrix ?flavescens

Calytrix gracilis

Calytrix strigosa

Darwinia pauciflora

Darwinia speciosa

Eremaea beaufortioides

Eremaea beaufortioides var. *beaufortioides*

Eremaea beaufortioides var. *microphylla*

Eremaea ectadioclada

Eremaea violacea subsp. *violacea*

Ericomyrtus tenuior

Eucalyptus ?leucoxylon

Eucalyptus camaldulensis

Eucalyptus camaldulensis subsp. *arida*

Eucalyptus camaldulensis subsp. *obtusa*

Eucalyptus ebbanoensis subsp. *ebbanoensis*

Eucalyptus eudesmioides

Eucalyptus horistes

Eucalyptus loxophleba

Eucalyptus loxophleba subsp. *loxophleba*

Eucalyptus macrocarpa subsp. *elachantha* (P4)

Eucalyptus sp. indet.

Eucalyptus todtiana

Hypocalymma hirsutum

Hypocalymma xanthopetalum

Leptospermopsis oligandra

Malleostemon decipiens (P1)

Melaleuca acutifolia

Melaleuca aff. *leuropoma*

Melaleuca aspalathoides

Melaleuca cardiophylla

Melaleuca concreta

Melaleuca hamulosa

Melaleuca leuropoma

Melaleuca marginata

Melaleuca radula

Melaleuca rhaphiophylla

Melaleuca sp. indet.

Melaleuca tinkeri

Melaleuca viminea subsp. *viminea*

Phymatocarpus porphyrocephalus

Pileanthus filifolius

Pileanthus peduncularis subsp. *peduncularis*

Scholtzia laxiflora

Scholtzia trilocularis

Scholtzia uniovulata

Thryptomene mucronulata

Thryptomene nitida (P3)

Thryptomene racemulosa

Verticordia densiflora

Verticordia densiflora var. *?roseostella*

Verticordia densiflora var. *cespitosa*

Verticordia densiflora var. *densiflora*

Verticordia densiflora var. *roseostella* (P3)

Verticordia grandis

Verticordia huegelii var. *huegelii*

Verticordia luteola var. *luteola* (P3)

Verticordia monadelpha

Verticordia monadelpha var. monadelpha

Verticordia pennigera

Orchidaceae

Caladenia ?dimidia

Caladenia ?flava

Caladenia flava

Caladenia flava subsp. *flava*

Caladenia longicauda

Caladenia longicauda subsp. *borealis*

Caladenia radialis

Caladenia varians

Cyanicula gemmata

Diuris aff. corymbosa

Diuris refracta

Elythranthera brunonis

Leporella fimbriata

Pheladenia deformis

Prasophyllum sp. indet.

Pterostylis ?sanguinea

Pterostylis ?vittata

Pterostylis setulosa

Thelymitra ?stellata (T)

Thelymitra antennifera

Thelymitra benthamiana

Thelymitra sp. indet.

Thelymitra stellata (T)

Orobanchaceae

**Parentucellia latifolia*

Phyllanthaceae

Poranthera asybosca (P1)

Poranthera microphylla

Poranthera moorokatta (P2)

Pittosporaceae

Pittosporum angustifolium

Plantaginaceae

?Plantago coronopus

**Plantago coronopus* subsp. *commutata*

Plantago debilis

Poaceae

**Aira cupaniana*

Amphibromus nervosus

Amphipogon caricinus var. caricinus

Amphipogon turbinatus

Aristida holathera var. holathera

Austrostipa ?nitida

Austrostipa elegantissima

Austrostipa macalpinei

Austrostipa nitida

Austrostipa sp. indet.

**Avena barbata*

**Briza maxima*

**Bromus diandrus*

**Cenchrus setaceus*

**Cynodon dactylon*

**Ehrharta brevifolia* var. *cuspidata*

**Ehrharta longiflora*

**Eragrostis curvula*

**Hordeum leporinum*

**Lamarckia aurea*

**Lolium perenne*

**Lolium rigidum*

Neurachne alopecuroidea

**Pentameris airoides* subsp. *Airoides*

Poaceae sp. indet.

**Polypogon monspeliensis*

**Rostraria pumila*

Rytidosperma ?setaceum

Triodia danthonioides

**Vulpia bromoides*

**Vulpia muralis*

**Vulpia myuros*

Polygalaceae

Comesperma integerrimum

Comesperma rhadinocarpum (P3)

Comesperma scoparium

Comesperma volubile

Polygonaceae

Muehlenbeckia adpressa

Primulaceae

**Lysimachia arvensis*

**Lysimachia loeflingii*

Proteaceae

Adenanthos cygnorum subsp. *cygnorum*

Banksia attenuata

Banksia carlinoides

Banksia dallanneyi subsp. *media*

Banksia elegans (P4)

Banksia fraseri var. *ashbyi*

Banksia fraseri var. *crebra* (P3)

Banksia fraseri var. *fraseri*

Banksia hookeriana

Banksia lanata

Banksia prionotes

Banksia scabrella (P4)

Banksia sessilis

Banksia sessilis var. *flabellifolia*

Banksia shuttleworthiana

Conospermum canaliculatum

Conospermum stoechadis

Conospermum unilaterale

Conospermum wycherleyi

Grevillea ?obliquistigma

Grevillea biternata

Grevillea candelabroides

Grevillea eriostachya

Grevillea leucopteris

Hakea auriculata

Hakea candolleana

Hakea circumalata

Hakea costata

Hakea incrassata

Hakea lissocarpha

Hakea neospathulata

Hakea orthorrhyncha

Hakea orthorrhyncha var. *filiformis*

Hakea polyanthema

Hakea preissii

Hakea prostrata

Hakea recurva

Hakea recurva subsp. *recurva*

Hakea trifurcata

Isopogon divergens

Persoonia acicularis

Persoonia rudis (P3)

Petrophile macrostachya

Petrophile megalostegia

Petrophile seminuda

Stirlingia latifolia

Synaphea spinulosa subsp. *spinulosa*

Pteridaceae

Cheilanthes adiantoides

Ranunculaceae

Clematis linearifolia

Restionaceae

Alexgeorgea nitens

Chordifex sinuosus

Desmocladus asper

Desmocladus parthenicus

Lepidobolus preissianus

Lepidobolus preissianus subsp. *preissianus*

Lepidobolus preissianus subsp. *volubilis*

Rhamnaceae

Cryptandra pungens

Stenanthemum notiale subsp. *notiale*

Rubiaceae

Opercularia spermacocea

Opercularia vaginata

Rutaceae

Boronia cymosa

Cyanothamnus coerulescens subsp. *spicatus*

Cyanothamnus coerulescens subsp. *spinescens*

Diplolaena eneabbensis

Diplolaena leemaniana

Geleznowia calycina

Santalaceae

Exocarpos sparteus

Santalum acuminatum

Sapindaceae

Diplopeltis huegelii subsp. *subintegra*

Dodonaea ericoides

Dodonaea pinifolia

Scrophulariaceae

**Zaluzianskya divaricata*

Solanaceae

Anthocercis genistoides

Anthocercis ilicifolia subsp. *ilicifolia*

Anthocercis littorea

Solanum hoplopetalum

**Solanum nigrum*

Stylidiaceae

Levenhookia dubia

Levenhookia murfetii

Stylidium adpressum

Stylidium androsaceum

Stylidium crossocephalum

Stylidium decipiens

Stylidium drummondianum (P3)

Stylidium emarginatum

Stylidium longitubum (P4)

Stylidium petiolare

Stylidium purpureum

Stylidium repens

Stylidium rigidulum

Stylidium torticarpum (P3)

Stylidium udusicola

Surianaceae

Stylobasium australe

Thymelaeaceae

Pimelea microcephala subsp. *microcephala*

Typhaceae

Typha domingensis

Vitaceae

Clematicissus angustissima

Xanthorrhoeaceae

Xanthorrhoea drummondii

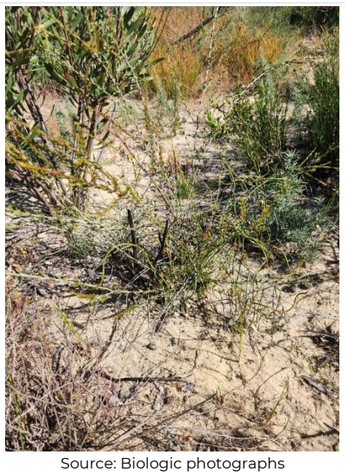
Zamiaceae

Macrozamia fraseri

Appendix O: Significant flora recorded in the Survey Area

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Threatened			
Thelymitra stellata Tuberous, perennial, herb growing to 0.15-0.25 m high. Producing yellow and brown flowers in October to November (WAH, 1998 -).	*Thelymitra stellata* occurs in sand, gravel, and lateritic loams, often in woodlands (WAH, 1998 -). Northern (i.e. between Gingin and Dongara) populations of *T. stellata* are known as *Thelymitra* sp. 'northern laterite' but are not recognised as a separate taxon on Florabase. *Thelymitra stellata* currently has 20 WAH records (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one area in the linear section of the Survey Area, adjacent to Yandanooka West Road, in vegetation type Re. All suitable habitat within entire Survey Area (along Yandanooka West Road) was targeted on multiple trips by multiple teams throughout the survey period and extensively searched. Total Abundance: 2 One recorded as *Thelymitra* ?*stellata* and one recorded as *Thelymitra stellata*.	  Source: (WANOSCG, 2025)
Priority 1			
Malleostemon decipiens A low spreading shrub growing to 1 m high, with slender branches and numerous glabrous, short branchlets. Linear to linear-spathulate leaves that are frequently alternate, often almost imbricate (Fitzgerald, 1904; WAH, 1998 -).	Occurs in the Mingenew area, in vegetation dominated by *Melaleuca*, *Acacia* or *Allocasuarina*, sometimes on breakaways. This species is geographically restricted around the Mingenew area (Rye & Trudgen, 2012). There are currently 15 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from two point-locations near a drainage line in the south-eastern section of the Survey Area, in vegetation type VT01. Total Abundance: 45	 Source: Biologic photographs
Poranthera asybosca Monoecious, erect annual, 20-45 mm high. Distinguished from other *Poranthera* species by the following combination of characters: stems reddish green; leaves with indistinct petiole 0.4-1.6 mm long; stipules entire; seeds with regular cerebriform pattern (Barrett & Barrett, 2015).	Grows in open kwongan shrubland on white sand over laterite (Barrett & Barrett, 2015). There are currently only two WAH records for this species, one at Cooljarloo and the other near Arrowsmith (WAH, 1998 -).	This taxon was recorded from five point-locations in the Survey Area. Four of these records were from the western section of the Survey Area, close to a track. These locations are associated with vegetation types VT12, VT16, VT19. Total Abundance: 17	  Source: Viridis photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Priority 2			
Poranthera moorokatta Monoecious, erect annual growing 16-47 mm high. Leaves shortly petiolate, opposite, widely spaced along branchlets, stems sparingly branched; branchlets smooth, glabrous. Seeds with many peaked mounds, the bases adjoining and faces furrowed. *P. moorokatta* produces pink-white (male) or green-red (female) flowers from late September to early November (Barrett, 2012).	*Poranthera moorokatta* has been recorded as growing in white, yellow or grey-brown sand on slopes and flats. The species is known to occur between Cervantes and Perth in the Swan Coastal Plain bioregion. There are currently 15 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 12 point-locations from the linear section of the Survey Area, close to Yandanooka West Road in vegetation types VT10, VT11, VT12.VT15. Total Abundance: 413	 Source: Viridis photographs
Schoenus badius Slender annual, grass-like or herb (sedge) growing to 0.05-0.12 m high which produces brown-green flowers in Sep to Oct (WAH, 1998 -).	*Schoenus badius* has been recorded as growing on grey sand in moist areas. The species is known from the Geraldton Sandplains and Swan Coastal Plain bioregions and occurs between Northampton and Cataby. There are currently six records for this species, only one of which is recorded for the Swan Coast Plain bioregion (each of which has a corresponding specimen held at WAH) (WAH, 1998 -)	This taxon was recorded from one site, LGD03, from the linear section of the Survey Area, close to Yandanooka W Road in vegetation type VT07. Total Abundance: 50	 Source: Woodman Environmental photographs
***Schoenus* sp. Eneabba (F. Obbens & C. Godden I154)** An erect, clumped rhizomatous and perennial sedge (WAH, 1998 -).	Grey, yellow or white sand, undulating sandplains, midslopes, tops of rises (WAH, 1998 -). This taxon has a relatively restricted distribution from near the Survey Area southwards to Eneabba. There are currently 14 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from nine point-locations from the western section of the Survey Area, in vegetation types VT15, VT16, VT19. Total Abundance: 122	  Source: Biologic photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Thysanotus kalbarriensis Short-lived, self-supporting perennial. Sterile stems growing 10-25 cm high, fertile stems growing 30-55 cm long. Produces pink/purple flowers in August to November (Macfarlane *et al.*, 2020).	Growing on flat plains in yellow or grey sand in shrublands that are often dominated by *Banksia* and *Grevillea* species (Macfarlane *et al.*, 2020). *Thysanotus kalbarriensis* is mostly found in Karijini National Park, with one disjunct record located close to the Survey Area on the eastern edge of Yardanogo Nature Reserve. There are currently 14 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 699 sites and occurred frequently near the north and south corners of the remnant vegetation located in the western section of the Survey Area, in vegetation types VT16, VT19. Total Abundance: 2,180	 Source: Viridis photographs
Priority 3			
Acacia isoneura subsp. isoneura Erect, open shrub, growing from 0.5 – 3 m in height, with flowers produced from August to September (WAH, 1998 -). Phyllodes are filiform/ slender, soft and flexible (Maslin, 2018).	Found on yellow-brown sand on flats and low rises, over a range of approximately 60 km, from east of Dongara in the north, to west of Three Springs in the south (WAH, 1998 -). There are currently 12 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location in the south-eastern section of the Survey Area, close to Yandanooka West Road in vegetation type VT01. Total Abundance: 2	 Source: (Maslin, 2018)
***Baeckea* sp. Walkaway (A.S. George 11249)** Dense, multi-stemmed shrub, 0.5-2m high with white flowers that are seen from December to January (WAH, 1998 -).	Found on yellow/brown or white sand on undulating plains and hillslopes. This species is known from 21 WAH records in the Geraldton Sandplains and Avon Wheatbelt bioregions (WAH, 1998 -).	This taxon was recorded from eight point-locations in the south-eastern section of the Survey Area, close to Yandanooka West Road in vegetation type VT16. Total Abundance: 10	 Source: Biologic photographs

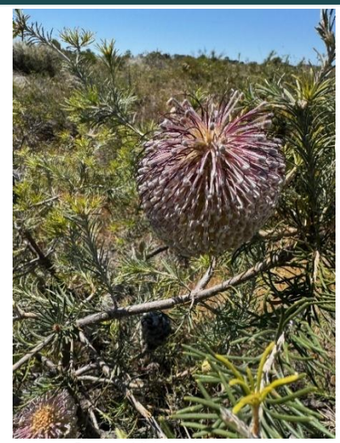
Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Banksia fraseri var. crebra Prostrate shrub growing up to 0.4-0.5 m in height. Branchlets are hairy glabrous or hairy, leaves alternate (40-70mm long, 10-20mm wide). This species cream flowers in July, August or September. This species is distinguished by the pistol length which ranges between 25-30mm long (Hollister *et al.*, 2025; WAH, 1998 -).	*Banksia fraseri* var. *crebra* has been recorded as growing in yellow or grey sand on plains. This species is known to occur within the Geraldton Sandplains and Swan Coastal Plain bioregions between Cataby and just north of Port Denison. There are currently 16 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 176 point-locations throughout the linear section along Yandanooka West Road and the northeast section of the Survey Area, in vegetation types VT03, VT07, VT10, V12, VT15, VT23 (primarily in V10 and V12) Total Abundance: 514	 Source: Viridis photographs
Comesperma rhadinocarpum Perennial, herb growing up to 0.45 m. This species produces blue flowers October to November (WAH, 1998 -).	*Comesperma rhadinocarpum* has been recorded in sandy soils. This species is known to occur mainly within the Geraldton Sandplains, Jarrah Forest and Swan Coastal Plain bioregions, with one record each from the Coolgardie and Great Victoria Desert. There are currently 18 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 71 point-locations from the linear section of the Survey Area along Yandanooka West Road and the western section of the Survey Area in vegetation types VT10. VT11, VT16, VT19. Total Abundance: 184	 Source: Viridis photographs
Gastrolobium rotundifolium Erect, bushy shrubs to 0.8 m high. Produces red/orange/yellow flowers in August and September. This species is difficult to confuse with any other of *Gastrolobium* due to particularly large stipules, which only *G. densifolium* shares, a species not found in the Geraldton Sandplains bioregion (Chandler *et al.*, 2002).	Grows in more open positions on heavier clay or loam soils in wandoo woodland. Occurs around Mingenew in the north, south through Watheroo and Calingiri to the areas around Wagin and Narrogin (Chandler *et al.*, 2002). There are currently 34 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one site, LGD04, from the northeastern section of the Survey Area in vegetation type VT09. Total Abundance: 10	 Source: (WAH, 1998 -)

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Hopkinsia anoectocolea Rhizomatous sedge-like perennial 0.5-1 m high. Flowers between Sep and Dec (WAH, 1998 -).	Winter-wet depressions, floodplains, salt lakes with white or grey sand, often saline. This taxon has a disjunct and scattered distribution, with populations just south of the Survey Area, north of Cataby, near Wongan Hills and along the great Eastern Hwy between Meckering and Tammin. There are currently 53 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location from a drainage line running north-south through the eastern section of the Survey Area in vegetation type VT13. Total Abundance: 1	 Source: (WAH, 1998 -)
Lechenaultia juncea Grass-like, erect perennial, herb or shrub, to 0.5 m high. Produces blue flowers from November to December (WAH, 1998 -).	White, grey or yellow sand, sandy gravel. This taxon is known from the Geraldton Sandplain and Avon Wheatbelt bioregions, from Watheroo to southeast of Mingenew. There are currently 22 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 119 sites from the western section of the Survey Area in vegetation types VT16, VT19. Total Abundance: 5,232	 Source: Viridis photographs
Mesomelaena stygia subsp. deflexa Tufted perennial, grass-like or herb (sedge), growing to 0.50 m in height. This species produces brown/black flowers March to October (WAH, 1998 -).	*Mesomelaena stygia* subsp. *deflexa* has been recorded from white, grey or lateritic sand, clay, gravel. This species is endemic to the Geraldton Sandplains between Jurien Bay and Dongara. There are currently 29 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 20 point-locations from the most eastern section of the Survey Area on Yandanooka West Road in vegetation type VT10. Total Abundance: 43	 Source: Viridis photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Persoonia rudis Erect, spreading, shrub growing to 1 m in height. Leaves are alternate, (20-35 mm long, 0.8 mm wide), hairy, margins are revolute and apex is pungent. This species produces yellow flowers September to December or January (Hollister *et al.*, 2025; WAH, 1998 -).	*Persoonia rudis* has been recorded from white, yellow or grey sand over laterite. This species occurs within the Geraldton Sandplains, Jarrah Forest and Swan Coastal Plain bioregions. There are currently 42 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location from near the northern edge of remnant vegetation in the western section of the Survey Area in vegetation type VT15. Total Abundance: 1	 Source: Viridis photographs and (WAH, 1998 -)
Stylidium drummondianum Rosetted perennial, herb growing to 0.22 m in height and 0.8 mm in width. The leaves are narrowly oblanceolate (0.5-3 cm long, 0.8-2 mm wide), apex mucronate, margin hyaline and serrulate, glabrous. Flower scape is hairy, inflorescence paniculate. This species produces pink flowers August to October (WAH, 1998 -).	*Stylidium drummondianum* has been recorded from sand or clay sand over laterite in upper hillslopes and breakaways. This species occurs within the Geraldton Sandplains, and Avon Wheatbelt bioregions. There are currently 37 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 22 point-locations from the linear section of the Survey Area, along Yandanooka West Road and nearby pastoral land in vegetation types VT15, VT16, VT23, Re. Total Abundance: 165	 Source: Viridis photographs
Stylidium torticarpum Caespitose perennial, herb growing to 0.27 m in height. The leaves are tufted, broadly linear (5-13 cm long, 0.6-1.5 mm wide), apex mucronate, margin hyaline and serrulate and glabrous. Flower scape is glandular throughout, inflorescence paniculate and capsule twisted. This species produces pink flowers September to November (WAH, 1998 -).	*Stylidium torticarpum* has been recorded from sandy clay and clay loam over laterite, adjacent to creeklines, depressions, and beneath breakaways. This species occurs within the Geraldton Sandplains, Avon Wheatbelt and Swan Coastal Plain bioregions. There are currently 51 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 76 point-locations from the eastern sections of the Survey Area, where drainage lines are more dominant in vegetation types VT02, VT04, VT05, VT06, VT20, VT23. Total Abundance: 400	 Source: Viridis photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Styphelia hyalina Low spreading, shrub growing to 0.4 m in height and width. Leaves are opposite, (2.5-5 mm long, 1.2-2.2 mm wide), ovate or narrowly ovate, with the longitudinal axis usually distinctly incurved. The leaves are usually sparsely hairy on the abaxial surface and margins, sometimes ± glabrous throughout. The external corolla tube is glabrous and red. This species produces white flowers October to December (Hislop & Nguyen, 2022).	*Styphelia hyalina* has been recorded from sand or loam soils, on lateritic uplands and often associated with breakaways. This species is endemic to the Geraldton Sandplains distributed from south of Mingenew to west of Three Springs. There are currently 11 records for this species (each of which has a corresponding specimen held at WAH) (Hislop & Nguyen, 2022; WAH, 1998 -).	This taxon was recorded from one site, LGD04, from the eastern linear section of the Survey Area, close to Yandanooka W Road in vegetation type VT07. Total Abundance: 10	 Source: (Hislop & Nguyen, 2022)
Thryptomene nitida Shrub growing to 0.8 m high, the main branches tending to be prostrate. It produces pale purple or mauve-pink flowers from June to September (Rye, 2014).	Occurring on sandy loam and yellow sand on slopes, flats, and often associated with creeks and minor drainage lines. The distribution of *T. nitida* extends from the Irwin River (near the Survey Area) to Mingenew and Three Springs (Rye, 2014). There are 32 records of this species held at WAH (WAH, 1998 -).	This taxon was recorded from 178 point-locations from the eastern sections of the Survey Area commonly found along drainage lines in vegetation types VT01, VT02, VT05, VT13, VT15, VT20. Total Abundance: 2,912	  Source: Viridis photographs
Tricoryne soullierae Multi-stemmed, open, caespitose rhizomatous, perennial, herb, growing to 0.2 m high which produces yellow flowers in October (WAH, 1998 -).	*Tricoryne soullierae* (formerly *Tricoryne* sp. Wongan Hills (B.H. Smith 794) has been recorded as growing in yellow to grey sand, gravelly clay quartz, laterite, limestone on midslopes and uplands. The species is known to occur within Avon Wheatbelt, Coolgardie, Geraldton Sandplains, Jarrah Forest and has two records in the Geraldton Sandplains bioregion. There are currently 10 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 33 point-locations from the linear section of the Survey Area in vegetation types VT15, Re. Total Abundance: 58	  Source: Viridis photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Verticordia densiflora var. roseostella Open shrub between 0.4 and 1.3m high, producing pink-white flowers from September to December (WAH, 1998 -).	Grows in sandy gravelly or sandy loam soils, on sandplains and breakaways. This taxon is known from Kalbarri in the north to Beekeepers Nature Reserve in the south. There are currently 46 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 9 point-locations primarily from the linear section of the Survey Area, and one location in the eastern section in vegetation type VT15. Total Abundance: 16	 Source: Viridis photograph
Verticordia luteola var. luteola A slender shrub growing to 0.50-1.4 m in height. This species produces white-yellow flowers between November and December (WAH, 1998 -).	*Verticordia luteola* var. *luteola* has been recorded in grey sand over gravel on flat. This species occurs within the Geraldton Sandplains and Avon Wheatbelt bioregions. There are currently 20 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location from the linear section of the Survey Area, in vegetation type VT12. This location has previously been recorded by WAH. Total Abundance: 1	 Source: Viridis photographs
Priority 4			
Banksia elegans Shrubs with suckering, fire tolerant rootstock, growing between 1 and 4 m in height, producing yellow to green-yellow flowers from Oct to Nov (WAH, 1998 -).	Grows on sandplains, low consolidated dunes with yellow sand. *Banksia elegans* is distributed primarily in the Geraldton Sandplains between Geraldton and Coomaloo Nature Reserve, with one record further east around Three Springs. There are currently 47 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location on a track's edge in the western section of the Survey Area. This section is surrounded by excellent vegetation, associated with vegetation types VT16, VT19. Total Abundance: 2	 Source: Viridis photograph

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Banksia scabrella A much-branched, lignotuberous shrub growing to 0.6- 2 m high. Leaves are petiolate, alternate, (15- 75 mm long, 1 mm wide) and inflorescences tomentose (matted or tangled soft woolly hairs). This species produces yellow, cream and purple flowers September to December or January (Hollister *et al.*, 2025; WAH, 1998 -).	*Banksia scabrella* has been recorded from white, grey or yellow sometimes with lateritic gravel on sandplains and lateritic ridges. This species is endemic to the Geraldton Sandplains and is distributed west of Three Springs to Geraldton. There are currently 55 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 157 point-locations on the roadside of Yandanooka West Road and Mount Adams Road in the linear section of the Survey Area in vegetation types VT10, VT12, VT15. Total Abundance: 344	 Source: Viridis photograph
Eucalyptus macrocarpa* subsp. *elachantha A spreading or sprawling mallee growing between 0.8-4 high. Bark smooth, grey over salmon pink in colour. Producing red-pink flowers in August to September or November to December (WAH, 1998 -).	Grows on white or grey sand over laterite on hillslopes, ridges, and sandplains. This taxon is distributed in the Geraldton Sandplains bioregion and Dandaragan subregion from just southeast of Geraldton to Regans Ford/ Moore River. There are currently 59 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location on the roadside of Yandanooka West Road in the linear section of the Survey Area in vegetation type Rd. This section is surrounded by Degraded-Good vegetation associated with vegetation types VT10, VT12, VT15. Total Abundance: 1	 Source: Biologic photograph
Schoenus griffinianus A small, tufted perennial, grass-like or herb (sedge) growing up to 0.1 m in height (WAH, 1998 -). Culms erect, more or less terete, strongly ribbed and hispid with leaf blades exceeding the culms, somewhat curly and thick (Wilson, 1997). Inflorescence raceme-like, erect with spikelets solitary at 2 or 3 widely separated nodes (Wilson, 1997). This species produces brown-white flowers between September to October (WAH, 1998 -).	*Schoenus griffinianus* has been recorded as growing in white sand on gently undulating low plains and sandplains. This species is known to occur within the Geraldton Sandplains, Avon Wheatbelt, Mallee and Swan Coastal Plain between Geraldton and Lake Grace. There are currently 45 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from six point-locations near the roadside of Yandanooka West Road in the linear section of the Survey Area in vegetation types VT10, VT11, VT12, Cl. Total Abundance: 12	 Source: Viridis photographs

Description	Habitat and Distribution	Records from survey	Representative floristic material/ habit and/ or habitat
Stawellia dimorphantha Stilt-rooted perennial herb, 0.05-0.2 m high. Flowers purple/cream, June to November (WAH, 1998 -).	Grows on white, grey or yellow sand. This taxon is distributed from Eneabba in the south towards Dongara in the north, with the northernmost record within Burma Road Nature Reserve. There are currently 24 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from 1,061 point-locations in the western section of the Survey Area in vegetation types VT15, VT16, VT19, Rd. Total Abundance: 5,262	 Source: Viridis and Biologic photographs
Stylidium longitubum Erect annual (ephemeral) herb to 0.05-0.12 m high. Producing pink flowers with red or purple markings in October to Dec (WAH, 1998 -).	Growing in sandy clay or clay soils in seasonal wetlands. This taxon is distributed along the Swan Coastal Plain from Busselton northwards into the Geraldton Sandplains bioregion around Arrowsmith, with one isolated record further east in the Jarrah Forest bioregion. There are currently 53 records for this species (each of which has a corresponding specimen held at WAH) (WAH, 1998 -).	This taxon was recorded from one point-location in the south-eastern section of the Survey Area with vegetation type VT01. Total Abundance: 1	 Source: Biologic photograph

Appendix P: Range extension and locality hole taxa

Taxon	Comments
Records represent extension of known range of the taxon	
Babingtonia camphorosmae	Survey Area 100km north of closest record on Florabase.
Drosera minutiflora	Survey Area 100km north of closest record (in Watheroo National Park).
Gnephosis tridens	Survey Area 110km north-west of the most southern record on Florabase (closest record near Marchagee Nature Reserve).
Isolepis cernua var. cernua	Survey Area 115km north (closest record in Jurien Bay).
**Juncus hybridus*	Survey Area 151km north of closest records.
Laxmannia ramosa subsp. ramosa	Survey Area 84km north from most northern record on Florabase.
Poranthera moorokatta (P2)	Survey Area 130km north of closest southern record (south east of Cervantes).
**Romulea rosea var. australis*	Survey Area 83km north of closest records.
**Vulpia bromoides*	Survey Area 100km north of closest southern record.
Records fill gap in known distribution for the taxon	
Cassytha glabella forma *dispar*	Survey Area 108km north of closest south-eastern record and 120km south of northern record.
**Chamaecytisus palmensis*	Survey Area 115km south from the closest northern population and 172km north of the closest southern population.
Isoetopsis graminifolia	Survey Area 78km south of the most northern Geraldton population, 144km west of the closest eastern population and 115km north-west of the closest southern population.
Leporella fimbriata	Survey Area 110km south of closest northern record and 90km north of closest southern record.
**Lysimachia arvensis*	Survey Area 150km north of closest southern record and 185km west of closest eastern record.
Phyllangium divergens	Survey Area 90km north of closest southern record and 105km south of northern record.
**Aira cupaniana*	Survey Area 87km south of closest northern record and 110 northwest of closest south record.

Appendix Q: Vegetation types of the Survey Area

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
Drainage Lines/ Floodplains					
VT01	**AcAbAs JhHhhCc** *Acacia acuminata, Acacia blakelyi, Acacia saligna* tall open to isolated shrubs (+/- *Acacia neurophylla* subsp. *neurophylla, Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628), *Jacksonia sternbergiana)* over *Jacksonia hakeoides, Hibbertia hypericoides* subsp. *hypericoides, Conostylis candicans* low isolated shrubs over introduced pasture weeds.	Relevés: DLR09, LGCR08, LGCR09, LGMR05, DLR06	Survey Area: 43.01 ha 0.63%	**Significant flora present:** *Malleostemon decipiens* (P1) *Stylidium longitubum* (P4) *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Good (19.46 ha), Degraded (18.46 ha), Completely Degraded (5.09 ha)	 (Source: Umwelt)
VT02	**AcaMvvAs SlTnGbOE Emo** *Allocasuarina campestris, Melaleuca viminea* subsp. *viminea, Acacia saligna* (+/- *Acacia neurophylla* subsp. *neurophylla, Acacia blakelyi, Acacia aciphylla*) tall open shrubland *Scholtzia laxiflora, Thryptomene nitida, Grevillea biternata, Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628) (+/- *Stylobasium australe, Alyogyne hakeifolia, Santalum acuminatum*) mid open to isolated shrubs over *Ecdeiocolea monostachya* mid isolated sedges over mixed native and introduced forbs and grasses.	Quadrats: DLQ04, LGCQ01 Relevés: LGCR11, LGCR10	Survey Area: 29.23 ha 0.43%	**Significant flora present:** *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Good (16.72 ha), Degraded (12.51 ha)	 (Source: Umwelt)
VT03	**AbCqaAc AllMlHlHhh EmoMps** *Acacia blakelyi, Calothamnus quadrifidus* subsp. *angustifolius, Allocasuarina campestris* mid isolated shrubs over *Acacia latipes* subsp. *latipes, Melaleuca leuropoma, Hakea lissocarpha, Hibbertia hypericoides* subsp. *hypericoides* low isolated shrubs over *Ecdeiocolea monostachya, Mesomelaena pseudostygia* sedges over introduced grasses and forbs, dominated by **Avena barbata, *Vulpia muralis, *Hypochaeris glabra*	Relevés: DLR08, LGDR03	Survey Area: 7.28 ha 0.11%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Good (3.51 ha), Degraded (3.76 ha)	 (Source: Umwelt)

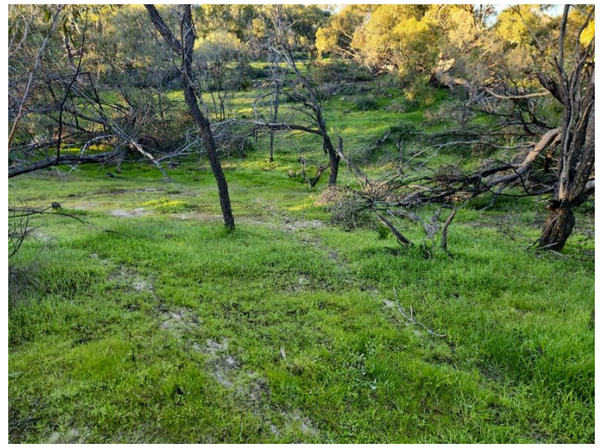
Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
VT04	**AcaGbAnnMco SlTrCp** *Allocasuarina campestris, Grevillea biternata, Acacia neurophylla* subsp. *neurophylla, Melaleuca concreta* tall to mid open shrubland over *Scholtzia laxiflora, Thryptomene racemulosa, Cryptandra pungens* low (to mid) sparse shrubland over introduced grassland and forbland	Quadrats: LGCQ02, LGCQ05, Relevés: LGCR06, LGCR12, LGMR07, LGDR02	Survey Area: 25.24 ha 0.37%	**Significant flora present:** *Acacia isoneura* subsp. *isoneura* (P3) *Banksia fraseri* var. *crebra* (P3) *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Very Good (11.60 ha), Good (13.15 ha), Degraded (0.49 ha)	 (Source: Umwelt)
VT05	**Aca Emo** *Allocasuarina campestris* tall open to sparse shrubland over (+/- *Melaleuca concreta, Melaleuca radula* shrubland mid open shrubland over) *Ecdeiocolea monostachya* mid open sedgeland over introduced grassland and forbland	Quadrat: DLQ03, DLQ13, LGCQ03, Relevés: DLR05, LGMR04	Survey Area: 24.09 ha 0.35%	**Significant flora present:** *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Good (13.14 ha), Degraded (10.95 ha)	 (Source: Umwelt)
VT06	**Aca McoAacMr Emo** *Allocasuarina campestris* tall sparse to isolated shrubs over *Melaleuca concreta*, *Acacia acuminata, Melaleuca radula* mid sparse shrubland over *Ecdeiocolea monostachya* mid sparse sedgeland over introduced pasture weeds	Quadrat: LGD10, LGJ03, LGM01 Relevés: LGDR06, LGDR07, LGJR01,	Survey Area: 60.85 ha 0.89%	**Significant flora present:** *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Very Good (56.41 ha), Good (3.07 ha), Degraded (1.37 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
Lateritic Uplands and Upper Slopes					
VT20	**MtMcoMmMa Bs** *Melaleuca tinkeri, Melaleuca concreta, Melaleuca marginata, Melaleuca acutifolia* (+/- *Thryptomene nitida, Acacia saligna, Ericomyrtus tenuior, Labichea lanceolata* subsp. *lanceolata*) tall to mid open shrubland over *Borya sphaerocephala, Trachymene ?cyanopetala* low sparse forbland with low sparse grassland	Quadrats: LGJ01, LGM07	Survey Area: 32.08 ha 0.47%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Very Good (0.33 ha), Good (9.83 ha), Degraded (21.75 ha), Completely Degraded (0.18 ha)	 (Source: Umwelt)
VT21	**Hrr OE Rd Emo** *Hakea recurva* subsp. *recurva* tall sparse shrubland over *Olearia* sp. Eremicola (Diels & Pritzel s.n. PERTH 00449628) mid sparse shrubland over *Rhagodia drummondii* low open shrubland over *Ecdeiocolea monostachya* mid sparse sedgeland over forbland	Quadrats: LGJ04, LGJN03	Survey Area: 8.97 ha 0.13%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) **Vegetation condition:** Very Good (3.43 ha), Degraded (1.51 ha), Completely Degraded (4.03 ha)	 (Source: Umwelt)
VT23	**Aca HaBfcHnHl EmoMps** *Allocasuarina campestris* mid isolated shrubs over *Hakea auriculata, Banksia fraseri* subsp. *crebra, Hakea neospathulata*, *Hakea lissocarpha* low sparse shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia* low isolated sedges over forbland	Quadrats LGJ05, Relevés LGJR05, LGMR02, LGJR03	Survey Area: 6.59 ha 0.10%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Stylidium drummondianum* (P3) *Stylidium torticarpum* (P3) **Vegetation condition:** Degraded (6.53 ha), Completely Degraded (0.06 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
Sandplains					
VT16	**BaEbmCgGc MlDddCwHhh MpsEmo** (+/- *Eucalyptus todtiana* low isolated trees over) *Banksia attenuata, Eremaea beaufortioides* var. *microphylla, Calothamnus glaber*, *Grevillea candelabroides* mid open shrubland over *Melaleuca leuropoma*, *Daviesia divaricata* subsp. *divaricata, Conospermum wycherleyi, Hibbertia hypericoides* subsp. *hypericoides* and *Persoonia acicularis* low open shrubland over *Mesomelaena pseudostygia* and *Ecdeiocolea monostachya* low sparse sedgeland	Quadrats: DLQ06, DLQ07, DLQ08, DLQ10, LGD01, LGM03	Survey Area: 194.08 ha 2.84%	**Significant flora present:** *Baeckea* sp. Walkaway (A.S. George 11249) (P3), *Banksia fraseri* var. *crebra* (P3), *Comesperma rhadinocarpum* (P3), *Lechenaultia juncea* (P3), *Poranthera asybosca* (P1), *Poranthera moorokatta* (P2), *Schoenus griffinianus* (P4), *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154) (P2), *Stawellia dimorphantha* (P4), *Stylidium drummondianum* (P3), *Thysanotus kalbarriensis* (P2) **Vegetation condition:** Excellent (191.87 ha), Very Good (1.31 ha), Good (0.30 ha), Degraded (0.60 ha)	 (Source: Umwelt)
VT18	**ShAscLl MpsEmo** *Seringia hermanniifolia, Acacia scirpifolia , Lechenaultia linarioides* low open shrubland over *Mesomelaena pseudostygia, Ecdeiocolea monostachya* low sparse sedgeland	Quadrats: DLQ09	Survey Area: 7.37 ha 0.11%	**Significant flora present:** *Stawellia dimorphantha* (P4) **Vegetation condition:** Excellent 3.58 ha), Very Good (2.69 ha), Degraded (1.09 ha)	 (Source: Umwelt)
VT19	**EbmHhhCg TcPa MpsEmo** *Eremaea beaufortioides* var. *microphylla, Hibbertia hypericoides* subsp. *hypericoides, Calothamnus glaber* mid isolated shrubs over *Tersonia cyathiflora*, *Persoonia acicularis* low sparse shrubland over *Mesomelaena pseudostygia, Ecdeiocolea monostachya* mid isolated sedges	Quadrats: DLQ11, LGM02	Survey Area: 97.23 ha 1.42%	**Significant flora present:** *Baeckea* sp. Walkaway (A.S. George 11249) (P3) *Comesperma rhadinocarpum* (P3) *Lechenaultia juncea* (P3) *Poranthera asybosca* (P1) *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154) (P2) *Stawellia dimorphantha* (P4) *Thysanotus kalbarriensis* (P2) **Vegetation condition:** Excellent (92.92 ha), Good (4.31 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
Undulating Plains					
VT07	**Aca MmMtMl EmoMps** *Allocasuarina campestris* tall isolated shrubs over *Melaleuca marginata*, *Melaleuca tinkeri, Melaleuca leuropoma, Daviesia divaricata* subsp. *divaricata, Hibbertia hypericoides* subsp. *hypericoides* low open shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia* mid isolated sedges over introduced grassland and forbland	Quadrat: LGD03 Relevés: LGCR14	Survey Area: 1.43 ha 0.02%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Schoenus badius* (P2) *Styphelia hyalina* (P3) **Vegetation condition:** Very Good (0.13 ha), Good (0.81 ha), Degraded (0.49 ha)	 (Source: Umwelt)
VT08	**Ah GcAsLoSl HhhDdd** *Allocasuarina huegeliana* low isolated trees over *Grevillea candelabroides*, *Acacia saligna, Leptospermopsis oligandra, Scholtzia laxiflora* mid to tall sparse shrubland over mixed low sparse shrubland including *Hibbertia hypericoides* subsp. *hypericoides*, *Daviesia divaricata* subsp. *divaricata* over introduced grassland and forbland.	Relevés LGJR07, LGCR07	Survey Area: 1.43 ha 0.02%	**Significant flora present:** None found **Vegetation condition:** Good (0.35 ha), Degraded (1.08 ha)	 (Source: Umwelt)
VT09	**Ah BaAca** *Allocasuarina huegeliana* low isolated trees over *Banksia attenuata, Allocasuarina campestris, Melaleuca* spp. (*M. leuropoma, M. tinkeri, M. marginata*) mid sparse shrubland over mixed low sparse shrubland over introduced grassland	Quadrat: LGD11, LGD04	Survey Area: 69.55 ha 1.02%	**Significant flora present:** *Gastrolobium rotundifolium* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Good (49.64 ha), Degraded (19.92 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
VT10	**AMH EmoMpsLpp** *Allocasuarina campestris, Allocasuarina microstachya, Melaleuca tinkeri, Melaleuca marginata, Melaleuca aspalathoides, Hibbertia hypericoides* subsp. *hypericoides,* mixed mid to low open shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia, Lepidobolus preissianus* subsp. *preissianus* mid open sedgeland over *Austrostipa elegantissima* isolated grassland over forbland	Quadrats: LGD12, LGD13, LGJ02, LGJ07, LGM04, LGM08 Relevés: LGMR06	Survey Area: 33.91 ha 0.50%	**Significant flora present:** *Banksia fraseri var. crebra* (P3) *Banksia scabrella* (P4) *Comesperma rhadinocarpum* (P3) *Mesomelaena stygia* subsp. *deflexa* (P3) *Poranthera moorokatta* (P2) *Schoenus griffinianus* (P4) *Stylidium torticarpum* (P3) *Thryptomene nitida* (P3) *Tricoryne soullierae* (P3) **Vegetation condition:** Very Good (24.56 ha), Good (4.79 ha), Degraded (4.15 ha), Completely Degraded (0.41 ha)	 (Source: Umwelt)
VT11	**Bp GeCgEbb EmoMps** *Banksia prionotes* (+/- *Nuytsia floribunda, Eucalyptus todtiana*) woodland over *Grevillea eriostachya, Calothamnus glaber, Eremaea beaufortioides* var. *beaufortioides*, *Hibbertia hypericoides* subsp. *hypericoides* mid shrubs over mixed low sparse shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia* mid sparse sedgeland	Quadrats: DLQ05, LGD02	Survey Area: 6.92 ha 0.10%	**Significant flora present:** *Baeckea* sp. Walkaway (A.S. George 11249) (P3) *Banksia scabrella* (P4) *Comesperma rhadinocarpum* (P3) *Poranthera moorokatta* (P2) *Schoenus griffinianus* (P4) **Vegetation condition:** Excellent 5.34 ha), Very Good (1.04 ha), Good (0.31 ha), Degraded (0.23 ha)	 (Source: Umwelt)
VT12	**BaBsSlMlHhhJn EmoMps** (+/- *Eucalyptus todtiana* low isolated trees over) *Banksia attenuata, Banksia scabrella, Scholtzia laxiflora, Melaleuca leuropoma, Hibbertia hypericoides* subsp. *hypericoides*, *Jacksonia nutans* low sparse shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia* mid sparse sedgeland over grassland forbland	Quadrats: DLQ14, LGJ06	Survey Area: 15.1 ha 0.22%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Banksia scabrella* (P4) *Poranthera asybosca* (P1) *Schoenus griffinianus* (P4) *Verticordia luteola* var. *luteola* (P3) **Vegetation condition:** Very Good (12.04 ha), Good (1.62 ha), Degraded (1.44 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
VT13	**Ec MvvMcoAsAa** *Eucalyptus camaldulensis* (+/- *Casuarina obesa*) low isolated trees over *Melaleuca viminea* subsp. *viminea, Melaleuca concreta*, *Acacia saligna, Acacia acuminata* tall sparse shrubland over mixed shrubland/sedgeland with *Typha domingensis* in wetter areas over introduced grassland and forbland	Relevés: LGDR06, LGDR07, LGJR02, LGMR03	Survey Area: 27.86 ha 0.41%	**Significant flora present:** *Hopkinsia anoectocolea* (P3) *Thryptomene nitida* (P3) **Vegetation condition:** Very Good (1.20 ha), Degraded (25.52 ha), Completely Degraded (1.14 ha)	 (Source: Umwelt)
VT14	**Ell Aca** *Eucalyptus loxophleba* subsp. *loxophleba* low isolated trees over *Allocasuarina campestris* tall sparse shrubland over low open shrubland over introduced grassland	Relevés: LGMR01	Survey Area: 21.45 ha 0.31%	**Significant flora present:** None found **Vegetation condition:** Good (19.07 ha), Degraded (2.38 ha)	 (source: Biologic)
VT15	**Et MlHhh EmoMpsLpp** *Eucalyptus todtiana* low isolated mallee trees over (+/- *Leptospermopsis oligandra, Allocasuarina humilis* mid isolated shrubs) *Melaleuca leuropoma, Hibbertia hypericoides* subsp. *hypericoides* low sparse shrubland over *Ecdeiocolea monostachya, Mesomelaena pseudostygia, Lepidobolus preissianus* subsp. *preissianus* mid sparse sedgeland over introduced grassland and forbland	Quadrats DLQ15, LGM09 Relevés: LGJR06	Survey Area: 64.63 ha 0.95%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3), *Banksia scabrella* (P4), *Lechenaultia juncea* (P3), *Persoonia rudis* (P3), *Poranthera moorokatta* (P2), *Schoenus* sp. Eneabba (F. Obbens & C. Godden 1154) (P2), *Stawellia dimorphantha* (P4), *Stylidium drummondianum* (P3), *Thryptomene nitida* (P3), *Tricoryne soullierae* (P3), *Verticordia densiflora* var. *roseostella* (P3) **Vegetation condition:** Very Good (24.61 ha), Good (5.36 ha), Degraded (34.65 ha), Completely Degraded (<0.001 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
VT17	**MlHhh Emo** (+/- *Eucalyptus todtiana* low isolated trees over) *Melaleuca leuropoma*, *Hibbertia hypericoides* subsp. *hypericoides*, low open shrubland over *Ecdeiocolea monostachya* mid sparse sedgeland over introduced grassland and forbland	Quadrats: DLQ01, DLQ02	Survey Area: 22.09 ha 0.32%	**Significant flora present:** *Poranthera moorokatta* (P2) **Vegetation condition:** Very Good	 (Source: Umwelt)
VT22	**MlHhhJh Ae** *Melaleuca leuropoma, Hibbertia hypericoides* subsp. *hypericoides, Jacksonia hakeoides* low (to mid) sparse shrubland over *Austrostipa elegantissima* isolated clumps of grasses over sparse sedges and introduced forbland and grassland	Quadrats LGM05, LGM06	Survey Area: 9.23 ha 0.14%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Banksia scabrella* (P4) **Vegetation condition:** Very Good (7.64 ha), Degraded (1.59 ha)	 (Source: Umwelt)
Other Vegetation Units					
PCr	**PCr** Perennial crops of **Chamaecytisus palmensis* over scattered native shrubs (including *Jacksonia hakeoides*) over introduced pasture weeds	No site	Survey Area: 144.07 ha 2.11%	**Significant flora present:** None found **Vegetation condition:** Completely Degraded	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
PEc	**Pec** *Eucalyptus camaldulensis* (planted) mid woodland over introduced pasture weeds	No site	Survey Area: 87.8 ha 1.29%	**Significant flora present:** None found **Vegetation condition:** Completely Degraded	 (Source: Umwelt)
PEt	**Pet** *Eucalyptus todtiana* low isolated mallee trees over *Macrozamia fraseri, Rhagodia preissii* subsp. *obovata* isolated tall shrubs over introduced pasture weeds within paddocks that are grazed with no intact vegetation.	Relevés: DLR02, DLR03, DLR04	Survey Area: 298.38 ha 4.37%	**Significant flora present:** None found **Vegetation condition:** Completely Degraded	 (Source: Umwelt)
Re	**Re** Regrowth of old roadside gravel pits with mixed species.	Relevés: LGDR01, LGJR08	Survey Area: 3.91 ha 0.06%	**Significant flora present:** *Banksia fraseri* var. *crebra* (P3) *Stylidium drummondianum* (P3) *Thelymitra stellata* (EN) *Tricoryne soullierae* (P3) **Vegetation condition:** Degraded (1.14 ha), Completely Degraded (2.77 ha)	 (Source: Umwelt)

Map Code	Vegetation Code & Vegetation Description	Sample Sites	Area Extent	Features of Interest & Condition	Representative Photo
Mapping Units					
Ag	**Ag** Agricultural pivots for fodder crops	No site	Survey Area: 114.28 ha 1.67%	**Significant flora present** None found **Vegetation condition:** Completely Degraded	No photo available
Cl	**Cl** Cleared areas, generally associated with minor tracks, road maintenance (drainage culverts) and agricultural infrastructure	No site	Survey Area: 19.94 ha 0.29%	**Vegetation condition:** N/A (cleared)	No photo available
NS	**NS** Areas of the Survey Area that were not sampled (unlikely to be impacted by any proposed disturbances)	No site	Survey Area: 525.68 ha 7.70%	**Significant flora present** None found **Vegetation condition:** N/A	No photo available
OW	**OW** Areas of open water associated with farm dams and Sand Plain Creek	No site	Survey Area: 1.84 ha 0.03%	**Vegetation condition:** N/A	No photo available
P	**P** Paddock and pasture areas for crops and/or stock grazing (sheep and cows)	No site	Survey Area: 4740.4 ha 69.40%	**Vegetation condition:** Completely Degraded	 (Source: Biologic)
Rd	**Rd** Gazetted roads and tracks throughout the Survey Area. For example, Yandanooka Road West.	No site	Survey Area: 84.51 ha 1.24%	**Vegetation condition:** N/A (Cleared)	No photo available

Appendix R: Vegetation condition of the Survey Area

Condition	Extent (ha/%)	Comment
Excellent	Survey Area: 293.71 ha 4.30%	Excellent vegetation was restricted to the western section of the Survey Area in diverse heathland dominated by Proteaceae and Myrtaceae species, where vegetation structure was intact and only minor non-aggressive weeds present. This area also has limited designated vehicles tracks.
Very Good	Survey Area: 169.07 ha 2.48%	Very Good vegetation was mostly *Melaleuca* and *Allocasuarina* woodlands, where vegetation structure was altered and disturbance was more obvious (e.g. more aggressive weeds and grazing).
Good	Survey Area: 165.45 ha 2.42%	Good vegetation was mostly in *Melaleuca* and *Allocasuarina* woodlands with *Acacia* species near creek lines, where only basic vegetation structure remained due to multiple disturbances such as aggressive weeds, partial clearing and grazing.
Degraded	Survey Area: 173.23 ha 2.54%	Degraded vegetation was mostly in *Melaleuca* woodland with *Eucalyptus camaldulensis* along creek lines, where partial clearing, grazing and very aggressive weed species have altered the vegetation structure. Some degraded areas also include planted vegetation.
Completely Degraded	Survey Area: 5,397.00 ha 79.01%	Completely Degraded areas were primarily pastoral land and paddocks, where the vegetation structure is no longer intact with little to no native species. Often it would be isolated *Eucalyptus todtiana* over weeds only and it was beyond the scope of the survey to individually map isolated remnant trees separately. These areas consisted mainly of weed and crop species with isolated native trees and shrubs.
Cleared	Survey Area: 104.45 ha 1.53%	Cleared areas consisted of roads, tracks, turnaround points, roadside drains, parking bays and other areas devoid of vegetation.
Not sampled	Survey Area: 527.52 ha 7.72%	Areas not sampled during field surveys.