REPORT ATTACHMENTS

M70/1302
BORANUP

Extraction of Limesand and Quartz sand

ENMIC PTY LTD



MDCP **207863**
MEG **MEG-231441**
VERSION NUMBER: 1 **22 APRIL 2026**

Environmental Group Site	Boranup Limesand
Environmental Group Site Code	S0231441
Project Code	J02910
Project	Boranup Limesand

Commodity	Limesand
Applicant	ENMIC PTY LTD
Address:	43 Hector Street Osborne Park, WA, 6017
Contact:	Manager 08 9241 1100

lance@limeindustries.com.au – peterm@limeindustries.com.au

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BORANUP LIMESAND
SOUTH-WEST MINERAL FIELD

Extraction of Limesand for Lime

ENMIC PTY LTD

ATTACHMENT 1
FLORA AND VEGETATION ASSESSMENT

M70/1302 BORANUP

2025 DETAILED FLORA AND VEGETATION SURVEY

Prepared for:	Lime Industries
Report Date:	17 February 2026
Version:	1
Report No.	2026-960

pgv ENVIRONMENTAL

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1 INTRODUCTION

1.1 Background

Mining Lease M70/1302 is located in the Shire of Augusta Margaret River, approximately 25km south of the Margaret River townsite (Figure 1). The mining lease is 77ha in size of which around 9.5ha has been excavated for lime sand mining at the eastern end. Lime Industries is proposing to extend the current sand mine further to the south-east (Figure 2).

The proposed expansion area is in the south-east corner of the lease and is around 5ha in size. PGV Environmental was commissioned by Lime Industries to undertake a Detailed Flora and Vegetation Survey in the proposed expansion area (the site).

1.2 Scope of Works

A Detailed Flora and Vegetation Survey was undertaken in accordance with EPA Technical Guidance *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016). The survey included the following:

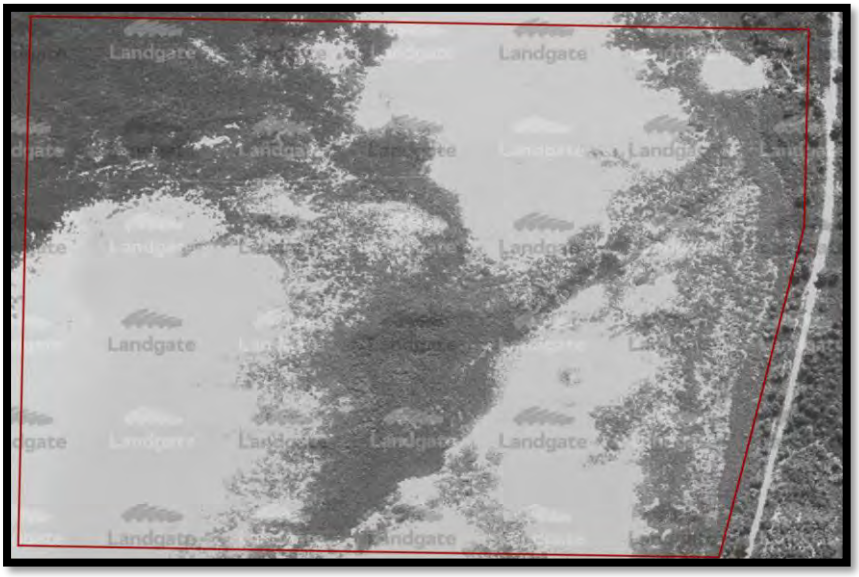
- Desktop search and review of the Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority flora and Ecological Community Databases;
- A search of the Atlas of Living Australia database (ALA, 2026);
- A search of the Commonwealth Government's Protected Matters Search Tool (DAWE, 2026) to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*;
- Examination of historic and recent aerial photography and contour and soil maps to provisionally identify vegetation types and condition;
- Field survey using quadrats to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Recording of any significant plant species using a hand-held GPS;
- Description and mapping of vegetation types and vegetation condition;
- Compilation of a flora list; and
- Assessing the conservation value of flora species and vegetation communities.

2 EXISTING ENVIRONMENT

2.1 Land Use

The earliest available historic aerial photograph on-line from 1971 shows that the site was mostly bare sand with some areas of native vegetation (Plate 1) (Landgate, 2026).

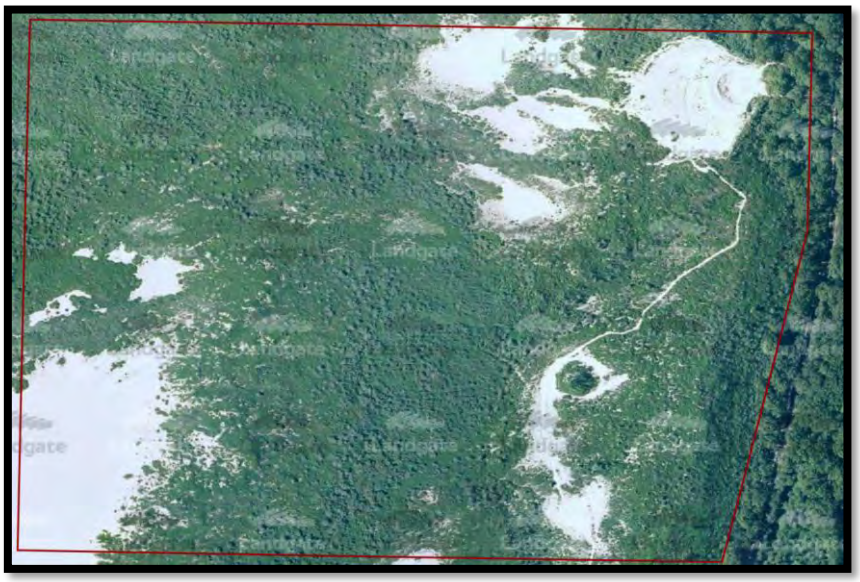
Plate 1: Aerial Photograph 1971 (Landgate, 2026)



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Native vegetation established over much of the bare sand areas over time (Plate 2). Lime sand mining has commenced at the north-east end of the tenement.

Plate 2: Aerial Photograph 2004 (Landgate, 2026)



The most recently available aerial photograph from December 2024 shows the expansion of the sand mine over the eastern part of the tenement. The area subject of this survey is all native vegetation with one sand track through the centre.

Plate 3: Aerial Photograph December 2024 (Landgate, 2026)



2.2 Topography

The site slopes down from the west from a high point of around 170 m Australian Height Datum (AHD) down to around 86m AHD at the eastern boundary (Figure 2).

2.3 Geology and Soils

The site is mapped as part of the Gracetown Ridge System which is a limestone ridge, in the coastal edge of the Leeuwin Zone (DPIRD, 2026). The soil unit mapped on the site is:

- Kilcarnup dunes (organic) Phase (216GrKPf) which are steep dunes, (gradients usually in excess of 20%) not exposed to prevailing winds with deep pale calcareous sands with brown topsoil (DPIRD, 2026) and are mapped over the whole site.

2.4 Hydrology

The Surficial Aquifer in the Cape to Cape South sub-area ranges from alluvial and colluvial deposits in river valleys to dunes and swales which can reach a thickness exceeding 100 m. The saturated thickness of the aquifer is small and in places, dune sands lie over dry bedrock with no water-table development (DoW, 2009).

The site is elevated on highly porous material and there are no drainage lines or wetlands.

3 METHODOLOGY

3.1 Database Searches

Searches of the following databases were undertaken prior to the site survey:

- Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority Flora database and Threatened Ecological Communities database (Appendix 1) with a buffer radius of 20km (Ref 37-1021FL);
- Atlas of Living Australia (ALA, 2026) (Appendix 2) with a buffer radius of 10km; and
- The Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999* (DAWE, 2026). A radius of 5km was used for this database (Appendix 3).

3.2 Previous Survey

A survey of a 15.5ha portion of M70/1302, directly west of the survey area for this report, was undertaken in October 2021 (PGV Environmental, 2022). The survey recorded four vegetation types and 42 plant species of which one Priority 4 species *Banksia sessilis* var. *cordata* was recorded.

3.3 Detailed Survey

The survey area for the 2025 survey is located to the south-east of the existing quarry. The area does not include the portions of Karri Forest that occur along the eastern boundary of the lease.

A Detailed spring flora and vegetation survey of the site was conducted by Dr Paul van der Moezel on 1 October 2025. The site was walked to record all species in the survey area. The vegetation on the site is extremely thick in most places and difficult to walk through. The track log is shown on Plate 4.

Plate 4: Track Log



All areas that appeared to be different vegetation types on the aerial photographs were able to be accessed. PGV Environmental consider the inability to survey the whole site in detail was not a constraint to the results given the uniform nature of the vegetation type recorded.Information on flora composition and vegetation structure was recorded in five 10m x 10m non-permanent quadrats sampled from representative vegetation types.

Most plant species were identified in the field. Some specimens were photographed or taken for identification at the Perth Reference Herbarium or office using standard reference guides.

3.4 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 1 in order to assess the adequacy of the survey.

Rainfall for Witchcliffe West (Margaret River District) (BOM Site Number 009521, 16km from the site) was above average for July in 2025 (228.2mm), August (181.4) and September (130.6mm) compared to mean values of 222.0mm, 164.8mm and 112.0 repsectively (BOM, 2026). There were no extremes in weather events in the months prior to the survey. Therefore, the climatic conditions are not considered a constraint on the survey.

Table 1: Statement of Botanical Survey Conditions

Issue	Constraints (Y/N)*	Comment
Competency/experience of the consultant conducting the survey	No	Dr Paul van der Moezel has extensive botanical survey experience in the Augusta-Margaret River area, including on the mining lease in 2021.
Proportion of the flora identified^	No	The timing of the survey in early October was optimal to identify most flora species on the site including all potential Priority Flora. No follow-up survey required.
Sources of information (historic/recent or new data)	No	The flora of the region is relatively well known.
Proportion of the task achieved and further work that may need to be undertaken	No	No follow-up survey required as no Threatened or Priority Flora expected to occur in other seasons.
Timing/weather/season/cycle	No	The spring survey was optimal for most flora species. 2025 was a good year for ephemeral species.
Disturbances (Fire)	No	The fire age of the vegetation was greater than 5 years
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	Site coverage was low due to the very difficult vegetation to walk through. All vegetation types and topographical areas accessed. Low site coverage unlikely to impact on results due to the uniformity of vegetation types.
Completeness (e.g. was relevant area fully surveyed)	No	
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook most plant identifications on site.
Remoteness and/or access problems	No	Accessible site close to Caves Road.

Issue	Constraints (Y/N)*	Comment
Availability of contextual (e.g. bioregional) information for the study area.	No	Beard *et al.* (2013)

*Constraints have been rated as Significant, Moderate or No constraints

^Fungi and nonvascular flora (e.g. algae, mosses and liverworts) were not specifically surveyed for during the survey.

4 RESULTS

4.1 Flora Database Searches

The search of the DBCA Threatened and Priority Flora Databases: the WA Herbarium database (WAHerb), the Threatened and Priority Flora Species List (TFPL) (37-1021FL) (Appendix 1) and Atlas of Living Australia (Appendix 2) indicates that a number of species that are listed as Endangered, Threatened or Priority have been recorded within the vicinity of the site. The EPBC Act Protected Matters Search Tool (Appendix 3) identifies species listed under the EPBC Act as potentially having habitat in the area. The results from these database searches are shown in Table 2.

Table 2: Conservation Significant Flora Identified in Database Searches

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Caladenia lodgeana	Lodge's Spider-orchid	Critically Endangered	Critically Endangered
Conospermum quadripetalum		Critically Endangered	
Gastrolobium papilio	Butterfly-leafed Poison	Critically Endangered	Endangered
Grevillea brachystylis subsp. *australis*		Critically Endangered	Vulnerable
Lambertia echinata subsp. *occidentalis*	Western Prickly Honeysuckle	Critically Endangered	Endangered
Banksia nivea subsp. *uliginosa*	Swamp Honeypot	Endangered	Endangered
Boronia exilis	Scott River Boronia	Endangered	Endangered
Caladenia excelsa	Giant Spider-orchid	Endangered	Endangered
Caladenia hoffmanii	Hoffman's Spider-orchid	Endangered	Endangered
Darwinia ferricola	Scott River Darwinia	Endangered	Endangered
Drakaea micrantha	Dwarf Hammer-orchid	Endangered	Vulnerable
Kennedia lateritia	Augusta Kennedia	Endangered	Endangered
Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	Roundleaf Honeysuckle	Endangered	Endangered
Reedia spathacea	Reedia	Endangered	Critically Endangered
Banksia squarrosa subsp. *argillacea*	Whicher Range Dryandra	Vulnerable	Vulnerable
Leptomeria dielsiana	Diels' Currant Bush	Presumed Extinct	Vulnerable
Caladenia pholcoidea subsp. *augustensis*	Augusta Spider Orchid	Priority 1	
Deyeuxia inaequalis		Priority 1	
Hemigenia obovata		Priority 1	
Netrostylis sp. Nannup (P.A. Jurjevich 1133)		Priority 1	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Philydrella pygmaea subsp. *minima*		Priority 1	
Schoenus indutus		Priority 1	
Stylidium sp. Scott River Plain (N.G. Marchant 74/23)		Priority 1	
Synaphea macrophylla		Priority 1	
Synaphea nexosa		Priority 1	
Synaphea sp. Redgate Road (J. Scott 16)		Priority 1	
Caladenia ambusta	Boranup Spider Orchid	Priority 2	
Hemigenia sp. Nillup (R.D. Royce 98)		Priority 2	
Hydrocotyle sp. *Hamelinensis* (G.J. Keighery s.n. PERTH 02391325)		Priority 2	
Leptomeria furtiva		Priority 2	
Lepyrodia extensa		Priority 2	
Schoenus loliaceus		Priority 2	
Schoenus sp. Grassy (E. Gude & J. Harvey 250)		Priority 2	
Stenanthemum sublineare		Priority 2	
Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)		Priority 3	
Actinotus repens		Priority 3	
Andersonia sp. Amabile (N. Gibson & M. Lyons 355)		Priority 3	
Austrostipa mundula		Priority 3	
Blennospora doliiformis		Priority 3	
Boronia anceps		Priority 3	
Caladenia abbreviata	Coastal Spider Orchid	Priority 3	
Calothamnus lateralis var. *crassus*		Priority 3	
Chordifex gracilior		Priority 3	
Chordifex jacksonii		Priority 3	
Cyathochaeta stipoides		Priority 3	
Dampiera heteroptera		Priority 3	
Gastrolobium formosum		Priority 3	
Grevillea manglesioides subsp. *ferricola*		Priority 3	
Grevillea papillosa		Priority 3	
Isopogon formosus subsp. *dasylepis*		Priority 3	
Juncus meianthus		Priority 3	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Leptinella drummondii		Priority 3	
Lepyrodia heleocharoides		Priority 3	
Leucopogon alternifolius		Priority 3	
Leucopogon wheelerae		Priority 3	
Loxocarya magna		Priority 3	
Netrostylis sp. Blackwood River (A.R. Annels 3043)		Priority 3	
Notisia intonsa	Shaggy Gnephosis	Priority 3	
Pimelea ciliata subsp. *longituba*		Priority 3	
Stylidium lowrieanum	Lowrie's Triggerplant	Priority 3	
Stylidium trudgenii		Priority 3	
Thysanotus cymosus		Priority 3	
Acacia semitrullata		Priority 4	
Acacia tayloriana		Priority 4	
Adenanthos detmoldii		Priority 4	
Adenanthos x pamela		Priority 4	
Aotus carinata		Priority 4	
Astartea onycis		Priority 4	
Banksia meisneri subsp. *ascendens*		Priority 4	
Banksia sessilis var. *cordata*		Priority 4	
Caladenia interjacens	Walpole Spider Orchid	Priority 4	
Eucalyptus calcicola subsp. *calcicola*		Priority 4	
Eucalyptus marginata x megacarpa		Priority 4	
Franklandia triaristata	Lanoline Bush	Priority 4	
Gonocarpus pusillus		Priority 4	
Hypolaena robusta		Priority 4	
Loricobbia skinneri	Skinner's Pea	Priority 4	
Melaleuca basicephala		Priority 4	
Stylidium gloeophyllum		Priority 4	
Stylidium ireneae		Priority 4	
Stylidium leeuwinense		Priority 4	
Tripterococcus sp. *Brachylobus* (A.S. George 14234)		Priority 4	
Verticordia lehmannii		Priority 4	

Definitions of the Conservation Codes are in Appendix 4.

Based on the soil types and vegetation type and conditions observed during the survey the likelihood of conservation significant species identified in the database searches occurring on the site has been examined (Table 3). No Threatened species are considered to have potential to occur on the site.

Three Priority flora species have potential to occur on the site based on the soil type. The Priority 4 species *Banksia sessilis* var. *cordata* was recorded on the site in the 2021 survey.

Table 3: Likelihood of Identified Significant Flora Species Occurring on the Site

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Critically Endangered			
Caladenia lodgeana	Lodge's Spider-orchid	Lodge's Spider-orchid occurs in clay soils or in black loam on the margins or winter-wet areas and below granite outcrops (Hopper and Brown, 2001).	No – not suitable habitat
Conospermum quadripetalum		*Conospermum quadripetalum* grows in sandy clay, grey sand on flats behind coastal hills.	Highly Unlikely – not suitable habitat
Gastrolobium papilio	Butterfly-leafed Poison	Butterfly-leafed Poison occurs on sandy clay over ironstone and laterite on flat plains.	No – not suitable habitat
Grevillea brachystylis subsp. *australis*		*Grevillea brachystylis* subsp. *australis* grows in sand, sandy clay in swampy situations, stream banks.	Highly Unlikely – not suitable habitat
Lambertia echinata subsp. *occidentalis*	Western Prickly Honeysuckle	The Western Prickly Honeysuckle prefers white sandy soils over laterite, orange/brown-red clay over ironstone on flats to foothills, winter-wet sites.	No – not suitable habitat
Endangered			
Banksia nivea subsp. *uliginosa*	Swamp Honeypot	The Swamp Honeypot occurs in sandy clay, gravel.	Highly Unlikely – not suitable habitat
Boronia exilis	Scott River Boronia	The Scott River Boronia grows in seasonally wet heath.	Highly Unlikely – not suitable habitat
Caladenia excelsa	Giant Spider-orchid	The Giant Spider-orchid Giant Spider-orchid grows on hilltops, slopes, swales and low plains in deep pale yellow, white or grey sandy soils (Brown *et al, 2013*), and is found among dense low shrubs in Banksia, Jarrah and Marri woodlands (Williams et al., 2001).	Highly Unlikely – not suitable vegetation types not on site
Caladenia hoffmanii	Hoffman's Spider-orchid	Hoffman's Spider-orchid grows in clay, loam, laterite, granite on rocky outcrops and hillsides, ridges, swamps and gullies.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Darwinia ferricola	Scott River Darwinia	The Scott River Darwinia prefers peaty sand over ironstone, around winter wet areas near the coast (Luu and English, 2004).	Highly Unlikely – not suitable habitat
Drakaea micrantha	Dwarf Hammer-orchid	Dwarf Hammer-orchid occurs in grey sands over dark, grey to blackish, sandy clay-loam substrates in winter wet depressions or swamps. Usually occurs on cleared fire breaks or open sandy patches in Banksia, Jarrah and Sheoak woodlands or forest and often found under Spearwood thickets.	Highly Unlikely – not suitable habitat
Kennedia lateritia	Augusta Kennedia	The Augusta Kennedia occurs on black humus-rich sand, often amongst granite outcrops.	Highly Unlikely – not suitable habitat
Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	Roundleaf Honeysuckle	*Lambertia orbifolia* subsp. Scott River Plains grows in yellow-brown sandy clay, grey sand, sandy gravel, laterite along riverbanks, sand dunes, plains and ridges, seasonally-inundated areas.	Highly Unlikely – not suitable habitat
Reedia spathacea	Reedia	Reedia occurs in peaty sand in swamps and on river edges.	Highly Unlikely – not suitable habitat
Vulnerable			
Banksia squarrosa subsp. *argillacea*	Whicher Range Dryandra	The Whicher Range Dryandra grows in white/grey sand, gravelly clay or loam on winter-wet flats, clay flats.	Highly Unlikely – not suitable habitat
Presumed Extinct			
Leptomeria dielsiana	Diels' Currant Bush	Diels' Currant Bush was recorded from scrubby heath in the Scott River area.	Highly Unlikely – not suitable habitat
Priority 1			
Caladenia pholcoidea subsp. *augustensis*	Augusta Spider Orchid	Augusta Spider Orchid grows in sandy clay on winter-wet flat in summer burnt areas.	Highly Unlikely – not suitable habitat
Deyeuxia inaequalis		*Deyeuxia inaequalis* grows in loam.	Highly Unlikely – not loam habitat
Hemigenia obovata		*Hemigenia obovata* occurs in white or black wet sand on flats.	Highly Unlikely – not suitable habitat
Netrostylis sp. Nannup (P.A. Jurjevich 1133)		*Netrostylis* sp. Nannup is recorded from a wetland (Western Australian Herbarium, 2007).	Highly Unlikely – not wetland habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Philydrella pygmaea subsp. *minima*		*Philydrella pygmaea* subsp. minima grows in damp sites.	Highly Unlikely – not damp habitat
Schoenus indutus		*Schoenus indutus* occurs in gravelly sand.	Highly Unlikely – not gravelly habitat
Stylidium sp. Scott River Plain (N.G. Marchant 74/23)		*Stylidium* sp. Scott River Plain occurs on the Scott River Plain.	Highly Unlikely – not river plain habitat
Synaphea macrophylla		*Synaphea macrophylla* occurs in gravelly loam.	Highly Unlikely – not gravelly habitat
Synaphea nexosa		*Synaphea nexosa* occurs in clay-loam on winter-wet flats.	Highly Unlikely – not winter-wet habitat
Synaphea sp. Redgate Road (J. Scott 16)		*Synaphea* sp. Redgate Road (J. Scott 16) occurs on grey clay, litter in winter-wet areas, wet areas along road verges and ditches.	Highly Unlikely – not suitable habitat
Priority 2			
Caladenia ambusta	Boranup Spider Orchid	Boranup Spider Orchid is recorded from a flat - gentle slope in brown soil (Western Australian Herbarium, 2002).	Highly Unlikely – not suitable soil type
Hemigenia sp. Nillup (R.D. Royce 98)		*Hemigenia* sp. Nillup grows in grey sand or gravelly soil in swamps and on sandy slopes.	Highly Unlikely – not suitable habitat
Hydrocotyle sp. *Hamelinensis* (G.J. Keighery s.n. PERTH 02391325)		*Hydrocotyle* sp. Hamelinensis grows in grey sand on limestone ridges.	Highly Unlikely – not suitable habitat
Leptomeria furtiva		*Leptomeria furtiva* grows in grey or black peaty sand on winter-wet flats.	Highly Unlikely – not suitable habitat
Lepyrodia extensa		*Lepyrodia extensa* grows in sand and sandy peat in seasonally inundated swamps.	Highly Unlikely – not suitable habitat
Schoenus loliaceus		*Schoenus loliaceus* occurs on sandy soils in winter-wet depressions.	Highly Unlikely – not wet habitat
Schoenus sp. Grassy (E. Gude & J. Harvey 250)		*Schoenus* sp. Grassy grows in black silt on swamps.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Stenanthemum sublineare		*Stenanthemum sublineare* grows in littered white sand on coastal plain (Rye, 2001).	Highly Unlikely – not suitable habitat
Priority 3			
Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)		*Acacia lateriticola* var. Glabrous variant (B.R.Maslin 6765) occurs in lateritic soils.	Highly Unlikely – not suitable habitat
Actinotus repens		*Actinotus repens* grows in sandy clay, mud on roadside ditches, creek banks.	Highly Unlikely – not suitable habitat
Andersonia sp. Amabile (N. Gibson & M. Lyons 355)		*Andersonia* sp. Amabile grows in grey or black peaty sand, loam on creek banks, swamp edges, seasonally wet flats.	Highly Unlikely – not suitable habitat
Austrostipa mundula		Austrostipa mundula occurs on plains in grey sand (Western Australian Herbarium, 2001).	Highly Unlikely – not suitable habitat
Blennospora doliiformis		*Blennospora doliiformis* grows in grey or red clay soils over ironstone on seasonally-wet flats.	Highly Unlikely – not suitable habitat
Boronia anceps		*Boronia anceps* grows in white sand, gravelly laterite on seasonally swampy heaths.	Highly Unlikely – not suitable habitat
Caladenia abbreviata	Coastal Spider Orchid	Coastal Spider Orchid grows in open sandy areas on coastal sand dunes under Agonis and Melaleuca species.	Unlikely – Not coastal sand dune
Calothamnus lateralis var. *crassus*		*Calothamnus lateralis* var. *crassus* grows in sand on wet depressions.	Highly Unlikely – not suitable habitat
Chordifex gracilior		*Chordifex gracilior* grows in peaty sand on swamps.	Highly Unlikely – not suitable habitat
Chordifex jacksonii		*Chordifex jacksonii* grows in sand, loamy sand on seasonally inundated swamps.	Highly Unlikely – not suitable habitat
Cyathochaeta stipoides		*Cyathochaeta stipoides* grows in grey or red-brown sand on seasonally wet flats.	Highly Unlikely – not suitable habitat
Dampiera heteroptera		*Dampiera heteroptera* grows in sandy soils on swampy areas.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Gastrolobium formosum		*Gastrolobium formosum* grows in clay loam along river banks or in swamps.	Highly Unlikely – not suitable habitat
Grevillea manglesioides subsp. *ferricola*		*Grevillea manglesioides* subsp. *ferricola* grows in red sandy clay over ironstone on winter wet flats.	Highly Unlikely – not suitable habitat
Grevillea papillosa		*Grevillea papillosa* grows in brown or peaty sand, sandy clay, loam on seasonally-wet areas, swamps.	Highly Unlikely – not suitable habitat
Isopogon formosus subsp. *dasylepis*		*Isopogon formosus* subsp. *dasylepis* grows in sand, sandy clay, gravelly sandy soils over laterite, often swampy areas.	Highly Unlikely – not suitable habitat
Juncus meianthus		*Juncus meianthus* grows in black sand, sandy clay near creeks, seepage areas.	Highly Unlikely – not suitable habitat
Leptinella drummondii		*Leptinella drummondii* grows in clay loam, mud along rivers.	Highly Unlikely – not suitable habitat
Lepyrodia heleocharoides		*Lepyrodia heleocharoides* grows in moist peaty sand in dry or seasonally inundated heath or woodland, swamps.	Highly Unlikely – not suitable habitat
Leucopogon alternifolius		*Leucopogon alternifolius* grows in grey/white sand in swampy areas, seasonally wet areas.	Highly Unlikely – not suitable habitat
Leucopogon wheelerae		*Leucopogon wheelerae* occurs in swamps, in heath or occasionally open woodland (Hislop, 2008).	Highly Unlikely – not suitable habitat
Loxocarya magna		*Loxocarya magna* grows in sand, loam, clay, ironstone on seasonally inundated or damp habitats.	Highly Unlikely – not suitable habitat
Netrostylis sp. Blackwood River (A.R. Annels 3043)		*Netrostylis* sp. Blackwood River (A.R. Annels 3043) is recorded from a creek bed (Western Australian Herbarium, 2005).	Highly Unlikely – not suitable habitat
Notisia intonsa	Shaggy Gnephosis	Shaggy Gnephosis grows in red/brown clay, stony saline loam.	Highly Unlikely – not suitable habitat
Pimelea ciliata subsp. *longituba*		*Pimelea ciliata* subsp. *longituba* occurs in grey sand over clay, loam.	Highly Unlikely – not suitable habitat
Stylidium lowrieanum	Lowrie's Triggerplant	Lowrie's Triggerplant grows in sand or sandy loam over limestone. Eucalypt or Agonis woodland, forest, scrub.	Possible – habitat may occur on the site

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Stylidium trudgenii		*Stylidium trudgenii* grows in grey sand, dark grey to black sandy peat on the margins of winter-wet swamps, depressions.	Highly Unlikely – not suitable habitat
Thysanotus cymosus		*Thysanotus cymosus* occurs in clay, granitic or lateritic sand.	Highly Unlikely – not suitable habitat
Priority 4			
Acacia semitrullata		*Acacia semitrullata* grows in white/grey sand, sometimes over laterite, clay on sandplains, swampy areas.	Highly Unlikely – not suitable habitat
Acacia tayloriana		*Acacia tayloriana* grows in grey or yellow/orange sandy soils, lateritic gravel, clay loam in winter-wet areas.	Highly Unlikely – not suitable habitat
Adenanthos detmoldii		*Adenanthos detmoldii* grows in grey or black peaty sand, wet on swamps, roadsides.	Highly Unlikely – not suitable habitat
Adenanthos x pamela		*Adenanthos x pamela* grows in grey sand, laterite on damp flats, roadsides.	Highly Unlikely – not suitable habitat
Aotus carinata		*Aotus carinata* occurs in sandy soils on seasonally wet flats.	Highly Unlikely – not suitable habitat
Astartea onycis		*Astartea onycis* grows in pale grey sand or sandy clay over clay in seasonally wet sedgelands (Rye, 2013).	Highly Unlikely – not suitable habitat
Banksia meisneri subsp. *ascendens*		*Banksia meisneri* subsp. *ascendens* grows in white or grey sand on swampy flats.	Highly Unlikely – not suitable habitat
Banksia sessilis var. *cordata*		*Banksia sessilis* var. *cordata* grows in white/grey sand on coastal limestone.	Previously recorded on the lease
Caladenia interjacens	Walpole Spider Orchid	Walpole Spider Orchid grows in sand on consolidated coastal dunes.	No – error in entry in ALA – occurs 100km away
Eucalyptus calcicola subsp. *calcicola*		*Eucalyptus calcicola* subsp. *calcicola* grows in red-brown sand over limestone on coastal dunes, calcareous ridges, rocky outcrops.	Unlikely – not typical habitat
Eucalyptus marginata x megacarpa		*Eucalyptus marginata x megacarpa* grows in sandy loam on interdunal areas.	Unlikely – may have habitat on the site

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Franklandia triaristata	Lanoline Bush	Lanoline Bush grows in white or grey sand.	Unlikely – not recorded in area since 1945 and generally occurs further inlands
Gonocarpus pusillus		*Gonocarpus pusillus* grows in grey sandy clay on winter-wet swamps.	Highly Unlikely – not suitable habitat
Hypolaena robusta		*Hypolaena robusta* grows in white sand on sandplains in poorly drained areas.	Highly Unlikely – not suitable habitat
Loricobbia skinneri	Skinner's Pea	Skinner's Pea occurs in sandy or clayey soils in winter-wet depressions.	Highly Unlikely – not suitable habitat
Melaleuca basicephala		*Melaleuca basicephala* grows in black peaty sand, clay on winter-wet flats, swamps.	Highly Unlikely – not suitable habitat
Stylidium gloeophyllum		*Stylidium gloeophyllum* grows in sandy clay loam, granite on winter wet depressions, or fringing outcrops with *Agonis*, mallee, or Hakea shrubland with sedges.	Highly Unlikely – not suitable habitat
Stylidium ireneae		*Stylidium ireneae* occurs in sandy loam in valleys near creek lines, woodland, often with *Agonis*.	Highly Unlikely – not suitable habitat
Stylidium leeuwinense		*Stylidium leeuwinense* grows in grey to black peaty sand on winter-wet habitats and depressions in shrubland, heath, sedgeland or low woodland.	Highly Unlikely – not suitable habitat
Tripterococcus sp. Brachylobus (A.S. George 14234)		*Tripterococcus* sp. Brachylobus occurs in grey, black or peaty sand winter-wet flats.	Highly Unlikely – not suitable habitat
Verticordia lehmannii		*Verticordia lehmannii* grows in sandy clay on winter-wet flats.	Highly Unlikely – not suitable habitat

* sourced from Florabase (DBCA, 2017) and SPRAT Database (DoEE, 2016) as well as the DBCA database searches unless otherwise denoted

Two Priority species were identified that possibly occur on the site being:

- *Stylidium lowrieanum* (Lowrie's Triggerplant) (P3); and
- *Banksia sessilis* var. cordata.

Stylidium lowrieanum flowers in October-November. *Banksia sessilis* var. cordata is identifiable all year round.

4.2 TEC and PEC Desktop Study

A search of DBCA's Threatened (TEC) and Priority Ecological Communities (PEC) database was conducted within a radius of 20km around the site (27_1021EC). Three TECs and four PECs at State level were identified in the database search. There are two TECs and one PEC listed as TECs under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The communities identified in the database searches are outlined in Table 4.

None of the TECs or PECs are expected to occur on the site given the preferred habitat of the communities identified.

Table 4: Threatened and Priority Ecological Communities likely to occur within 5km of the Site

Ecological Community	Description	Conservation Status WA	Status under the EPBC Act
CAVES LEEUWIN01	Aquatic Root Mat Community Number 1 of Caves of the Leeuwin Naturaliste Ridge (Easter and Jewel Caves)	Critically Endangered	Endangered
SCOTT IRONSTONE	Scott River Ironstone Association	Endangered	Endangered
Augusta-microbial	Rimstone Pools and Cave Structures Formed by Microbial Activity on Marine Shorelines (Augusta microbialites)	Endangered	
Reedia swamps - Blackwood Plateau	*Reedia spathacea - Empodisma gracillimum - Sporadanthus rivularis* dominated floodplains and paluslopes of the Blackwood Plateau.	Priority 1	
Sedgelands of Cape Leeuwin Spring	Tall closed sedgeland on shallow soils derived from granite gneiss on the Leeuwin Naturaliste Ridge	Priority 1	
Melaleuca lanceolata forests	*Melaleuca lanceolata* forests, Leeuwin Naturaliste Ridge	Priority 2	
Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh	Priority 3	Vulnerable

4.3 Flora

A total of 42 plant species were recorded during the flora survey (Appendix 5). This total consisted of 38 native species and 4 introduced species (9.5%). The total number of native species is low for a 9ha area of native vegetation mostly in Excellent condition, however is the same number recorded for the 15.5ha area on the lease surveyed in 2021 and is indicative of Peppermint woodland vegetation on sand dunes which is typically species poor.

No Threatened or Priority species were recorded on the site.

Plant families with the greatest number of species were the Asteraceae (Daisy family – 6 species, all native) and Cyperaceae (Sedge family – 4 species, 3 native and 1 introduced).

The number of plant species recorded in the five quadrats ranged from 14-17 (average 15.0). This is very similar to the number of plant species recorded in the 2021 survey quadrats (average 14). A maximum of one non-native species was recorded in the quadrats.

4.4 Vegetation Complex

Vegetation complexes/associations are a broad level of vegetation description which is based on the underlying geomorphology and rainfall (Heddle *et al*., 1980). Two vegetation associations are mapped on the site as follows:

- Beard Association Boranup 1108 Thicket of Wattle, *Casuarina* and Teatree *Acacia-Allocasuarina-Melaleuca* alliance; and
- Beard Association Boranup 1 Tall forest or Tall woodland. Mainly karri *Eucalyptus diversicolor* or Tuart *E. gomphocephala*. (Beard *et al.,* 2013)

The Peppermint-dominated vegetation on the site does not closely match either of the Beard Associations. The Boranup 1 vegetation association boundary is mapped slightly wrong and should be mapped along the eastern boundary of the survey area as that is where the Karri forest vegetation starts.

4.5 Vegetation

4.5.1 Vegetation Type

Vegetation complexes are a very broad mapping unit used to map the vegetation at the scale of the Swan Coastal Plain for example. For small scale sites, such as the survey area, vegetation mapping can be further refined by using vegetation types which are based on the composition and structure of the dominant species rather than based on geomorphology.

One vegetation type was described and mapped on the site. The vegetation type is the same as that previously recorded over the majority of the area surveyed to the west in 2021.

One single, relatively young Karri tree (*Eucalyptus diversicolor*) was recorded within the Peppermint (*Agonis flexuosa*) vegetation and is considered an isolated individual rather than indicative of Karri Forest vegetation.

The vegetation types are described in Table 5 and mapped in Figure 3.

Table 5: Vegetation Types on the Site

Vegetation Type	Description	Photograph
AfSg[2] *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath	This is the only vegetation type on the site. *Agonis flexuosa* is 5-10m high and 10-20% cover over *Spyridium globulosum* 2-4m high and 10-25% cover. The understorey is sparse and contains abundant moss on the ground. Typical understorey species include *Leucopogon parviflorus, Acrotriche cordata, Lepidosperma gladiatum* and the creeper *Cassytha racemosa.* The soils are cream sand. Quadrats B8-12 are representative of this vegetation type.	

4.5.2 Vegetation Condition

The condition of the vegetation was assessed according to the system of Keighery as described in Bush Forever (Government of Western Australia, 2000) (Table 6).

Table 6: Vegetation Condition Rating Scale

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

The condition of the native vegetation was all rated as Excellent with very few weed species present (Figure 3).

4.6 Conservation Significance of Flora and Vegetation

4.6.1 Flora

No Threatened or Priority plant species were recorded on the site.

4.6.2 Vegetation

4.6.2.1 Vegetation Complex

Two vegetation associations are mapped on the site as follows:

- Beard Association Boranup 1108 Thicket of Wattle, *Casuarina* and Teatree *Acacia-Allocasuarina-Melaleuca* alliance; and
- Beard Association Boranup 1 Tall forest or Tall woodland. Mainly karri *Eucalyptus diversicolor* or Tuart *E. gomphocephala*. (Beard *et al.,* 2013)

The Boranup 1 association (Karri Forest) occurs to the east of the survey area and is therefore not relevant to this section of the report.

The extent of Beard Association Boranup 1108 vegetation association remaining is shown in Table 7 (Government of Western Australia, 2014). The associations has a high percentage of the original extent remaining and a high percentage protected in the conservation estate. Association 1108 occurs extensively in the nearby Leeuwin-Naturaliste National Park (National Map, 2022).

The percentage remaining and in the conservation estate is above the 30% target set by the EPA for vegetation complexes in Western Australia. Therefore, the vegetation on the site is not considered to be a regionally significant remnant of either vegetation association.

Table 7: Vegetation Association Statistics

Vegetation Association	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	Current Extent Protected for Conservation (ha)	% Current Extent Protected for Conservation
1108	8247.847	7666.396	92.95	5717.032	69.3

4.6.2.2 Threatened and Priority Ecological Communities

None of the Threatened or Priority Ecological Communities listed in the database searches occur on the site.

5 SUMMARY AND CONCLUSIONS

The 2025 Detailed Flora and Vegetation Survey of a 9ha portion of M70/1302 in Boranup resulted in the following findings:

- Native vegetation occurs over the whole survey area. Most of the vegetation is regrowth from a time when it was a bare, sand sheet in the 1970s;
- One vegetation type was described and mapped on the site - *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath. This vegetation type is the dominant type in other parts of the lease;
- The vegetation was all rated in Excellent condition;
- A total of 42 plant species were recorded in the survey area, consisting of 38 native species and 4 introduced species. The low number of introduced species reflects the Excellent condition of the vegetation;
- No Threatened or Priority flora species were recorded during the survey or are expected to occur at any other time of the year;
- No Threatened or Priority Ecological Communities were recorded on the site;
- The Vegetation Association occurring on the site (1108) has more than 90% of its original extent remaining and 69% retained in the conservation estate, including the nearby Leeuwin-Naturaliste National Park. The vegetation on the site therefore is not a significant remnant of this vegetation association.

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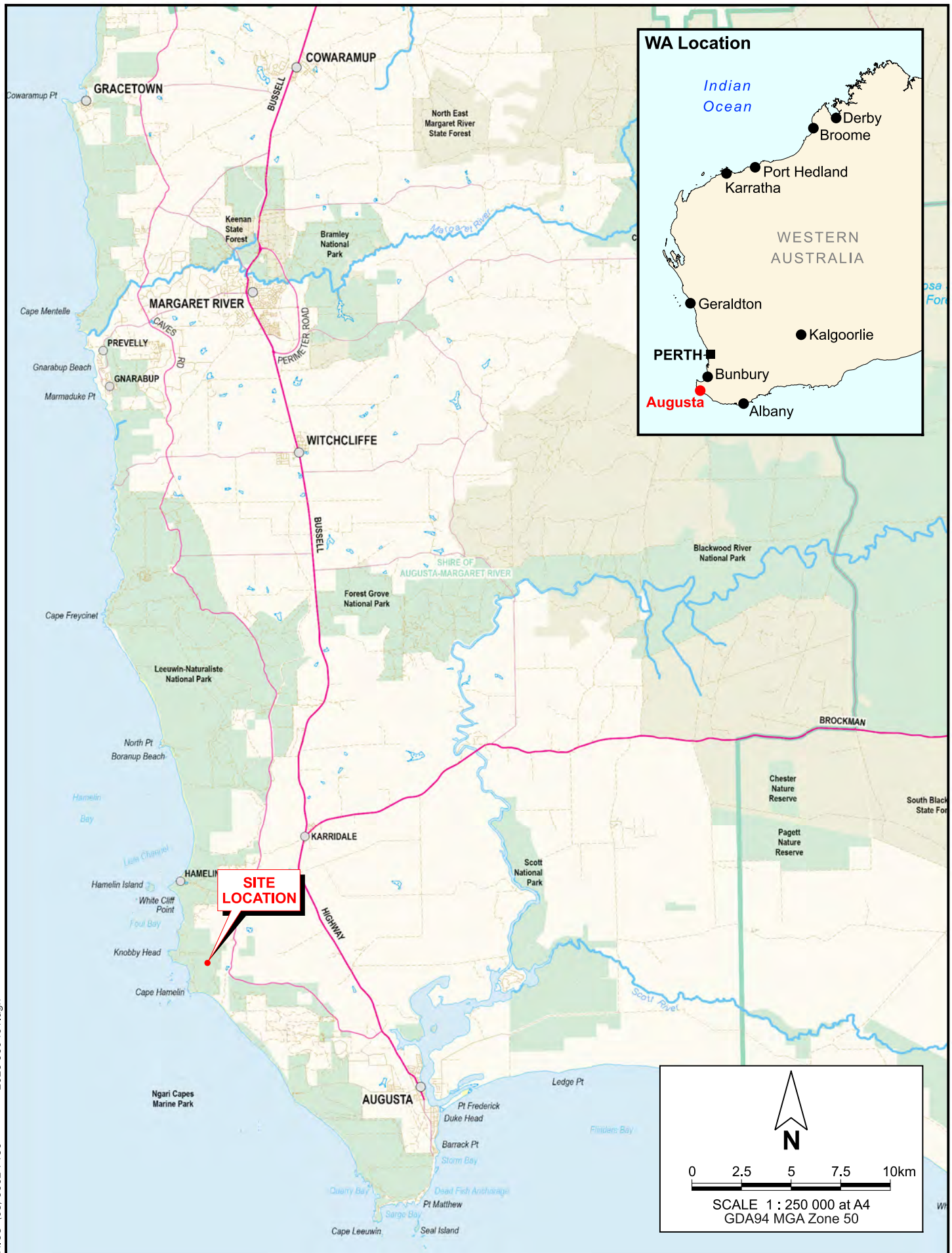
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FIGURES



PINPOINT CARTOGRAPHICS (08) 9562 7136 2026-960-f01.dgn

pgv ENVIRONMENTAL

Lime Industries
2025 DETAILED FLORA AND VEGETATION SURVEY
M70/1302 BORANUP

Drawn: P. van der Moezel	Date: 23 Feb 2026
Job: 10469 Rpt: 2026-960	Revision: A

REGIONAL LOCATION

Figure 1

322 000mE
322 500mE
323 000mE
6 215 500mN
6 215 000mN
4230
VCL
305
R 8428
4543
R 30656
1364
150
125
100
75

N

0 50 100 150 200m

SCALE 1 : 3 500 at A3
GDA94 MGA Zone 50

Legend

- 2025 Survey Area Boundary
- 2022 Survey Area Boundary
- Cadastral Boundary
- Topographic Contour

CADASTRAL SOURCE: Landgate, April 2022.
AERIAL PHOTOGRAPH SOURCE: ESRI, flown March 2021.
CONTOURS SOURCE: Landgate 1:50,000 Topographic Mapping.

pgv ENVIRONMENTAL

Lime Industries
2025 DETAILED FLORA AND VEGETATION SURVEY
M70/1302 BORANUP

Drawn: P. van der Moezel	Date: 23 Feb 2026
Job: 10469 Rpt: 2026-960	Revision: A

SURVEY BOUNDARY AND TOPOGRAPHY

Figure 2

PINPOINT CARTOGRAPHICS (08) 9562 7136 2026-960-f02.dgn

N

0 50 100 150 200m

SCALE 1 : 3 500 at A3
GDA94 MGA Zone 50

322 500mE

323 000mE

305
R 8428

1364

4543
R 30656

6 215 500mN

6 215 000mN

AfSg¹

B2

Sand

E

B3

AfSg¹

E

AfSg¹

B1

Sand

Sand

AfSg²

Sand

B4

BsAf

E

B9

B11

B10

AfSg²

E

B7

B6

B5

AfHcSg

E

AfSg²

E

B12

B8

2026-960-f03.dgn

PINPOINT CARTOGRAPHICS (08) 9562 7136

Legend

- 2025 Survey Area Boundary
- 2022 Survey Area Boundary
- Cadastral Boundary
- Quadrat Location
- Vegetation Type Boundary
- **AfSg** Vegetation Type
- **E** Vegetation Condition
- *Banksia sessilis* var. *cordata* P4 population

Vegetation Types

AfSg¹
Agonis flexuosa Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata* Open Low Heath

AfSg²
Agonis flexuosa Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath

BsAf
Banksia sessilis var. *cordata/Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/Acacia littorea* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath

AfHcSg
Agonis flexuosa/Hibbertia cuneiformis/Spyridium globulosum Tall Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath

Sand

Vegetation Condition
(SOURCE: Bush Forever, Govt. of W.A., 2000)

P - Pristine
Pristine or nearly so, no obvious signs of disturbance.

Ex - Excellent
Vegetation structure intact, disturbance affecting individual species and weeds are non aggressive species.

VG - Very Good
Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.

G - Good
Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.

D - Degraded
Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.

CD - Completely Degraded
The structure of the vegetation is no longer intact and the areas is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora composing weed or crop species with isolated native trees or shrubs.

Cl - Cleared
No native vegetation remaining.

CADASTRAL SOURCE: Landgate, April 2022.
AERIAL PHOTOGRAPH SOURCE: ESRI, flown March 2021.

pgv ENVIRONMENTAL

Drawn: P. van der Moezel | Date: 23 Feb 2026
Job: 10469 Rpt: 2026-960 | Revision: A

Lime Industries
2025 DETAILED FLORA AND VEGETATION SURVEY
M70/1302 BORANUP

VEGETATION TYPES AND CONDITION

Figure 3

APPENDIX 1

DBCA Flora Database Searches

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
2439	4678249	3386	Acacia inops	3	Shrub 40 cm.		Very open woodland of Eucalyptus calophylla and E. marginata over a dense understorey dominated by Xanthorrhoea preissii. Associated species: Anarthria prolifera, Podocarpus drouynianus, Persoonia longifolia, Platysace tenuissima, Leucopogon australis, L			MAN	0	11/12/1996
2440	4557832	3386	Acacia inops	3		Swamp.	Agonis linearifolia, Lepidosperma, dense swampy vegetation.			MAN	0	4/09/1990
2448	4293924	3386	Acacia inops	3	Straggly, cream flowers, ht 40cms.	Valley floor, humic sand.	Homalospermum firmum, Agonis linearifolia, Lepidosperma tetraqueturm, Eucalyptus patens, Mesomelaena stygia			TOPO	0	23/09/1992
2743	1853252	14930	Acacia lateriticola var. Glabrous variant (B.R. Maslin 6765)	3	Small shrub 500 mm, flowers yellow.	Flat, sand.	Jarrah - Marri riverside.		Abundance: common	AUTO	4	21/09/1990
3887	4835794	3537	Acacia semitrullata	4	Perennial, erect, open shrub 60 cm high, single stem at ground level. Flowers cream. Plant active, healthy.	Site: Upland. Soil Surface: Littered. Soil Colour: Grey Soil Texture: Coarse Sand Comments: None pH: 5.50 Very Slightly Rocky 2% Exposed Iron Enriched Laterite Fire History: 1990-91 Season: Unknown Type: Unknown	High open woodland.		Abundance: frequent. Ca 80% of population flowering.	GPS	1	21/08/1997
4400	311545	3571	Acacia tayloriana	4	Prostrate, stems 9 - 12 inches. Flowers cream.	Gravelly soil.				MAN	3	15/01/1945
4868	4589823	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, Homalospermum firmum, Lepidosperma tetraquetrum, Gymnoschoenus anceps, Dmapiera hederacea, Acacia diversifolia.			MAN	0	10/02/1993
4871	4589815	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, A.parviceps, Homalospermum firmum, Eucalyptus patens, Dampiera hederacea.			MAN	0	10/02/1993
4872	4589807	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, Homalospermum firmum, Velleia trinervis.			MAN	0	10/02/1993
4874	4298780	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, A.parviceps, Homalospermum firmum, Astartea fascicularis, Gahnia trifida.			TOPO	0	10/02/1993
4880	5466563	44007	Actinotus repens	3	Prostrate herb.	Valley floor.	Agonis linearifolia, Homalopsermum firmum, Astartea fascicularis, Pimelia hispida, Gymnoschoenus anceps, Vellia trinervis.			MAN	0	17/11/1992
4888	4295048	44007	Actinotus repens	3		Valley floor.	Agonis linearifolia, A. parviceps, Homalospermum firmum, Eucalyptus patens, Dampiera hederacea, Stylidium scandens			TOPO	0	12/11/1992
4970	5753023	1776	Adenanthos detmoldii	4	Upright shrub 1.3 m tall, flowers yellow.	Flat white sand.	Shrubland.		frequent.	MAN	0	10/06/1987
4972	8287775	1776	Adenanthos detmoldii	4	Shrub.	Near roadside. Coarse damp grey sand.	Near roadside in heath vegetation, with Casuarinaceae, Xyris, sedges.	locally occasional.		UNK	2	27/09/1992
4973	1098993	1776	Adenanthos detmoldii	4	Shrub 5 ft high. Flowers yellow and orange.	Sand.				MAN	4	19/06/1971
4977	3487008	1776	Adenanthos detmoldii	4		Road verge remnant.				MAN	3	9/11/1993
4981	2002477	1776	Adenanthos detmoldii	4		Plains.				AUTO	4	24/10/1948
4983	1099043	1776	Adenanthos detmoldii	4	Spike like shrub 2 m. Flowers yellow-orange.	Growing in wet sand.				MAN	4	15/09/1982

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4986	1099000	1776	Adenanthos detmoldii	4	Erect shrub to 5 ft. Flowers yellow-green.	Sand, winter wet.				MAN	4	7/01/1967
4991	1099027	1776	Adenanthos detmoldii	4	Small shrub, 3 ft tall. Flowers orange-yellow.					MAN	3	8/09/1972
4992	1099507	1776	Adenanthos detmoldii	4	Shrub ca 1 m. Perianth pale yellow with orange-yellow lower lip.	Freshwater marsh.				MAN	3	16/11/1982
4994	1098969	1776	Adenanthos detmoldii	4						MAN	4	26/06/1950
4999	4396634	1776	Adenanthos detmoldii	4	Erect open shrub 2 m x 1.5 m, flowers orange.	Grey sand, road verge.	Shrubland.		Abundance: frequent.	GPS	1	19/09/1995
5002	7002289	1776	Adenanthos detmoldii	4	Virgate shrub to 1.5 m; corolla yellow, fading to dark red; pollen presenter dark red.	On sand by ditch at roadside.				UNK	2	24/09/2004
5006	6031625	1776	Adenanthos detmoldii	4	Erect, compact, perennial shrub 1.5 m high x 90 cm wide. Flowers yellow. Fruit absent.	Watercourse - wetland. W aspect. Soggy.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally abundant.	90% of population flowering. Weeds abundant.	GPS	1	3/10/2001
5007	7892586	1776	Adenanthos detmoldii	4	Sprawling shrub to 1.6 m high x 3 m diam. Tepals creamy-villous, the free limbs bright yellow; pollen-presenter dark reddish.	Swamy roadside on loamy soil.	Swamp-heath with Gastrolobium formosum, Grevillea diversifolia.	frequent but localised.		GPS	1	5/08/2007
5008	1099035	1776	Adenanthos detmoldii	4						MAN	3	24/04/1977
5009	4150910	1776	Adenanthos detmoldii	4	2 m high, with yellow and orange flowers.	Sandy loam swamp.	In association with Grevillea sp. and Melaleuca sp.			AUTO	3	20/04/1981
5012	4151089	1776	Adenanthos detmoldii	4	Erect, diffuse shrub to 4 m, with yellow flowers, having a bright orange throat.	Swamp sandy flats, waterlogged in winter.	In association with Grevillea sp., Dryandra sp., grasses and sedges.			MAN	3	20/12/1984
5246	1719815	13116	Adenanthos x pamela	4	Spreading erect shrub, 75 cm in height, flowers dull orange.	Edges road verge, grey sand over wet sandy clay.	Adenanthos detmoldii swamp.		Abundance: 1 plant.	AUTO	3	29/05/1983
5259	4151097	13116	Adenanthos x pamela	4	Diffuse shrub to 4 m, with pale red orange flowers.	Damp sandy flats, waterlogged in winter.	In association with Grevillea spp., Dryandra spp., grasses and sedges.			MAN	3	20/12/1984
6383	3052915	41730	Andersonia sp. Amabile (N. Gibson & M. Lyons 355)	3	small perennial shrub, 150mm high, flowers	very shallow loam over laterite,flat	Paperbark flat			MAN	0	10/12/1990
7078	5468949	3685	Aotus carinata	4						MAN	0	7/10/1991
7083	676357	3685	Aotus carinata	4						MAN	3	22/09/1976
7085	676322	3685	Aotus carinata	4	Broome-like shrub 1.2 m. Flowers yellow and red. Leaves lanceolate, grey tomentose, close to stems.	Sand-wet.				MAN	3	15/09/1982
7086	676373	3685	Aotus carinata	4						MAN	3	24/04/1977
7088	676330	3685	Aotus carinata	4	Compact shrub, 1.5 ft tall. Flowers bright yellow and purple.					MAN	3	8/09/1971
7089	1823108	3685	Aotus carinata	4	Erect emergent shrub 700 mm high, flowers yellow, red centre.	Flat, sandy clay.	Wet heath.		Abundance: uncommon.	AUTO	4	17/09/1990
7090	676802	3685	Aotus carinata	4	Erect shrub, flowers yellow, eye red/purple.	grey swampy sand	sedge scrub Adenanthos/Calothamus	common.		MAN	3	4/11/1978

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7093	5804205	3685	Aotus carinata	4	Shrub to 40 cm. Soft bluish-grey foliage. Yellow flower, red keel.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.	occasional.		MAN	3	9/11/1985
7095	6051561	3685	Aotus carinata	4	Erect, open perennial shrub 1.1 m high x 30 cm wide. Flowers yellow-brown.	Watercourse - wetland. Soggy. W aspect.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally frequent.	90% of population flowering. Weeds abundant.	GPS	1	3/10/2001
7096	7643411	3685	Aotus carinata	4	Perennial shrub 0.5 m high x 0.3 m wide. Yellow / red flowers.	Recontoured landform - paluslope, revegetated minesite. Grey wet soil.	Within BHP Beenup revegetation.	50+ plants.		GPS	1	10/01/2007
7097	676306	3685	Aotus carinata	4		Grey sand. Flat topography.	Low shrubland.			MAN	3	29/10/1985
7425	1898116	42792	Astartea onycis	4	Branches more or less prostrate. Petals white or pale pink.	Swampy heath with patches of bare, pale grey sand.	Swampy heath.			MAN	0	17/12/1982
7428	5795087	42792	Astartea onycis	4	Slender, spindly shrub, 1 m high x 60 cm wide. Pinkish white flowers. Plant varies from low and tangled to erect and slender.	Flat, winter wet swamp. Light litter on surface of grey clay over sediments.	Low Woodland B with Melaleuca preissiana, Agonis parviceps and Eutaxia virgata, Velvet Rush.	frequent.		MAN	2	26/01/2001
7433	5577594	42792	Astartea onycis	4	Slender, spreading shrub 60 cm high x 1 m wide. Pinkish white flowers.	Flat, winter wet swampland. Bare grey-yellow sandy clay. Underlying geology sedimentary.	Low Forest A. Melaleuca preissiana, Agonis parviceps, Agonis linearifolia, Callystachys lanceolata, Hakea linearis.	abundant in small area.		MAN	0	1/01/2000
7437	3055639	42792	Astartea onycis	4	Medium shrub, 1.5 m high, flowers white.	Sandy depression.	Leptocarpus swamp under greater inundation of wet heath where A. fascicularis occurs.		same as priority listed collection backshall 88233?	MAN	0	2/01/1991
7867	567116	35317	Austrostipa mundula	3	Perennial caespitose herb; rhizomatous. Inflorescence to 30 cm high. Flowers purplish.	Growing in high fixed coastal dunes, in grey sand with coarse humus rich sand undersurface.	With Agonis coastal heath.	common in open areas.	in open areas.	MAN	3	2/10/1982
9518	1882597	17107	Banksia meisneri subsp. ascendens	4	Low compact shrub 500 mm high, flowers yellow.	Flat, sand.	Heath - sedgeland.		Abundance: uncommon	AUTO	3	26/09/1990
9519	4954432	17107	Banksia meisneri subsp. ascendens	4	Perennial. Erect open shrub, 50 cm high. Flowers yellow. Single stem at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: occasional. Ca 75% of population flowering.	GPS	1	26/08/1997
9521	1155806	17107	Banksia meisneri subsp. ascendens	4	Shrub 70 cm, one stem at base, smooth brown bark; in fruit and with old flowers.	On sandy rise near swamp flat.	In Banksia ilicifolia - heath.		Host for Banksiamyces sp. 4 apothecia removed from carpological collection. E.M. Davison 2/04/2008. 10 Banksiamyces removed for Tom May (MEL). E. Davison, 15/04/2008.	MAN	3	3/02/1976
9522	1155830	17107	Banksia meisneri subsp. ascendens	4	Small shrub 1-2 ft tall.	Sandy semi-swamp.				MAN	3	24/10/1948

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9523	1736191	17107	Banksia meisneri subsp. ascendens	4	Spreading shrub c. 1.5 x 1.5 m. Lower branches procumbent.	Deep siliceous sand.	Heathland.			MAN	0	19/08/1982
9526	1736205	17107	Banksia meisneri subsp. ascendens	4					Abundance: abundant in patches.	AUTO	4	1/07/1988
9528	5814871	17107	Banksia meisneri subsp. ascendens	4	Shrub to 70 cm tall, one stem at base with smooth brown bark. Fruits more or less round. Few follicles.	Winter wet plain. Brown sandy loam over laterite?	Heathland. Associated species: Banksia ilicifolia, Lepidosperma sp., Nuytsia floribunda, Isolepis sp.	100+ plants.		GPS	1	31/01/2001
9535	4333128	17107	Banksia meisneri subsp. ascendens	4	To 1 m high, with yellow gold flowers.	Sandy loam swamp.	In association with Melaleuca sp. and Adenanthos sp.			MAN	0	23/04/1981
9626	4228936	32204	Banksia nivea subsp. uliginosa	T	Bushy shrub 70 cm tall, style maroon, pollen presenter green.	In clay over laterite.	Scrub.			MAN	0	21/10/1993
9627	4228944	32204	Banksia nivea subsp. uliginosa	T	Bushy shrub 70 cm tall, style maroon, pollen presenter green.	In clay over laterite.	Scrub.			MAN	0	21/10/1993
9633	3054136	32204	Banksia nivea subsp. uliginosa	T	low shrub, 200mm high, flowers yellow-brown	sandy flats	jarrah marri			MAN	0	17/09/1990
9637	4669118	32204	Banksia nivea subsp. uliginosa	T	Mounded shrub to 1 m with long leaves similar to D. nivea.	Flat plain seasonally inundated. White sand over laterite.	Coastal heathland with Calothamnus aff. crassus, Adenanthos detmoldii, Darwinia sp., Andersonia aff. latiflora, Verticordia spp., Lambertia orbifolia, Banksia attenuata.			GPS	1	19/02/1997
10254	5749859	32078	Banksia sessilis var. cordata	4	Open, straggly shrub 3 m high x 2 m wide. Creamy-yellow flowers.	Stabilised dune. Litter, yellow-grey sand over limestone.	Dense thicket, Agonis flexuosa, Olearia axillaris, Spyridium globulosum.	common.		GPS	1	12/10/2000
11152	3053512	20026	Blennospora doliiformis	3	Annual herb, 80 mm high, flowers brown.	Shallow loam over laterite.	Laterite heath.			MAN	0	1/11/1990
11223	8459851	16313	Boronia anceps	3	Shrub 30 cm tall, low spreading at base with erect flower stalks. Flowers dark pink.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.	locally frequent.		UNK	3	9/11/1985
11224	4980441	16313	Boronia anceps	3	Erect herb, ca 0.6 m high x ca 0.3 m wide.	Seasonally inundated flats. Dry white-grey sand.	Open Low Woodland B, Dense Low Heath C. Hypocalymma sp.		Abundance: frequent.	GPS	1	22/10/1997
11225	4980425	16313	Boronia anceps	3	Erect herb, ca 0.4 m high x ca 0.2 m wide.	Seasonally inundated flats. Dry white-grey sand.	Open Low Woodland B, Dense Low Heath C.		Abundance: frequent.	GPS	1	22/10/1997
11227	946273	16313	Boronia anceps	3	Flowers bright pink.	Freshwater marsh.				MAN	0	16/11/1982
11228	943843	16313	Boronia anceps	3	Flowers deep pink-purple. Shrub 30 cm high.	Growing in recently flooded roadside drains.				AUTO	3	8/09/1971
11229	6227260	16313	Boronia anceps	3	Shrub 30 cm tall, low spreading at base with erect flower stalks. Flowers dark pink.	Flat plain. At road side with wet sand. Black sand below white.	Very open heath with sedges.	locally frequent.	Living coll. no.: 852544 [NSW]	MAN	3	9/11/1985
11230	6031706	16313	Boronia anceps	3	Erect, open, perennial shrub 35 cm high x 30 cm wide. Flowers pink. Fruits absent.	Plain - wetland. Open site. W aspect. Erosion present. Road verge. Brown loam.	Shrubland. Adenanthos detmoldii, Nuytsia floribunda, Agonis flexuosa.	locally frequent.	Weeds abundant.	GPS	1	3/10/2001
11231	5351693	16313	Boronia anceps	3	Erect, open, perennial shrub 30 cm high x 35 cm wide. Flowers pink.	Swamp - wetland. Open N-S aspect. Moist brown sandy-loam over laterite, bare.	Open woodland - heath. Agonis flexuosa, Adenanthos detmoldii, Xanthorrhoea preissii, Pericalymma elliptica, Eucalyptus marginata.	frequent.	Percentage of population flowering 20%. Percentage of dead plants in area 30% of population.	GPS	1	11/10/2000

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11232	5351812	16313	Boronia anceps	3	Erect open perennial shrub, height to 70 cm, width to 45 cm; flowers pink.	Wetland; road verge; brown clayey sand.	Shrubland.	locally frequent.	30% of population flowering. Floristic richness: 0-20 species.	GPS	1	11/10/2000
11234	7643403	16313	Boronia anceps	3	Perennial shrub 0.3 m high. Pink flowers.	Recontoured landform, revegetated minesite. Grey wet soil.	Within BHP Beenup revegetation.	50+ plants.	Percentage of population flowering 90%	GPS	1	10/01/2007
11235	3053393	16313	Boronia anceps	3	Spindly shrub, 550mm high, flowers pink.	Sandy flats.	Wet heath.		Abundance: uncommon.	MAN	0	3/12/1990
11394	3054810	16318	Boronia exilis	T	Spindly shrub, 500mm high, flowers pink	Sandy flats	Wet heath Homalospermum firmum Beaufortia sparsa Evandra aristata		uncommon	MAN	0	17/09/1990
11395	3054829	16318	Boronia exilis	T	Spindly shrub, 500 mm high, flowers pink.	Sandy flats.	Wet heath - Homalospermum firmum, Beaufortia sparsa.		Abundance: uncommon.	MAN	0	17/09/1990
11396	5412625	16318	Boronia exilis	T	Low, erect habit.	Swamp. Grey-white soil.	Heath B over Tall Sedges.	40-60 plants.		GPS	1	27/09/1999
11399	957615	16318	Boronia exilis	T						AUTO	3	8/09/1965
11400	5527937	16318	Boronia exilis	T	Spindly shrub 50 cm high with pink flowers. Fruit 4-loculed capsule with 1-2 seed per section.	Flat. Grey sand over laterite.	Winter-wet heathland. Associated species: Anarthrium spp., heathland spp.			MAN	0	25/11/1999
11401	5543231	16318	Boronia exilis	T	Erect shrub 1 m high x 5 cm wide.	Flat plain swamp. Grey sand over ?laterite.	Heath A over tall sedges. Characteristic species: tall sedgeland of Leptocarpus, Restio and Schoenus spp.	sparse dispersal 50-100 plants.	Taller specimen than at population 1 c. Due to taller associated species, a lot more slender.	GPS	1	17/09/1999
11402	6017479	16318	Boronia exilis	T	Spindly shrub 50 cm high with pink flowers.	Flat, winter wet lowland. Grey sand over laterite.	Winter wet heathland. Associated species: Anarthrium spp., heathland spp., Leucopogon sp., Sphenotoma sp., Melaleuca sp.	hundreds.		GPS	1	11/12/2001
11403	4469275	16318	Boronia exilis	T	Tall, very spindly, single stemmed shrub. 50 cm high x 3 cm wide. Large, bright pink flowers.	Plain. Grey sand, dry but beside saturated areas.	Dense Hummock Grass. Anarthrium.	infrequent.	Area burnt 18 months ago - Boronia found within this area also but not in large numbers.	GPS	1	19/09/1996
11404	5543223	16318	Boronia exilis	T	Low, erect habit 50 cm high x 15 cm wide.	Flat plain, swamp. Grey sandy soil over laterite?	Heath B over Low Sedges. Characteristic species: sedgeland of Anarthria spp. with emergent pockets of Proteaceae and Myrtaceae shrub spp.	large numbers of plants.	Distinct population boundary.	GPS	1	17/09/1999
12427	2389797	13852	Caladenia abbreviata	3		Sand white to grey.	Marri and Jarrah coastal scrub.			AUTO	3	/11/1991
12428	1935135	13852	Caladenia abbreviata	3	An erect tuberous herb to 25 cm high. Flowers yellow with short dark petals and sepals.	In open sandy clearings - deep sand. On slopes of consolidated sand dunes.	Amongst dense thickets of Agonis flexuosa.	50+ plants in early flower.		MAN	3	11/11/1986
12429	1751565	13852	Caladenia abbreviata	3	An erect, tuberous herb to 25 cm high. Flowers yellow with short, dark petals and sepals.	In open sandy clearings - deep sand. On slopes of consolidated sand dunes.	Amongst dense thickets of Agonis flexuosa.	50+ plants in early flower.		MAN	3	11/11/1986
12430	5907209	13852	Caladenia abbreviata	3	Most plants with a yellowish colouration and red hairs on the end of all perianth segments.	Sandy-loam soil.	Tall Eucalyptus diversicolor - Agonis woodland; scattered Eucalyptus calophylla and Banksia grandis over dense shrubs of Templetonia retusa, Hibbertia cuneata, Chorolaena, Pimelea, etc.	16 plants, 6 in flower, most in bud.		MAN	2	11/11/1986

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12432	7501102	13852	Caladenia abbreviata	3		E facing slope.	Dense Agonis woodland.		Most finished however some still in full flower. eg. 20+ in full flower.	UNK	3	2/12/1986
12433	7109539	13852	Caladenia abbreviata	3		On winter wet run off with open granite.	Open heathland.	small colony of 15 plants.		GPS	1	13/11/2004
12436	5536251	13852	Caladenia abbreviata	3		White sand, consolidated dunes.	Banksia woodland with grass trees and native grasses.	small colonies.		GPS	1	1/11/1998
12439	6283535	44910	Caladenia ambusta	2	Orchid 400 mm high x 70 mm wide. Flower length 100 mm. Flowers pale green-red with maroon labellum.	Flat - gentle slope. Brown soil. Possibly burnt 1999.	Xanthorrhoea preissii over dense low heath. Melaleuca sp., ? Acacia pulchella, Senecio lautus, Pimelea sp., Spyridium globulosum.	21-50 plants over > 1 ha.	Adult population, 95% flowering. Grows within vegetation rather than bare areas. Wasp pollinator.	GPS	1	7/11/2002
12440	7111061	44910	Caladenia ambusta	2		Above open wetland. Consolidated dunes.	With grass trees and open heath.	common.		GPS	1	28/10/2004
12606	404373	13619	Caladenia excelsa	T	Erect tuberous herb ca 40 cm high. Flowers large, cream with red tipped labella.					MAN	4	//
12619	237272	13619	Caladenia excelsa	T		In sandy undulating country.	Growing in low woodland of Eucalyptus marginata, Banksia ilicifolia and Agonis flexuosa over low heath.	two plants in bud and flower.		MAN	3	4/10/1983
12788	8604320	18037	Caladenia lodgeana	T		Open granite with brown clay loam.	Open heathland. Dodonea ceratocarpa, Davesia horrida, Lepidosperma sp., Hypocalymma angustifolium, Phyllanthus sp.	40 in flower or bud.	Used for pollinator baiting study. Attracted thynnine wasps (vouchers KP 338, KP 339, KP 340).	GPS	1	4/11/2009
12790	7109547	18037	Caladenia lodgeana	T		On winter wet run off with open granite.	Open heathland.	common.		GPS	1	13/11/2004
12791	404349	18037	Caladenia lodgeana	T	Erect tuberous herb with white flowers.	In black loam/	With Blackboys and Red Gum, amongst herbs.			MAN	0	26/10/1984
12850	908010	18034	Caladenia pholcoidea subsp. augustensis	1	Last flowers, some in seed.	In peaty sand on flat swampy floor of broad valley.	Regenerating low heath, Pimelea rosea, sedges etc., fringing Melaleuca rhaphiophylla low woodland B.	500+, last flowers, some in seed.		MAN	0	11/12/1985
12851	7109717	18034	Caladenia pholcoidea subsp. augustensis	1		Burnt in summer. Swampland.	Open heath.	12 plants.		GPS	1	13/11/2004
13416	3129357	35799	Calothamnus lateralis var. crassus	3	Shrub to 1.5 m high, flowers red.	Gravel/clay.	Jarrah/Marri forest, Agonis parviceps, Dasypogon bromeliifolius.			MAN	0	27/08/1991
13418	1617745	35799	Calothamnus lateralis var. crassus	3	Flowers crimson, embedded in soft, corky tissue. Shrub brittle, ca 2 m tall.	Growing in wet depression at roadside.				MAN	0	20/08/1982
13419	1074806	35799	Calothamnus lateralis var. crassus	3						MAN	4	17/01/1945
13420	4231562	35799	Calothamnus lateralis var. crassus	3	Shrub to ca 2 m, flowers red.	Red loam over ironstone outcropping.	Roadside remnant of Viminaria juncea, Melaleuca incana, Hakea sp., Loxocarya sp. and other shrubs, sedges and Restionaceae.		Abundance: uncommon.	MAN	0	1/06/1995

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13421	4349814	35799	Calothamnus lateralis var. crassus	3	1 m high, with red flowers.	Peaty sandy swamp.	In association with Melaleuca sp. and Kunzea vestita.			AUTO	3	16/10/1986
13424	4608895	35799	Calothamnus lateralis var. crassus	3	Diffuse shrub 1.5 m, flowers deep red, large leaves, terete 15 cm.	Sand - wet.				MAN	3	15/09/1982
13425	4614615	35799	Calothamnus lateralis var. crassus	3	Erect open shrub 1 m x 50 cm, flowers red, stems corky.	Grey peaty sand, swamp.	Shrubland.		Abundance: occasional.	MAN	0	19/09/1995
13426	4406559	35799	Calothamnus lateralis var. crassus	3	Erect open shrub 2 m x 70 cm, flowers red.	Grey peaty sand, swamp.	Heath.		Abundance: frequent.	GPS	1	19/09/1995
13427	6031803	35799	Calothamnus lateralis var. crassus	3	Erect, open, perennial shrub 1.1 m high x 1 m wide. Flowers red. Fruit exposed.	Plain. E-W aspect. Brown-yellow clayey sand.	Tall woodland over shrubland. Agonis flexuosa, Eucalyptus marginata, Corymbia calophylla, Meeboldinia scariosa, Kunzea recurva.	locally occasional.	70% of population flowering. Weeds few.	GPS	1	3/10/2001
13429	6996515	35799	Calothamnus lateralis var. crassus	3	Shrub to 2 m, without lignotuber; stamens dull red.	In sandy peat on winter-wet flat.				UNK	2	24/09/2004
13430	6996507	35799	Calothamnus lateralis var. crassus	3	Shrub 2 m, without lignotuber; stamens bright reddish pink; flowers scented.	In sandy peat on winter-wet flat.	In shrubland.			UNK	2	24/09/2004
13431	3053857	35799	Calothamnus lateralis var. crassus	3	erect to decumbant perennial shrub, 700mm high, flowers red	sandy depression	leptocarpus pericalymma swamp			MAN	0	17/09/1990
14822	4723317	17686	Chordifex gracilior	3	Herb 50 cm high.	Drainage line, swamp.	With low sedge and shrubland, Hypolaena exulca, Leptocarpus sp., Hakea ceratophylla, Melaleuca sp. Associated species: Calothamnus sp., Cassytha sp., Beaufortia sparsa, Diapsis filifolius.			MAN	0	29/01/1997
14829	2176351	17686	Chordifex gracilior	3	Female. Large tussocks.	Extensive area of swampy grey sand.	With abundant Restionaceae, and small shrubs, occasional stands of Jarrah in area. Leptocarpus diffusus and L. scariosus present.			MAN	0	6/10/1984
14830	2176343	17686	Chordifex gracilior	3	Male.	Extensive area of swampy grey sand.	With abundant Restionaceae, and small shrubs, occasional stands of Jarrah in area. Leptocarpus diffusus and L. scariosus present.		Abundant.	MAN	0	6/10/1984
14835	4849442	17686	Chordifex gracilior	3	Perennial. Rhizomatous restiad, 40 cm high. Multistemmed underground. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: locally frequent.	GPS	1	26/08/1997
14840	1620312	17686	Chordifex gracilior	3	Rhizomatous herb 30-50 cm x 70 cm. Brown flowers.	Winter wet flats in black peaty sand over clay.	Restio ustulatus sedgeland.		Abundance: very common.	MAN	0	24/09/1990
14841	3141772	17686	Chordifex gracilior	3	Sedge.	Soil: Light grey/grey sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Restio spp., Leptocarpus spp. Dense Tall Sedges over Pericalymma ellipticum Dense Low Heath D.			MAN	0	7/04/1990
14874	9400613	17675	Chordifex jacksonii	3	Rush to 70 cm.	In annual swamp over ironstone.	Low heath.	uncommon.		GPS	1	29/05/2002
15367	4225880	14003	Conospermum quadripetalum	2	Lax plant 30 cm high, flowers pale blue.	Swampy grey sand.	With sedges.	not common.		MAN	2	4/09/1985
15372	3052419	14003	Conospermum quadripetalum	2	Diffuse shrub, 450 mm high, flowers pale blue.	Sandy clay flats.	Jarrah paperbark flats.			MAN	0	9/11/1990

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
16514	3142876	16262	Cyathochaeta stipoides	3	Clumped perennial herb 1.7m.	Soil: Dark reddish brown sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Agonis floribunda, A. parviceps Dense Heath A.			MAN	0	24/10/1990
16518	4850017	16262	Cyathochaeta stipoides	3	Perennial. Caespitose sedge, 10 cm high. Multistemmed underground. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.	occasional.		GPS	1	26/08/1997
16520	3133907	16262	Cyathochaeta stipoides	3	Clumped perennial herb 1.7m.	Soil: Dark reddish brown sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Agonis floribunda, A. parviceps Dense Heath A.		PERTH 04741382 is also housed with this specimen.	MAN	0	9/04/1990
16521	6126065	16262	Cyathochaeta stipoides	3	Tussocks. Culms yellow-green.	Restiad heath on swampy coastal plain. Sandy soil.	Isolepis nodosa (beside road), Tricostularia neesii (8973), Evandra aristata (8974), Gymnoschoenus anceps (8975).	frequent.		MAN	2	20/11/1994
16788	2542722	7446	Dampiera heteroptera	3	Straggling perennial 12-18 inches tall.					AUTO	3	28/10/1947
16792	1606735	7446	Dampiera heteroptera	3		In swamp.				AUTO	3	21/10/1970
16797	4318846	7446	Dampiera heteroptera	3	30 cm high, with blue flowers.	Sandy soil.	In association with Stackhousia sp. and Eriostemon sp.			MAN	3	16/10/1984
17086	1044125	34774	Darwinia ferricola	T		On road verge on N side of road. On iron spongolite.	In dense thicket of Melaleuca thymoides, Loxocarya sp., Grevillea manglesioides, Microtis unifolia, Anigozanthos viridis, Calothamnus sp, Viminaria juncea.			MAN	3	11/12/1985
18598	5127165	298	Deyeuxia inaequalis	1	Spreading rhizomatous grass, to 70 cm. Flowers green.	Black sandy clay. Creekline.	Eucalyptus diversicolor forest.	locally common.		AUTO	3	14/12/1994
22269	1136534	20250	Eucalyptus calcicola subsp. calcicola	4	A low stunted tree to 2 m. Flowering when collected.	Growing on the seaward slope of a large dune (which has its peak 3 miles from the coast).			Abundance: restricted in occurrence; patch ca 2 hectares.	MAN	3	//1971
22270	1157388	20250	Eucalyptus calcicola subsp. calcicola	4	A several stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22271	1136488	20250	Eucalyptus calcicola subsp. calcicola	4						MAN	4	16/11/1981
22272	1136011	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 3 m tall, smooth grey bark, bright green slightly glossy leaves.				Oil collection 46.	MAN	3	24/03/1983
22273	1136518	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 3 m tall, smooth grey bark, bright green slightly glossy leaves.				Oil collection 46.	MAN	3	24/03/1983
22274	1135996	20250	Eucalyptus calcicola subsp. calcicola	4	Small mallee, 8 to 10 ft high.	Sand overlying limestone.	Coastal heath.			MAN	3	30/01/1973
22275	1157426	20250	Eucalyptus calcicola subsp. calcicola	4	A spreading mallee 4 m high, d.b.h. 6 cm, with smooth grey stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22276	1136496	20250	Eucalyptus calcicola subsp. calcicola	4	2.4 m tall smooth barked mallee.	Gradual slope, W aspect. Sand and outcropping limestone.	Forming open shrub mallee over Acacia truncata, Diplolaena, Scaevola, Oleria axillaris, Xanthorrhoea heath.			MAN	3	9/10/1984

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
22277	1157418	20250	Eucalyptus calcicola subsp. calcicola	4	A spreading mallee 4 m high, d.b.h. 6 cm, with smooth grey stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22278	1157396	20250	Eucalyptus calcicola subsp. calcicola	4	A several stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22279	3125467	20250	Eucalyptus calcicola subsp. calcicola	4	Tree mallee 3-5m, bark smooth.	Soil: Reddish brown sand. Topography: Well drained slight SW facing slope. Geology: Late Pleistocene coastal limestone.	Vegetation: Eucalyptus calcicola Shrub Mallee over Hakea spp., Spyridium globulosum Heath A.			MAN	0	28/11/1989
22280	1136437	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee to 3.5 m. Flowers white.	Calcareous ridge with westerly aspect.				MAN	3	22/05/1982
22281	1165305	20250	Eucalyptus calcicola subsp. calcicola	4	A several-stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22282	1151053	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22283	1151037	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22284	1151045	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22285	9190228	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee, 3 m high. Bark rough, thin at base, smooth above. Juvenile leaves bright green.	Seaward limestone dune slope.	Heath.	common.		GPS	1	21/01/2017
22286	5999456	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 4 m tall. Bark smooth, grey over yellow tan. Leaves glossy, light green.	On sand over limestone.	Eucalyptus megacarpa.			MAN	2	27/01/1996
22287	5895510	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee to 4 m tall with smooth bark and bright green glossy leaves. Corrugated buds and fruits.	Ridge. Grey sand over limestone.	Mallee heath. Associated species: Spyridium globulosum, Olearia axillaris, Eucalyptus megacarpa, Agonis flexuosa, Dryandra sessilis, Templetonia retusa, Xanthorrhoea.	100's of plants. Plants occur in dense stands.		GPS	1	7/11/2001
22288	9359869	20250	Eucalyptus calcicola subsp. calcicola	4	Large mallee to 5 m tall. White flowers. Smooth grey bark, peeling at base.	W slope. Soil: pale brown sand.	Dense mallee shrubland. Associated species: Spyridium sp., Hakea sp., Templetonia retusa, Agonis flexuosa.	>25 plants.		GPS	1	10/03/2021
22289	1136038	20250	Eucalyptus calcicola subsp. calcicola	4					Oil collection 47.	MAN	3	24/03/1983

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
22290	8803978	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee, 4 m tall. Bark rough, thin grey to 1 m, smooth cream-grey above.	W facing coastal slope, out-cropping limestone.	Coastal heath.	common on track.	Occurs within 200 m of Boranup Beach, occurs with Eucalyptus megacarpa other locations.	GPS	1	28/01/2015
22291	1136445	20250	Eucalyptus calcicola subsp. calcicola	4	A mallee 2.5 m tall with light grey or greenish-grey stems. Fruits conspicuously clustered in many specimens about half-way up around the main stem or main axis.	Outcropping limestone.	Growing in a pure dense stand.		Abundance: pure dense stand.	MAN	3	8/05/1972
22292	9359877	20250	Eucalyptus calcicola subsp. calcicola	4	Large mallee to 5 m tall. White flowers. Smooth grey bark, peeling at base.	W slope. Soil: pale brown sand.	Dense mallee shrubland. Associated species: Spyridium sp., Hakea sp., Templetonia retusa, Agonis flexuosa.	>25 plants.		GPS	1	10/03/2021
23731	4642864	16888	Eucalyptus marginata x megacarpa	4	Umbrageous tree 8 m tall with thin non-decorticated grey bark.	On 0.4 m of brown loamy sand over lateritic sand.				MAN	0	11/10/1975
25886	1676415	1945	Franklandia triaristata	4						AUTO	3	//
26164	1047671	20504	Gastrolobium formosum	3	Erect, multistemmed shrub. Flowers red.	Grey sand. Edges of river.	Jarrah/Marri forest, forms thickets.	common.		MAN	3	4/11/1978
26173	1047663	20504	Gastrolobium formosum	3	Flowers crimson.					MAN	3	28/12/1922
26174	1047655	20504	Gastrolobium formosum	3						MAN	3	28/12/1922
26176	1879693	20504	Gastrolobium formosum	3	Erect shrub 750 mm high, flowers red.	Sloped bank, soil variable.	Thick river vegetation.		Abundance: common along river	AUTO	4	26/09/1990
26178	1048198	20504	Gastrolobium formosum	3	Shrub 1-3 m. Flowers deep red; bracts rusty brown.	Ironstone. Swampy forest and thicket by the river.	Forest.			MAN	3	16/11/1982
26181	4406567	20504	Gastrolobium formosum	3	Erect open shrub 2 m x 2 m.	Grey peaty sand, swamp.	Heath.		Abundance: occasional.	GPS	1	19/09/1995
26184	7488874	20504	Gastrolobium formosum	3	Erect, spreading shrub; 0.5-3 m high, to 2 m wide; flowers red, Sep-Dec.			100+		TOPO	3	15/06/2001
26191	7892594	20504	Gastrolobium formosum	3	Sprawling shrub to 1.2 m high x 4 m diam. Inflorescences pendent, comprising 4 dark red flowers surrounded by 4 brownish-pubescent decussate bracts.	Swamy roadside on loamy soil.	Swamp-heath with Adenanthos detmoldii, Grevillea diversifolia.	abundant but localised.		GPS	1	5/08/2007
27159	3494438	6162	Gonocarpus pusillus	4		On shoulder of road half buried in drifting sand.			Same as A.E.Orchard 4340 but from wetter locality.	AUTO	3	8/12/1974
27163	3762343	6162	Gonocarpus pusillus	4	Low, rather compact herb with reddish upper stems and greenish flowers.	Grey sand.	Heathy fenland.			AUTO	4	8/12/1974
27176	4621395	6162	Gonocarpus pusillus	4	Low spreading perennial subshrub. In flower.	Winter wet flat. Brown loamy clay.	Eucalyptus calophylla woodland over sedges.		Abundance: locally common.	MAN	0	7/02/1997
28433	1459066	14010	Grevillea brachystylis subsp. australis	T						AUTO	3	24/04/1977

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
28435	8285632	14010	Grevillea brachystylis subsp. australis	T	Plants to 1 m tall, erect with lanceolate leaves. Flowers red and immature fruits pink-red.	Swamp. Flat, low lying. Winter wet clay soil over laterite.	Agonis flexuosa, Agonis parviceps, Grass weeds, Juncus sp., weed.	<20 plants seen.		GPS	1	30/11/2009
28437	1459074	14010	Grevillea brachystylis subsp. australis	T						AUTO	3	24/04/1977
28441	4357256	14010	Grevillea brachystylis subsp. australis	T	Upright generally single stemmed shrub. Pale green foliage. Occasional red flowers. Appears to be new growth (burnt 1992).	Swamp, dry, wet in winter. Grey sandy clay.	Heath B. Viminaria sp.		Abundance: in localised area, common. Does not appear to extend into Jarrah/Marri woodland fringing the swamp.	MAN	0	20/01/1996
28442	4357272	14010	Grevillea brachystylis subsp. australis	T	Upright, open to sprawling, straggly shrub 1 m x 60 cm. Bright red flowers with purple style. Pale dull green leaves. Many with insect predation.	Plain, dry, grey sandy-clay.	Woodland, Marri, Jarrah, Agonis, Viminaria sp.		Abundance: localised area frequent. Very restricted distribution. Road verge increasing weed invasion.	GPS	1	20/01/1996
28443	1071890	14010	Grevillea brachystylis subsp. australis	T	Prostrate shrub 10-15 cm x 40 cm high. Flower red, style purple.	Road verge, flats. Grey clay over clay.	Eucalyptus calophylla over Viminaria.	common.		MAN	3	28/01/1988
28444	1071882	14010	Grevillea brachystylis subsp. australis	T	Erect or spreading shrub 50 cm - 1.2 m high. Flower red, style purple.	Edges swamp or edges creek. Sandy clay over clay.	Eucalyptus calophylla over Agonis.		Common.	MAN	3	29/01/1988
28445	6784895	14010	Grevillea brachystylis subsp. australis	T	Sprawling, spreading shrub to 1 m wide, 10 cm high. Lignotuberous. Red perianth, blue style.	Undulating plain. Yellow sand. Moist depressions.	Wet heath.	locally frequent. Plentiful seedlings in area (see 1035A).		MAN	3	2/11/1986
28446	5467071	14010	Grevillea brachystylis subsp. australis	T	Sprawling shrub to 0.3 m tall with red flowers.	On ? reddish soil.	Dense low heath D.			MAN	0	3/05/1989
29754	4397401	18436	Grevillea manglesioides subsp. ferricola	3	Erect open shrub 2 m x 1 m, flowers greenish yellow.	Grey peaty sand, swamp.	Heath.	frequent.		GPS	1	19/09/1995
29756	5074355	18436	Grevillea manglesioides subsp. ferricola	3	Erect or spreading shrub 1.5 x 1.5 m; flowers red, green or red-green, in full flower.	Winter wet flats, red sandy clay over ironstone.	Shrubland over sedges Hakea tuberculata, Grevillea manglesioides, Melaleuca incana, Restio isomorphus.	abundant.		TOPO	3	5/10/1997
29758	6455867	18436	Grevillea manglesioides subsp. ferricola	3	Erect, compact perennial shrub 1.6 m high x 1.2 m wide. Flowers yellow-green.	Plain, open wetland. Soggy brown clayey sand, bare.	Road verge remnant.	ca 45 plants.	Percentage of population flowering 70%.	GPS	1	11/10/2000
29761	5443091	18436	Grevillea manglesioides subsp. ferricola	3	Open bush to 1.8m, flowers greenish.	lyBLS near drain line.	Denase low Heath (on road verge).			MAN	0	3/05/1989
29954	2143674	14911	Grevillea papillosa	3						AUTO	3	24/10/1948
29957	4396618	14911	Grevillea papillosa	3	Sprawling shrub 1 m x 2 m. Flowers white, style red, tip green.	Grey peaty sand, swamp.	Shrubland.		Abundance: frequent.	GPS	1	19/09/1995
29961	5443067	14911	Grevillea papillosa	3						MAN	0	30/04/1992

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
29969	6051545	14911	Grevillea papillosa	3	Erect, compact, perennial shrub 90 cm high x 1.6 m wide. Flowers reddish green. Fruit absent.	Watercourse - wetland. Soggy. W aspect.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally abundant.	80% of population flowering. Weeds abundant.	GPS	1	3/10/2001
29970	6031595	14911	Grevillea papillosa	3	Prostrate, decumbent, compact, perennial shrub 1 m high x 1.5 m wide. Flowers reddish-green.	Plain - wetland. Open site. W aspect. Erosion present. Road verge. Brown loam.	Shrubland. Adenanthos detmoldii, Nuytsia floribunda, Agonis flexuosa.	locally abundant.	10% of population flowering. Weeds abundant.	GPS	1	3/10/2001
29973	7892292	14911	Grevillea papillosa	3	Prostrate shrub. Tepals whitish shading to dull plum-coloured at base and on limb; pollen-presenters green.	Swamy roadside on loamy soil.	Swamp-heath with Adenanthos detmoldii, Gastrolobium formosum.	frequent but localised.		GPS	1	5/08/2007
29974	1820893	14911	Grevillea papillosa	3						AUTO	4	24/10/1948
29975	3911217	14911	Grevillea papillosa	3	rounded shrub, 1.0M high, flowers yellow flushed red	sandy clay flat	wet heath-sedgeland			MAN	0	17/09/1990
29976	3055485	14911	Grevillea papillosa	3	rounded shrub, 1.0M high, flowers yellow flushed red	sandy clay flat	wet heath-sedgeland			MAN	0	17/09/1990
29977	3053873	14911	Grevillea papillosa	3	erect shrub, 600mm high, flowers red and yellow	flat sandy clay	jarrah marri			MAN	0	20/09/1990
32134	5577225	38322	Hemiandra sp. Windy Harbour (B.J. Conn & J.A. Scott BJC 3344)	3	Branched upright shrub 60 cm high x 40 cm wide. Mauve, reddish sepals.	Gentle slope. Light litter. Yellow-brown sand over granite.	Open Low Scrub A. Dodonoea ceratocarpa, Xanthorrhoea preissii, Hibbertia hypericoides, Hypocalymma angustifolium.	occasional.	Large granite outcrop surrounded by Jarrah-Marri forest.	MAN	0	13/11/1999
32231	1257323	6860	Hemigenia obovata	1	Erect compact shrub to 40 cm. Mauve flowers.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.		Abundance: occasional	MAN	0	9/11/1985
32294	3777103	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Flowers mauve; straggling succulent herb or undershrub.	Gravelly soil.				AUTO	3	19/01/1945
32295	1811673	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Diffuse under shrub, 40 mm high. Flowers lilac.	Slopes, sandy.	Bossiaea - Mirbelia.		Abundance: uncommon.	MAN	0	2/01/1991
32297	4542479	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Twining delicate herb. Pale mauve or lilac flowers, small.	Swamp. Dry grey sand. Inundated in winter.	Woodland over dense thicket with Eucalyptus marginata, Xanthorrhoea preissii, Mirbelia densiflora, Acacia pulchella, Dampiera diversifolia, Sedges, Hypocalymma cordifolium.	not common.	Growing in amongst dense vegetation close to swamp. Difficult to locate.	GPS	1	20/01/1996
33327	1846116	5222	Hybanthus volubilis	2	Twining perennial 500 mm high, flowers pale purple.	Gentle slope, sandy.	Jarrah - Marri.		Abundance: c. 50 plants in immediate vicinity.	AUTO	3	17/09/1990
33330	3508366	5222	Hybanthus volubilis	2	Scandent soft shrub 2-4 m, flowers pale blue.	Creekline, grey sandy clay over clay.	Eucalyptus patens woodland.	locally common.		MAN	0	25/09/1990
33724	8071292	17622	Hypolaena robusta	4	Male plant.	On grey sand with humus, somewhat poorly drained.	Banksia attenuata - Eucalyptus todtiana woodland with shrub undergrowth.			UNK	2	22/10/2008
34156	1903861	16522	Isopogon formosus subsp. dasylepis	3	Erect shrub to 1 m high. Flowers pink. Leaves pungent.	Brown-black sandy clay at roadside to flat topography.	Shrubland rising to woodland.			MAN	0	29/10/1985
34187	3054128	16522	Isopogon formosus subsp. dasylepis	3	low shrub, 400mm high, flowers red and grey	sandy flats	jarrah marri			MAN	0	17/09/1990
34830	4575024	14631	Juncus meianthus	3	Small sedge, height to 30 cm.	Valley floor.	Agonis linearifolia, Dampiera hederacea, Pteridium esculentum, Lepidosperma tetraquetrum, Astartea fasciularis, Bossiaea rufa.			MAN	0	2/12/1992

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34901	8575282	33518	Kennedia lateritia	T	Climbing shrub to 1.5 m. Rounded glossy leaflets in groups of three. Pods brown-black.	S-E slope. Dark brown loam over granite.	In heath growing tangled amongst other shrubs and Eucalyptus. With agonis flexuosa, bracken fern, bridal creeper, Coprosma, Eucalyptus sp., Hardenbergia comptoniana, kikuyu, Lonicera japonica.	? 10 plants.	Many fruits with tiny aborted seeds.	GPS	1	22/12/2009
34903	456470	33518	Kennedia lateritia	T	Scandens, usque 3 m. alt., folia laete viridia, corolla rubra.					MAN	4	/10/1965
34904	4085140	33518	Kennedia lateritia	T						AUTO	3	//
34905	456454	33518	Kennedia lateritia	T						MAN	3	/11/1962
34908	1040146	33518	Kennedia lateritia	T	Twiner to 10 feet, flowers orange-yellow.	Granitic soil.				MAN	4	21/10/1972
34909	4135725	33518	Kennedia lateritia	T	Climbing shrub to 1.5 m. Rounded glossy leaflets in groups of three. Pods brown-black.	SE slope. Dark brown loam.	In heath, growing tangled amongst other shrubs with Eucalyptus diversicolor, Hardenbergia comptoniana, Macrozamia riedlei, bracken fern, bridal creeper.		Abundance: ca 10 plants (?).	GPS	1	14/12/1995
35182	8285543	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Shrub to 3.5 m with dense crown branching at 40-60 cm. Forming a clumped pure stand (constituting 1-3 families?).	Gently undulating plain. Sandy loam with well developed O horizon. Laterite.	Closed shrubland amid open woodland. With Acacia sp., Agonis flexuosa, Calothamnus sp. Scott River (R.D. Royce 84), Grevillea sp., weeds, Xanthorrhoea preissii.	>30 plants 10+ seedlings.		GPS	1	30/11/2009
35183	5428831	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Erect shrub to 2 m tall. A 3.5 m shrub with 8 cm diameter, trunk and large rootstock has existed.					MAN	0	15/08/1984
35197	8160465	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Plant in flower.	Roadside.				TOPO	2	27/03/2008
35200	3125823	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Shrub to 3 m with sparse crowns branching from ca 60 cm.	Gentle slopes of riverbank. Parent material: alluvium. Loamy sand, pH: 6.0.	Riparian woodland/shrubland. Agonis juniperina, Agonis flexuosa, Banksia sp.		Abundance: ca 25 mature ca 35 seedlings.	MAN	0	15/05/1993
36702	434035	8100	Leptinella drummondii	3	Flowers yellow; rhizomatose and stoloniferous perennial.	Red clay loam on banks of river.				AUTO	3	20/02/1973
36712	4123530	17702	Leptomeria furtiva	2	Shrub. Fine, single stemmed, branching into terete branchlets. Pale green to yellow. Reddish colour to flowers. Flowers minute. Tuberous. Grows within shelter of other vegetation.	Swamp. Dry, winter wet. Grey sand.	Tall sedge. Anarthria scabra, sedges, Xanthorrhoea preissii, Beaufortia sparsa.	rare.	Hard to find.	GPS	1	21/01/1996
36714	4734424	17702	Leptomeria furtiva	2	Shrub. Fine, single stemmed, branching into terete branchlets. Pale green to yellow. Reddish colour to flowers. Flowers minute. Tuberous. Grows within shelter of other vegetation.	Swamp. Dry, winter wet. Grey sand.	Tall sedge. Anarthria scabra, sedges, Xanthorrhoea preissii, Beaufortia sparsa.	rare.	Hard to find.	GPS	1	21/01/1996
36805	2138085	17954	Lepyrodia extensa	2	Male.	Swamp, largely cleared, on moist peat.	In Melaleuca-Agonis swamp.		Abundance: common (see 722 female).	AUTO	3	20/09/1966
37697	1024477	33397	Leucopogon wheelerae	3						MAN	3	8/09/1965

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
37698	1841785	33397	Leucopogon wheelerae	3	Diffuse shrub, elegant, 450 mm, flowers pink-white.	Gentle slope, sand over laterite.	Wet heath.		Abundance: Common.	AUTO	4	25/09/1990
37700	1024485	33397	Leucopogon wheelerae	3	20 cm high shrub, spreading from short stem at base. Flowers white, buds pink.	On flat area over dark grey sand (white when dry). Disturbed roadside site.	Sedge-heath.		Abundance: locally abundant.	MAN	0	24/08/1986
37701	4396804	33397	Leucopogon wheelerae	3	Erect tangled shrub 70 x 50 cm, flowers white.	Grey sand, plain.	Shrubland.		Abundance: occasional.	GPS	1	19/09/1995
37702	4478584	33397	Leucopogon wheelerae	3	Erect open 70 cm high, 40 cm wide, sterile, tap roots.	Plain near swamp, grey sand.	Woodland.		Abundance: frequent.	GPS	1	12/06/1996
37704	1556355	33397	Leucopogon wheelerae	3	Shrub 40 cm, very spreading open growth, young branches bright red, flowers white, buds pink tipped.	Wet sand flat; roadside, flat plain.	Open sedge heath.	rare.		MAN	0	9/11/1985
37705	1024434	33397	Leucopogon wheelerae	3	Finely branched, woody shrub to 50 cm. Buds pink, flowers white.	White sand.	Low open heath.		Abundance: locally occasional.	MAN	0	24/08/1986
37706	5073790	33397	Leucopogon wheelerae	3	Highly branched shrub 50 cm tall; with multiple stems from base of plant; buds pink, corolla white, sepals and bracts deep pink/red; fruit green with red patches; young stems red with young growth forming very swollen buds before expansion; leaf apex ref	Roadside embankment; surrounding area a plain. Sand with high organic content.	Tussock vegetation less than 1 m tall; Cyperaceae, Juncaceae, Grevillea, Sphenotoma. Disturbed.	common.		MAN	0	10/10/1997
37707	5558042	33397	Leucopogon wheelerae	3						MAN	0	28/04/1992
37708	6051537	33397	Leucopogon wheelerae	3	Erect, compact, perennial shrub 45 cm high x 70 cm wide. Flowers white suffused pink. Fruit absent.	Plain, wetland. E-W aspect. Soggy, grey peaty sand. Road verge.	Disturbed area. Homalospermum firmum, Anarthria scabra, Meeboldina scariosa.	frequent.	80% of population flowering. Weeds abundant.	GPS	1	3/10/2001
37709	7467605	33397	Leucopogon wheelerae	3	Sprawling shrub 70 cm high x 70 cm wide. Plants single stemmed at ground level, fruiting.	Low winter wet flat. Seasonally damp or wet grey, sandy loam.	Heath mostly 1 - 1.5 m. Associated vegetation: Taxandria parviceps, Adenanthos obovatus, Boronia spathulata, numerous restiads.	occasional.		GPS	1	26/11/2006
37711	1024469	33397	Leucopogon wheelerae	3	Flowers white and pink, rounded delicately branched shrub, 3 ft. tall.					MAN	3	8/09/1971
37998	8245711	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub heath.	locally abundant.		UNK	3	11/09/1990
38002	8506418	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub heath.	locally abundant.		UNK	3	11/09/1990
38006	2528347	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub-heath.	locally abundant.		MAN	0	11/09/1990
38031	3052710	13779	Loxocarya magna	3	Perennial sedge, 500 mm high, flowers.	Shallow loam over laterite, flat.	Wet laterite heath.		Common on this laterite flat.	MAN	0	10/09/1990
38033	3050564	13779	Loxocarya magna	3	Tall sedge 1m.	Soil: Skeletal red loamy sand. Topography: Seasonally wet slight SW facing slope on ironstone.	Vegetation: Melaleuca preisianna Low Woodland B over Calothamnus lateralis Heath B.			MAN	0	19/11/1991
38475	1824503	5877	Melaleuca basicephala	4	Erect shrub 400 mm, flowers mauve.	Flats, depressions, sandy clay. Large wetlands.	Wet heath.		Abundance: common	AUTO	3	2/01/1991

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
38476	1081462	5877	Melaleuca basicephala	4	Flowers mauve-pink. Straggling undershrub to 60 cm.	Dense swamp.	Undershrub.			MAN	4	9/12/1978
38482	4986164	5877	Melaleuca basicephala	4	Low spreading multistemmed shrub, from a single base. Flowers purple, in full flower.	Brown clay loam.	Leptocarpus sedgeland.	locally common.		MAN	0	7/02/1997
38489	5797586	5877	Melaleuca basicephala	4	Spreading, woody sub shrub 50 cm high x 50 cm wide. Pink-violet flowers.	Flat, winter wet swamp. Light litter. Grey-black sandy peat. Underlying geology sediments.	Dwarf Scrub D. Velvet rush, sedges, Xyris flexiflora, Eutaxia virgata.	frequent in wet area of swamp.	Swamp starting to dry out, central area still wet.	GPS	1	28/11/2000
38490	8032130	5877	Melaleuca basicephala	4	Slender decumbent shrub, 20 cm high x 30 cm wide. Flowers light purple; in full flower.	Winter wet flat. Brown sandy clay.	Melaleuca low shrubland over low dense shrubland.	locally common.		GPS	1	17/11/2007
38491	8058520	5877	Melaleuca basicephala	4	Spreading few branched shrub 40 cm high x 40 cm wide. Flowers purple, in full flower.	Winter wet flats. Black peaty over clay.	Beaufortia sparsa, Agonis, Homalospermum firmum shrubland.	common.		GPS	1	17/11/2007
40153	4738349	50569	Netrostylis sp. Blackwood River (A.R. Annels 3043)	3	Sedge, height to 40 cm.	Valley floor.	Agonis flexuosa. A. linearifloia, Oxylobium lanceolatum, Lepidosperma tetraquetrum, Dampiera hederacea, Acacia alata.			MAN	0	18/11/1992
40162	4738322	50564	Netrostylis sp. Nannup (P.A. Jurjevich 1133)	1	Rush, height to 60 cm.	Valley floor.	Agonis linearifloia, Acacia pulchella, Lepidosperma tetraquetrum, Stylidium scandens, Dampiera hederaceae, Comesperma confertum, Gahnia trifida, Hovea elliptica.			MAN	0	18/11/1992
41686	1934848	11860	Philydrella pygmaea subsp. minima	1	Slender reddish plant.	In damp hollows.				MAN	0	8/12/1974
41949	5121981	12077	Pimelea ciliata subsp. longituba	3	Slender erect open shrub to 80 cm. Flowers pink, in full flower.	Grey sand.	Eucalyptus marginata woodland over Agonis.		Abundance: locally common.	MAN	0	30/10/1996
43424	572578	4179	Pultenaea pinifolia	3						MAN	3	/10/1905
43479	635138	4183	Pultenaea skinneri	4						MAN	3	//1873
43533	1127144	958	Reedia spathacea	T	Scapes up to 8 ft tall. Basal leaves eaten by cattle.	Moist, dark grey loam soil.				MAN	3	14/02/1971
43538	1127152	958	Reedia spathacea	T	Leaves 3-4 feet long, flowering stem to 8-9 inches long.	In spongy, wet swampy soil.				MAN	3	14/01/1945
43543	7886713	958	Reedia spathacea	T	Robust, tufted perennial sedge, 2-4m high, clumps 1.5-2m wide; flower brown, November-January.					GPS	1	12/10/2005
43550	5305195	958	Reedia spathacea	T	Ls 1.2 m long on basal stem to 0.4 m long x 0.1 m. Scape 3.3 m long, spathes 330 mm long, young flowers not seen.	Restricted occurance in swamp on lower parts of 5 degree to 10 degree slope. Soil organic over pale sandy loam.	Agonis linearfolia and monocots.			MAN	0	13/10/1983
44655	2263270	995	Schoenus indutus	1	Rhizomatous herb 10 cm x 20 cm, flowers brown.	Edges swamp, black sand over clay.	Marri over Kunzea.		Abundance: Common.	AUTO	4	28/01/1988
44657	3052826	999	Schoenus loliaceus	2	small aquatic sedge, 100mm high, flowers	sandy clay,flat	inundated cleared firebreak			MAN	0	20/11/1990
44658	3054780	999	Schoenus loliaceus	2	annual aquatic, 100mm high, flowers green	sandy depression	seasonally inundated depressions open firebreaks			MAN	0	26/09/1990

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
44797	6972985	16269	Schoenus sp. Grassy (E. Gude & J. Harvey 250)	2	Grasslike sprawling. Herb appears perennial 5-10 cm high and 30-40 cm wide. Pale green leaves and stems with large heads, red-brown leaf sheaths and plant bases.	Low seasonal wet area. Moist grey sandy loam.	Low forest B, over low heath C, over dense tall sedges, Melaleuca rhaphiophylla M. incana, Xanthorrhoea preissii, Rhadinothamnus anceps, Acacia alata, Lepidosperma spp. Baumea juncea.	only one plant noted.	Plant is growing around edges of small water hole dug in vegetation, it was collected for identification purposes and unfortunately its abundance was not noted.	MAN	2	17/06/2004
44801	4723201	16269	Schoenus sp. Grassy (E. Gude & J. Harvey 250)	2	Herb 50 cm high.	In peaty swamp.	Thick sedgeland dominated by Baumea spp. to 2.5 m. Associated species: Baumea spp., Gahnia trifida, Phlebalium sp., Lepidosperma sp.			GPS	1	18/12/1996
46584	4849353	19704	Stenanthemum sublineare	2	Perennial. Low open shrub, 5 cm high. Multistemmed at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: occasional.	GPS	1	26/08/1997
47094	8526788	20691	Stylidium gloeophyllum	4	Erect perennial herb, 15 cm high x 5 - 7 cm wide. Glandular sticky leaves and pale pink flowers.	Upland granite outcrop with brown loam over granite rock at shallow depth.	Verticordia plumosa, Darwinia citriodora, Pimelia imbricata, Stypandra glauca low shrubland, over Amphipogon sp., Neurachne alopecuroides grasses.	uncommon.		UNK	2	5/12/2013
47180	5849047	17850	Stylidium ireneae	4	Flowers pink. All plants in flower, some in juvenile fruit.	Growing in brown loamy soils.	Under Agonis flexuosa, Eucalyptus calophylla, Xanthorrhoea preissii.	Large population of multi-rosetted plants seen throughout natural bush.	Many specimens colonizing road side on man-made road verges, embankments and drainage road runoff lines. This Augusta collection is significant. This gathering is 185 km distance SW of the type location. *	GPS	1	19/11/2000
47213	4478517	17411	Stylidium leeuwinense	4	Erect dwarf shrub 30 cm high, 5 cm wide, fertile, flowers pink.	Plain near swamp, grey sand.	Woodland.		Abundance: occasional.	GPS	1	12/06/1996
47262	3051080	17411	Stylidium leeuwinense	4	Erect herb flowers dark pink.	Soil: Dark grey sand. Topography: Well drained flat. Geology: Pleistocene quartz sand.	Vegetation: Homalospermum firmum Low Heath C.			MAN	0	4/04/1991
47379	4840259	12590	Stylidium lowrieanum	3	Perennial. Rosulate herb, 2 cm high. Multistemmed at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Littered. Soil Colour: Pale Grey Soil Texture: Sand Comments: None pH: 5.00 Very Slightly Rocky 2% Exposed Limestone Fire History: 1992-93 Season: Unknown Type: Unknown	Open forest.	frequent.		GPS	1	28/08/1997

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
47383	2955792	12590	Stylidium lowrieanum	3						AUTO	3	/10/1905
47387	7751036	12590	Stylidium lowrieanum	3	Perennial herb 6-15 cm high with one whorl of scape bracts. Corolla lobes vertically-paired, white to pale pink.	Brown sand over limestone.	Agonis shrubland with Stylidium fasciculatum.	occasional.		GPS	2	28/11/1995
47392	3056651	12590	Stylidium lowrieanum	3	Tall trigger plant to 50 cm; leaves in basal rosette; corolla pale pink.		In Karri forest.			MAN	3	13/11/1993
47393	3051188	12590	Stylidium lowrieanum	3	Perennial herb.	Soil: Dark brown sand. Topography: Well drained slight WNW facing slope. Geology: Late Pleistocene coastal limestone.	Vegetation: Agonis flexuosa, Xanthorrhoea preissii Scrub over mixed Low Heath C.			MAN	2	25/11/1989
47971	7239785	33105	Stylidium sp. Scott River Plain (N.G. Marchant 74/23)	1						TOPO	3	22/01/1974
48150	3055728	20603	Stylidium trudgenii	3	tufted perennial herb, 500mm high, flowers pink mauve	sand depression	leptocarpus agonis wetland		uncommon	MAN	0	2/01/1991
49099	8285527	17271	Synaphea macrophylla	1	Prostrate plant with very large lobed leaves, pale green. Yellow flowers on tall stems.	Slight slope. Orange gravelly clay loam over laterite.	Woodland. With Corymbia calophylla, Daviesia cordata, Eucalyptus marginata, Leucopogon verticillatus, Mirbelia dilata.			GPS	1	30/11/2009
49105	4422643	17271	Synaphea macrophylla	1	Clumped shrub with ascending stems; rachis reddish green or green; flowers bright yellow; no scent.	In gravelly loam.	In Jarrah/Marri forest.			AUTO	4	21/10/1993
49106	5351758	17271	Synaphea macrophylla	1	Erect compact perennial shrub, height to 40 cm, width to 35 cm; flowers yellow; immature fruits present; deep tap root.	Hill; bare to littered yellow sandy loam.	Road culvert.		Population flowering: 70%. (91+ plants)	GPS	1	11/10/2000
49107	5351596	17271	Synaphea macrophylla	1	Erect compact perennial shrub, height to 40 cm, width to 40 cm; flowers yellow; deep tap root.	Undulating plain; bare to littered brown sandy clay over laterite.	Open forest with Corymbia calophylla, Agonis flexuosa, Daviesia cordata, Mirbelia dilatata, Eucalypus marginata.	locally frequent.	80% of population flowering.	GPS	1	11/10/2000
49109	7224575	17271	Synaphea macrophylla	1	Prostrate plant with very large lobed leaves, pale green. Yellow flowers on tall stems.	Slight slope. Orange gravelly clay loam. Laterite. Plants located on disturbed road edge and into bushland.	Woodland. Eucalyptus marginata, E. calophylla, Mirbelia dilata, Astroloma sp. Nannup, Leucopogon verticillatus, Daviesia cordata.	100+ plants.	Most fruits predated or aborted. Otherwise population is very healthy.	GPS	1	11/12/2001
49110	7836872	17271	Synaphea macrophylla	1	Leaves dark green, very broad with tapering base. Inflorescences with old flowers and second set of buds developing. Flowers opening narrowly and stigma oblong.	Strongly undulating topography, mid-slope. Laterite substrate with grey sand.	Eucalyptus woodland.	infrequent.		UNK	3	12/10/2000
49114	4422694	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
49115	5351731	17270	Synaphea nexosa	1	Erect, open to compact, perennial shrub, height to 40 cm, width to 40 cm; flowers yellow; plant overgrown and stressed.	Wetland; soggy brown sandy loam; disturbance (weeds) from powerline and road verge.	Weedy road verge.	locally occasional.	Population flowering: 100%. (12 plus plants).	GPS	1	11/10/2000
49116	5351820	17270	Synaphea nexosa	1	Erect perennial shrub, height to 40 cm, width to 40 cm.	Wetland; road verge, brown clayey sand.	Shrubland.	locally occasional.	Population flowering:100%.(9 plants). Floristic richness: 0-20 species.	GPS	0	11/10/2000
49117	8035776	17270	Synaphea nexosa	1	Erect, clumped shrub. Inflorescences greatly exceeding leaves, late flowering stage. Fruits developing, red on one side, neck prominent. Flowers somewhat compressed laterally, opening more narrowly than S. petiolaris, apices of tepals not strongly reflex	Clayey, flat area; Scott Plain. Degraded.	Remnant; Jarrah, Agonis flexuosa, Viminaria juncea, Xanthorrhoea preissii, Lepidosperma, Synaphea ?petiolaris.	occasional, <20 plants.		GPS	1	9/12/2008
49118	8114013	17270	Synaphea nexosa	1	Dwarf shrub 60 cm tall. Flowers opening widely. Juvenile leaves red-brown and glabrous. Fruits glabrous, reddening. Inflorescence exceeding leaves. Stigma distinctly forned with more or less incurved lobes.	Flat, seasonally wet area, lying below level of road. Grey-brown sand.	Disturbed roadside remnant. Xanthorrhoea preissii, Restionaceae, Fabaceae.	rare, ca 5 plants seen.		GPS	1	12/10/1997
49119	4422708	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993
49120	4422686	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993
49498	4634659	18591	Synaphea sp. Redgate Road (J. Scott 16)	1	Sprawling, with many stems; rachis green; perianth yellow.	In gravel-loam.	In Marri forest.			MAN	0	21/10/1993
49500	5145627	18591	Synaphea sp. Redgate Road (J. Scott 16)	1	Compact, spreading shrub 50 cm high x 50 cm wide.	Wetland - road verge, winter wet. Litter, grey clay.	Woodland, Dense Low Heath D, Jarrah, Marri, Hibbertia hypericoides.		Abundance: locally abundant. Grows in wet conditions along roadside ditches.	MAN	0	17/07/1998
51516	8032157	1327	Thysanotus cymosus	3	Tuberous perennial herb, 20/40 cm high. Flowers purple, anthers black, in full flower.	Winter wet flats - sandy rise. Black peaty sand over clay.	Kunzea shrubland over Anarthria scabra sedgeland.	scattered.		GPS	1	17/11/2007
52341	1984772	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4	Tall herb, 650 mm high, flowers green-yellow.	Depression shallow, sandy clay.	Pericalymma - Leptocarpus woodland.		Abundance: Uncommon.	AUTO	3	2/01/1991
53554	5508401	6093	Verticordia lehmannii	4						MAN	0	30/04/1992

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
53565	4849434	6093	Verticordia lehmannii	4	Perennial. Erect open shrub, 40 cm high. Flowers pink. Single stem at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: locally frequent. Ca 2% of population flowering.	GPS	1	26/08/1997
53573	1086502	6093	Verticordia lehmannii	4	Shrub 30-60 cm x 10-30 cm. Flowers pinkish-purple with white reflexed lobes.	Grey sand and clay.			Abundance: 50-100 plants in a very small area (20 x 10 m). This specimen was collected for painting.	MAN	3	23/04/1983
53574	2579642	6093	Verticordia lehmannii	4	Flowers pink.	Base of grey sand ridge.	Low heath D and Low sedges in 5-10 m zone.			MAN	3	28/04/1992

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
851	86405	3386	Acacia inops	3		4			BLACKWOOD	LGA	VER		23/09/1992 0:00		0			0			Y	Mesomelaena stygia		OPEN_DPN	UNKNOWN		SAND		
853	86407	3386	Acacia inops	3		6			BLACKWOOD	LGA	CAM	PUT	11/12/1996 0:00		0			0			N	Very open woodland. Associated spp: Anarthria prolifera, Podocarpu drouynianus, Persoonia longifolia, +							
933	92881	14930	Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)	3		1			BLACKWOOD	CC	NPK	REC	21/09/1990 0:00		0			0			Y	In Jarrah-Marri forest.		OD_RVRBK			SAND		
1614	93277	44007	Actinotus repens	3		9			BLACKWOOD	CC	NPK		12/11/2002 0:00		0			0			N	Forest over dense thicket over low sedge. Agonis linearifolia, Mirbella dilatata, Acacia divergens		OPEN_DPN			CLAY_SND	WHITE	
1681	97475	1776	Adenanthos detmoldii	4		8	A		BLACKWOOD	LGA	VER		19/09/1995 0:00		0			0			Y			OD_SWAMP			SND_LOAM		
1682	97476	1776	Adenanthos detmoldii	4		8	B		BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1683	97477	1776	Adenanthos detmoldii	4		8	C		BLACKWOOD	PRI			13/07/1983 0:00		0			0			N								
1684	85136	1776	Adenanthos detmoldii	4		9			BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1685	85132	1776	Adenanthos detmoldii	4		10			BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1687	85134	1776	Adenanthos detmoldii	4		12			BLACKWOOD	LGA	VER		9/11/1993 0:00		0			0			N								
3210	103606	17107	Banksia meisneri subsp. ascendens	4		7	A		BLACKWOOD	LGA	VER		16/07/1984 0:00		0			0			N						SAND	GREY	
3211	103607	17107	Banksia meisneri subsp. ascendens	4		7	B		BLACKWOOD	CC	NPK		16/07/1984 0:00	ACT_IND	0		54	55			N						SAND	GREY	
3214	103610	17107	Banksia meisneri subsp. ascendens	4		9	B		BLACKWOOD	CC	NPK		14/08/1984 0:00		0			0			N			FL_PLAIN			SAND	GREY	
3222	93819	17107	Banksia meisneri subsp. ascendens	4		15			BLACKWOOD	NON	SET	TIM	23/06/1988 0:00	ESTMT	####			####			Y	Dense Heath B with emergent Banksia ilicifolia and Eucalyptus marginata. Dasypogon bromeliifolius.		RI_DUNE			SAND	WHITE	
3223	93820	17107	Banksia meisneri subsp. ascendens	4		16			BLACKWOOD	NON	SET	TIM	6/07/1988 0:00	ACT_IND	16			16			Y	Adenanthos obvata, Xanthorrhoea preissii, Dasypogon, Kunzea.	MOIST	FL_PLAIN					
3226	103590	17107	Banksia meisneri subsp. ascendens	4		19	A		BLACKWOOD	LGA	VER		26/09/1990 0:00	ESTMT	100			100			Y		DRY	FL_PLAIN			SAND	GREY	
3227	103591	17107	Banksia meisneri subsp. ascendens	4		19	B		BLACKWOOD	CC	NPK		13/03/1985 0:00		0			0			N								
3228	103592	17107	Banksia meisneri subsp. ascendens	4		19	C		BLACKWOOD	CC	NPK		26/08/1997 0:00		0			0			Y	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey.		FL_PLAIN			SAND	GREY	
3229	93823	17107	Banksia meisneri subsp. ascendens	4		20			BLACKWOOD	LGA	VER		23/05/1992 0:00		0			0			N								
3230	93824	17107	Banksia meisneri subsp. ascendens	4		21			BLACKWOOD	LGA	VER		23/05/1992 0:00		0			0			N								
3232	103599	17107	Banksia meisneri subsp. ascendens	4		23	A		BLACKWOOD	CC	NPK		29/05/1986 0:00		0			0			N			FLAT			SAND	GREY	
3233	103600	17107	Banksia meisneri subsp. ascendens	4		23	B		BLACKWOOD	CC	NPK		28/04/1986 0:00		0			0			N			FLAT			SAND	GREY	
3234	93826	17107	Banksia meisneri subsp. ascendens	4		24			BLACKWOOD	UNKNOWN			5/10/1985 0:00	ESTMT	0			5			Y			FLAT			SAND	GREY	
3235	103602	17107	Banksia meisneri subsp. ascendens	4		25	A		BLACKWOOD	CC	NPK		12/09/1985 0:00	ESTMT	0			5			N			FLAT			SAND	GREY	
3236	103603	17107	Banksia meisneri subsp. ascendens	4		25	B		BLACKWOOD	UNKNOWN			11/08/1984 0:00	ESTMT	0			300			N			CD_LKBED			SAND	GREY	
3237	103604	17107	Banksia meisneri subsp. ascendens	4		25	C		BLACKWOOD	CC	NPK		7/08/1985 0:00		0			0			N								
3238	93827	17107	Banksia meisneri subsp. ascendens	4		26			BLACKWOOD	CC	NPK		7/08/1985 0:00		0			0			N								
3280	96202	32204	Banksia nivea subsp. uliginosa	T	EN	1			BLACKWOOD	CC	NPK		14/01/2011 0:00		0			0			N								

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3310	108542	32204	Banksia nivea subsp. uliginosa	T	EN	19		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	132			0	PLANTS	####		Area cleared for mining and is now slowly rehabilitating with native species	DRY	FLAT			SAND	GREY	WLL_DRND
3458	96122	32078	Banksia sessilis var. cordata	4		5			BLACKWOOD	CC	NPK		12/10/2000 0:00	ESTMT	0			####			Y	Open straggly shrub 3 m high x 2m wide. Creamy-yellow flowers.		RI_DUNE	LIMESTN		SAND	YELLOW	
3833	94976	20026	Blennospora doliiformis	3		9			BLACKWOOD	CC	NPK	REC	9/11/1987 0:00		0			0			N				LATERITE		LOAM		
3882	103312	16313	Boronia anceps	3		5	A		BLACKWOOD	LGA	CAM	REC	3/12/1990 0:00		0			0			N	Wet Heath.	MOIST	FLAT			SAND		
3883	103313	16313	Boronia anceps	3		5	B		BLACKWOOD	LGA	VER		22/10/1997 0:00		0			0			N	Open Low Woodland B, Dense Low Heath C. Hypocalymma sp. Recontoured landform.	DRY	FL_PALU			SAND	WHITE	
3884	93262	16313	Boronia anceps	3		6			BLACKWOOD	PRI			10/01/2007 0:00	ESTMT	50			50			Y	Within BHP Beenup revegetation.	MOIST				SAND	GREY	
3885	93263	16313	Boronia anceps	3		7			BLACKWOOD	LGA	VER		11/10/2000 0:00	ESTMT	6			6			Y	Shrubland	MOIST	OD_SWAMP			CLAY_SND	BROWN	
3886	93264	16313	Boronia anceps	3		8			BLACKWOOD	LGA	VER		9/11/1985 0:00		0			0			N	Very open heath with sedges.	MOIST	FLAT			SAND	WHITE	
3887	93265	16313	Boronia anceps	3		9			BLACKWOOD	LGA	VER		11/10/2000 0:00	ESTMT	12			12			Y	Open woodland over heath. Pericalymma ellipticum, Eucalyptus marginata	MOIST	OD_SWAMP	LATERITE		LOAM_SND	BROWN	
3892	93258	16313	Boronia anceps	3		14			BLACKWOOD	LGA	VER		3/10/2001 0:00	ESTMT	12			12			Y	Shrubland.	MOIST	FL_PLAIN			CLA_LOAM	BROWN	
3934	103315	16318	Boronia exilis	T	EN	1	A		BLACKWOOD	LGA	WAT	REC	19/03/2007 0:00		0			0			N	dense hummock grass	MOIST	FL_PLAIN			SAND	GREY	
3935	103316	16318	Boronia exilis	T	EN	1	B		BLACKWOOD	CC	NPK	REC	19/03/2007 0:00		0			0			N	Heath B over low sedges; dense hummock grass	MOIST	FLAT	LATERITE		SAND	GREY	
3936	103317	16318	Boronia exilis	T	EN	1	D		BLACKWOOD	LGA	WAT	CAM	11/12/2001 0:00	ESTMT	0			100			Y	Heath B over low sedges; Anarthria sp. w. emergent Proteaceae/Myrtaceae scrub pockets.		FLAT	LATERITE		SAND	GREY	SEASINUN
3937	93288	16318	Boronia exilis	T	EN	2			BLACKWOOD	CC	NPK	REC	19/03/2007 0:00		0			0			N	Tall sedgeland	MOIST	FLAT	LATERITE		SAND	GREY	
3939	93290	16318	Boronia exilis	T	EN	6			BLACKWOOD	LGA	REC	OTH	19/03/2007 0:00		0			0			N	Heath B over tall sedges	MOIST	FLAT	LATERITE		SAND	GREY	
4209	91441	13852	Caladenia abbreviata	3		1			BLACKWOOD	CC	NPK		16/11/2007 0:00	ACT_IND	28			28			Y	Eucalyptus marginata	DRY	SLOPE			SAND	RED_BRWN	
4211	91444	13852	Caladenia abbreviata	3		3			BLACKWOOD	NON			15/11/1991 0:00		0			0			N	Growing on white-grey sand in marri and jarrah coastal scrub.	DRY				SAND	WHITE	
4216	91450	13852	Caladenia abbreviata	3		9			BLACKWOOD	CC	NPK	REC	1/11/1998 0:00		0			0			N	VegClass:Banksia woodland with grass trees and native grasses		RI_DUNE			SAND	WHITE	
4217	91442	13852	Caladenia abbreviata	3		10			BLACKWOOD	NON	UCL		13/11/2004 0:00	UNKNOWN	15			15			N	VegClass:Open Healthland		OD_DRGLN	GRANITE				SEASINUN
4478	91221	13619	Caladenia excelsa	T	EN	5	A		BLACKWOOD	MRD	VER		12/10/2013 0:00	ACT_IND	1			0	PLANTS		Y	Low forest A over dense low heath C; Drakaea glyptodon, Pterostylis plumosa, Anarthria scabra.	MOIST	FLAT			SAND	WHITE	WLL_DRND
4479	105782	13619	Caladenia excelsa	T	EN	5	B		BLACKWOOD	CC	NPK		12/10/2013 0:00	ACT_IND	3			0	PLANTS		Y		MOIST	FLAT			SAND	GREY	
4480	91222	13619	Caladenia excelsa	T	EN	6			BLACKWOOD	CC	NPK	VER	12/10/2013 0:00		0			2			Y		MOIST	FLAT			SAND	GREY	WLL_DRND
4528	108342	13619	Caladenia excelsa	T	EN	32			BLACKWOOD	CC	NPK		22/10/2012 0:00	ACT_IND	1			0	PLANTS		Y	Vegetation recently cleared. Plant growing on edge on clearing	DRY	SLOPE			SAND	WHITE	WLL_DRND
4829	94301	18037	Caladenia lodgeana	T	CR	2			BLACKWOOD	NON	UCL		20/10/2014 0:00	ACT_IND	2			0	PLANTS		Y	4WD tracks are becoming wider	MOIST	SLOPE	GRANITE		CLA_LOAM	BROWN	WLL_DRND
5106	96726	35799	Calothamnus lateralis var. crassus	3		3			BLACKWOOD	LGA	VER		15/04/1992 0:00		0			0			N								

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5561	94114	17686	Chordifex gracilior	3		2			BLACKWOOD	CC	NPK		7/04/1990 0:00	ESTMT	30			30			N	Seasonally wet flat, Pleistocene quartz sand. Tall sedges over low heath.	MOIST				SAND	GREY	
5568	94106	17686	Chordifex gracilior	3		10			BLACKWOOD	CC	NPK		29/01/1997 0:00		0			0			N	Drainage line/swamp with low sedge and shrubland.		OD_SWAMP					
5570	94108	17686	Chordifex gracilior	3		12			BLACKWOOD	CC	NPK	REC	24/09/1990 0:00		0			0			N			FL_PALU			PEAT	BLACK	SEASINUN
5574	94112	17686	Chordifex gracilior	3		16			BLACKWOOD	CC	NPK	REC	26/08/1997 0:00		0			0			N	VegClass:Swamp Vegetation		OD_SWAMP			SAND	GREY	
5728	91563	14003	Conospermum quadripetalum	2		2			BLACKWOOD	LGA	VER		19/09/1996 0:00		0			0			N	Swampy grey sand, with sedges.		OD_SWAMP			SAND	GREY	
5729	91564	14003	Conospermum quadripetalum	2		3			BLACKWOOD	CC	NPK	REC	9/11/1990 0:00		0			0			Y	Sandy clay flats, jarrah paperbark flats.		FLAT			CLAY_SND		
6356	93224	16262	Cyathochaeta stipoides	3		1			BLACKWOOD	CC	NPK	VER	24/10/1990 0:00		0			0			N	In dark reddish-brown sand, on a seasonally wet flat. Geology: Pleistocene quartz sand. Altitude: 10m.		FLAT	QUARTZ		SAND	RED_BRWN	SEASINUN
6367	93226	16262	Cyathochaeta stipoides	3		11			BLACKWOOD	CC	NPK	VER	20/11/1994 0:00		0			0			N	Restiad heath on swampy coastal plain.		OD_SWAMP			SAND		
6588	105285	34774	Darwinia ferricola	T	EN	2	E		BLACKWOOD	PRI			25/09/2006 0:00	ESTMT	0			####	PLANTS		Y		INUNDATE	FLAT	IRONSTN		LOAM_SND	RED	
6593	111349	34774	Darwinia ferricola	T	EN	4		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	107			0	PLANTS	####	N								
7588	109254	13635	Drakaea micrantha	T	EN	42			BLACKWOOD	CC	FOR		11/10/2019 0:00	ACT_IND	10	3		0	PLANTS	####	Y	Jarrah and WA Christmas tree woodland on white sand	DRY	RIDGE	QUARTZ		SAND	WHITE	WLL_DRND
8505	95026	20250	Eucalyptus calcicola subsp. calcicola	4		1			BLACKWOOD	CC	NPK		28/11/1989 0:00	ESTMT	50			50			N		DRY	SLOPE			SAND	RED_BRWN	
8506	95027	20250	Eucalyptus calcicola subsp. calcicola	4		2			BLACKWOOD	CC	NPK		9/02/1991 0:00		0			0			N				LIMESTN				
9694	104341	20504	Gastrolobium formosum	3		7	A		BLACKWOOD	LGA	VER		5/08/2007 0:00		0			0			N	Swamp Heath. Adenanthos sp., Sheok.		OD_SWAMP			LOAM		
9695	104342	20504	Gastrolobium formosum	3		7	B		BLACKWOOD	PRI			5/08/2007 0:00		0			0			N	Swamp Heath. Adenanthos sp., Sheok.		OD_SWAMP			LOAM		
9709	95144	20504	Gastrolobium formosum	3		17			BLACKWOOD	NON	UCL		13/05/1998 0:00		0			0			N								
9710	95145	20504	Gastrolobium formosum	3		18			BLACKWOOD	PRI			7/11/2006 0:00	ESTMT	50			50			Y	Recontoured landform.	MOIST		IRONSTN		SAND	GREY	
9923	88268	6162	Gonocarpus pusillus	4		1			BLACKWOOD	CC	NPK	VER	7/02/1997 0:00		0			0			Y	Woodland over sedges.		FLAT			CLA_LOAM	BROWN	SEASINUN
10304	91573	14010	Grevillea brachystylis subsp. australis	T	EN	1			BLACKWOOD	CC	NPK		14/01/2011 0:00	ACT_IND	0	0	0	0	PLANTS		N		DRY	OD_SWAMP			SAND	GREY	SEASINUN
10305	91574	14010	Grevillea brachystylis subsp. australis	T	EN	2	A		BLACKWOOD	LGA	VER		12/12/2012 0:00	ACT_IND	15			0	PLANTS	510	Y		MOIST	FLAT	LATERITE		CLA_LOAM	BROWN	SEASINUN
10306	107243	14010	Grevillea brachystylis subsp. australis	T	EN	2	B		BLACKWOOD	LGA	VER		12/12/2012 0:00	ACT_IND	31			0	PLANTS	337	Y	Major weed infestation at site; Bossiaea ornata, Juncus sp.	MOIST	FLAT	LATERITE		CLA_LOAM	BROWN	SEASINUN
10307	107244	14010	Grevillea brachystylis subsp. australis	T	EN	3	A		BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	273			0	PLANTS	####	Y	Rehabilitating mine site	DRY	FLAT	IRONSTN		SAND	GREY	WLL_DRND
10308	107246	14010	Grevillea brachystylis subsp. australis	T	EN	3	B	T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	65		44	0	PLANTS	####	Y	Rehabilitating mine site	DRY	FLAT	IRONSTN		SAND	GREY	WLL_DRND
10965	94471	18436	Grevillea manglesioides subsp. ferricola	3		1			BLACKWOOD	LGA			1/01/1992 0:00	ESTMT	100			100			N								
11062	92860	14911	Grevillea papillosa	3		1			BLACKWOOD	CC	NPK		8/04/1990 0:00	ESTMT	10			10			N		MOIST	OD_SWAMP			SAND	GREY	
11069	92877	14911	Grevillea papillosa	3		8			BLACKWOOD	LGA	VER		18/05/1992 0:00	ACT_IND	204			204			N								
11070	92878	14911	Grevillea papillosa	3		9			BLACKWOOD	LGA	VER		3/10/2001 0:00	ESTMT	60			60			Y	Shrubland. Mellboldinia sp.		OD_SWAMP			CLAY_SND	GREY	
11071	103127	14911	Grevillea papillosa	3		10	A		BLACKWOOD	LGA	VER		18/05/1992 0:00		0			0			N								

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11072	103128	14911	Grevillea papillosa	3		10	B		BLACKWOOD	PRI	VER		3/10/2001 0:00	ESTMT	20			20			Y	Shrubland. Plain-wetland.	MOIST	OD_SWAMP			LOAM_SND	BROWN	
11073	92861	14911	Grevillea papillosa	3		11			BLACKWOOD	LGA	VER		19/09/1995 0:00		0			0			Y	Shrubland. Grey peaty sand, swamp.		OD_SWAMP			PEAT	GREY	
11074	92862	14911	Grevillea papillosa	3		12			BLACKWOOD	CC	NPK		17/09/1990 0:00		0			0			Y	Red sandy clay flat. Wet heath-sedgeland.		FLAT			CLAY_SND	RED	PERMINUN
11086	92871	14911	Grevillea papillosa	3		22			BLACKWOOD	CC	NPK		20/09/1990 0:00		0			0			N	Jarrah, Marri.		FLAT			CLAY_SND		
11679	96846	38322	Hemiandra sp. Windy Harbour (B.J. Conn & J.A. Scott BJC 3344)	3		4			BLACKWOOD	CRW	GE		13/11/1999 0:00	ESTMT	100			100			N	Low heath, Jarrah/Marri Forest.		SLOPE	GRANITE	GRVL_30	SAND	YEL_BRWN	
11945	87463	5222	Hybanthus volubilis	2		2			BLACKWOOD	CC	NPK		17/09/1990 0:00		0			0			N	Jarrah/Marri		SLOPE			SAND		
12108	93353	16522	Isopogon formosus subsp. dasylepis	3		3			BLACKWOOD	LGA	VER		29/10/1985 0:00		0			0			N	Brown-black sandy clay at roadside to flat topography. Shrubland rising to woodland.					SND_CLAY	BLACK	
12324	92515	14631	Juncus meianthus	3		14			BLACKWOOD	CC	NPK		2/12/1992 0:00		0			0			N	Astartea fasciularis, Bossiaea rufa.		OPEN_DPN					
12365	96490	33518	Kennedia lateritia	T	EN	1			BLACKWOOD	LGA	PAR		23/03/2017 0:00	ACT_CLMP	0			15	CLUMPS			Invasive weeds increasing, though plants are healthy	MOIST	HILL	GRANITE		LOAM	BROWN	WLL_DRND
12366	105126	33518	Kennedia lateritia	T	EN	2	A		BLACKWOOD	PRI			28/08/2001 0:00	ESTMT	3			3			N	highly degraded; buffalo grass, arum lily, bridal creeper.					SAND		
12367	105127	33518	Kennedia lateritia	T	EN	2	B		BLACKWOOD	PRI			31/10/2006 0:00	ACT_IND	2			0		10	Y	Very disturbed due to vegetation clearing and cultivated garden beds	MOIST	FLAT	LIMESTN		SND_LOAM	BROWN	
12486	111329	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	EN	6		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	73		6	0	PLANTS	####	Y	Area cleared for mining and is now slowly rehabilitating with native species	DRY	FLAT			SAND	GREY	WLL_DRND
13070	86003	2343	Leptomeria dielsiana	X	EX	1			BLACKWOOD	UNKNOWN	UNKNOWN		7/05/1957 0:00		0			0			Y	heath/scrub							
13072	94138	17702	Leptomeria furtiva	2		2			BLACKWOOD	CC	NPK	REC	21/01/1996 0:00		0			0			Y	Growing within shelter of other vegetation in a winter wet swamp, in grey sand. With tall sedges. Uncommon		OD_SWAMP			SAND	GREY	SEASINUN
13109	84548	1086	Lepyrodia heleocharoides	3		1			BLACKWOOD	LGA	VER		27/10/1988 0:00		0			0			N	On peaty sand in moist, open sedge-heath, on bare patches. With other Restionaceae and sedges.	MOIST	FL_PLAIN			PEAT		
13112	84551	1086	Lepyrodia heleocharoides	3		4			BLACKWOOD	LGA	VER		7/10/1991 0:00		0			0			N	Found in grey sand on a gentle slope, in woodland/shrubland/sedgeland of the above associated species.		SLOPE			SAND	GREY	
13116	88567	6355	Leucopogon alternifolius	3		1			BLACKWOOD	LGA	VER		7/10/1991 0:00		0			0			N		DRY	SLOPE			SAND	GREY	
13406	91395	13779	Loxocarya magna	3		2			BLACKWOOD	CC	NPK	WAT	19/11/1991 0:00	ESTMT	30			30			N		MOIST	SLOPE	LATERITE		SND_LOAM	RED	
13408	91397	13779	Loxocarya magna	3		4			BLACKWOOD	CC	NPK	OTH	10/09/1990 0:00		0			0			Y		MOIST	FLAT	LATERITE		LOAM		
13410	91399	13779	Loxocarya magna	3		6			BLACKWOOD	CC	NPK	WAT	11/09/1990 0:00		0			0			N				IRONSTN		SAND		
14601	89806	11860	Philydrella pygmaea subsp. minima	1		1			BLACKWOOD	CC	NPK		8/12/1974 0:00		0			0			N	In damp Hollows							
15201	84472	958	Reedia spathacea	T	EN	1			BLACKWOOD	LGA	CAM	PUT	14/02/1971 0:00		0			0			N	Moist, dark grey loam soil.	MOIST				LOAM	GREY	
15222	84481	958	Reedia spathacea	T	EN	19			BLACKWOOD	PRI			22/05/2003 0:00	ESTMT	350		200	550			N	Cyathochaeta teretifolia, Empodisma gracillimum, Xyris gracillima, Gymnoschoenus anceps	INUNDATE	OD_DRGLN	GRANITE		SAND	GREY	
15230	84491	958	Reedia spathacea	T	EN	30			BLACKWOOD	PRI			12/10/2005 0:00	ESTMT	277		5	282			Y		INUNDATE	OD_DRGLN	LATERITE		SAND	BROWN	

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
15237	84498	958	Reedia spathacea	T	EN	37			BLACKWOOD	CC	NPK		30/03/2006 0:00	ESTMT	260		5	265			Y	Scrup over open tall sedges. Baumea sp, Agonis sp.	MOIST	OD_DRGLN			CLAY_SND	BROWN	
15456	84523	999	Schoenus loliaceus	2		1			BLACKWOOD	CC	NPK		26/09/1990 0:00		0			0			N								
15924	93948	17411	Stylidium leeuwinense	4		8			BLACKWOOD	LGA	WAT	REC	26/05/1996 0:00		0			0			Y	In dark grey-black sandy soil on swamp heathland. Well drained flat of Pleistocene quartz sand. Low heath.		FLAT	QUARTZ		SAND	GREY	SEASINUN
16246	103653	17271	Synaphea macrophylla	1		1	A		BLACKWOOD	NON	UCL		11/10/2000 0:00	ACT_IND	125		20	125			Y	Hakea ruscifolia, Acacia ssp., Hibbertia sp., Kennedia coccinea, Leucopogon verticillata.		FL_PLAIN	LATERITE		CLAY_SND	BROWN	
16247	103654	17271	Synaphea macrophylla	1		1	B		BLACKWOOD	MRD	VER		11/10/2000 0:00	ACT_IND	125		20	0			Y	Hakea ruscifolia, Acacia ssp., Hibbertia sp., Kennedia coccinea, Leucopogon verticillata.		FL_PLAIN	LATERITE		CLAY_SND	BROWN	
16248	93892	17271	Synaphea macrophylla	1		2			BLACKWOOD	MRD	VER		11/10/2000 0:00	ACT_IND	91		20	91			Y	Hibbertia hypericoides, Persoonia longifolia		CREST			SAND	BROWN	
16249	93887	17270	Synaphea nexosa	1		1			BLACKWOOD	LGA	VER		11/10/2000 0:00	ACT_IND	12			12			Y	Disturbed, weedy grasses & sedges, Pericalymma ellipticum, Grevillea papillosa, Baumea articulata.	MOIST	FL_PLAIN	IRONSTN		LOAM_SND	BROWN	
16250	93888	17270	Synaphea nexosa	1		2			BLACKWOOD	LGA	VER		11/10/2000 0:00	ACT_IND	9			9			N	Shrubland	MOIST	FL_PLAIN			CLAY_SND	BROWN	
16251	93891	17270	Synaphea nexosa	1		5			BLACKWOOD	LGA	VER		3/10/2001 0:00		0			8			Y	Tall woodland over shrubland	MOIST	FL_PLAIN			CLAY_SND	BROWN	
16941	93636	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4		2			BLACKWOOD	CC	CFF	NPK	2/01/1991 0:00		0			0			Y						SAND		
17244	88233	6093	Verticordia lehmannii	4		4			BLACKWOOD	LGA	VER		15/05/1992 0:00	ESTMT	####			####			N								
17245	88234	6093	Verticordia lehmannii	4		5			BLACKWOOD	LGA	VER		28/04/1992 0:00	ESTMT	30			30			N								
17246	88235	6093	Verticordia lehmannii	4		6			BLACKWOOD	LGA	VER		15/05/1992 0:00	ESTMT	####			####			N								

APPENDIX 2

Atlas of Living Australia Report

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2891427	Caladenia huegelii	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Western Australia ; Conservation status | EPBC Act Threatened Species	
https://id.biodiversity.org.au/name/apni/129100	Caladenia interjacens	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2901628	Dampiera heteroptera	Rajput & Carolin	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2893323	Hydrocotyle sp. Hamelinensis (G.J.Keighery s.n. (PERTH 02391325))	WA Herbarium	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2908083	Lepyrodia extensa	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2914568	Meeboldina thysanantha MS	L.A.S.Johnson & B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2901117	Stylidium gloeophyllum	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2899602	Cardamine moirensis	I.Thomps.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Riverina Bitter-cress	Victoria : Conservation Status	
https://id.biodiversity.org.au/name/apni/81674	Corybas despectans	D.L.Jones & R.C.Nash	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Sandhill Helmet Orchid	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2905235	Deyeuxia quadriseta	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Bent grass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10070703	Dicranoloma diaphanoneuron	(Hampe) Paris	species	Plantae	Bryophyta	Bryopsida	Dicranales	Dicranaceae	Diaphanous Fork-moss	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891342	Levenhookia pusilla	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Midget Stylewort	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907149	Pelargonium littorale	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Coast Stork's-bill	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902063	Poa poiformis	(Labill.) Druce	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Blue Tussock Grass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891336	Triglochin trichophora	Nees	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae	Torpedo Arrowgrass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912261	Acrotriche cordata	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Coast Ground Berry	Tasmania : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888724	Parietaria debilis	G.Forst.	species	Plantae	Charophyta	Equisetopsida	Rosales	Urticaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2916674	Centipeda cunninghamii	(DC.) A.Braun & Asch.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51291672	Persicaria decipiens	(R.Br.) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/7386160	Schenkia australis	(R.Br.) G.Mans.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Gentianaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920067	Sporobolus virginicus	(L.) Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Seashore dropseed	Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893374	Tricoryne elatior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51266490	Alternanthera denticulata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Lesser joyweed	Tasmania : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2906496	Chorizandra enodis	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Black Bristle Rush	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892738	Lobelia rhombifolia	de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Tufted Lobelia	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914299	Phyllangium divergens	(Hook.f.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae	Wiry Mitrewort	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886928	Podotheca angustifolia	(Labill.) Less.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Sticky Heads	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/8453517	Utricularia tenella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Pink Bladderwort	Tasmania : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51316831	Pterostylis tasmanica	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		South Australia : Conservation Status | Victoria : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2917094	Leptorhynchos scaber	(Benth.) Haegi	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Annual Buttons	South Australia : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2898687	Picris squarrosa	Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Squat Picris	South Australia : Conservation Status | Victoria : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886180	Poa drummondiana	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Knotted Poa	South Australia : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2896373	Asplenium trichomanes	L.	species	Plantae	Charophyta	Equisetopsida	Polypodiales	Aspleniaceae	Common Spleenwort	South Australia : Conservation Status | Tasmania : Conservation Status | Victoria : Conservation Status | ACT Rare Plant List | New Zealand Sensitive Species List for Vascular Plants	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2905984	Utricularia violacea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Violet Bladderwort	South Australia : Conservation Status | Tasmania : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2904505	Viminaria juncea	(Schrad. & J.C.Wendl.) Hoffmanns.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		South Australia : Conservation Status | Tasmania : Conservation Status | Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911719	Gratiola pubescens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Austral Brooklime	South Australia : Conservation Status | Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892177	Stypandra glauca	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae		South Australia : Conservation Status | Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903464	Lobelia heterophylla	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Wing-seeded Lobelia	South Australia : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2908930	Hydrocotyle diantha	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Kangaroo Island Pennywort	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886608	Isotoma scapigera	(R.Br.) G.Don	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Long-scaped Isotome	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2899003	Meionectes brownii	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	Swamp Raspwort	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893288	Phyllanthus calycinus	Labill.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	False Boronia	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914852	Polypogon tenellus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		South Australia : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/87231	Prasophyllum calcicola	R.J.Bates	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903041	Kennedia lateritia	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status | EPBC Act Threatened Species	
https://id.biodiversity.org.au/node/apni/2897673	Acacia inops	Maiden & Blakely	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2896685	Acacia subracemosa	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Western Karri Wattle	Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2910812	Bossiaea disticha	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2895742	Pteris vittata	L.	species	Plantae	Charophyta	Equisetopsida		Pteridaceae	Chinese brake	Queensland : Conservation Status | Victoria : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51311522	Roepera similis	(H.Eichler) Beier & Thulin	species	Plantae	Charophyta	Equisetopsida	Zygophyllales	Zygophyllaceae		Queensland : Conservation Status | Victoria : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886585	Beyeria viscosa	(Labill.) Miq.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae		Queensland : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920854	Isolepis cernua	(Vahl) Roem. & Schult.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Victoria : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901796	Daucus glochidiatus	(Labill.) Fisch., C.A.Mey. & Ave-Lall.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Pinaki	Queensland : Conservation Status | Northern Territory : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/ausmoss/10059274	Barbula calycina	SchwÃ¤gr.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51267823	Brachyscome iberidifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10066620	Campylopus introflexus	(Hedw.) Brid.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911592	Carex fascicularis	Sol. ex Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2916573	Cyperus laevigatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2898676	Exocarpos sparteus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10086811	Gymnostomum calcareum	Nees & Hornsch.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2919217	Lachnagrostis filiformis	(G.Forst.) Trin.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Perehia	Queensland : Conservation Status | Northern Territory : Conservation Status	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2920431	Lobelia gibbosa	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907634	Medicago polymorpha	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2886103	Melilotus indicus	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2894269	Oxalis perennans	Haw.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2905928	Poranthera microphylla	Brongn.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/7061040	Pseudognaphalium luteoalbum	(L.) Hilliard & B.L.Burtt	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Pukatea	Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915568	Streptoglossa liatroides	(Turcz.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912188	Actites megalocarpus	(Hook.f.) Lander	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2896508	Senecio hispidulus	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2908591	Sphaerolobium vimineum	Sm.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/name/apni/116042	Thelymitra nuda	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Queensland : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2905053	Acacia alata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889160	Acacia browniana	H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2908914	Acacia cochlearis	(Labill.) H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888190	Acacia cyclops	A.Cunn. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2897063	Acacia divergens	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2904648	Acacia extensa	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2900213	Acacia gilbertii	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914671	Acacia littorea	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51286955	Acacia longifolia	(Andrews) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901160	Acacia myrtifolia	(Sm.) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51287044	Acacia pulchella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Prickly Moses	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2886690	Acacia rostellifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907533	Acacia uliginosa	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2894580	Acacia urophylla	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51299839	Aotus cordifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915386	Bossiaea eriocarpa	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888058	Bossiaea linophylla	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893021	Bossiaea rufa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2893560	Bulbine semibarbata	(R.Br.) Haw.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2890796	Burchardia umbellata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893819	Callistachys lanceolata	Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2891269	Centrolepis fascicularis	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/2893573	Cephaloziella hirta	(Steph.) R.M.Schust.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Cephaloziellaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903296	Chorizandra cymbaria	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/8354183	Chorizema cordatum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902156	Chorizema diversifolium	A.DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914322	Chorizema ilicifolium	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920473	Chorizema rhombeum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/120752	Cladia aggregata	(Sw.) Nyl.	species	Plantae						Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/122517	Cladia schizopora	(Nyl.) Nyl.	species	Plantae						Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/127339	Collema glaucophthalmum	Nyl.	species	Plantae				Collemataceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/6979038	Craspedia variabilis	J.Everett & Doust	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status	
55095017	Cryptonemia undulata	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae		Queensland : Conservation Status	
55106001	Curdiea angustata	(Sonder) A.J.K.Millar	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892431	Daviesia inflata	Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2901294	Dichelachne crinita	(L.f.) Hook.f.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Plume grass	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886410	Dichondra repens	J.R.Forst. & G.Forst.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Creeping dichondra	Queensland : Conservation Status	
NZOR-6-137124	Dichotomaria marginata	(J.Ellis & Sol.) Lam.	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Galaxauraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2898321	Dipogon lignosus	(L.) Verdc.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	mile-a-minute	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55130002	Euptilota articulata	(J.Agardh) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Callithamniaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51300117	Eutaxia epacridoides	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911963	Eutaxia myrtifolia	(Sm.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2909747	Ficinia nodosa	(Rottb.) Goetgh., Muasya & D.A.Simpson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2899214	Genista monspessulana	(L.) L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Weeds of National Significance (WoNS) as at Feb. 2013 | Weeds listing Queensland Government | National Weeds Lists | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2917378	Gompholobium polymorphum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
55106020	Gracilaria preissiana	(Sonder) Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae		Queensland : Conservation Status	
55121022	Haliptilon roseum	(Lamarck) Garbary & Johansen	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912367	Hardenbergia comptoniana	(Andrews) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/instance/ausmoss/10144112	Hedwigidium integrifolium	(P.Beauv.) Dixon	species	Plantae	Bryophyta	Bryopsida	Hedwigiales	Hedwigiaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903052	Hovea chorizemifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915992	Hovea elliptica	(Sm.) DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/9442728	Isotropis cuneifolia	(Sm.) Walp.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902225	Jacksonia horrida	DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2910276	Juncus planifolius	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893596	Kennedia carinata	(Benth.) Van Houtte	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/7238218	Kennedia coccinea	(Curtis) Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2919218	Lathyrus latifolius	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
NZOR-6-64256	Laurencia brongniartii	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae		Queensland : Conservation Status	
55133011	Lenormandia spectabilis	Sonder	species	Plantae	Rhodophyta			Rhodomelaceae		Queensland : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2905839	Leptospermum laevigatum	(Gaertn.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	coast tea tree	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2886078	Leucopogon parviflorus	(Andrews) Lindl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891182	Linum marginale	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Linaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2909260	Lobelia anceps	L.f.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Punakuru	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886127	Lotus angustissimus	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2893373	Lotus subbiflorus	Lag.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/74195	Microtis unifolia	(G.Forst.) Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common onion orchid	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886391	Mirbelia dilatata	R.Br. ex Dryand.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920461	Oxalis exilis	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/taxon/apni/51286820	Paraserianthes lophantha	(Willd.) I.C.Nielsen	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Plume albizia	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2911110	Pelargonium australe	Willd.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
NZOR-6-111160	Peyssonnelia capensis	Mont.	species	Plantae	Rhodophyta	Florideophyceae	Peyssonneliales	Peyssonneliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51249803	Pteridium esculentum	(G.Forst.) Cockayne	species	Plantae	Charophyta	Equisetopsida	Polypodiales	Dennstaedtiaceae	Manehu	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889274	Pultenaea brachytropis	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888651	Pultenaea ericifolia	Benth. ex Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51285711	Pultenaea reticulata	(Sm.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10110301	Rosulabryum albolimbatum	(Hampe) J.R.Spence	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2895388	Samolus repens	(J.R.Forst. & G.Forst.) Pers.	species	Plantae	Charophyta	Equisetopsida	Ericales	Primulaceae	MÄ koako	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903774	Schoenus nitens	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920819	Sigesbeckia orientalis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Punawaru	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907453	Sphaerolobium hygrophilum	R.Butcher	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893196	Sphaerolobium nudiflorum	(Meisn.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2897832	Sphaerolobium racemulosum	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912060	Stackhousia monogyna	Labill.	species	Plantae	Charophyta	Equisetopsida	Celastrales	Celastraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10117643	Tayloria octoblepharum	(Hook.) Mitt.	species	Plantae	Bryophyta	Bryopsida	Splachnales	Splachnaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2896952	Templetonia retusa	(Vent.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914196	Tetraria capillaris	(F.Muell.) J.M.Black	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
NZOR-6-89979	Thelymitra pauciflora sensu	Cheeseman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/122570	Thysanothecium scutellatum	(Fr.) D.J.Galloway	species	Plantae				Cladoniaceae		Queensland : Conservation Status	
NZOR-6-17611	Tricleocarpa cylindrica	(J.Ellis & Sol.) Huisman & Borow.	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Galaxauraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886977	Trifolium campestre	Schreb.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2905033	Trifolium subterraneum	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2893781	Triglochin striata	Ruiz & Pav.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51285764	Vicia sativa	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/taxon/apni/51267241	Arctotheca calendula	(L.) K.Lewin	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2908064	Briza maxima	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Great quaking grass	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2891835	Bromus diandrus	Roth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2893162	Cardamine hirsuta	L.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Bitter cress	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2902145	Cenchrus clandestinus	(Hochst. ex Chiov.) Morrone	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/ausmoss/2896833	Chiloscyphus semiteres	(Lehm. & Lindenb.) Lehm. & Lindenb.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Lophocoleaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2897232	Crassula colorata	(Nees) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889451	Echium plantagineum	L.	species	Plantae	Charophyta	Equisetopsida		Boraginaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests | National Weeds Lists | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/ausmoss/10075601	Entosthodon subnudus	(Taylor) Fife	species	Plantae	Bryophyta	Bryopsida	Funariales	Funariaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903803	Erodium cicutarium	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2894434	Hordeum glaucum	Steud.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907367	Hypochaeris glabra	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	smooth catsear	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2904997	Juncus bufonius	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900900	Juncus kraussii	Hochst.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2909588	Oxalis corniculata	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2899343	Plantago lanceolata	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	English plantain	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913511	Rhodanthe citrina	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907494	Silene nocturna	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912741	Solanum nigrum	L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	Poroporo	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2895772	Sonchus oleraceus	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Pororua	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2907105	Sporobolus africanus	(Poir.) Robyns & Tournay	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	ratstail	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
https://id.biodiversity.org.au/node/apni/2896776	Stellaria media	(L.) Vill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Kohukohu	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2887197	Vulpia fasciculata	(Forssk.) Fritsch	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2891029	Xerochrysum bracteatum	(Vent.) Tzvelev	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901610	Geranium retrorsum	L'HÃ©r. ex DC.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Matua-kÅ«mara	New Zealand Sensitive Species List for Vascular Plants	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/7387836	Geranium solanderi	Carolin	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Matua-kÅ«mara	New Zealand Sensitive Species List for Vascular Plants	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2887979	Juncus pauciflorus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	Common rush	New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/name/apni/179292	Linguella nana	(R.Br.) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2896012	Acanthocarpus preissii	Lehm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/name/apni/73211	Acianthus reniformis	(R.Br.) Schltr.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2896596	Actinotus glomeratus	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
55050002	Adelophycus corneus	(J.Agardh) Kraft	species	Plantae	Rhodophyta	Florideophyceae		Nemastomataceae			
https://id.biodiversity.org.au/node/apni/2897492	Adenanthos obovatus	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2912734	Agonis flexuosa	(Willd.) Sweet	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Peppermint willow		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896402	Agrostocrinum hirsutum	(Lindl.) Keighery	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2899616	Agrostocrinum scabrum	(R.Br.) Baill.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2915129	Aira cupaniana	Guss.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2890667	Alternanthera philoxeroides	(Mart.) Griseb.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Weeds of National Significance (WoNS) as at Feb. 2013 | Weeds listing Queensland Government | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913921	Amaryllis belladonna	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Amaryllidaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2889364	Ammi majus	L.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2913418	Ammophila arenaria	(L.) Link	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	European beachgrass		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2894932	Amperea simulans	R.J.F.Hend.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			
https://id.biodiversity.org.au/node/apni/2908821	Amphibolis griffithii	(J.M.Black) Hartog	species	Plantae	Charophyta	Equisetopsida	Alismatales	Cymodoceaceae	sea-nymph		
55121006	Amphiroa anceps	(Lamarck) Decaisne	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
NZOR-6-19303	Amphiroa anceps	(Lam.) Decne.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2901458	Anarthria prolifera	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae			
https://id.biodiversity.org.au/node/apni/2911540	Anarthria scabra	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae			
https://id.biodiversity.org.au/node/apni/2900260	Andersonia caerulea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2897618	Andersonia geniculata	Lemson	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2889252	Anigozanthos flavidus	RedoutÃ©	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Evergreen kangaroo paw		
https://id.biodiversity.org.au/node/apni/2900204	Anigozanthos humilis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2900921	Anigozanthos manglesii	D.Don	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/taxon/apni/51299833	Anthocercis littorea	Labill.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae			
55130032	Antithamnion hanovioides	(Sonder) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2891037	Aphelia cyperoides	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae			
https://id.biodiversity.org.au/node/apni/2914809	Apium annuum	P.S.Short	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2912609	Apium prostratum	Vent.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Sea celery		
https://id.biodiversity.org.au/name/apni/182319	Arachnorchis brownii	(Hopper) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2898204	Arctotheca populifolia	(P.J.Bergius) Norl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
NZOR-6-120100	Asparagopsis armata	Harv.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/taxon/apni/51288759	Astartea pulchella	(DC.) Rye	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2917694	Astroloma ciliatum	(Lindl.) Druce	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2909103	Astroloma pallidum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2902954	Austrostipa flavescens	(Labill.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915032	Avellinia michelii	(Savi) Parl.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			Non-native species
https://id.biodiversity.org.au/node/apni/5040372	Banksia dallanneyi	A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2896043	Banksia grandis	Willd.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2905735	Banksia ilicifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2913977	Banksia littoralis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2905445	Banksia sessilis	(Knight) A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2913181	Baumea vaginalis	(Benth.) S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/taxon/apni/51291052	Bellardia trixago	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/6945171	Berkheya rigida	(Thunb.) Bolus & Wolley-Dod	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	African thistle		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests
https://id.biodiversity.org.au/node/apni/2901234	Billardiera floribunda	(Putt.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2899057	Billardiera heterophylla	(Lindl.) L.Cayzer & Crisp	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2900860	Billardiera laxiflora	(Benth.) E.M.Benn.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2910549	Billardiera variifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2908511	Boronia alata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51311636	Boronia crenulata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2920563	Boronia denticulata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915094	Boronia heterophylla	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2907267	Boronia molloyae	J.Drumm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913525	Boronia tenuior	Domin	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
55110001	Botryocladia sonderi	P.C.Silva	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2920944	Briza minor	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912917	Burchardia congesta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae			
https://id.biodiversity.org.au/node/apni/2904117	Caesia micrantha	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2919041	Cakile maritima	Scop.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2911277	Caladenia arrecta	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/135730	Caladenia attingens	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/90685	Caladenia bicalliata	R.S.Rogers	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/123015	Caladenia brownii	Hopper	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/90748	Caladenia cairnsiana	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91032	Caladenia corynephora	A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91238	Caladenia elongata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91294	Caladenia ferruginea	Nicholls	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91452	Caladenia flava	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/129096	Caladenia gardneri	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91601	Caladenia hirta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91664	Caladenia infundibularis	A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91701	Caladenia latifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91784	Caladenia longicauda	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91880	Caladenia macrostylis	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91912	Caladenia marginata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91994	Caladenia nana	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/92356	Caladenia rhomboidiformis	(E.Coleman) M.A.Clem. & Hopper	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/92397	Caladenia sericea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2902353	Calandrinia brevipedata	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae			
https://id.biodiversity.org.au/node/apni/2905552	Callistemon phoeniceus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51302262	Calothamnus quadrifidus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/ausmoss/10065951	Campylopus bicolor	(MÃ¼ll.Hal.) Wilson	species	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae			
https://id.biodiversity.org.au/node/apni/2888650	Carex thecata	Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2911970	Carpobrotus virescens	(Haw.) Schwantes	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae			
55095005	Carpopeltis elata	(Harvey) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
55095007	Carpopeltis spongeaplexus	Womersley & J.A. Lewis	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2899088	Cassytha flava	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2907668	Cassytha glabella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2906672	Cassytha racemosa	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2887652	Catapodium rigidum	(L.) C.E.Hubb.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912379	Centaurium erythraea	Rafn	species	Plantae	Charophyta	Equisetopsida	Gentianales	Gentianaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896375	Centranthus ruber	(L.) DC.	species	Plantae	Charophyta	Equisetopsida	Dipsacales	Caprifoliaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2899294	Centrolepis polygyna	(R.Br.) Hieron.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae			
https://id.biodiversity.org.au/node/ausmoss/2895141	Cephaloziella varians	(Gottsche) Steph.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Cephaloziellaceae			
https://id.biodiversity.org.au/node/ausmoss/2890287	Chaetophyllopsis whiteleggei	(Carrington & Pearson) R.M.Schust.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Scapaniaceae			
https://id.biodiversity.org.au/node/apni/2920316	Chamaescilla corymbosa	(R.Br.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
55111014	Champia zostericola	(Harvey) Reedman & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Champiaceae			
55131019	Chauviniella coriifolia	(Harvey) Papenfuss	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae			
https://id.biodiversity.org.au/node/apni/2908384	Cheiranthera parviflora	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
55133032	Chondria curdieana	(J.Agardh) Falkenberg	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2909734	Chorilaena quercifolia	Endl.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/127705	Cladonia cervicornis	(Ach.) Flot.	species	Plantae				Cladoniaceae			
https://id.biodiversity.org.au/name/apni/137726	Cladonia enantia	Nyl.	species	Plantae				Cladoniaceae			
NZOR-6-2064	Cladonia neozelandica	Vain.	species	Plantae				Cladoniaceae			
https://id.biodiversity.org.au/name/apni/129474	Cladonia rigida	(Hook.f. & Taylor) Hampe	species	Plantae				Cladoniaceae			
55057005	Claviclonium ovatum	(J.V.Lamouroux) Kraft & Min-Thein	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae			
https://id.biodiversity.org.au/node/apni/2901148	Clematis linearifolia	Steud.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
https://id.biodiversity.org.au/node/apni/2887834	Clematis pubescens	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
55133051	Cliftonaea pectinata	(Harvey) Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55095009	Codiophyllum flabelliforme	(Sonder) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
https://id.biodiversity.org.au/node/apni/2919145	Comesperma calymega	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/2916907	Comesperma confertum	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/2897625	Comesperma virgatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/6283310	Conostylis aculeata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2918878	Coprosma repens	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2915629	Cortaderia selloana	(Schult. & Schult.f.) Asch. & Graebn.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/117409	Corybas recurvus	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2892673	Corymbia calophylla	(Lindl.) K.D.Hill & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2899137	Crassula glomerata	P.J.Bergius	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2894404	Crassula thunbergiana	Schult.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55095012	Cryptonemia kallymenioides	(Harvey) Kraft	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
https://id.biodiversity.org.au/name/apni/89039	Cryptostylis ovata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
55106011	Curdiea irvineae	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae			
55106012	Curdiea obesa	(Harvey) Kylin	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae			
https://id.biodiversity.org.au/taxon/apni/51270683	Cuscuta epithymum	(L.) L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/174223	Cyanicula sericea	(Lindl.) Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2906808	Cyathochaeta avenacea	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2901642	Cycnogeton huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2912620	Cynosurus echinatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	rough dogstail		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51283097	Cyperus congestus	Vahl	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/100165	Cyrtostylis huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2894031	Dampiera hederacea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2893089	Dampiera leptoclada	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2888259	Dampiera linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2897369	Dampiera tenuicaulis	E.Pritz.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2903276	Darwinia citriodora	(Endl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
55130128	Dasyphila preissii	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2895292	Dasypogon hookeri	J.Drumm.	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae			
https://id.biodiversity.org.au/node/apni/2887451	Desmocladus fasciculatus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2900824	Desmocladus flexuosus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2907521	Diaspasis filifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
55133061	Dictyomenia harveyana	Sonder	species	Plantae	Rhodophyta			Rhodomelaceae			
55133062	Dictyomenia sonderi	Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55133002	Dictyomenia tridens	(Mertens ex Turner) Greville	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/name/apni/182752	Dictyosphaeria sericea	Harv.	species	Plantae							
https://id.biodiversity.org.au/name/apni/179327	Diplodium rogersii	(E.Coleman) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2920924	Diplolaena dampieri	Desf.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2914410	Dischisma arenarium	E.Mey.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/245525	Diuris jonesii	C.J.French & G.Brockman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/79346	Diuris longifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/83741	Drakaea glyptodon	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2897353	Drosanthemum candens	(Haw.) Schwantes	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/taxon/apni/51283539	Drosera drummondii	Planch.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2909880	Drosera enodes	N.G.Marchant & Lowrie	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51283567	Drosera indumenta	Lowrie & Conran	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51283580	Drosera macrantha	Endl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51298315	Drosera menziesii	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2889387	Drosera pallida	Lindl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2908653	Drosera platypoda	Turcz.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2903335	Drosera pulchella	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2911051	Ehrharta erecta	Lam.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/68104	Elythranthera brunonis	(Endl.) A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2904092	Empodisma gracillimum	(F.Muell.) L.A.S.Johnson & D.F.Cutler	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/6987629	Erigeron canadensis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/6990396	Erigeron sumatrensis	Retz.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/89541	Eriochilus dilatatus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2891467	Erodium moschatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2899692	Eryngium pinnatifidum	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
55113002	Erythrymenia minuta	Kylin	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Faucheaceae			
https://id.biodiversity.org.au/node/apni/2916354	Eucalyptus calcicola	Brooker	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2886613	Eucalyptus cornuta	Labill.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2918255	Eucalyptus diversicolor	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51302290	Eucalyptus marginata	Donn ex Sm.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893392	Eucalyptus megacarpa	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2897219	Eucalyptus patens	Benth.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2895139	Euphorbia helioscopia	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2906911	Euphorbia paralias	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Sea spurge		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
55130140	Euptilocladia spongiosa	Wollaston	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
55130142	Euptilota coralloidea	(J.Agardh) Ki¿½tzing	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Callithamniaceae			
https://id.biodiversity.org.au/node/apni/2887774	Exocarpos odoratus	(Miq.) A.DC.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2905672	Ferraria crispa	Burm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/ausmoss/10083595	Fissidens taylorii	MÃ¼ll.Hal.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Fissidentaceae			
https://id.biodiversity.org.au/node/apni/2900534	Galium murale	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae	Small bedstraw		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/name/apni/117457	Gastrodia lacista	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2904887	Geranium gardneri	de Lange	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			
https://id.biodiversity.org.au/node/apni/2902330	Geranium molle	L.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Namunamu		GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913312	Gladiolus cardinalis	Curtis	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2886541	Gnaphalium indutum	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2910332	Gonocarpus benthamii	Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2905790	Gonocarpus diffusus	(Diels) Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2902844	Gonocarpus micranthus	Thunb.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	Piripiri		
https://id.biodiversity.org.au/node/apni/2919002	Goodenia pusilla	(de Vriese) de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2901342	Grevillea brachystylis	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/taxon/apni/51300172	Grevillea manglesioides	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2891344	Gymnoschoenus anceps	(R.Br.) C.B.Clarke	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2891615	Haemodorum laxum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2895963	Haemodorum spicatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2910790	Hakea amplexicaulis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2896542	Hakea lasianthoides	Rye	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2903955	Hakea linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2916495	Hakea lissocarpha	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Honey bush		
https://id.biodiversity.org.au/node/apni/7823819	Hakea oleifolia	(Sm.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/taxon/apni/51300183	Hakea pandanicarpa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2893007	Hakea prostrata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2900733	Hakea ruscifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2919591	Hakea tuberculata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
55130004	Haloplegma preissii	(Harvey) Montagne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2908815	Haloragis digyna	Labill.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2918338	Heliophila pusilla	L.f.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900200	Hemarthria uncinata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2904766	Hemiandra pungens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			
55057006	Hennedya crispa	Harvey	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae			
55132038	Heterosiphonia muelleri	(Sonder) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
55132044	Heterosiphonia wrangelioides	(Harvey) Reinbold	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
https://id.biodiversity.org.au/node/apni/2901311	Hibbertia amplexicaulis	Steud.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2908888	Hibbertia cuneiformis	(Labill.) Sm.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2903911	Hibbertia diamesogenos	(Steud.) J.R.Wheeler	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/taxon/apni/51300216	Hibbertia grossulariifolia	(Salisb.) Salisb.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/taxon/apni/51298304	Hibbertia hypericoides	(DC.) Benth.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2893275	Hibbertia perfoliata	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2894620	Hibbertia pilosa	Steud.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2896141	Hibbertia racemosa	(Endl.) Gilg	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/name/apni/51306673	Hibbertia semipilosa	K.R.Thiele	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2914214	Hibbertia serrata	Hotchk.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2908255	Hibbertia stellaris	Endl.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2892036	Hirschfeldia incana	(L.) Lagr.-Foss.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2907479	Holcus lanatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2898345	Homalosciadium homalocarpum	(F.Muell.) H.Eichler	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2896476	Homalospermum firmum	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2903011	Hornungia procumbens	(L.) Hayek	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2887643	Hyalosperma cotula	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2918303	Hybanthus debilissimus	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Violaceae			
https://id.biodiversity.org.au/node/apni/2897882	Hydrocotyle algida	N.A.Wakef.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2897655	Hydrocotyle blepharocarpa	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2894173	Hydrocotyle callicarpa	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2914728	Hydrocotyle hirta	R.Br. ex A.Rich.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2887633	Hydrocotyle hispidula	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/instance/apni/761215	Hydrocotyle intertexta	R.Br. ex A.Rich.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2915098	Hydrocotyle pilifera	Turcz.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2898261	Hydrocotyle scutellifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2904119	Hydrocotyle tetragonocarpa	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
55113014	Hymenocladia chondricola	(Sonder) J.Lewis	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
55113020	Hymenocladia usnea	(R.Brown ex Turner) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2898411	Hypericum perforatum	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Hypericaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | WA State Notifiable Pests | Weeds listing Queensland Government | Global Invasive Species Information Network (GISIN)
55061001	Hypnea ramentacea	(C.Agardh) J. Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Gloiosiphoniaceae			
https://id.biodiversity.org.au/node/ausmoss/10089505	Hypnum cupressiforme	Hedw.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Hypnaceae			
https://id.biodiversity.org.au/node/apni/2918204	Hypocalymma robustum	(Endl.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
55131034	Hypoglossum revolutum	(Harvey) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae			
https://id.biodiversity.org.au/node/apni/2902062	Hypolaena exsulca	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2908047	Hypolaena pubescens	(R.Br.) Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2912929	Hypolaena viridis	L.A.S.Johnson & B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2920942	Isolepis levynsiana	Muasya & D.A.Simpson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			Non-native species
https://id.biodiversity.org.au/node/apni/2891248	Isolepis prolifera	(Rottb.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	three-square		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2917276	Isotoma hypocrateriformis	(R.Br.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
NZOR-6-26225	Jania affinis	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2905697	Johnsonia lupulina	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2900324	Juncus microcephalus	Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55042010	Kraftia dichotoma	Shepley & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dumontiaceae			
55133088	Kuetzingia angusta	Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55133089	Kuetzingia canaliculata	(Greville) Sonder	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2893469	Lagenophora huegelii	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2917995	Lagurus ovatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2902376	Lasiopetalum floribundum	Benth.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/name/apni/9349594	Lasiopetalum occidentale	K.A.Sheph. & C.F.Wilkins	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
NZOR-6-37652	Laurencia elata	(C.Agardh) Hook.f. & Harv.	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
55133008	Laurencia filiformis	(C.Agardh) Montagne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2897938	Lemna disperma	Hegelm.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Araceae			
https://id.biodiversity.org.au/node/apni/2913538	Lepidium rotundum	(Desv.) DC.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			
https://id.biodiversity.org.au/node/apni/2907847	Lepidosperma angustatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/7121288	Lepidosperma calcicola	R.L.Barrett & K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2914832	Lepidosperma effusum	Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2896726	Lepidosperma gladiatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2895560	Lepidosperma leptostachyum	Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2919436	Lepidosperma squamatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2900500	Lepidosperma tetraquetrum	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/taxon/apni/51293740	Leptocarpus coangustatus	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/taxon/apni/51293793	Leptocarpus scariosus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/name/apni/247171	Leptocarpus thysananthus	B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/name/apni/60226	Leptoceras menziesii	(R.Br.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2909051	Leptomeria scrobiculata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2917266	Leptomeria squarrulosa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2895169	Leptospermum erubescens	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2914117	Leucophyta brownii	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2896873	Leucopogon australis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2888913	Leucopogon capitellatus	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2888147	Leucopogon gilbertii	Stschegl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/taxon/apni/51284002	Leucopogon glabellus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2886450	Leucopogon interstans	Hislop	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/3601859	Leucopogon obovatus	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2919524	Leucopogon pendulus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2905202	Leucopogon propinquus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2898177	Leucopogon racemulosus	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2908100	Leucopogon verticillatus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2911951	Levenhookia pauciflora	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
55025020	Liagora wilsoniana	Zeh	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Liagoraceae			
https://id.biodiversity.org.au/node/apni/2886820	Limonium sinuatum	(L.) Mill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Plumbaginaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2904282	Liparophyllum lasiospermum	(F.Muell.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/taxon/apni/51288662	Liparophyllum latifolium	(Benth.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/node/apni/2915025	Lobelia tenuior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
https://id.biodiversity.org.au/node/apni/2911683	Lobularia maritima	(L.) Desv.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915625	Logania vaginalis	(Labill.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae			
https://id.biodiversity.org.au/node/apni/2888174	Lomandra caespitosa	(F.Muell. ex Benth.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2894809	Lomandra integra	T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2911793	Lomandra nigricans	T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2913413	Lomandra pauciflora	(R.Br.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2893609	Lomandra sericea	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/name/apni/101016	Lyperanthus serratus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2915937	Macrozamia riedlei	(Fisch. ex Gaudich.) C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Cycadales	Zamiaceae			
https://id.biodiversity.org.au/node/apni/2914187	Marianthus candidus	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2903542	Marianthus tenuis	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
55130191	Medeiothamnion halurus	(Harvey) E.Gordon	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Wrangeliaceae			
https://id.biodiversity.org.au/node/apni/2915205	Melaleuca huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2913065	Melaleuca incana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896656	Melaleuca preissiana	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2915917	Melaleuca systena	Craven	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2915420	Mentha aquatica	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2896543	Mentha pulegium	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2921022	Mercurialis annua	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Dog's mercury		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2887332	Mesomelaena graciliceps	(C.B.Clarke) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2903256	Mesomelaena tetragona	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
55121069	Metagoniolithon chara	(Lamarck) Ducker	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121070	Metagoniolithon radiatum	(Lamarck) Ducker	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121003	Metagoniolithon stelliferum	(Lamarck) Weber-van Bosse	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121071	Metamastophora flabellata	(Sonder) Setchell	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2916956	Microlaena stipoides	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	PÄ‚Ã«tÃ«		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/name/apni/73792	Microtis alba	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/73914	Microtis brownii	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/73920	Microtis densiflora	(Benth.) M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/74001	Microtis media	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2906267	Millotia myosotidifolia	(Benth.) Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2904122	Millotia tenuifolia	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2904253	Monotaxis occidentalis	Endl.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			
https://id.biodiversity.org.au/node/apni/4750977	Muehlenbeckia adpressa	(Labill.) Meisn.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae			
https://id.biodiversity.org.au/node/apni/2904981	Myoporum insulare	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2908996	Myoporum oppositifolium	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			
https://id.biodiversity.org.au/node/apni/2919702	Myriophyllum salsugineum	Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
55059001	Nizymenia conferta	(Sonder) Chiovitti, Saunders & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Nizymeniaceae			
55059002	Nizymenia furcata	(Harvey) Chiovitti, Saunders & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Nizymeniaceae			
https://id.biodiversity.org.au/node/apni/2889663	Nuytsia floribunda	(Labill.) R.Br. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Santalales	Loranthaceae	Western Australian Christmas tree		
https://id.biodiversity.org.au/node/apni/2915964	Olearia axillaris	(DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2898016	Olearia elaeophila	(A.Cunn. ex DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2903906	Olearia paucidentata	(Steetz) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2905512	Olearia rudis	(Benth.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2886612	Oncosiphon suffruticosum	(L.) Kallersjo	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2891338	Opercularia echinocephala	Benth.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2912636	Opercularia hispidula	Endl.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2913924	Opercularia scabrida	Schltdl.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2893649	Opercularia vaginata	Labill. ex Juss.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2914900	Opercularia volubilis	R.Br. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/taxon/apni/51288225	Orianthera serpyllifolia	(R.Br.) C.S.P.Foster & B.J.Conn	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae			
https://id.biodiversity.org.au/taxon/apni/51288688	Ornduffia parnassifolia	(Labill.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/node/apni/2903083	Orobanche minor	Sm.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55133148	Osmundaria prolifera	J.V.Lamouroux	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2917706	Oxalis incarnata	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/taxon/apni/51291069	Parentucellia latifolia	(L.) Caruel	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae	Sticky bartsia		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2904580	Patersonia occidentalis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			
https://id.biodiversity.org.au/node/apni/2908467	Patersonia umbrosa	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			
https://id.biodiversity.org.au/node/apni/7455751	Pauridia glabella	(R.Br.) Snijman & Kocyan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hypoxidaceae			
https://id.biodiversity.org.au/node/apni/2908379	Pelargonium alchemilloides	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
https://id.biodiversity.org.au/node/apni/2908333	Pelargonium capitatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901876	Pelargonium drummondii	Turcz.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			
https://id.biodiversity.org.au/node/apni/2894633	Pentapeltis silvatica	(Diels) Domin	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2892102	Persoonia longifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2886251	Petrophile axillaris	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2898563	Petrophile serruriae	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2900642	Petrorhagia dubia	(Raf.) G.Lopez & Romo	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55058003	Phacelocarpus apodus	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			
55058002	Phacelocarpus peperocarpos	(Poiret) M.J. Wynne, Ardriï¿½ & P.C. Silva	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			
NZOR-6-119784	Phacelocarpus sessilis	Harv. ex J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886300	Philotheca spicata	(A.Rich.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915837	Philydrella pygmaea	(R.Br.) Caruel	species	Plantae	Charophyta	Equisetopsida	Commelinales	Philydraceae			
https://id.biodiversity.org.au/node/apni/2903217	Phlebocarya ciliata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2916353	Picris angustifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2913302	Pimelea clavata	Labill.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2906270	Pimelea ferruginea	Labill.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2888598	Pimelea hispida	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2890451	Pimelea imbricata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2908504	Pimelea rosea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2892341	Pimelea spectabilis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2905275	Pimelea sylvestris	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/7056827	Pithocarpa cordata	(DC.) Schmidt-Leb. & R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/7057513	Pithocarpa ramosa	(DC.) Schmidt-Leb. & R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2907927	Plantago exilis	Decne.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			
https://id.biodiversity.org.au/node/apni/2889667	Platysace compressa	(Labill.) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2903788	Platysace filiformis	(Bunge) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2896233	Platysace juncea	(Bunge) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2920858	Platysace tenuissima	(Benth.) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
NZOR-6-33381	Plocamium cartilagineum	(L.) P.S.Dixon	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
55090004	Plocamium mertensii	(Greville) Harvey	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
55090009	Plocamium preissianum	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
https://id.biodiversity.org.au/name/apni/9605937	Plumatichilos serotinus	D.L.Jones, C.J.French & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2914796	Poa homomalla	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915173	Poa porphyroclados	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2894055	Podocarpus drouynianus	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Pinales	Podocarpaceae			
https://id.biodiversity.org.au/node/apni/2891893	Podolepis gracilis	Graham	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2890292	Podolepis lessonii	(Cass.) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2895392	Polygala myrtifolia	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2910698	Poranthera drummondii	Klotzsch	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae			
https://id.biodiversity.org.au/node/apni/2920874	Poranthera huegelii	Klotzsch	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae			
https://id.biodiversity.org.au/name/apni/104509	Prasophyllum fimbria	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/105032	Prasophyllum hians	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/106157	Prasophyllum regium	R.S.Rogers	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/3707332	Prasophyllum sp. early (G.Brockman GBB 1626)		species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
NZOR-6-59550	Pterocladia lucida	(Turner) J.Agardh	species	Plantae	Rhodophyta			Pterocladiaceae			
https://id.biodiversity.org.au/name/apni/237084	Pterostylis brevisepala	J.R.Wheeler, N.G.Marchant & M.Lewington	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/51258529	Pterostylis ectypha	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/74992	Pterostylis nana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/75560	Pterostylis rogersii	E.Coleman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/75971	Pterostylis vittata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
55130221	Ptilocladia vestita	(Harvey) Wollaston	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2920050	Ptilotus drummondii	(Moq.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/apni/2891179	Ptilotus sericostachyus	(Nees) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/apni/2891611	Ptilotus stirlingii	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/ausmoss/10107316	Ptychostomum angustifolium	(Brid.) J.R.Spence & H.P.Ramsay	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae			
https://id.biodiversity.org.au/node/ausmoss/10108619	Racopilum cuspidigerum	(SchwÃ¤gr.) Ã...ngstr.	species	Plantae	Bryophyta	Bryopsida	Hypnodendrales	Racopilaceae			
https://id.biodiversity.org.au/node/apni/2890275	Ranunculus colonorum	Endl.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
https://id.biodiversity.org.au/node/apni/2907093	Ranunculus muricatus	L.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2888230	Rhadinothamnus anceps	(DC.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913396	Rhagodia baccata	(Labill.) Moq.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
55053003	Rhodoglossum gigartinoides	(Sonder) Edyvane & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Gigartinaceae			
55042011	Rhodopeltis australis	(Harvey) Harvey	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dumontiaceae			
NZOR-6-28285	Rhodymenia sonderi	P.C.Silva	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2896357	Romulea rosea	(L.) Eckl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/ausmoss/10110398	Rosulabryum campylothecium	(Taylor) J.R.Spence	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae			
https://id.biodiversity.org.au/node/apni/2908709	Rubus laudatus	A.Berger	species	Plantae	Charophyta	Equisetopsida	Rosales	Rosaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | WA State Notifiable Pests
https://id.biodiversity.org.au/node/apni/2911607	Rytidosperma pilosum	(R.Br.) Connor & Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915685	Rytidosperma setaceum	(R.Br.) Connor & Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2908785	Sarcocornia blackiana	(Ulbr.) A.J.Scott	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
https://id.biodiversity.org.au/node/apni/2906539	Scaevola anchusifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2918481	Scaevola calliptera	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2893977	Scaevola crassifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2917770	Scaevola glandulifera	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2889975	Scaevola globulifera	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2911395	Scaevola microphylla	(de Vriese) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2916912	Scaevola nitida	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2913099	Schoenus bifidus	(Nees) Boeckeler	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2893349	Schoenus curvifolius	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2918334	Schoenus grandiflorus	(Nees ex Lehm.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2896412	Schoenus latitans	S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2888386	Schoenus rigens	S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2916328	Schoenus sublateralis	(Steud.) C.B.Clarke	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/ausmoss/10113352	Sematophyllum subhumile	(MÃ¼ll.Hal.) M.Fleisch.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Sematophyllaceae			
https://id.biodiversity.org.au/node/apni/2910676	Senecio elegans	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/name/apni/242122	Senecio lautus	G.Forst.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2888279	Senecio multicaulis	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2917792	Senecio pinnatifolius	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2893478	Senecio ramosissimus	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2898986	Sherardia arvensis	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900859	Silene gallica	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2892966	Siloxerus filifolius	(Benth.) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886532	Solanum symonii	H.Eichler	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae			
https://id.biodiversity.org.au/node/apni/2896184	Sowerbaea laxiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
55130233	Spermothamnion cymosum	(Harvey) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2899600	Sphenotoma gracilis	(R.Br.) Sweet	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2897920	Sporadanthus rivularis	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2908206	Sporadanthus strictus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2900587	Spyridium globulosum	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
https://id.biodiversity.org.au/node/apni/2917529	Stenopetalum robustum	Endl.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			
https://id.biodiversity.org.au/node/apni/2910515	Stenotaphrum secundatum	(Walter) Kuntze	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2921108	Stylidium acuminatum	(Carlquist) Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2890737	Stylidium adnatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2917156	Stylidium amoenum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2888659	Stylidium androsaceum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2902939	Stylidium caespitosum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2909592	Stylidium fasciculatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/taxon/apni/51294367	Stylidium hesperium	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2901489	Stylidium junceum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2891766	Stylidium lowrieanum	Carlquist	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2904168	Stylidium pygmaeum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2911942	Stylidium rhynchocarpum	Sond.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2916440	Stylidium scandens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2920123	Stylidium spathulatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2910072	Taraxis grossa	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2916557	Taxandria fragrans	(J.R.Wheeler & N.G.Marchant) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51300349	Taxandria juniperina	(Schauer) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2894898	Taxandria linearifolia	(DC.) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2900496	Taxandria parviceps	(Schauer) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51283213	Tetraria octandra	(Nees) KÃ¾k.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2902391	Tetrarrhena laevis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2920211	Tetratheca filiformis	Benth.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2896026	Tetratheca hirsuta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2886663	Tetratheca setigera	Endl.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2899487	Thalassodendron pachyrhizum	Hartog	species	Plantae	Charophyta	Equisetopsida	Alismatales	Cymodoceaceae			
https://id.biodiversity.org.au/name/apni/97103	Thelymitra crinita	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115296	Thelymitra fuscolutea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115384	Thelymitra graminea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115854	Thelymitra macrophylla	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/188214	Thelymitra vulgaris	Jeanes	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2893885	Thomasia grandiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2894817	Thomasia paniculata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2908597	Thomasia pauciflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2892440	Thomasia triphylla	(Labill.) J.Gay	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2896155	Threlkeldia diffusa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
https://id.biodiversity.org.au/node/apni/2899134	Thryptomene saxicola	(A.Cunn. ex Hook.) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/ausmoss/10118616	Thuidiopsis furfurosa	(Hook.f. & Wilson) M.Fleisch.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Thuidiaceae			
https://id.biodiversity.org.au/node/ausmoss/10119041	Thuidiopsis sparsa	(Hook.f. & Wilson) Broth.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Thuidiaceae			
55132003	Thuretia quercifolia	Decaisne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
https://id.biodiversity.org.au/node/apni/2912118	Thysanotus arenarius	Brittan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2894540	Thysanotus gracilis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/taxon/apni/51267100	Thysanotus multiflorus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2915505	Thysanotus patersonii	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2913946	Trachyandra divaricata	(Jacq.) Kunth	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2886346	Trachymene coerulea	Graham	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2916273	Trachymene pilosa	Sm.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2893326	Tremandra diffusa	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2916077	Tremandra stelligera	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2895152	Tribonanthes australis	Endl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/taxon/apni/51269051	Trichocline spathulata	(A.Cunn. ex DC.) J.H.Willis	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2910345	Trihaloragis hexandra	(F.Muell.) M.L.Moody & Les	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2913192	Trymalium ledifolium	Fenzl	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
https://id.biodiversity.org.au/node/apni/2891523	Trymalium odoratissimum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
55055003	Tylotus obtusatus	(Sonder) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dicranemataceae			
https://id.biodiversity.org.au/node/apni/2895958	Ursinia speciosa	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2904814	Utricularia paulineae	Lowrie	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae			
https://id.biodiversity.org.au/node/apni/2911448	Velleia macrophylla	(Lindl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2892131	Verbascum creticum	(L.) Cav.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2920526	Verbascum virgatum	Stokes	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2897057	Veronica arvensis	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2913390	Veronica distans	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			
https://id.biodiversity.org.au/node/apni/2908818	Vinca major	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	Periwinkle		GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2901926	Viola odorata	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Violaceae	Violet		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2913788	Wahlenbergia gracilenta	Lothian	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
https://id.biodiversity.org.au/node/apni/2918789	Waitzia suaveolens	(Benth.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
55130255	Wollastoniella myriophylloides	(Harvey) E.Gordon	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2912176	Wurmbea monantha	(Endl.) T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae			
https://id.biodiversity.org.au/node/apni/2905888	Xanthorrhoea preissii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Xanthorrhoeaceae			
https://id.biodiversity.org.au/node/apni/2910094	Xanthosia atkinsoniana	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2910279	Xanthosia candida	(Benth.) Steud.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/taxon/apni/51311057	Xerochrysum macranthum	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2917018	Xyris gracillima	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Xyridaceae			
https://id.biodiversity.org.au/node/apni/6917219	Zantedeschia aethiopica	(L.) Spreng.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Araceae	Arum lily		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests | Global Invasive Species Information Network (GISIN)
eb326170-b652-4a0f-80e8-26e0cd0943b6	Crucibulum laeve	(Huds.) Kambly	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
9e396944-1d26-4895-afce-8219ded08f38	Amanita xanthocephala	(Berk.) D.A.Reid & R.N.Hilton	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae		Queensland : Conservation Status	
2a309a7e-20d9-479f-b835-db4530273301	Anthracophyllum archeri	(Berk.) Pegler	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
e6d2b97e-bcd0-4f47-8a21-ad935fce79da	Armillaria luteobubalina	Watling & Kile	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Physalacriaceae		Queensland : Conservation Status	
23190e80-b492-4c2d-95a2-8887fdba7eac	Austroboletus occidentalis	Watling & N.M.Greg.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae		Queensland : Conservation Status	
011002b7-08bb-43cb-904e-382156827125	Boletellus obscurecoccineus	(HÃ¶hn.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae		Queensland : Conservation Status	
005d003c-ef61-49d7-a707-89407c058550	Cortinarius archeri	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae		Queensland : Conservation Status	
89d7d3c7-0b38-41a7-aaf7-2845a1ca0f03	Cortinarius persplendidus	Gasparini	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae		Queensland : Conservation Status	
2d643cea-1812-4e1f-bb18-83238a40b5d9	Cystangium balpineum	Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae		Queensland : Conservation Status	
22adf4ab-cb28-4b05-afe2-ea55c7531f85	Fistulina hepatica	(Schaeff.) With.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Fistulinaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/120868	Flavoparmelia haysomii	(C.W.Dodge) Hale	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
58ab8571-0cb8-49c7-9632-282d5486d0e8	Geastrum triplex	Jungh.	species	Fungi	Basidiomycota	Agaricomycetes	Geastrales	Geastraceae		Queensland : Conservation Status	
NZOR-6-21771	Hyperphyscia adglutinata	(FlÃ¶rke) H.Mayrhofer & Poelt	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae		Queensland : Conservation Status	
61895931-343b-47cc-b12a-2c8589c71e73	Hypholoma fasciculare	(Huds.) P.Kumm.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae		Queensland : Conservation Status	
5883002e-7bc1-46f9-b926-658797ceb30c	Labyrinthomyces varius	(Rodway) Trappe	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Tuberaceae		Queensland : Conservation Status	
8ee91933-e091-4a64-87f4-fa494a05b9f9	Laccocephalum mylittae	(Cooke & Massee) NÃºÃ±ez & Ryvarden	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/155362	Marasmius crinisequi	F.Muell.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
500cdc4e-c73b-4c34-aaf1-829da78dce54	Marasmius elegans	(Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
NZOR-6-70219	Notoparmelia erumpens	(Kurok.) A.Crespo, Ferencova & Divakar	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
880abd7a-b60f-44b6-8c08-ea72f832d2e0	Omphalotus nidiformis	(Berk.) O.K.Mill.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
NZOR-6-1965	Panaeolus papilionaceus	(Bull.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Bolbitiaceae		Queensland : Conservation Status	
NZOR-6-97062	Phellinus gilvus	(Schwein.) Pat.	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae		Queensland : Conservation Status	
1c30b8f8-617c-465b-8e44-8594b64170b8	Piptoporus australiensis	(Wakef.) G.Cunn.	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Fomitopsidaceae		Queensland : Conservation Status	
628f718d-28dc-4ad6-97a6-b91fa02927ea	Psathyrella echinata	(Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae		Queensland : Conservation Status	
NZOR-6-113645	Pyxine subcinerea	Stirt.	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae		Queensland : Conservation Status	
590a6784-9633-4fd1-b273-52eaca4ad604	Russula persanguinea	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae		Queensland : Conservation Status	
NZOR-6-1856	Tephromela atra	(Huds.) Hafellner	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Tephromelataceae		Queensland : Conservation Status	
NZOR-6-47855	Usnea inermis	Motyka	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/125583	Xanthoparmelia isidiigera	(MÃ¾ll.Arg.) Elix & J.Johnst.	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/135979	Xanthoparmelia neorimalis	(Elix & P.M.Armstr.) Elix & T.H.Nash	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
fbde5899-a023-4d4f-9c9f-d33c90647714	Batrachochytrium dendrobatidis	Longcore, Pessier & D.K.Nichols	species	Fungi	Chytridiomycota	Chytridiomycetes	Rhizophydiales				GRIIS - Global Register of Introduced and Invasive Species - Australia
NZOR-6-11980	Buellia albula	(Nyl.) MÃ¾ll.Arg.	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae			
1bad8470-6db3-46ae-b38a-8a1d5697c1cb	Hemimycena cephalotricha	(Redhead) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae			
NZOR-6-4547	Henningsomyces candidus	(Pers.) Kuntze	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Porotheleaceae			
NZOR-6-25837	Hohenbuehelia ligulata	(E. Horak) J.A. Cooper	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Pleurotaceae			
4f039d30-04d7-42eb-9d47-14da0199f1fc	Laccocephalum sclerotinium	(Rodway) NÃºÃ±ez & Ryvarden	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae			
1c5bd30e-b3b9-400c-a99c-f43b260bf012	Macrotyphula juncea	(Alb. & Schwein.) Berthier	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Typhulaceae			
db8c1ea7-6a61-4470-9b3b-e3abce97c5b7	Marasmius alveolaris	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae			
2b810ccb-cdba-490d-bccc-801952d533ad	Mesophellia labyrinthina	Trappe et al.	species	Fungi	Basidiomycota	Agaricomycetes	Hysterangiales	Mesophelliaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
39997875-a008-4234-ab60-1dd5a5f94d59	Mycena tenerrima	(Berk.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae			
d486f280-ff62-4c22-8525-a0d0869a1b20	Neolentinus dactyloides	(Cleland) Redhead & Ginns	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae			
NZOR-6-127069	Phaeosphaeriopsis glaucopunctata	(Grev.) M.P.S. CÃ¢mara, M.E. Palm & A.W. Ramaley	species	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae			
94f154b9-2cf0-415a-9f34-cfed1815ced2	Plectania rhytidia	(Berk.) Nannf. & Korf	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Sarcosomataceae			
6086df2b-e495-4c65-914c-cab7c16d23fc	Pleuroflammula praestans	E.Horak	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae			
NZOR-6-30170	Ramaria capitata	Corner	species	Fungi	Basidiomycota	Agaricomycetes	Gomphales	Gomphaceae			
NZOR-6-134409	Ramboldia stuartii	(Hampe) Kantvilas & Elix	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Lecanoraceae			
3880e427-e351-41af-8d3c-2d27ffee799b	Russula pumicoidea	T.Lebel	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae			
68027715-7d73-4ed8-a777-051e63139ae5	Scleroderma paradoxum	G.W.Beaton	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae			
https://id.biodiversity.org.au/name/apni/121823	Xanthoparmelia parvoincerta	Elix & J.Johnst.	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae			

APPENDIX 3

Protected Matters Search Tool Report

Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 24-Feb-2026

Summary

Details

- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat

Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	55
Listed Migratory Species:	46

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at https://www.dcceew.gov.au/parks-heritage/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	67
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	7
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Aquatic Root Mat Community 2 in Caves of the Leeuwin Naturaliste Ridge	Endangered	Community known to occur within area	In buffer area only
Empodisma peatlands of southwestern Australia	Endangered	Community likely to occur within area	In feature area

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anous tenuirostris melanops			
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris acuminata			
Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris canutus			
Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Limosa lapponica menzbieri Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Pachyptila turtur subantarctica Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Phaethon rubricauda westralis Red-tailed Tropicbird (Indian Ocean), Indian Ocean Red-tailed Tropicbird [91824]	Endangered	Species or species habitat may occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche steadi			
White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Zanda baudinii listed as Calyptorhynchus baudinii			
Baudin's Cockatoo, Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Breeding known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris			
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
CRUSTACEAN			
Engaewa pseudoreducta			
Margaret River Burrowing Crayfish [82674]	Critically Endangered	Species or species habitat known to occur within area	In feature area
FISH			
Galaxiella munda			
Western Dwarf Galaxias, Western Mud Minnow [79240]	Vulnerable	Species or species habitat known to occur within area	In feature area
FROG			
Anstisia alba listed as Geocrinia alba			
White-bellied Frog, Creek Frog [92544]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
Balaenoptera musculus			
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Dasyurus geoffroii			
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Eubalaena australis			
Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Neophoca cinerea			
Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Pseudocheirus occidentalis			
Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Setonix brachyurus Quokka [229]	Vulnerable	Species or species habitat likely to occur within area	In feature area
OTHER			
Westralunio carteri Carter's Freshwater Mussel, Ambiguus Mussel [86266]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
PLANT			
Banksia mimica Summer Honeypot [82765]	Endangered	Species or species habitat may occur within area	In buffer area only
Banksia squarrosa subsp. argillacea Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat may occur within area	In feature area
Caladenia hoffmanii Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat may occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area	In feature area
Gastrolobium papilio Butterfly-leaved Gastrolobium [78415]	Endangered	Species or species habitat may occur within area	In feature area
Lambertia echinata subsp. occidentalis Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat may occur within area	In feature area
Reedia spathacea Reedia [2995]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dermochelys coriacea			
Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus			
Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			
Carcharias taurus (west coast population)			
Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Carcharodon carcharias			
White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Rhincodon typus			
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini			
Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only

Listed Migratory Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea			
Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis			
Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Diomedea dabbenena](#) Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
[Diomedea epomophora](#) Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Diomedea exulans](#) Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Diomedea sanfordi](#) Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
[Hydroprogne caspia](#) Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
[Macronectes giganteus](#) Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
[Macronectes halli](#) Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Onychoprion anaethetus](#) Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Phaethon rubricauda](#) Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
[Phoebetria fusca](#) Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Thalassarche carteri			
Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta			
Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida			
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris			
Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche steadi			
White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Marine Species			
Balaenoptera edeni			
Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus			
Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata			
Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharhinus longimanus			
Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharias taurus			
Grey Nurse Shark [64469]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Congregation or aggregation known to occur within area	In buffer area only
Mobula alfredi as Manta alfredi Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
Mobula birostris as Manta birostris Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Rhincodon typus](#) Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Limosa lapponica](#) Bar-tailed Godwit [844]		Species or species habitat may occur within area	In buffer area only
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Pandion haliaetus](#) Osprey [952]		Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Ardenna grisea as Puffinus griseus Sooty Shearwater [82651]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Species or species habitat may occur within area	In buffer area only
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Pandion haliaetus Osprey [952]		Species or species habitat may occur within area	In feature area
Phaethon rubricauda Red-tailed Tropicbird [994]		Species or species habitat may occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Puffinus assimilis](#) Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
[Stercorarius antarcticus as Catharacta skua](#) Brown Skua [85039]		Species or species habitat may occur within area	In buffer area only
[Thalassarche carteri](#) Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
[Thalassarche cauta](#) Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Thalassarche impavida](#) Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Thalassarche melanophris](#) Black-browed Albatross [66472]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Thalassarche steadi](#) White-capped Albatross [64462]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Thinornis cucullatus as Thinornis rubricollis](#) Hooded Plover, Hooded Dotterel [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Fish			
[Acentronura australe](#) Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only
[Campichthys galei](#) Gale's Pipefish [66191]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area	In buffer area only
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Mammal			
Arctocephalus forsteri Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Neophoca cinerea Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Whales and Other Cetaceans			[Resource Information]
Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
Balaenoptera acutorostrata Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Delphinus delphis Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]		Congregation or aggregation known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Leeuwin-Naturaliste	National Park	WA	In feature area
Ngari Capes	Marine Park	WA	In buffer area only
NTWA Bushland covenant (0155)	Conservation Covenant	WA	In buffer area only

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
South-West Forest Region of Western Australia	Western Australia	In feature area

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Vlam Road Gravel Pit, Vlam Road, Karridale, WA	2014/7141	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Busselton to Flinders Bay Rails to Trails Project, WA	2013/6835	Not Controlled Action	Completed	In feature area
Geo-science Investigations	2005/2069	Not Controlled Action	Completed	In feature area
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas			[Resource Information]
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna carneipes			
Flesh-footed Shearwater [82404]	Foraging (in high numbers)	Known to occur	In buffer area only
Onychoprion anaethetus			
Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In buffer area only
Puffinus assimilis tunneyi			
Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only
Sharks			
Carcharodon carcharias			
White Shark [64470]	Foraging	Known to occur	In buffer area only
Whales			
Eubalaena australis			
Southern Right Whale [40]	Migration		In buffer area only
Eubalaena australis			
Southern Right Whale [40]	Reproduction		In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
Megaptera novaeangliae			
Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact us page.

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APPENDIX 4

Conservation Codes

Conservation Codes for Western Australian Flora and Fauna

Threatened, Extinct and Specially Protected fauna or flora are species which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such.

The lists of Threatened, Extinct and Specially Protected species are listed under Part 2 of the Biodiversity Conservation Act 2016.

Categories of Threatened, Extinct and Specially Protected fauna and flora are:

T Threatened species

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

> ***Threatened fauna*** is the species of fauna that are listed as critically endangered, endangered or vulnerable threatened species.
>
> ***Threatened flora*** is the species of flora that are listed as critically endangered, endangered or vulnerable threatened species.

The assessment of the conservation status of threatened species is in accordance with the BC Act listing criteria and the requirements of Ministerial Guideline (Number 1) and Ministerial Guideline (Number 2) that adopts the use of the International Union for Conservation of Nature (IUCN) Red List of Threatened Species Categories and Criteria 4, and is based on the national distribution of the species.

CR Critically endangered species

> 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*".
>
> Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines.

EN Endangered species

> 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*".
>
> Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines.

VU Vulnerable species

> 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*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines.

Extinct Species

EX Presumed extinct species

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).

EW Extinct in the wild species

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 fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Currently only fauna are listed as species of special conservation interest.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Currently only fauna are listed as species otherwise in need of special protection.

P Priority species

Priority is not a listing category under the BC Act.

All fauna and flora are protected in WA following the provisions in Part 10 of the BC Act. The protection applies even when a species is not listed as threatened or specially protected, and regardless of land tenure (State managed land (Crown land), private land, or Commonwealth land).

Species that may possibly be threatened species that do not meet the criteria for listing under the BC Act because of insufficient survey or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of prioritisation for survey and evaluation of conservation status so that consideration can be given to potential listing as threatened.

Species that are adequately known, meet criteria for near threatened, or are rare but not threatened, or that have been recently removed from the threatened species list or conservation dependent or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of priority status is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

Priority 1: 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, for example, 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 for threatened listing and appear to be under immediate threat from known threatening processes. These species are in urgent need of further survey.

Priority 2: 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, for example, 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 for threatened listing and appear to be under threat from known threatening processes. These species are in urgent need of further survey.

Priority 3: 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. These species need further survey.

Priority 4: Rare, Near Threatened and other species in need of monitoring

(a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as a conservation dependent specially protected species.

(c) Species that have been removed from the list of threatened species or lists of conservation dependent or other specially protected species, during the past five years for reasons other than taxonomy.

(d) Other species in need of monitoring.

Western Australian Ecological Communities

<u>Threatened Ecological Communities</u>

The BC Act provides for the statutory listing of threatened ecological communities (TECs) by the Minister.

Presumed Totally Destroyed (PD)

An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally

destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

Critically Endangered (CR)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

Endangered (EN)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

Vulnerable (VU)

An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

Priority Ecological Communities

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community List under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: 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.

Priority Two: 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 Three: 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) munities made up of large, and/or widespread occurrences, that 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 Four: 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 Five: 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.

Commonwealth of Australia Conservation Codes

Threatened Flora and Fauna

Threatened fauna and flora may be listed under Section 178 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in any one of the following six categories:

Extinct

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

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

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered

A taxon is Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable

A taxon is Vulnerable when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a high risk of extinction in the wild.

Conservation dependent

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;
iv. cessation of the plan of management would adversely affect the conservation status of the species.

The EPBC Act does not provide for listing in a data deficient category. Where sufficient data (evidence) is unavailable to allow assessment by the Threatened Species Scientific Committee against the criteria for listing, the species are found to be ineligible. A recommendation is made to the Minister to not include the species in any category under the EPBC Act. For reasons of transparency and to inform future research, the Threatened Species Scientific Committee publishes the names of those species found to be data deficient. As data deficient is not a listing category under the EPBC Act, this has no statutory implications and the species is not considered to be listed under the EPBC Act.

Threatened Ecological Communities

Threatened Ecological communities under the EPBC Act are listed in three categories.

Critically endangered

If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).

Endangered

If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).

Vulnerable

If, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).

APPENDIX 5

Flora Species List

SPECIES LIST – Boranup 2025

MONOCOTYLEDONS

ASPARAGACEAE
Thysanotus patersonii

CYPERACEAE
Ficinia nodosa
Isolepis marginata
Lepidosperma gladiatum
Morelotia octandra

HAEMODORACEAE
Conostylis aculeata subsp. *aculeata*

ORCHIDACEAE
Caladenia latifolia
Cyrtostylis huegelii

POACEAE
Austrostipa sp

RESTIONACEAE
Desmocladus flexuosus

DICOTYLEDONS

AIZOACEAE
Carpobrotus virescens

APIACEAE
Daucus glochidiatus

ARALIACEAE
Hydrocotyle intertexta
Trachymene pilosa

ASTERACEAE
Hyalosperma cotula
Olearia axillaris
Ozothamnus cordatus
**Podotheca angustifolia*
Rhodanthe citrina
Senecio pinnatifolius

BRASSICACEAE
**Heliophila pusilla*

CAMPANULACEAE
Isotoma hypocrateriformis

CHENOPODIACEAE
Rhagodia baccata subsp. *baccata*

CRASSULACEAE
Crassula colorata

DILLENIACEAE
Hibbertia cuneiformis

ERICACEAE
Acrotriche cordata
Leucopogon parviflorus

FABACEAE
Acacia littorea

GOODENIACEAE
Scaevola nitida

LAURACEAE
Cassytha racemosa

MYRTACEAE
Agonis flexuosa
Eucalyptus diversicolor

OROBANCHACEAE
**Parentucellia latifolia*

PHYLLANTHACEAE
Poranthera microphylla

PITTOSPORACEAE
Billardiera fusiformis

POLYGALACEAE
Comesperma confertum

POLGONACEAE
Muehlenbeckia adpressa

RANUNCULACEAE
Clematis linearifolia

RHAMNACEAE
Spyridium globulosum

SANTALACEAE
Exocarpos sparteus

SCROPHULARIACEAE
**Dischisma arenarium*

THYMELEACEAE
Pimelea ferruginea

APPENDIX 6

Quadrat Data

QUADRAT B8

34°11.345' 115°4.561'

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/Acacia littorea/Leucopogon parviflorus* Closed Heath over *Acrotriche cordata* Low Shrubland

Condition: Excellent

Soil Type: Cream sand

Landform: Undulating

Date: 1.10.25

Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	6	15
Leucopogon parviflorus	2	3
Acacia littorea	1.8	5
Olearia axillaris	0.8	<1
Acrotriche cordata	0.6	20
Pimelea ferruginea	0.6	<1
Ficinia nodosa	0.5	<1
Rhagodia baccata	0.4	<1
Austrostipa sp	0.3	<1
Conostylis aculeata	0.2	<1
Senecio pinnatifolius	0.2	<1
Cyrtostylis huegelii	0.1	<1
**Heliophila pusilla*	0.1	<1
Daucus glochidiatus	<0.1	<1
Hydrocotyle intertexta	<0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B9

34°11.228' 115°4.673'

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Condition: Excellent
Soil Type: Cream sand
Landform: Steep slope
Date: 1.10.25
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosus	6	10
Spyridium globulosum	2.5	25
Leucopogon parviflorus	1.4	10
Olearia axillaris	1.3	<1
Hibbertia cuneiformis	1	<1
Lepidosperma gladiatum	0.8	2
Pimelea ferruginea	0.8	<1
Scaevola nitida	0.7	<1
Austrostipa sp	0.4	<1
Acrotriche cordata	0.3	4
Conostylis aculeata	0.2	1
**Heliophila pusilla*	0.1	<1
Poranthera microphylla	<0.1	<1
Daucus glochidiatus	<0.1	<1
Thysanotus patersonii	Climber	<1
Clematis linearifolia	Climber	<1

* introduced species

QUADRAT B10

34°11.280' 115°4.677'

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/ Leucopogon parviflorus* Tall Open Scrub
Condition: Excellent
Soil Type: Cream sand
Landform: Steep slope
Date: 1.10.25
Recorder: Paul van der Moezel



Quadrat (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	5	5
Spyridium globulosum	2	3
Exocarpos sparteus	2	1
Leucopogon parviflorus	1.5	10
Rhagodia baccata	1	<1
Acacia truncata	1	<1
Lepidosperma gladiatum	0.7	3
Desmocladus flexuosus	0.7	<1
Acrotriche cordata	0.6	1
Austrostipa sp	0.6	<1
Scaevola nitida	0.5	<1
Morelotia octandra	0.3	<1
Conostylis aculeata	0.2	1
Thysanotus patersonii	Climber	<1

* introduced species

QUADRAT B11

34°11.273' 115°4.628'

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/ Leucopogon parviflorus* Shrubland over *Acrotriche cordata* Open Low Heath

Condition: Excellent

Soil Type: Cream sand

Landform: Gently undulating

Date: 1.10.25

Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	4	3
Spyridium globulosum	2	5
Leucopogon parviflorus	1.3	4
Hibbertia cuneiformis	1	<1
Acacia truncata	0.9	<1
Scaevola nitida	0.8	<1
Lepidosperma gladiatum	0.7	2
Pimelea ferruginea	0.6	<1
Acrotriche cordata	0.5	2
Austrostipa sp	0.4	<1
Comesperma confertum	0.3	<1
Conostylis aculeata	0.2	<1
Cyrtostylis huegelii	0.1	<1
Trachymene pilosa	<0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B12

34°11.335' 115°4.643'

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/ Leucopogon parviflorus* Shrubland over *Acrotriche cordata* Open Low Heath
Condition: Excellent
Soil Type: Cream sand
Landform: Undulating
Date: 1.10.25
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	8	5
Spyridium globulosum	2.5	2
Acacia truncata	2	1
Leucopogon parviflorus	1.5-2	20
Pimelea ferruginea	1.2	<1
Lepidosperma gladiatum	0.7	<1
Olearia axillaris	0.7	<1
Acrotriche cordata	0.6	25
Scaevola nitida	0.6	<1
Austrostipa sp	0.5	<1
Ficinia nodosa	0.4	<1
Conostylis aculeata	0.3	<1
**Heliophila pusilla*	0.2	1
Isotoma hypocrateriformis	0.1	<1
Trachymene pilosa	<0.1	<1
Cyrtostylis huegelii	Flat	<1
Thysanotus patersonii	Climber	<1

* introduced species

M70/1342 BORANUP

DETAILED FLORA AND VEGETATION SURVEY

Prepared for: Lime Industries

Report Date: 5 April 2022

Version: 1

Report No. 2022-661

pgv ENVIRONMENTAL

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Figure 2: Survey Boundary and Topography

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Appendix 1: DBCA Flora Database Searches

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1 INTRODUCTION

1.1 Background

Mining Lease M70/1342 is located in the Shire of Augusta Margaret River, approximately 25km south of the Margaret River townsite (Figure 1). The mining lease is 77ha in size of which around 9ha has been excavated for lime sand mining at the eastern end. Lime Industries is proposing to extend the current sand mine further west and south-west (Figure 2).

The proposed expansion area is around 15.5ha and contains native vegetation. PGV Environmental was commissioned by Lime Industries to undertake a Detailed Flora and Vegetation Survey in the proposed expansion area (the site).

1.2 Scope of Works

A Detailed Flora and Vegetation Survey was undertaken in accordance with EPA Technical Guidance *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016). The survey included the following:

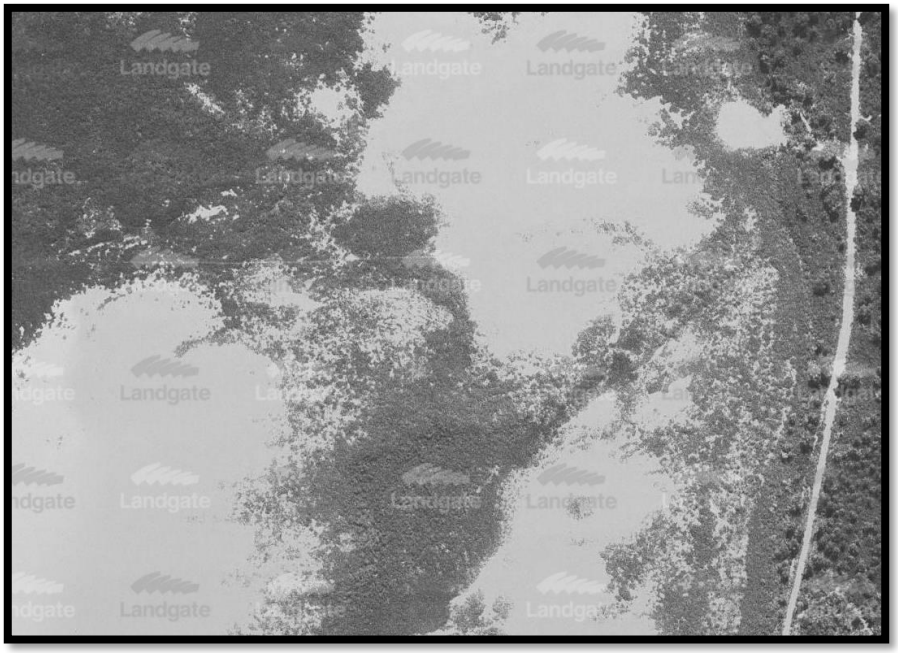
- Desktop search and review of the Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority flora and Ecological Community Databases;
- A search of the Atlas of Living Australia database (ALA, 2021);
- A search of the Commonwealth Government's Protected Matters Search Tool (DAWE, 2022) to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999*;
- Examination of historic and recent aerial photography and contour and soil maps to provisionally identify vegetation types and condition;
- Field survey using quadrats to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Recording of any significant plant species using a hand-held GPS;
- Description and mapping of vegetation types and vegetation condition;
- Compilation of a flora list; and
- Assessing the conservation value of flora species and vegetation communities.

2 EXISTING ENVIRONMENT

2.1 Land Use

The earliest available historic aerial photograph on-line from 1971 shows that the site was mostly bare sand with some areas of native vegetation (Plate 1) (Landgate, 2022).

Plate 1: Aerial Photograph 1971 (Landgate, 2022)



.

Native vegetation established over much of the bare sand areas over time (Plate 2). Lime sand mining has commenced at the north-east end of the tenement.

Plate 2: Aerial Photograph 2004 (Landgate, 2022)



The most recently available aerial photograph from 2020 shows the expansion of the sand mine over the eastern part of the tenement. The area subject of this survey is all native vegetation.

Plate 3: Aerial Photograph 2020 (Landgate, 2022)



2.2 Topography

The site gently slopes up from the top of the existing pit at around 120m to a high point near the south-west corner with an elevation of around 170 m Australian Height Datum (AHD) (Figure 2). A network of small dunes and swales occurs within the site.

2.3 Geology and Soils

The site is mapped as part of the Gracetown Ridge System which is a limestone ridge, in the coastal edge of the Leeuwin Zone (DPIRD, 2022). The soil units mapped on the site are:

- Kilcarnup dunes (organic) Phase (216GrKPf) which are steep dunes, (gradients usually in excess of 20%) not exposed to prevailing winds with deep pale calcareous sands with brown topsoil (DPIRD, 2022) and are mapped over the majority of the site.
- Kilcarnup blowout Phase (216GrKPm) which are steep bare dunes of mobile pale calcareous sand, not exposed to prevailing winds. (DPIRD, 2022). This phase is mapped on the north-eastern corner of the site.

2.4 Hydrology

The Surficial Aquifer in the Cape to Cape South sub-area ranges from alluvial and colluvial deposits in river valleys to dunes and swales which can reach a thickness exceeding 100 m. The saturated thickness of the aquifer is small and in places, dune sands lie over dry bedrock with no water-table development (DoW, 2009).

The site is elevated on highly porous material and there are no drainage lines or wetlands.

3 METHODOLOGY

3.1 Database Searches

Searches of the following databases were undertaken prior to the site survey:

- Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority Flora database and Threatened Ecological Communities database (Appendix 1) with a buffer radius of 20km;
- Atlas of Living Australia (ALA, 2021) (Appendix 2) with a buffer radius of 10km; and
- The Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation* (EPBC) *Act 1999* (DAWE, 2021). A radius of 5km was used for this database (Appendix 3).

3.2 Detailed Survey

A Detailed spring flora and vegetation survey of the site was conducted by Dr Paul van der Moezel on 22 October 2021. The site was walked to record all species in the survey area. The vegetation on the site is extremely thick in most places and difficult to walk through. All areas that appeared to be different vegetation types on the aerial photographs were able to be accessed. In addition, the highest point in the south-west corner of the site was reached. PGV Environmental consider the inability to survey the whole site in detail was not a constraint to the results given the uniform nature of the vegetation types recorded.

Information on flora composition and vegetation structure was recorded in seven 10m x 10m non-permanent quadrats sampled from representative vegetation types.

Most plant species were identified in the field. Some specimens were photographed or taken for identification at the Perth Reference Herbarium or office using standard reference guides.

3.3 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 1 in order to assess the adequacy of the survey. Rainfall for Jandakot (Measured at Jandakot Airport, Site Number 009712, 16km from the site) was above average for July in 2021 being 242.2mm and slightly below average in August being 144.6mm compared to mean values of 222.0mm and 164.8mm (BOM, 2021). The rainfall in September was 93.6mm compared to an average of 112.0mm (BOM, 2021). Thewre was higher than average rainfall in October (109.4mm compared to a mean of 71.8mm) (BOM, 2021). There are no extremes in weather events so the climatic conditions are not a constraint on the survey.

Table 1: Statement of Botanical Survey Conditions

Issue	Constraints (Y/N)*	Comment
Competency/experience of the consultant conducting the survey	No	Dr Paul van der Moezel has extensive botanical survey experience in the Augusta-Margaret River area.
Proportion of the flora identified^	No	The timing of the survey in mid-October was optimal to identify most flora species on the site including all potential Threatened and Priority Flora. No follow-up survey required.
Sources of information (historic/recent or new data)	No	The flora of the region is relatively well known.
Proportion of the task achieved and further work that may need to be undertaken	No	No follow-up survey required as no Threatened Flora expected to occur in other seasons.
Timing/weather/season/cycle	No	The spring survey was optimal for most flora species. 2021 was a good year for ephemeral species.
Disturbances (Fire)	No	The fire age of the vegetation was greater than 5 years
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	Site coverage was low due to the very difficult vegetation to walk through. All vegetation types and topographical areas accessed. Low site coverage unlikely to impact on results due to the uniformity of vegetation types.
Completeness (e.g. was relevant area fully surveyed)	No	
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook most plant identifications on site.
Remoteness and/or access problems	No	Accessible site close to Caves Road.
Availability of contextual (e.g. bioregional) information for the study area.	No	Beard *et al.* (2013)

*Constraints have been rated as Significant, Moderate or No constraints

^Fungi and nonvascular flora (e.g. algae, mosses and liverworts) were not specifically surveyed for during the survey.

4 RESULTS

4.1 Flora Database Searches

The search of the DBCA Threatened and Priority Flora Databases: the WA Herbarium database (WAHerb), the Threatened and Priority Flora Species List (TFPL) (37-1021FL) (Appendix 1) and Atlas of Living Australia (Appendix 2) indicates that a number of species that are listed as Endangered, Threatened or Priority have been recorded within the vicinity of the site. The EPBC Act Protected Matters Search Tool (Appendix 3) identifies species listed under the EPBC Act as potentially having habitat in the area. The results from these database searches are shown in Table 2. None of the species has been recorded from the survey area.

Table 2: Conservation Significant Flora Identified in Database Searches

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Caladenia lodgeana	Lodge's Spider-orchid	Critically Endangered	Critically Endangered
Gastrolobium papilio	Butterfly-leafed Poison	Critically Endangered	Endangered
Lambertia echinata subsp. *occidentalis*	Western Prickly Honeysuckle	Critically Endangered	Endangered
Banksia nivea subsp. *uliginosa*	Swamp Honeypot	Endangered	Endangered
Boronia exilis	Scott River Boronia	Endangered	Endangered
Caladenia excelsa	Giant Spider-orchid	Endangered	Endangered
Caladenia hoffmanii	Hoffman's Spider-orchid	Endangered	Endangered
Darwinia ferricola	Scott River Darwinia	Endangered	Endangered
Drakaea micrantha	Dwarf Hammer-orchid	Endangered	Vulnerable
Grevillea brachystylis subsp. *australis*		Endangered	Vulnerable
Kennedia lateritia	Augusta Kennedia	Endangered	Endangered
Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	Roundleaf Honeysuckle	Endangered	Endangered
Reedia spathacea	Reedia	Endangered	Critically Endangered
Banksia squarrosa subsp. *argillacea*	Whicher Range Dryandra	Vulnerable	Vulnerable
Leptomeria dielsiana	Diels' Currant Bush	Presumed Extinct	Vulnerable
Caladenia pholcoidea subsp. *augustensis*	Augusta Spider Orchid	Priority 1	
Deyeuxia inaequalis		Priority 1	
Hemigenia obovata		Priority 1	
Netrostylis sp. Nannup (P.A. Jurjevich 1133)		Priority 1	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Philydrella pygmaea subsp. *minima*		Priority 1	
Schoenus indutus		Priority 1	
Stylidium sp. Scott River Plain (N.G. Marchant 74/23)		Priority 1	
Synaphea macrophylla		Priority 1	
Synaphea nexosa		Priority 1	
Synaphea sp. Redgate Road (J. Scott 16)		Priority 1	
Caladenia ambusta	Boranup Spider Orchid	Priority 2	
Conospermum quadripetalum		Priority 2	
Hemigenia sp. Nillup (R.D. Royce 98)		Priority 2	
Hydrocotyle sp. *Hamelinensis* (G.J. Keighery s.n. PERTH 02391325)		Priority 2	
Leptomeria furtiva		Priority 2	
Lepyrodia extensa		Priority 2	
Schoenus loliaceus		Priority 2	
Schoenus sp. Grassy (E. Gude & J. Harvey 250)		Priority 2	
Stenanthemum sublineare		Priority 2	
Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)		Priority 3	
Actinotus repens		Priority 3	
Andersonia sp. Amabile (N. Gibson & M. Lyons 355)		Priority 3	
Austrostipa mundula		Priority 3	
Blennospora doliiformis		Priority 3	
Boronia anceps		Priority 3	
Caladenia abbreviata	Coastal Spider Orchid	Priority 3	
Calothamnus lateralis var. *crassus*		Priority 3	
Chordifex gracilior		Priority 3	
Chordifex jacksonii		Priority 3	
Cyathochaeta stipoides		Priority 3	
Dampiera heteroptera		Priority 3	
Gastrolobium formosum		Priority 3	
Grevillea manglesioides subsp. *ferricola*		Priority 3	
Grevillea papillosa		Priority 3	
Isopogon formosus subsp. *dasylepis*		Priority 3	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
Juncus meianthus		Priority 3	
Leptinella drummondii		Priority 3	
Lepyrodia heleocharoides		Priority 3	
Leucopogon alternifolius		Priority 3	
Leucopogon wheelerae		Priority 3	
Loxocarya magna		Priority 3	
Netrostylis sp. Blackwood River (A.R. Annels 3043)		Priority 3	
Notisia intonsa	Shaggy Gnephosis	Priority 3	
Pimelea ciliata subsp. *longituba*		Priority 3	
Pultenaea pinifolia		Priority 3	
Stylidium lowrieanum	Lowrie's Triggerplant	Priority 3	
Stylidium trudgenii		Priority 3	
Thysanotus cymosus		Priority 3	
Acacia semitrullata		Priority 4	
Acacia tayloriana		Priority 4	
Adenanthos detmoldii		Priority 4	
Adenanthos x pamela		Priority 4	
Aotus carinata		Priority 4	
Astartea onycis		Priority 4	
Banksia meisneri subsp. *ascendens*		Priority 4	
Banksia sessilis var. *cordata*		Priority 4	
Caladenia interjacens	Walpole Spider Orchid	Priority 4	
Eucalyptus calcicola subsp. *calcicola*		Priority 4	
Eucalyptus marginata x megacarpa		Priority 4	
Franklandia triaristata	Lanoline Bush	Priority 4	
Gonocarpus pusillus		Priority 4	
Hypolaena robusta		Priority 4	
Melaleuca basicephala		Priority 4	
Pultenaea skinneri	Skinner's Pea	Priority 4	
Stylidium gloeophyllum		Priority 4	
Stylidium ireneae		Priority 4	
Stylidium leeuwinense		Priority 4	
Tripterococcus sp. *Brachylobus* (A.S. George 14234)		Priority 4	
Verticordia lehmannii		Priority 4	

Definitions of the Conservation Codes are in Appendix 4.

Based on the soil types and vegetation type and conditions observed during the survey the likelihood of conservation significant species identified in the database searches occurring on the site has been examined (Table 3). No Threatened species are considered to have potential to occur on the site.

Three Priority flora species have potential to occur on the site based on the soil type.

Table 3: Likelihood of Identified Significant Flora Species Occurring on the Site

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Critically Endangered			
Caladenia lodgeana	Lodge's Spider-orchid	Lodge's Spider-orchid occurs in clay soils or in black loam on the margins or winter-wet areas and below granite outcrops (Hopper and Brown, 2001).	No – not suitable habitat
Gastrolobium papilio	Butterfly-leafed Poison	Butterfly-leafed Poison occurs on sandy clay over ironstone and laterite on flat plains.	No – not suitable habitat
Lambertia echinata subsp. *occidentalis*	Western Prickly Honeysuckle	The Western Prickly Honeysuckle prefers white sandy soils over laterite, orange/brown-red clay over ironstone on flats to foothills, winter-wet sites.	No – not suitable habitat
Endangered			
Banksia nivea subsp. *uliginosa*	Swamp Honeypot	The Swamp Honeypot occurs in sandy clay, gravel.	Highly Unlikely – not suitable habitat
Boronia exilis	Scott River Boronia	The Scott River Boronia grows in seasonally wet heath.	Highly Unlikely – not suitable habitat
Caladenia excelsa	Giant Spider-orchid	The Giant Spider-orchid Giant Spider-orchid grows on hilltops, slopes, swales and low plains in deep pale yellow, white or grey sandy soils (Brown *et al, 2013*), and is found among dense low shrubs in Banksia, Jarrah and Marri woodlands (Williams et al., 2001).	Highly Unlikely – not suitable vegetation types not on site
Caladenia hoffmanii	Hoffman's Spider-orchid	Hoffman's Spider-orchid grows in clay, loam, laterite, granite on rocky outcrops and hillsides, ridges, swamps and gullies.	Highly Unlikely – not suitable habitat
Darwinia ferricola	Scott River Darwinia	The Scott River Darwinia prefers peaty sand over ironstone, around winter wet areas near the coast (Luu and English, 2004).	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Drakaea micrantha	Dwarf Hammer-orchid	Dwarf Hammer-orchid occurs in grey sands over dark, grey to blackish, sandy clay-loam substrates in winter wet depressions or swamps. Usually occurs on cleared fire breaks or open sandy patches in Banksia, Jarrah and Sheoak woodlands or forest and often found under Spearwood thickets.	Highly Unlikely – not suitable habitat
Grevillea brachystylis subsp. *australis*		*Grevillea brachystylis* subsp. *australis* grows in sand, sandy clay in swampy situations, stream banks.	Highly Unlikely – not suitable habitat
Kennedia lateritia	Augusta Kennedia	The Augusta Kennedia occurs on black humus-rich sand, often amongst granite outcrops.	Highly Unlikely – not suitable habitat
Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	Roundleaf Honeysuckle	*Lambertia orbifolia* subsp. Scott River Plains grows in yellow-brown sandy clay, grey sand, sandy gravel, laterite along riverbanks, sand dunes, plains and ridges, seasonally-inundated areas.	Highly Unlikely – not suitable habitat
Reedia spathacea	Reedia	Reedia occurs in peaty sand in swamps and on river edges.	Highly Unlikely – not suitable habitat
Vulnerable			
Banksia squarrosa subsp. *argillacea*	Whicher Range Dryandra	The Whicher Range Dryandra grows in white/grey sand, gravelly clay or loam on winter-wet flats, clay flats.	Highly Unlikely – not suitable habitat
Presumed Extinct			
Leptomeria dielsiana	Diels' Currant Bush	Diels' Currant Bush was recorded from scrubby heath in the Scott River area.	Highly Unlikely – not suitable habitat
Priority 1			
Caladenia pholcoidea subsp. *augustensis*	Augusta Spider Orchid	Augusta Spider Orchid grows in sandy clay on winter-wet flat in summer burnt areas.	Highly Unlikely – not suitable habitat
Deyeuxia inaequalis		*Deyeuxia inaequalis* grows in loam.	Highly Unlikely – not loam habitat
Hemigenia obovata		*Hemigenia obovata* occurs in white or black wet sand on flats.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Netrostylis sp. Nannup (P.A. Jurjevich 1133)		*Netrostylis* sp. Nannup is recorded from a wetland (Western Australian Herbarium, 2007).	Highly Unlikely – not wetland habitat
Philydrella pygmaea subsp. *minima*		*Philydrella pygmaea* subsp. minima grows in damp sites.	Highly Unlikely – not damp habitat
Schoenus indutus		*Schoenus indutus* occurs in gravelly sand.	Highly Unlikely – not gravelly habitat
Stylidium sp. Scott River Plain (N.G. Marchant 74/23)		*Stylidium* sp. Scott River Plain occurs on the Scott River Plain.	Highly Unlikely – not river plain habitat
Synaphea macrophylla		*Synaphea macrophylla* occurs in gravelly loam.	Highly Unlikely – not gravelly habitat
Synaphea nexosa		*Synaphea nexosa* occurs in clay-loam on winter-wet flats.	Highly Unlikely – not winter-wet habitat
Synaphea sp. Redgate Road (J. Scott 16)		*Synaphea* sp. Redgate Road (J. Scott 16) occurs on grey clay, litter in winter-wet areas, wet areas along road verges and ditches.	Highly Unlikely – not suitable habitat
Priority 2			
Caladenia ambusta	Boranup Spider Orchid	Boranup Spider Orchid is recorded from a flat - gentle slope in brown soil (Western Australian Herbarium, 2002).	Highly Unlikely – not suitable soil type
Conospermum quadripetalum		*Conospermum quadripetalum* grows in sandy clay, grey sand on flats behind coastal hills.	Highly Unlikely – not suitable habitat
Hemigenia sp. Nillup (R.D. Royce 98)		*Hemigenia* sp. Nillup grows in grey sand or gravelly soil in swamps and on sandy slopes.	Highly Unlikely – not suitable habitat
Hydrocotyle sp. *Hamelinensis* (G.J. Keighery s.n. PERTH 02391325)		*Hydrocotyle* sp. Hamelinensis grows in grey sand on limestone ridges.	Highly Unlikely – not suitable habitat
Leptomeria furtiva		*Leptomeria furtiva* grows in grey or black peaty sand on winter-wet flats.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Lepyrodia extensa		*Lepyrodia extensa* grows in sand and sandy peat in seasonally inundated swamps.	Highly Unlikely – not suitable habitat
Schoenus loliaceus		*Schoenus loliaceus* occurs on sandy soils in winter-wet depressions.	Highly Unlikely – not wet habitat
Schoenus sp. Grassy (E. Gude & J. Harvey 250)		*Schoenus* sp. Grassy grows in black silt on swamps.	Highly Unlikely – not suitable habitat
Stenanthemum sublineare		*Stenanthemum sublineare* grows in littered white sand on coastal plain (Rye, 2001).	Highly Unlikely – not suitable habitat
Priority 3			
Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)		*Acacia lateriticola* var. Glabrous variant (B.R.Maslin 6765) occurs in lateritic soils.	Highly Unlikely – not suitable habitat
Actinotus repens		*Actinotus repens* grows in sandy clay, mud on roadside ditches, creek banks.	Highly Unlikely – not suitable habitat
Andersonia sp. Amabile (N. Gibson & M. Lyons 355)		*Andersonia* sp. Amabile grows in grey or black peaty sand, loam on creek banks, swamp edges, seasonally wet flats.	Highly Unlikely – not suitable habitat
Austrostipa mundula		Austrostipa mundula occurs on plains in grey sand (Western Australian Herbarium, 2001).	Highly Unlikely – not suitable habitat
Blennospora doliiformis		*Blennospora doliiformis* grows in grey or red clay soils over ironstone on seasonally-wet flats.	Highly Unlikely – not suitable habitat
Boronia anceps		*Boronia anceps* grows in white sand, gravelly laterite on seasonally swampy heaths.	Highly Unlikely – not suitable habitat
Caladenia abbreviata	Coastal Spider Orchid	Coastal Spider Orchid grows in open sandy areas on coastal sand dunes under Agonis and Melaleuca species.	Possible – habitat may occur on the site
Calothamnus lateralis var. *crassus*		*Calothamnus lateralis* var. *crassus* grows in sand on wet depressions.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Chordifex gracilior		*Chordifex gracilior* grows in peaty sand on swamps.	Highly Unlikely – not suitable habitat
Chordifex jacksonii		*Chordifex jacksonii* grows in sand, loamy sand on seasonally inundated swamps.	Highly Unlikely – not suitable habitat
Cyathochaeta stipoides		*Cyathochaeta stipoides* grows in grey or red-brown sand on seasonally wet flats.	Highly Unlikely – not suitable habitat
Dampiera heteroptera		*Dampiera heteroptera* grows in sandy soils on swampy areas.	Highly Unlikely – not suitable habitat
Gastrolobium formosum		*Gastrolobium formosum* grows in clay loam along river banks or in swamps.	Highly Unlikely – not suitable habitat
Grevillea manglesioides subsp. *ferricola*		*Grevillea manglesioides* subsp. *ferricola* grows in red sandy clay over ironstone on winter wet flats.	Highly Unlikely – not suitable habitat
Grevillea papillosa		*Grevillea papillosa* grows in brown or peaty sand, sandy clay, loam on seasonally-wet areas, swamps.	Highly Unlikely – not suitable habitat
Isopogon formosus subsp. *dasylepis*		*Isopogon formosus* subsp. *dasylepis* grows in sand, sandy clay, gravelly sandy soils over laterite, often swampy areas.	Highly Unlikely – not suitable habitat
Juncus meianthus		*Juncus meianthus* grows in black sand, sandy clay near creeks, seepage areas.	Highly Unlikely – not suitable habitat
Leptinella drummondii		*Leptinella drummondii* grows in clay loam, mud along rivers.	Highly Unlikely – not suitable habitat
Lepyrodia heleocharoides		*Lepyrodia heleocharoides* grows in moist peaty sand in dry or seasonally inundated heath or woodland, swamps.	Highly Unlikely – not suitable habitat
Leucopogon alternifolius		*Leucopogon alternifolius* grows in grey/white sand in swampy areas, seasonally wet areas.	Highly Unlikely – not suitable habitat
Leucopogon wheelerae		*Leucopogon wheelerae* occurs in swamps, in heath or occasionally open woodland (Hislop, 2008).	Highly Unlikely – not suitable habitat
Loxocarya magna		*Loxocarya magna* grows in sand, loam, clay, ironstone on seasonally inundated or damp habitats.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Netrostylis sp. Blackwood River (A.R. Annels 3043)		*Netrostylis* sp. Blackwood River (A.R. Annels 3043) is recorded from a creek bed (Western Australian Herbarium, 2005).	Highly Unlikely – not suitable habitat
Notisia intonsa	Shaggy Gnephosis	Shaggy Gnephosis grows in red/brown clay, stony saline loam.	Highly Unlikely – not suitable habitat
Pimelea ciliata subsp. *longituba*		*Pimelea ciliata* subsp. *longituba* occurs in grey sand over clay, loam.	Highly Unlikely – not suitable habitat
Pultenaea pinifolia		*Pultenaea pinifolia* grows in loam or clay on floodplains, swampy areas.	Highly Unlikely – not suitable habitat
Stylidium lowrieanum	Lowrie's Triggerplant	Lowrie's Triggerplant grows in sand or sandy loam over limestone. Eucalypt or Agonis woodland, forest, scrub.	Possible – habitat may occur on the site
Stylidium trudgenii		*Stylidium trudgenii* grows in grey sand, dark grey to black sandy peat on the margins of winter-wet swamps, depressions.	Highly Unlikely – not suitable habitat
Thysanotus cymosus		*Thysanotus cymosus* occurs in clay, granitic or lateritic sand.	Highly Unlikely – not suitable habitat
Priority 4			
Acacia semitrullata		*Acacia semitrullata* grows in white/grey sand, sometimes over laterite, clay on sandplains, swampy areas.	Highly Unlikely – not suitable habitat
Acacia tayloriana		*Acacia tayloriana* grows in grey or yellow/orange sandy soils, lateritic gravel, clay loam in winter-wet areas.	Highly Unlikely – not suitable habitat
Adenanthos detmoldii		*Adenanthos detmoldii* grows in grey or black peaty sand, wet on swamps, roadsides.	Highly Unlikely – not suitable habitat
Adenanthos x pamela		*Adenanthos x pamela* grows in grey sand, laterite on damp flats, roadsides.	Highly Unlikely – not suitable habitat
Aotus carinata		*Aotus carinata* occurs in sandy soils on seasonally wet flats.	Highly Unlikely – not suitable habitat
Astartea onycis		*Astartea onycis* grows in pale grey sand or sandy clay over clay in seasonally wet sedgelands (Rye, 2013).	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Banksia meisneri subsp. *ascendens*		*Banksia meisneri* subsp. *ascendens* grows in white or grey sand on swampy flats.	Highly Unlikely – not suitable habitat
Banksia sessilis var. *cordata*		*Banksia sessilis* var. *cordata* grows in white/grey sand on coastal limestone.	Possible but no limestone present
Caladenia interjacens	Walpole Spider Orchid	Walpole Spider Orchid grows in sand on consolidated coastal dunes.	No – error in entry in ALA – occurs 100km away
Eucalyptus calcicola subsp. *calcicola*		*Eucalyptus calcicola* subsp. *calcicola* grows in red-brown sand over limestone on coastal dunes, calcareous ridges, rocky outcrops.	Unlikely – not typical habitat
Eucalyptus marginata x megacarpa		*Eucalyptus marginata x megacarpa* grows in sandy loam on interdunal areas.	Unlikely – may have habitat on the site
Franklandia triaristata	Lanoline Bush	Lanoline Bush grows in white or grey sand.	Unlikely – not recorded in area since 1945 and generally occurs further inlands
Gonocarpus pusillus		*Gonocarpus pusillus* grows in grey sandy clay on winter-wet swamps.	Highly Unlikely – not suitable habitat
Hypolaena robusta		*Hypolaena robusta* grows in white sand on sandplains in poorly drained areas.	Highly Unlikely – not suitable habitat
Melaleuca basicephala		*Melaleuca basicephala* grows in black peaty sand, clay on winter-wet flats, swamps.	Highly Unlikely – not suitable habitat
Pultenaea skinneri	Skinner's Pea	Skinner's Pea occurs in sandy or clayey soils in winter-wet depressions.	Highly Unlikely – not suitable habitat
Stylidium gloeophyllum		*Stylidium gloeophyllum* grows in sandy clay loam, granite on winter wet depressions, or fringing outcrops with *Agonis*, mallee, or Hakea shrubland with sedges.	Highly Unlikely – not suitable habitat
Stylidium ireneae		*Stylidium ireneae* occurs in sandy loam in valleys near creek lines, woodland, often with *Agonis*.	Highly Unlikely – not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
Stylidium leeuwinense		*Stylidium leeuwinense* grows in grey to black peaty sand on winter-wet habitats and depressions in shrubland, heath, sedgeland or low woodland.	Highly Unlikely – not suitable habitat
Tripterococcus sp. Brachylobus (A.S. George 14234)		*Tripterococcus* sp. Brachylobus occurs in grey, black or peaty sand winter-wet flats.	Highly Unlikely – not suitable habitat
Verticordia lehmannii		*Verticordia lehmannii* grows in sandy clay on winter-wet flats.	Highly Unlikely – not suitable habitat

* sourced from Florabase (DBCA, 2017) and SPRAT Database (DoEE, 2016) as well as the DBCA database searches unless otherwise denoted

Three Priority species were identified that possibly occur on the site being:

- *Caladenia abbreviata* (Coastal Spider Orchid) (P3);
- *Stylidium lowrieanum* (Lowrie's Triggerplant) (P3); and
- *Eucalyptus marginata x megacarpa* (P4).

Both Coastal Spider Orchid and Lowrie's Triggerplant flower in October. *Eucalyptus marginata x megacarpa* is identifiable all year round.

4.2 TEC and PEC Desktop Study

A search of DBCA's Threatened (TEC) and Priority Ecological Communities (PEC) database was conducted within a radius of 20km around the site (27_1021EC). Three TECs and four PECs at State level were identified in the database search. There are two TECs and one PEC listed as TECs under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). The communities identified in the database searches are outlined in Table 4.

None of the TECs or PECs are expected to occur on the site given the preferred habitat of the communities identified.

Table 4: Threatened and Priority Ecological Communities likely to occur within 5km of the Site

Ecological Community	Description	Conservation Status WA	Status under the EPBC Act
CAVES LEEUWIN01	Aquatic Root Mat Community Number 1 of Caves of the Leeuwin Naturaliste Ridge (Easter and Jewel Caves)	Critically Endangered	Endangered
SCOTT IRONSTONE	Scott River Ironstone Association	Endangered	Endangered
Augusta-microbial	Rimstone Pools and Cave Structures Formed by Microbial Activity on Marine Shorelines (Augusta microbialites)	Endangered	

Ecological Community	Description	Conservation Status WA	Status under the EPBC Act
Reedia swamps - Blackwood Plateau	*Reedia spathacea - Empodisma gracillimum - Sporadanthus rivularis* dominated floodplains and paluslopes of the Blackwood Plateau.	Priority 1	
Sedgelands of Cape Leeuwin Spring	Tall closed sedgeland on shallow soils derived from granite gneiss on the Leeuwin Naturaliste Ridge	Priority 1	
Melaleuca lanceolata forests	Melaleuca lanceolata forests, Leeuwin Naturaliste Ridge	Priority 2	
Coastal Saltmarsh	Subtropical and Temperate Coastal Saltmarsh	Priority 3	Vulnerable

4.3 Flora

A total of 42 plant species were recorded during the flora survey (Appendix 5). This total consisted of 36 native species and 6 introduced species (14%). The total number of native species is low for a 15.5ha area of native vegetation mostly in Excellent condition, however is indicative of the type of sand dune vegetation (mostly Peppermint woodland) which is typically species poor. The percentage of introduced species is low.

No Threatened species were recorded on the site.

One Priority 4 species, *Banksia sessilis* var. *cordata,* was recorded on the site. The plants were up to 5m high and scattered in an area mixed with *Agonis flexuosa* small trees (Plate 4; Figure 3).

Plate 4: *Banksia sessilis* var. *cordata* on the site



Plant families with the greatest number of species were the Asteraceae (Daisy family – 6 species, 4 native and 2 introduced) and Cyperaceae (Sedge family – 4 species, all native).

The total number of species recorded in the six quadrats sampled ranged from 8 to 22, averaging 14 (Appendix 6). The percentage of introduced species in the quadrats ranged from 0-12%. The number of species in the quadrats is low but was considered average for the dune vegetation types which have a moderately dense tree canopy cover.

4.4 Vegetation Complex

Vegetation complexes/associations are a broad level of vegetation description which is based on the underlying geomorphology and rainfall (Heddle *et al*., 1980). Two vegetation associations are mapped on the site as follows:

- Beard Association Boranup 1108 Thicket of wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance; and
- Beard Association Boranup 1109 Scrub, open scrub or sparse scrub of wattle, teatree and other species Acacia spp. Melaleuca spp. (Beard *et al.,* 2013)

The Peppermint-dominated vegetation on the site does not closely match either of the Beard Associations.

4.5 Vegetation

4.5.1 Vegetation Type

Vegetation complexes are a very broad mapping unit used to map the vegetation at the scale of the Swan Coastal Plain for example. For small scale sites, such as the survey area, vegetation mapping can be further refined by using vegetation types which are based on the composition and structure of the dominant species rather than based on geomorphology.

Four native vegetation types were described and mapped on the site. The vegetation types are similar to each other but differ slightly in the understorey structure and composition.

The vegetation types are described in Table 5 and mapped in Figure 3.

Table 5: Vegetation Types on the Site

Vegetation Type	Description	Photograph
AfSg[1] *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata* Open Low Heath	Occurs at the eastern end of the survey area and contains fewer trees than the AfSg[2] vegetation type. *Agonis flexuosa* trees are small (2-4m) and sparse (<2% cover) over *Spyridium globulosum* to 1-2m high and 10-20% cover. Other common species include *Acrotriche cordata, Acacia littorea, Ficinia nodosa, Pimelea ferruginea, Leucopogon parviflorus, Comesperma confertum* and several ephemeral herb species. The soils are cream sand. Quadrats B1 and 3 are representative of this vegetation type.	
AfSg[2] *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath	This is the main vegetation type on the site. *Agonis flexuosa* is 5-10m high and 10-20% cover over *Spyridium globulosum* 2-4m high and 10-25% cover. The understorey is sparse and contains abundant moss on the ground. Typical understorey species include *Leucopogon parviflorus, Acrotriche cordata, Lepidosperma gladiatum* and the creeper *Cassytha racemosa.* The soils are cream sand. Quadrats B2, 5 and 7 are representative of this vegetation type.	

Vegetation Type	Description	Photograph
BsAf *Banksia sessilis* var. *cordata/Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/ Acacia littorea* Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath	One small stand of this vegetation type occurred in the central part of the site. *Banksia sessilis* var. *cordata* was emergent to 5m high over *Agonis flexuosa*1.5-2m high. Otherwise similar species composition to AfSg[2] The soils are dark orange-brown sand. Quadrat B4 is representative of this vegetation type.	
AfHcSg *Agonis flexuosa/Hibbertia cuneiformis/Spyridium globulosum* Tall Shrubland over *Acrotriche cordata/ Leucopogon parviflorus* Open Low Heath	This vegetation type occurred on the highest part of the site in the south-west corner. *Hibbertia cuneiformis* and *Spyridium globulosum* were the main tall shrub species present 1.8-2.5m high with *Agonis flexuosa* less common. Other common species included *Leucopogon parviflorus, Acrotriche cordata* and *Lepidosperma gladiatum.* The soils are cream sand. Quadrat B6 is representative of this vegetation type.	

4.5.2 Vegetation Condition

The condition of the vegetation was assessed according to the system of Keighery as described in Bush Forever (Government of Western Australia, 2000) (Table 6).

Table 6: Vegetation Condition Rating Scale

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

The condition of the native vegetation was all rated as Excellent with very few weed species present (Figure 3).

4.6 Conservation Significance of Flora and Vegetation

4.6.1 Flora

One Priority 4 species, *Banksia sessilis* var. *cordata,* was recorded on the site. The number of plants was not counted but would be in excess of 50. *Banksia sessilis* var. *cordata* occurs on white/grey sand and coastal limestone along the coast from Cape Naturaliste to just west of Albany.

Priority 4 species are those that are rare or near threatened but have been adequately surveyed and not currently threatened or in need of special protection. Priority species are not protected under State or Commonwealth environmental legislation in the way that Threatened species are.

4.6.2 Vegetation

4.6.2.1 Vegetation Complex

Two vegetation associations are mapped on the site as follows:

- Beard Association Boranup 1108 Thicket of wattle, casuarina and teatree acacia-allocasuarina-melaleuca alliance; and
- Beard Association Boranup 1109 Scrub, open scrub or sparse scrub of wattle, teatree and other species Acacia spp. Melaleuca spp. (Beard *et al.,* 2013)

The extent of each vegetation association remaining is shown in Table 7 (Government of Western Australia, 2014). Both vegetation associations have a high percentage of the original extent remaining and a high percentage protected in the conservation estate. Both Association 1108 and 1109 occur extensively in the nearby Leeuwin-Naturaliste National Park (National Map, 2022).

The percentage remaining and in the conservation estate is above the 30% target set by the EPA for vegetation complexes in Western Australia. Therefore, the vegetation on the site is not considered to be a regionally significant remnant of either vegetation association.

Table 7: Vegetation Association Statistics

Vegetation Association	Pre-European Extent (ha)	Current Extent (ha)	% Remaining	Current Extent Protected for Conservation (ha)	% Current Extent Protected for Conservation
1108	8247.847	7666.396	92.95	5717.032	69.3
1109	29988.44	29143.46	97.18	24175.23	80.6

4.6.2.2 Threatened and Priority Ecological Communities

None of the Threatened or Priority Ecological Communities listed in the database searches occur on the site.

5 SUMMARY AND CONCLUSIONS

The 2021 Detailed Flora and Vegetation Survey of a 15.5ha portion of M70/1342 in Boranup resulted in the following findings:

- Native vegetation occurs over the whole 15.5ha survey area. A lot of the vegetation is regrowth from a time when it was a bare, sand sheet in the 1970s;
- Four vegetation types were described and mapped on the site. The vegetation types were all similar, with *Agonis flexuosa* (WA Peppermint) the dominant tree and tall shrub species over a slightly varying understorey;
- The vegetation was all rated in Excellent condition;
- A total of 42 plant species were recorded in the survey area, consisting of 36 native species and 6 introduced species. The low number of introduced species reflects the Excellent condition of the vegetation;
- No Threatened flora species were recorded during the survey or are expected to occur at any other time of the year;
- One Priority 4 species, *Banksia sessilis* var. *cordata,* was recorded in the centre of the site. Approximately 50 plants were recorded in an area of around 0.3ha;
- No Threatened or Priority Ecological Communities were recorded on the site;
- The Vegetation Associations occurring on the site (1108 and 1109) both have more than 90% of their original extent remaining and 69% and 80% retained in the conservation estate, including the nearby Leeuwin-Naturaliste National Park. The vegetation on the site therefore is not a significant remnant of these vegetation associations.

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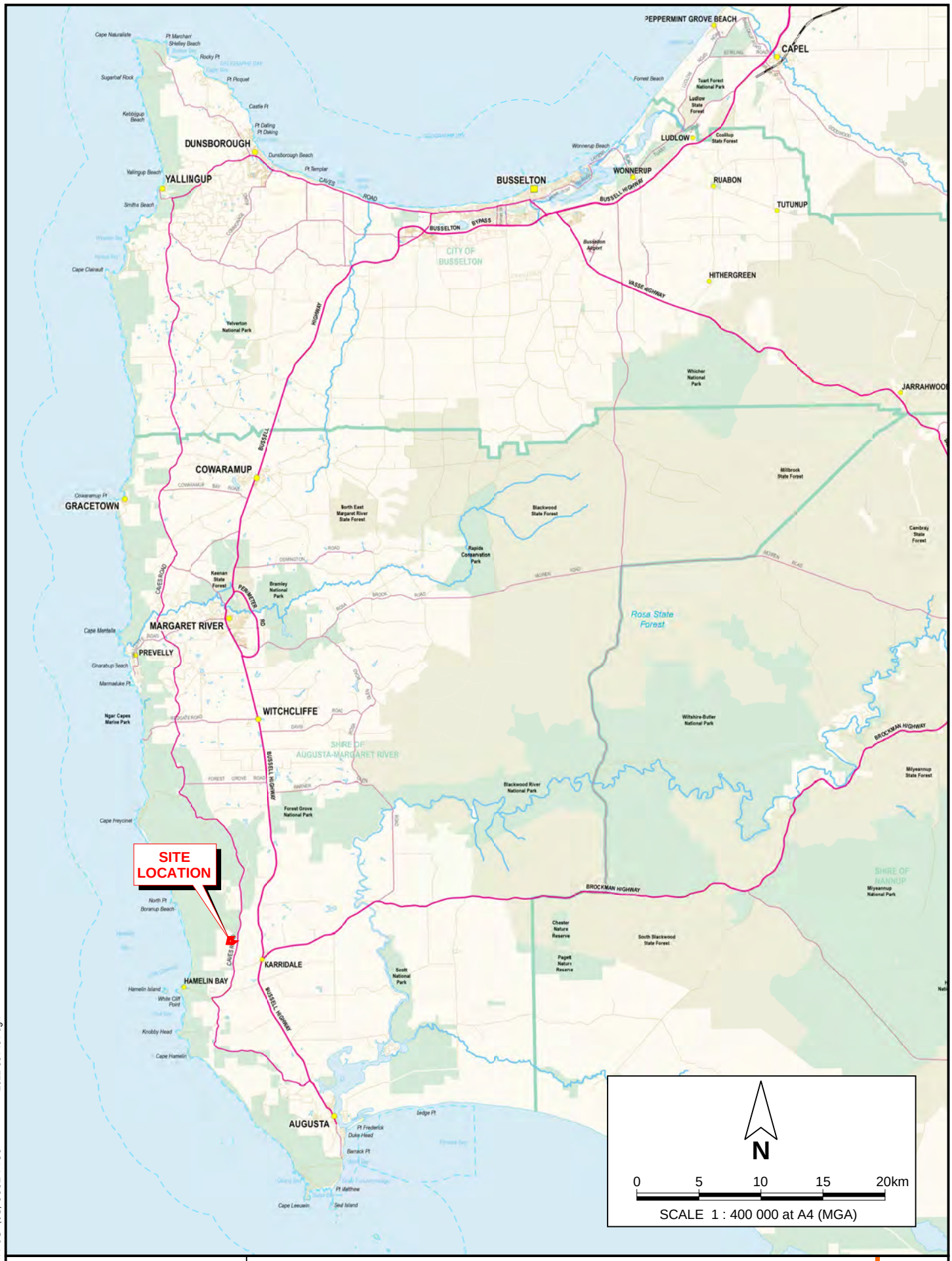
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FIGURES



PINPOINT CARTOGRAPHICS (08) 9562 7136 2022-661-f01.dgn

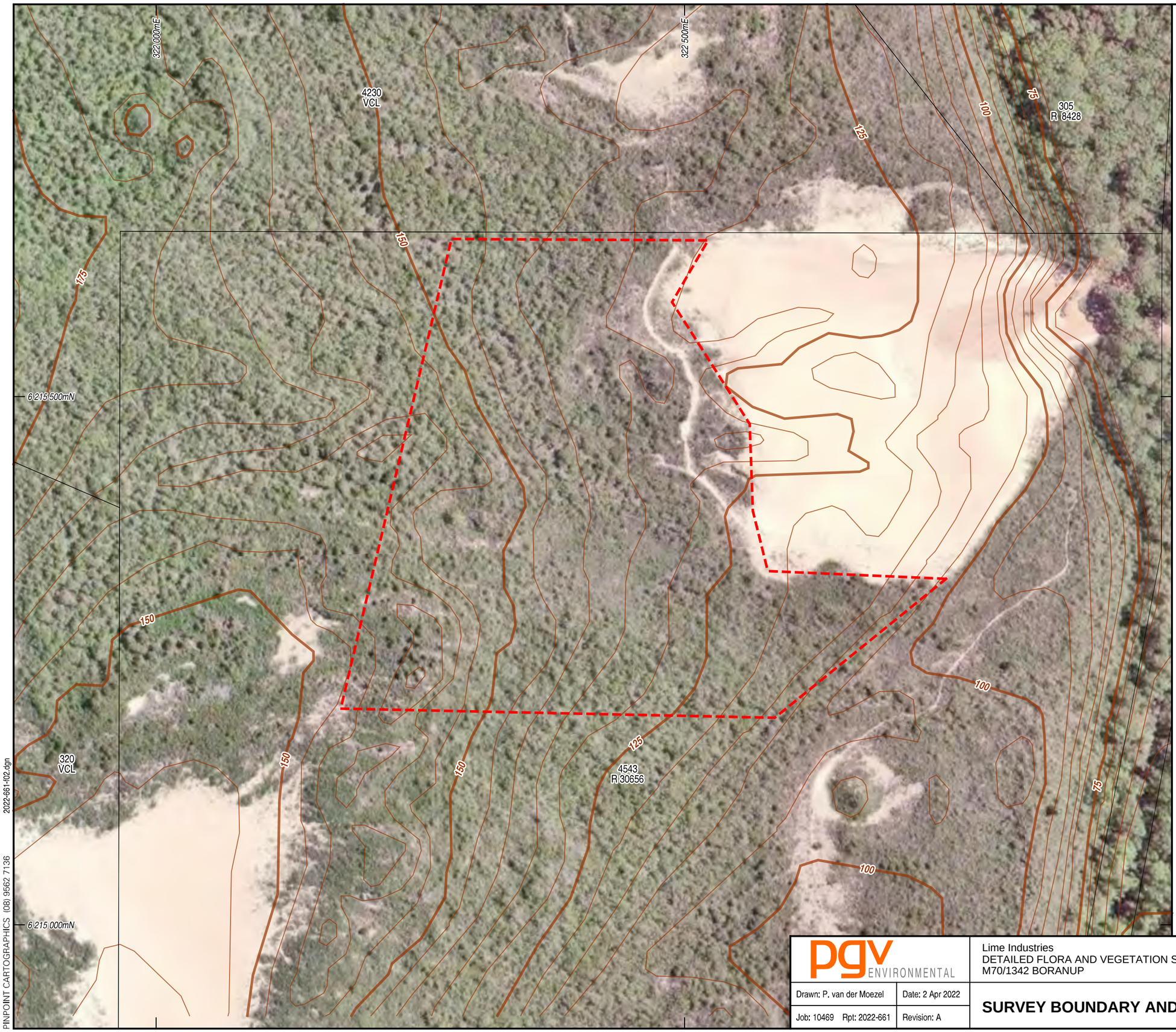
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Lime Industries
DETAILED FLORA AND VEGETATION SURVEY
M70/1342 BORANUP

Drawn: P. van der Moezel	Date: 2 Apr 2022
Job: 10469 Rpt: 2022-661	Revision: A

SITE LOCATION

Figure 1



N

0 50 100 150 200m

SCALE 1 : 3 500 at A3 (MGA)

Legend

- Site Boundary
- Cadastral Boundary
- Topographic Contour

CADASTRAL SOURCE: Landgate, April 2022.
AERIAL PHOTOGRAPH SOURCE: ESRI, flown March 2021.
CONTOUR SOURCE: Landgate 1:50 000 Topographic Mapping.

pgv ENVIRONMENTAL

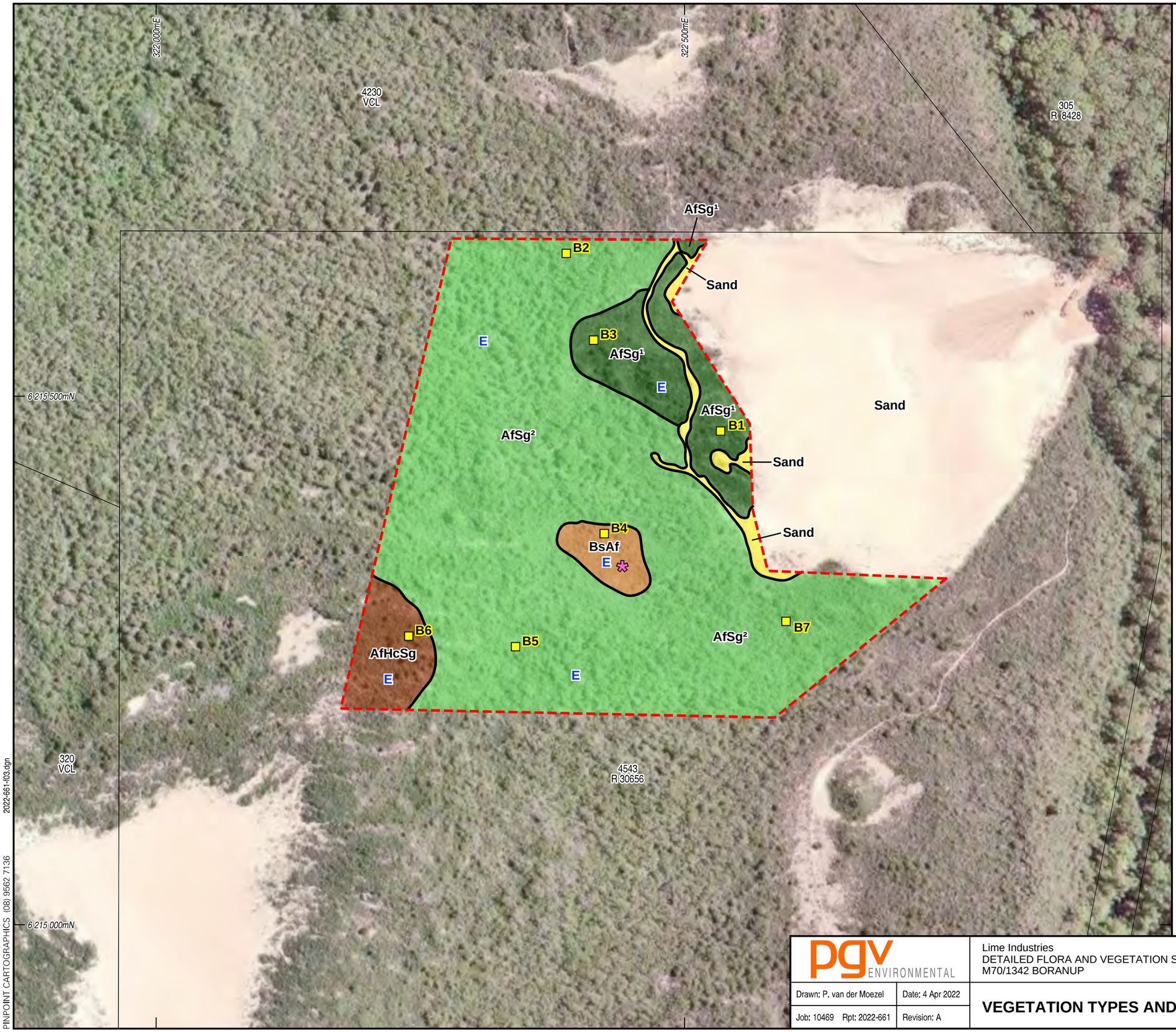
Lime Industries
DETAILED FLORA AND VEGETATION SURVEY
M70/1342 BORANUP

Drawn: P. van der Moezel | Date: 2 Apr 2022
Job: 10469 Rpt: 2022-661 | Revision: A

SURVEY BOUNDARY AND TOPOGRAPHY

Figure 2

PINPOINT CARTOGRAPHICS (08) 9562 7136 2022-661-f02.dgn



N

0 50 100 150 200m

SCALE 1 : 3 500 at A3 (MGA)

Legend

- Site Boundary
- Cadastral Boundary
- Quadrat Location
- Vegetation Type Boundary
- Em — Vegetation Type
- E — Vegetation Condition
- *Banksia sessilis* var. *cordata* P4 population

Vegetation Types

AfSg¹
Agonis flexuosa Low Open Woodland over Spyridium globulosum Shrubland over Acrotriche cordata Open Low Heath

AfSg²
Agonis flexuosa Low Open Woodland over Spyridium globulosum Shrubland over Acrotriche cordata/Leucopogon parviflorus Open Low Heath

BsAf
Banksia sessilis var. cordata/Agonis flexuosa Low Open Woodland over Spyridium globulosum/Acacia littorea Shrubland over Acrotriche cordata/Leucopogon parviflorus Open Low Heath

AfHcSg
Agonis flexuosa/Hibbertia cuneiformis/Spyridium globulosum Tall Shrubland over Acrotriche cordata/Leucopogon parviflorus Open Low Heath

Sand

Vegetation Condition
(SOURCE: Bush Forever, Govt. of W.A., 2000)

P - Pristine
Pristine or nearly so, no obvious signs of disturbance.

Ex - Excellent
Vegetation structure intact, disturbance affecting individual species and weeds are non aggressive species.

VG - Very Good
Vegetation structure altered, obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and grazing.

G - Good
Vegetation structure significantly altered by very obvious signs of multiple disturbance. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and grazing.

D - Degraded
Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and grazing.

CD - Completely Degraded
The structure of the vegetation is no longer intact and the areas is completely or almost completely without native species. These areas are often described as 'parkland cleared' with the flora composing weed or crop species with isolated native trees or shrubs.

Cl - Cleared
No native vegetation remaining.

CADASTRAL SOURCE: Landgate, April 2022.
AERIAL PHOTOGRAPH SOURCE: ESRI, flown March 2021.

pgv ENVIRONMENTAL

Lime Industries
DETAILED FLORA AND VEGETATION SURVEY
M70/1342 BORANUP

Drawn: P. van der Moezel | Date: 4 Apr 2022
Job: 10469 Rpt: 2022-661 | Revision: A

VEGETATION TYPES AND CONDITION

Figure 3

PINPOINT CARTOGRAPHICS (08) 9562 7136 2022-661-f03.dgn

APPENDIX 1

DBCA Flora Database Searches

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
851	86405	3386	Acacia inops	3		4			BLACKWOOD	LGA	VER		23/09/1992 0:00		0			0			Y	Mesomelaena stygia		OPEN_DPN	UNKNOWN		SAND		
853	86407	3386	Acacia inops	3		6			BLACKWOOD	LGA	CAM	PUT	11/12/1996 0:00		0			0			N	Very open woodland. Associated spp: Anarthria prolifera, Podocarpu drouynianus, Persoonia longifolia, +							
933	92881	14930	Acacia lateriticola var. Glabrous variant (B.R.Maslin 6765)	3		1			BLACKWOOD	CC	NPK	REC	21/09/1990 0:00		0			0			Y	In Jarrah-Marri forest.		OD_RVRBK			SAND		
1614	93277	44007	Actinotus repens	3		9			BLACKWOOD	CC	NPK		12/11/2002 0:00		0			0			N	Forest over dense thicket over low sedge. Agonis linearifolia, Mirbella dilatata, Acacia divergens		OPEN_DPN			CLAY_SND	WHITE	
1681	97475	1776	Adenanthos detmoldii	4		8	A		BLACKWOOD	LGA	VER		19/09/1995 0:00		0			0			Y			OD_SWAMP			SND_LOAM		
1682	97476	1776	Adenanthos detmoldii	4		8	B		BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1683	97477	1776	Adenanthos detmoldii	4		8	C		BLACKWOOD	PRI			13/07/1983 0:00		0			0			N								
1684	85136	1776	Adenanthos detmoldii	4		9			BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1685	85132	1776	Adenanthos detmoldii	4		10			BLACKWOOD	LGA	VER		13/07/1983 0:00		0			0			N								
1687	85134	1776	Adenanthos detmoldii	4		12			BLACKWOOD	LGA	VER		9/11/1993 0:00		0			0			N								
3210	103606	17107	Banksia meisneri subsp. ascendens	4		7	A		BLACKWOOD	LGA	VER		16/07/1984 0:00		0			0			N						SAND	GREY	
3211	103607	17107	Banksia meisneri subsp. ascendens	4		7	B		BLACKWOOD	CC	NPK		16/07/1984 0:00	ACT_IND	0		54	55			N						SAND	GREY	
3214	103610	17107	Banksia meisneri subsp. ascendens	4		9	B		BLACKWOOD	CC	NPK		14/08/1984 0:00		0			0			N			FL_PLAIN			SAND	GREY	
3222	93819	17107	Banksia meisneri subsp. ascendens	4		15			BLACKWOOD	NON	SET	TIM	23/06/1988 0:00	ESTMT	####			####			Y	Dense Heath B with emergent Banksia ilicifolia and Eucalyptus marginata. Dasypogon bromeliifolius.		RI_DUNE			SAND	WHITE	
3223	93820	17107	Banksia meisneri subsp. ascendens	4		16			BLACKWOOD	NON	SET	TIM	6/07/1988 0:00	ACT_IND	16			16			Y	Adenanthos obvata, Xanthorrhoea preissii, Dasypogon, Kunzea.	MOIST	FL_PLAIN					
3226	103590	17107	Banksia meisneri subsp. ascendens	4		19	A		BLACKWOOD	LGA	VER		26/09/1990 0:00	ESTMT	100			100			Y		DRY	FL_PLAIN			SAND	GREY	
3227	103591	17107	Banksia meisneri subsp. ascendens	4		19	B		BLACKWOOD	CC	NPK		13/03/1985 0:00		0			0			N								
3228	103592	17107	Banksia meisneri subsp. ascendens	4		19	C		BLACKWOOD	CC	NPK		26/08/1997 0:00		0			0			Y	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey.		FL_PLAIN			SAND	GREY	
3229	93823	17107	Banksia meisneri subsp. ascendens	4		20			BLACKWOOD	LGA	VER		23/05/1992 0:00		0			0			N								
3230	93824	17107	Banksia meisneri subsp. ascendens	4		21			BLACKWOOD	LGA	VER		23/05/1992 0:00		0			0			N								
3232	103599	17107	Banksia meisneri subsp. ascendens	4		23	A		BLACKWOOD	CC	NPK		29/05/1986 0:00		0			0			N			FLAT			SAND	GREY	
3233	103600	17107	Banksia meisneri subsp. ascendens	4		23	B		BLACKWOOD	CC	NPK		28/04/1986 0:00		0			0			N			FLAT			SAND	GREY	
3234	93826	17107	Banksia meisneri subsp. ascendens	4		24			BLACKWOOD	UNKNOWN			5/10/1985 0:00	ESTMT	0			5			Y			FLAT			SAND	GREY	
3235	103602	17107	Banksia meisneri subsp. ascendens	4		25	A		BLACKWOOD	CC	NPK		12/09/1985 0:00	ESTMT	0			5			N			FLAT			SAND	GREY	
3236	103603	17107	Banksia meisneri subsp. ascendens	4		25	B		BLACKWOOD	UNKNOWN			11/08/1984 0:00	ESTMT	0			300			N			CD_LKBED			SAND	GREY	
3237	103604	17107	Banksia meisneri subsp. ascendens	4		25	C		BLACKWOOD	CC	NPK		7/08/1985 0:00		0			0			N								
3238	93827	17107	Banksia meisneri subsp. ascendens	4		26			BLACKWOOD	CC	NPK		7/08/1985 0:00		0			0			N								
3280	96202	32204	Banksia nivea subsp. uliginosa	T	EN	1			BLACKWOOD	CC	NPK		14/01/2011 0:00		0			0			N								

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
3310	108542	32204	Banksia nivea subsp. uliginosa	T	EN	19		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	132			0	PLANTS	####		Area cleared for mining and is now slowly rehabilitating with native species	DRY	FLAT			SAND	GREY	WLL_DRND
3458	96122	32078	Banksia sessilis var. cordata	4		5			BLACKWOOD	CC	NPK		12/10/2000 0:00	ESTMT	0			####			Y	Open straggly shrub 3 m high x 2m wide. Creamy-yellow flowers.		RI_DUNE	LIMESTN		SAND	YELLOW	
3833	94976	20026	Blennospora doliiformis	3		9			BLACKWOOD	CC	NPK	REC	9/11/1987 0:00		0			0			N				LATERITE		LOAM		
3882	103312	16313	Boronia anceps	3		5	A		BLACKWOOD	LGA	CAM	REC	3/12/1990 0:00		0			0			N	Wet Heath.	MOIST	FLAT			SAND		
3883	103313	16313	Boronia anceps	3		5	B		BLACKWOOD	LGA	VER		22/10/1997 0:00		0			0			N	Open Low Woodland B, Dense Low Heath C. Hypocalymma sp. Recontoured landform.	DRY	FL_PALU			SAND	WHITE	
3884	93262	16313	Boronia anceps	3		6			BLACKWOOD	PRI			10/01/2007 0:00	ESTMT	50			50			Y	Within BHP Beenup revegetation.	MOIST				SAND	GREY	
3885	93263	16313	Boronia anceps	3		7			BLACKWOOD	LGA	VER		11/10/2000 0:00	ESTMT	6			6			Y	Shrubland	MOIST	OD_SWAMP			CLAY_SND	BROWN	
3886	93264	16313	Boronia anceps	3		8			BLACKWOOD	LGA	VER		9/11/1985 0:00		0			0			N	Very open heath with sedges.	MOIST	FLAT			SAND	WHITE	
3887	93265	16313	Boronia anceps	3		9			BLACKWOOD	LGA	VER		11/10/2000 0:00	ESTMT	12			12			Y	Open woodland over heath. Pericalymma ellipticum, Eucalyptus marginata	MOIST	OD_SWAMP	LATERITE		LOAM_SND	BROWN	
3892	93258	16313	Boronia anceps	3		14			BLACKWOOD	LGA	VER		3/10/2001 0:00	ESTMT	12			12			Y	Shrubland.	MOIST	FL_PLAIN			CLA_LOAM	BROWN	
3934	103315	16318	Boronia exilis	T	EN	1	A		BLACKWOOD	LGA	WAT	REC	19/03/2007 0:00		0			0			N	dense hummock grass	MOIST	FL_PLAIN			SAND	GREY	
3935	103316	16318	Boronia exilis	T	EN	1	B		BLACKWOOD	CC	NPK	REC	19/03/2007 0:00		0			0			N	Heath B over low sedges; dense hummock grass	MOIST	FLAT	LATERITE		SAND	GREY	
3936	103317	16318	Boronia exilis	T	EN	1	D		BLACKWOOD	LGA	WAT	CAM	11/12/2001 0:00	ESTMT	0			100			Y	Heath B over low sedges; Anarthria sp. w. emergent Proteaceae/Myrtaceae scrub pockets.		FLAT	LATERITE		SAND	GREY	SEASINUN
3937	93288	16318	Boronia exilis	T	EN	2			BLACKWOOD	CC	NPK	REC	19/03/2007 0:00		0			0			N	Tall sedgeland	MOIST	FLAT	LATERITE		SAND	GREY	
3939	93290	16318	Boronia exilis	T	EN	6			BLACKWOOD	LGA	REC	OTH	19/03/2007 0:00		0			0			N	Heath B over tall sedges	MOIST	FLAT	LATERITE		SAND	GREY	
4209	91441	13852	Caladenia abbreviata	3		1			BLACKWOOD	CC	NPK		16/11/2007 0:00	ACT_IND	28			28			Y	Eucalyptus marginata	DRY	SLOPE			SAND	RED_BRWN	
4211	91444	13852	Caladenia abbreviata	3		3			BLACKWOOD	NON			15/11/1991 0:00		0			0			N	Growing on white-grey sand in marri and jarrah coastal scrub.	DRY				SAND	WHITE	
4216	91450	13852	Caladenia abbreviata	3		9			BLACKWOOD	CC	NPK	REC	1/11/1998 0:00		0			0			N	VegClass:Banksia woodland with grass trees and native grasses		RI_DUNE			SAND	WHITE	
4217	91442	13852	Caladenia abbreviata	3		10			BLACKWOOD	NON	UCL		13/11/2004 0:00	UNKNOWN	15			15			N	VegClass:Open Healthland		OD_DRGLN	GRANITE				SEASINUN
4478	91221	13619	Caladenia excelsa	T	EN	5	A		BLACKWOOD	MRD	VER		12/10/2013 0:00	ACT_IND	1			0	PLANTS		Y	Low forest A over dense low heath C; Drakaea glyptodon, Pterostylis plumosa, Anarthria scabra.	MOIST	FLAT			SAND	WHITE	WLL_DRND
4479	105782	13619	Caladenia excelsa	T	EN	5	B		BLACKWOOD	CC	NPK		12/10/2013 0:00	ACT_IND	3			0	PLANTS		Y		MOIST	FLAT			SAND	GREY	
4480	91222	13619	Caladenia excelsa	T	EN	6			BLACKWOOD	CC	NPK	VER	12/10/2013 0:00		0			2			Y		MOIST	FLAT			SAND	GREY	WLL_DRND
4528	108342	13619	Caladenia excelsa	T	EN	32			BLACKWOOD	CC	NPK		22/10/2012 0:00	ACT_IND	1			0	PLANTS		Y	Vegetation recently cleared. Plant growing on edge on clearing	DRY	SLOPE			SAND	WHITE	WLL_DRND
4829	94301	18037	Caladenia lodgeana	T	CR	2			BLACKWOOD	NON	UCL		20/10/2014 0:00	ACT_IND	2			0	PLANTS		Y	4WD tracks are becoming wider	MOIST	SLOPE	GRANITE		CLA_LOAM	BROWN	WLL_DRND
5106	96726	35799	Calothamnus lateralis var. crassus	3		3			BLACKWOOD	LGA	VER		15/04/1992 0:00		0			0			N								

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
5561	94114	17686	Chordifex gracilior	3		2			BLACKWOOD	CC	NPK		7/04/1990 0:00	ESTMT	30			30			N	Seasonally wet flat, Pleistocene quartz sand. Tall sedges over low heath.	MOIST				SAND	GREY	
5568	94106	17686	Chordifex gracilior	3		10			BLACKWOOD	CC	NPK		29/01/1997 0:00		0			0			N	Drainage line/swamp with low sedge and shrubland.		OD_SWAMP					
5570	94108	17686	Chordifex gracilior	3		12			BLACKWOOD	CC	NPK	REC	24/09/1990 0:00		0			0			N			FL_PALU			PEAT	BLACK	SEASINUN
5574	94112	17686	Chordifex gracilior	3		16			BLACKWOOD	CC	NPK	REC	26/08/1997 0:00		0			0			N	VegClass:Swamp Vegetation		OD_SWAMP			SAND	GREY	
5728	91563	14003	Conospermum quadripetalum	2		2			BLACKWOOD	LGA	VER		19/09/1996 0:00		0			0			N	Swampy grey sand, with sedges.		OD_SWAMP			SAND	GREY	
5729	91564	14003	Conospermum quadripetalum	2		3			BLACKWOOD	CC	NPK	REC	9/11/1990 0:00		0			0			Y	Sandy clay flats, jarrah paperbark flats.		FLAT			CLAY_SND		
6356	93224	16262	Cyathochaeta stipoides	3		1			BLACKWOOD	CC	NPK	VER	24/10/1990 0:00		0			0			N	In dark reddish-brown sand, on a seasonally wet flat. Geology: Pleistocene quartz sand. Altitude: 10m.		FLAT	QUARTZ		SAND	RED_BRWN	SEASINUN
6367	93226	16262	Cyathochaeta stipoides	3		11			BLACKWOOD	CC	NPK	VER	20/11/1994 0:00		0			0			N	Restiad heath on swampy coastal plain.		OD_SWAMP			SAND		
6588	105285	34774	Darwinia ferricola	T	EN	2	E		BLACKWOOD	PRI			25/09/2006 0:00	ESTMT	0			####	PLANTS		Y		INUNDATE	FLAT	IRONSTN		LOAM_SND	RED	
6593	111349	34774	Darwinia ferricola	T	EN	4		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	107			0	PLANTS	####	N								
7588	109254	13635	Drakaea micrantha	T	EN	42			BLACKWOOD	CC	FOR		11/10/2019 0:00	ACT_IND	10	3		0	PLANTS	####	Y	Jarrah and WA Christmas tree woodland on white sand	DRY	RIDGE	QUARTZ		SAND	WHITE	WLL_DRND
8505	95026	20250	Eucalyptus calcicola subsp. calcicola	4		1			BLACKWOOD	CC	NPK		28/11/1989 0:00	ESTMT	50			50			N		DRY	SLOPE			SAND	RED_BRWN	
8506	95027	20250	Eucalyptus calcicola subsp. calcicola	4		2			BLACKWOOD	CC	NPK		9/02/1991 0:00		0			0			N				LIMESTN				
9694	104341	20504	Gastrolobium formosum	3		7	A		BLACKWOOD	LGA	VER		5/08/2007 0:00		0			0			N	Swamp Heath. Adenanthos sp., Sheok.		OD_SWAMP			LOAM		
9695	104342	20504	Gastrolobium formosum	3		7	B		BLACKWOOD	PRI			5/08/2007 0:00		0			0			N	Swamp Heath. Adenanthos sp., Sheok.		OD_SWAMP			LOAM		
9709	95144	20504	Gastrolobium formosum	3		17			BLACKWOOD	NON	UCL		13/05/1998 0:00		0			0			N								
9710	95145	20504	Gastrolobium formosum	3		18			BLACKWOOD	PRI			7/11/2006 0:00	ESTMT	50			50			Y	Recontoured landform.	MOIST		IRONSTN		SAND	GREY	
9923	88268	6162	Gonocarpus pusillus	4		1			BLACKWOOD	CC	NPK	VER	7/02/1997 0:00		0			0			Y	Woodland over sedges.		FLAT			CLA_LOAM	BROWN	SEASINUN
10304	91573	14010	Grevillea brachystylis subsp. australis	T	EN	1			BLACKWOOD	CC	NPK		14/01/2011 0:00	ACT_IND	0	0	0	0	PLANTS		N		DRY	OD_SWAMP			SAND	GREY	SEASINUN
10305	91574	14010	Grevillea brachystylis subsp. australis	T	EN	2	A		BLACKWOOD	LGA	VER		12/12/2012 0:00	ACT_IND	15			0	PLANTS	510	Y		MOIST	FLAT	LATERITE		CLA_LOAM	BROWN	SEASINUN
10306	107243	14010	Grevillea brachystylis subsp. australis	T	EN	2	B		BLACKWOOD	LGA	VER		12/12/2012 0:00	ACT_IND	31			0	PLANTS	337	Y	Major weed infestation at site; Bossiaea ornata, Juncus sp.	MOIST	FLAT	LATERITE		CLA_LOAM	BROWN	SEASINUN
10307	107244	14010	Grevillea brachystylis subsp. australis	T	EN	3	A		BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	273			0	PLANTS	####	Y	Rehabilitating mine site	DRY	FLAT	IRONSTN		SAND	GREY	WLL_DRND
10308	107246	14010	Grevillea brachystylis subsp. australis	T	EN	3	B	T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	65		44	0	PLANTS	####	Y	Rehabilitating mine site	DRY	FLAT	IRONSTN		SAND	GREY	WLL_DRND
10965	94471	18436	Grevillea manglesioides subsp. ferricola	3		1			BLACKWOOD	LGA			1/01/1992 0:00	ESTMT	100			100			N								
11062	92860	14911	Grevillea papillosa	3		1			BLACKWOOD	CC	NPK		8/04/1990 0:00	ESTMT	10			10			N		MOIST	OD_SWAMP			SAND	GREY	
11069	92877	14911	Grevillea papillosa	3		8			BLACKWOOD	LGA	VER		18/05/1992 0:00	ACT_IND	204			204			N								
11070	92878	14911	Grevillea papillosa	3		9			BLACKWOOD	LGA	VER		3/10/2001 0:00	ESTMT	60			60			Y	Shrubland. Mellboldinia sp.		OD_SWAMP			CLAY_SND	GREY	
11071	103127	14911	Grevillea papillosa	3		10	A		BLACKWOOD	LGA	VER		18/05/1992 0:00		0			0			N								

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11072	103128	14911	Grevillea papillosa	3		10	B		BLACKWOOD	PRI	VER		3/10/2001 0:00	ESTMT	20			20			Y	Shrubland. Plain-wetland.	MOIST	OD_SWAMP			LOAM_SND	BROWN	
11073	92861	14911	Grevillea papillosa	3		11			BLACKWOOD	LGA	VER		19/09/1995 0:00		0			0			Y	Shrubland. Grey peaty sand, swamp.		OD_SWAMP			PEAT	GREY	
11074	92862	14911	Grevillea papillosa	3		12			BLACKWOOD	CC	NPK		17/09/1990 0:00		0			0			Y	Red sandy clay flat. Wet heath-sedgeland.		FLAT			CLAY_SND	RED	PERMINUN
11086	92871	14911	Grevillea papillosa	3		22			BLACKWOOD	CC	NPK		20/09/1990 0:00		0			0			N	Jarrah, Marri.		FLAT			CLAY_SND		
11679	96846	38322	Hemiandra sp. Windy Harbour (B.J. Conn & J.A. Scott BJC 3344)	3		4			BLACKWOOD	CRW	GE		13/11/1999 0:00	ESTMT	100			100			N	Low heath, Jarrah/Marri Forest.		SLOPE	GRANITE	GRVL_30	SAND	YEL_BRWN	
11945	87463	5222	Hybanthus volubilis	2		2			BLACKWOOD	CC	NPK		17/09/1990 0:00		0			0			N	Jarrah/Marri		SLOPE			SAND		
12108	93353	16522	Isopogon formosus subsp. dasylepis	3		3			BLACKWOOD	LGA	VER		29/10/1985 0:00		0			0			N	Brown-black sandy clay at roadside to flat topography. Shrubland rising to woodland.					SND_CLAY	BLACK	
12324	92515	14631	Juncus meianthus	3		14			BLACKWOOD	CC	NPK		2/12/1992 0:00		0			0			N	Astartea fasciularis, Bossiaea rufa.		OPEN_DPN					
12365	96490	33518	Kennedia lateritia	T	EN	1			BLACKWOOD	LGA	PAR		23/03/2017 0:00	ACT_CLMP	0			15	CLUMPS			Invasive weeds increasing, though plants are healthy	MOIST	HILL	GRANITE		LOAM	BROWN	WLL_DRND
12366	105126	33518	Kennedia lateritia	T	EN	2	A		BLACKWOOD	PRI			28/08/2001 0:00	ESTMT	3			3			N	highly degraded; buffalo grass, arum lily, bridal creeper.					SAND		
12367	105127	33518	Kennedia lateritia	T	EN	2	B		BLACKWOOD	PRI			31/10/2006 0:00	ACT_IND	2			0		10	Y	Very disturbed due to vegetation clearing and cultivated garden beds	MOIST	FLAT	LIMESTN		SND_LOAM	BROWN	
12486	111329	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	EN	6		T	BLACKWOOD	PRI			5/04/2011 0:00	ACT_IND	73		6	0	PLANTS	####	Y	Area cleared for mining and is now slowly rehabilitating with native species	DRY	FLAT			SAND	GREY	WLL_DRND
13070	86003	2343	Leptomeria dielsiana	X	EX	1			BLACKWOOD	UNKNOWN	UNKNOWN		7/05/1957 0:00		0			0			Y	heath/scrub							
13072	94138	17702	Leptomeria furtiva	2		2			BLACKWOOD	CC	NPK	REC	21/01/1996 0:00		0			0			Y	Growing within shelter of other vegetation in a winter wet swamp, in grey sand. With tall sedges. Uncommon		OD_SWAMP			SAND	GREY	SEASINUN
13109	84548	1086	Lepyrodia heleocharoides	3		1			BLACKWOOD	LGA	VER		27/10/1988 0:00		0			0			N	On peaty sand in moist, open sedge-heath, on bare patches. With other Restionaceae and sedges.	MOIST	FL_PLAIN			PEAT		
13112	84551	1086	Lepyrodia heleocharoides	3		4			BLACKWOOD	LGA	VER		7/10/1991 0:00		0			0			N	Found in grey sand on a gentle slope, in woodland/shrubland/sedgeland of the above associated species.		SLOPE			SAND	GREY	
13116	88567	6355	Leucopogon alternifolius	3		1			BLACKWOOD	LGA	VER		7/10/1991 0:00		0			0			N		DRY	SLOPE			SAND	GREY	
13406	91395	13779	Loxocarya magna	3		2			BLACKWOOD	CC	NPK	WAT	19/11/1991 0:00	ESTMT	30			30			N		MOIST	SLOPE	LATERITE		SND_LOAM	RED	
13408	91397	13779	Loxocarya magna	3		4			BLACKWOOD	CC	NPK	OTH	10/09/1990 0:00		0			0			Y		MOIST	FLAT	LATERITE		LOAM		
13410	91399	13779	Loxocarya magna	3		6			BLACKWOOD	CC	NPK	WAT	11/09/1990 0:00		0			0			N				IRONSTN		SAND		
14601	89806	11860	Philydrella pygmaea subsp. minima	1		1			BLACKWOOD	CC	NPK		8/12/1974 0:00		0			0			N	In damp Hollows							
15201	84472	958	Reedia spathacea	T	EN	1			BLACKWOOD	LGA	CAM	PUT	14/02/1971 0:00		0			0			N	Moist, dark grey loam soil.	MOIST				LOAM	GREY	
15222	84481	958	Reedia spathacea	T	EN	19			BLACKWOOD	PRI			22/05/2003 0:00	ESTMT	350		200	550			N	Cyathochaeta teretifolia, Empodisma gracillimum, Xyris gracillima, Gymnoschoenus anceps	INUNDATE	OD_DRGLN	GRANITE		SAND	GREY	
15230	84491	958	Reedia spathacea	T	EN	30			BLACKWOOD	PRI			12/10/2005 0:00	ESTMT	277		5	282			Y		INUNDATE	OD_DRGLN	LATERITE		SAND	BROWN	

FID	PopId	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Method	MatCount	JuvCount	SeedlCount	LiveTotal	CountType	AreaOccupy	InFlower	HabNotes	SoilCondit	Landform	RockType	Gravel	SoilType	SoilColor	Drainage
15237	84498	958	Reedia spathacea	T	EN	37			BLACKWOOD	CC	NPK		30/03/2006 0:00	ESTMT	260		5	265			Y	Scrup over open tall sedges. Baumea sp, Agonis sp.	MOIST	OD_DRGLN			CLAY_SND	BROWN	
15456	84523	999	Schoenus loliaceus	2		1			BLACKWOOD	CC	NPK		26/09/1990 0:00		0			0			N								
15924	93948	17411	Stylidium leeuwinense	4		8			BLACKWOOD	LGA	WAT	REC	26/05/1996 0:00		0			0			Y	In dark grey-black sandy soil on swamp heathland. Well drained flat of Pleistocene quartz sand. Low heath.		FLAT	QUARTZ		SAND	GREY	SEASINUN
16246	103653	17271	Synaphea macrophylla	1		1	A		BLACKWOOD	NON	UCL		11/10/2000 0:00	ACT_IND	125		20	125			Y	Hakea ruscifolia, Acacia ssp., Hibbertia sp., Kennedia coccinea, Leucopogon verticillata.		FL_PLAIN	LATERITE		CLAY_SND	BROWN	
16247	103654	17271	Synaphea macrophylla	1		1	B		BLACKWOOD	MRD	VER		11/10/2000 0:00	ACT_IND	125		20	0			Y	Hakea ruscifolia, Acacia ssp., Hibbertia sp., Kennedia coccinea, Leucopogon verticillata.		FL_PLAIN	LATERITE		CLAY_SND	BROWN	
16248	93892	17271	Synaphea macrophylla	1		2			BLACKWOOD	MRD	VER		11/10/2000 0:00	ACT_IND	91		20	91			Y	Hibbertia hypericoides, Persoonia longifolia		CREST			SAND	BROWN	
16249	93887	17270	Synaphea nexosa	1		1			BLACKWOOD	LGA	VER		11/10/2000 0:00	ACT_IND	12			12			Y	Disturbed, weedy grasses & sedges, Pericalymma ellipticum, Grevillea papillosa, Baumea articulata.	MOIST	FL_PLAIN	IRONSTN		LOAM_SND	BROWN	
16250	93888	17270	Synaphea nexosa	1		2			BLACKWOOD	LGA	VER		11/10/2000 0:00	ACT_IND	9			9			N	Shrubland	MOIST	FL_PLAIN			CLAY_SND	BROWN	
16251	93891	17270	Synaphea nexosa	1		5			BLACKWOOD	LGA	VER		3/10/2001 0:00		0			8			Y	Tall woodland over shrubland	MOIST	FL_PLAIN			CLAY_SND	BROWN	
16941	93636	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4		2			BLACKWOOD	CC	CFF	NPK	2/01/1991 0:00		0			0			Y						SAND		
17244	88233	6093	Verticordia lehmannii	4		4			BLACKWOOD	LGA	VER		15/05/1992 0:00	ESTMT	####			####			N								
17245	88234	6093	Verticordia lehmannii	4		5			BLACKWOOD	LGA	VER		28/04/1992 0:00	ESTMT	30			30			N								
17246	88235	6093	Verticordia lehmannii	4		6			BLACKWOOD	LGA	VER		15/05/1992 0:00	ESTMT	####			####			N								

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
2439	4678249	3386	Acacia inops	3	Shrub 40 cm.		Very open woodland of Eucalyptus calophylla and E. marginata over a dense understorey dominated by Xanthorrhoea preissii. Associated species: Anarthria prolifera, Podocarpus drouynianus, Persoonia longifolia, Platysace tenuissima, Leucopogon australis, L			MAN	0	11/12/1996
2440	4557832	3386	Acacia inops	3		Swamp.	Agonis linearifolia, Lepidosperma, dense swampy vegetation.			MAN	0	4/09/1990
2448	4293924	3386	Acacia inops	3	Straggly, cream flowers, ht 40cms.	Valley floor, humic sand.	Homalospermum firmum, Agonis linearifolia, Lepidosperma tetraqueturm, Eucalyptus patens, Mesomelaena stygia			TOPO	0	23/09/1992
2743	1853252	14930	Acacia lateriticola var. Glabrous variant (B.R. Maslin 6765)	3	Small shrub 500 mm, flowers yellow.	Flat, sand.	Jarrah - Marri riverside.		Abundance: common	AUTO	4	21/09/1990
3887	4835794	3537	Acacia semitrullata	4	Perennial, erect, open shrub 60 cm high, single stem at ground level. Flowers cream. Plant active, healthy.	Site: Upland. Soil Surface: Littered. Soil Colour: Grey Soil Texture: Coarse Sand Comments: None pH: 5.50 Very Slightly Rocky 2% Exposed Iron Enriched Laterite Fire History: 1990-91 Season: Unknown Type: Unknown	High open woodland.		Abundance: frequent. Ca 80% of population flowering.	GPS	1	21/08/1997
4400	311545	3571	Acacia tayloriana	4	Prostrate, stems 9 - 12 inches. Flowers cream.	Gravelly soil.				MAN	3	15/01/1945
4868	4589823	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, Homalospermum firmum, Lepidosperma tetraquetrum, Gymnoschoenus anceps, Dmapiera hederacea, Acacia diversifolia.			MAN	0	10/02/1993
4871	4589815	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, A.parviceps, Homalospermum firmum, Eucalyptus patens, Dampiera hederacea.			MAN	0	10/02/1993
4872	4589807	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, Homalospermum firmum, Velleia trinervis.			MAN	0	10/02/1993
4874	4298780	44007	Actinotus repens	3	Prostrate herb, white flower.	Valley floor.	Agonis linearifolia, A.parviceps, Homalospermum firmum, Astartea fascicularis, Gahnia trifida.			TOPO	0	10/02/1993
4880	5466563	44007	Actinotus repens	3	Prostrate herb.	Valley floor.	Agonis linearifolia, Homalopsermum firmum, Astartea fascicularis, Pimelia hispida, Gymnoschoenus anceps, Vellia trinervis.			MAN	0	17/11/1992
4888	4295048	44007	Actinotus repens	3		Valley floor.	Agonis linearifolia, A. parviceps, Homalospermum firmum, Eucalyptus patens, Dampiera hederacea, Stylidium scandens			TOPO	0	12/11/1992
4970	5753023	1776	Adenanthos detmoldii	4	Upright shrub 1.3 m tall, flowers yellow.	Flat white sand.	Shrubland.		frequent.	MAN	0	10/06/1987
4972	8287775	1776	Adenanthos detmoldii	4	Shrub.	Near roadside. Coarse damp grey sand.	Near roadside in heath vegetation, with Casuarinaceae, Xyris, sedges.	locally occasional.		UNK	2	27/09/1992
4973	1098993	1776	Adenanthos detmoldii	4	Shrub 5 ft high. Flowers yellow and orange.	Sand.				MAN	4	19/06/1971
4977	3487008	1776	Adenanthos detmoldii	4		Road verge remnant.				MAN	3	9/11/1993
4981	2002477	1776	Adenanthos detmoldii	4		Plains.				AUTO	4	24/10/1948
4983	1099043	1776	Adenanthos detmoldii	4	Spike like shrub 2 m. Flowers yellow-orange.	Growing in wet sand.				MAN	4	15/09/1982

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4986	1099000	1776	Adenanthos detmoldii	4	Erect shrub to 5 ft. Flowers yellow-green.	Sand, winter wet.				MAN	4	7/01/1967
4991	1099027	1776	Adenanthos detmoldii	4	Small shrub, 3 ft tall. Flowers orange-yellow.					MAN	3	8/09/1972
4992	1099507	1776	Adenanthos detmoldii	4	Shrub ca 1 m. Perianth pale yellow with orange-yellow lower lip.	Freshwater marsh.				MAN	3	16/11/1982
4994	1098969	1776	Adenanthos detmoldii	4						MAN	4	26/06/1950
4999	4396634	1776	Adenanthos detmoldii	4	Erect open shrub 2 m x 1.5 m, flowers orange.	Grey sand, road verge.	Shrubland.		Abundance: frequent.	GPS	1	19/09/1995
5002	7002289	1776	Adenanthos detmoldii	4	Virgate shrub to 1.5 m; corolla yellow, fading to dark red; pollen presenter dark red.	On sand by ditch at roadside.				UNK	2	24/09/2004
5006	6031625	1776	Adenanthos detmoldii	4	Erect, compact, perennial shrub 1.5 m high x 90 cm wide. Flowers yellow. Fruit absent.	Watercourse - wetland. W aspect. Soggy.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally abundant.	90% of population flowering. Weeds abundant.	GPS	1	3/10/2001
5007	7892586	1776	Adenanthos detmoldii	4	Sprawling shrub to 1.6 m high x 3 m diam. Tepals creamy-villous, the free limbs bright yellow; pollen-presenter dark reddish.	Swamy roadside on loamy soil.	Swamp-heath with Gastrolobium formosum, Grevillea diversifolia.	frequent but localised.		GPS	1	5/08/2007
5008	1099035	1776	Adenanthos detmoldii	4						MAN	3	24/04/1977
5009	4150910	1776	Adenanthos detmoldii	4	2 m high, with yellow and orange flowers.	Sandy loam swamp.	In association with Grevillea sp. and Melaleuca sp.			AUTO	3	20/04/1981
5012	4151089	1776	Adenanthos detmoldii	4	Erect, diffuse shrub to 4 m, with yellow flowers, having a bright orange throat.	Swamp sandy flats, waterlogged in winter.	In association with Grevillea sp., Dryandra sp., grasses and sedges.			MAN	3	20/12/1984
5246	1719815	13116	Adenanthos x pamela	4	Spreading erect shrub, 75 cm in height, flowers dull orange.	Edges road verge, grey sand over wet sandy clay.	Adenanthos detmoldii swamp.		Abundance: 1 plant.	AUTO	3	29/05/1983
5259	4151097	13116	Adenanthos x pamela	4	Diffuse shrub to 4 m, with pale red orange flowers.	Damp sandy flats, waterlogged in winter.	In association with Grevillea spp., Dryandra spp., grasses and sedges.			MAN	3	20/12/1984
6383	3052915	41730	Andersonia sp. Amabile (N. Gibson & M. Lyons 355)	3	small perennial shrub, 150mm high, flowers	very shallow loam over laterite,flat	Paperbark flat			MAN	0	10/12/1990
7078	5468949	3685	Aotus carinata	4						MAN	0	7/10/1991
7083	676357	3685	Aotus carinata	4						MAN	3	22/09/1976
7085	676322	3685	Aotus carinata	4	Broome-like shrub 1.2 m. Flowers yellow and red. Leaves lanceolate, grey tomentose, close to stems.	Sand-wet.				MAN	3	15/09/1982
7086	676373	3685	Aotus carinata	4						MAN	3	24/04/1977
7088	676330	3685	Aotus carinata	4	Compact shrub, 1.5 ft tall. Flowers bright yellow and purple.					MAN	3	8/09/1971
7089	1823108	3685	Aotus carinata	4	Erect emergent shrub 700 mm high, flowers yellow, red centre.	Flat, sandy clay.	Wet heath.		Abundance: uncommon.	AUTO	4	17/09/1990
7090	676802	3685	Aotus carinata	4	Erect shrub, flowers yellow, eye red/purple.	grey swampy sand	sedge scrub Adenanthos/Calothamus	common.		MAN	3	4/11/1978

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7093	5804205	3685	Aotus carinata	4	Shrub to 40 cm. Soft bluish-grey foliage. Yellow flower, red keel.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.	occasional.		MAN	3	9/11/1985
7095	6051561	3685	Aotus carinata	4	Erect, open perennial shrub 1.1 m high x 30 cm wide. Flowers yellow-brown.	Watercourse - wetland. Soggy. W aspect.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally frequent.	90% of population flowering. Weeds abundant.	GPS	1	3/10/2001
7096	7643411	3685	Aotus carinata	4	Perennial shrub 0.5 m high x 0.3 m wide. Yellow / red flowers.	Recontoured landform - paluslope, revegetated minesite. Grey wet soil.	Within BHP Beenup revegetation.	50+ plants.		GPS	1	10/01/2007
7097	676306	3685	Aotus carinata	4		Grey sand. Flat topography.	Low shrubland.			MAN	3	29/10/1985
7425	1898116	42792	Astartea onycis	4	Branches more or less prostrate. Petals white or pale pink.	Swampy heath with patches of bare, pale grey sand.	Swampy heath.			MAN	0	17/12/1982
7428	5795087	42792	Astartea onycis	4	Slender, spindly shrub, 1 m high x 60 cm wide. Pinkish white flowers. Plant varies from low and tangled to erect and slender.	Flat, winter wet swamp. Light litter on surface of grey clay over sediments.	Low Woodland B with Melaleuca preissiana, Agonis parviceps and Eutaxia virgata, Velvet Rush.	frequent.		MAN	2	26/01/2001
7433	5577594	42792	Astartea onycis	4	Slender, spreading shrub 60 cm high x 1 m wide. Pinkish white flowers.	Flat, winter wet swampland. Bare grey-yellow sandy clay. Underlying geology sedimentary.	Low Forest A. Melaleuca preissiana, Agonis parviceps, Agonis linearifolia, Callystachys lanceolata, Hakea linearis.	abundant in small area.		MAN	0	1/01/2000
7437	3055639	42792	Astartea onycis	4	Medium shrub, 1.5 m high, flowers white.	Sandy depression.	Leptocarpus swamp under greater inundation of wet heath where A. fascicularis occurs.		same as priority listed collection backshall 88233?	MAN	0	2/01/1991
7867	567116	35317	Austrostipa mundula	3	Perennial caespitose herb; rhizomatous. Inflorescence to 30 cm high. Flowers purplish.	Growing in high fixed coastal dunes, in grey sand with coarse humus rich sand undersurface.	With Agonis coastal heath.	common in open areas.	in open areas.	MAN	3	2/10/1982
9518	1882597	17107	Banksia meisneri subsp. ascendens	4	Low compact shrub 500 mm high, flowers yellow.	Flat, sand.	Heath - sedgeland.		Abundance: uncommon	AUTO	3	26/09/1990
9519	4954432	17107	Banksia meisneri subsp. ascendens	4	Perennial. Erect open shrub, 50 cm high. Flowers yellow. Single stem at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: occasional. Ca 75% of population flowering.	GPS	1	26/08/1997
9521	1155806	17107	Banksia meisneri subsp. ascendens	4	Shrub 70 cm, one stem at base, smooth brown bark; in fruit and with old flowers.	On sandy rise near swamp flat.	In Banksia ilicifolia - heath.		Host for Banksiamyces sp. 4 apothecia removed from carpological collection. E.M. Davison 2/04/2008. 10 Banksiamyces removed for Tom May (MEL). E. Davison, 15/04/2008.	MAN	3	3/02/1976
9522	1155830	17107	Banksia meisneri subsp. ascendens	4	Small shrub 1-2 ft tall.	Sandy semi-swamp.				MAN	3	24/10/1948

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9523	1736191	17107	Banksia meisneri subsp. ascendens	4	Spreading shrub c. 1.5 x 1.5 m. Lower branches procumbent.	Deep siliceous sand.	Heathland.			MAN	0	19/08/1982
9526	1736205	17107	Banksia meisneri subsp. ascendens	4					Abundance: abundant in patches.	AUTO	4	1/07/1988
9528	5814871	17107	Banksia meisneri subsp. ascendens	4	Shrub to 70 cm tall, one stem at base with smooth brown bark. Fruits more or less round. Few follicles.	Winter wet plain. Brown sandy loam over laterite?	Heathland. Associated species: Banksia ilicifolia, Lepidosperma sp., Nuytsia floribunda, Isolepis sp.	100+ plants.		GPS	1	31/01/2001
9535	4333128	17107	Banksia meisneri subsp. ascendens	4	To 1 m high, with yellow gold flowers.	Sandy loam swamp.	In association with Melaleuca sp. and Adenanthos sp.			MAN	0	23/04/1981
9626	4228936	32204	Banksia nivea subsp. uliginosa	T	Bushy shrub 70 cm tall, style maroon, pollen presenter green.	In clay over laterite.	Scrub.			MAN	0	21/10/1993
9627	4228944	32204	Banksia nivea subsp. uliginosa	T	Bushy shrub 70 cm tall, style maroon, pollen presenter green.	In clay over laterite.	Scrub.			MAN	0	21/10/1993
9633	3054136	32204	Banksia nivea subsp. uliginosa	T	low shrub, 200mm high, flowers yellow-brown	sandy flats	jarrah marri			MAN	0	17/09/1990
9637	4669118	32204	Banksia nivea subsp. uliginosa	T	Mounded shrub to 1 m with long leaves similar to D. nivea.	Flat plain seasonally inundated. White sand over laterite.	Coastal heathland with Calothamnus aff. crassus, Adenanthos detmoldii, Darwinia sp., Andersonia aff. latiflora, Verticordia spp., Lambertia orbifolia, Banksia attenuata.			GPS	1	19/02/1997
10254	5749859	32078	Banksia sessilis var. cordata	4	Open, straggly shrub 3 m high x 2 m wide. Creamy-yellow flowers.	Stabilised dune. Litter, yellow-grey sand over limestone.	Dense thicket, Agonis flexuosa, Olearia axillaris, Spyridium globulosum.	common.		GPS	1	12/10/2000
11152	3053512	20026	Blennospora doliiformis	3	Annual herb, 80 mm high, flowers brown.	Shallow loam over laterite.	Laterite heath.			MAN	0	1/11/1990
11223	8459851	16313	Boronia anceps	3	Shrub 30 cm tall, low spreading at base with erect flower stalks. Flowers dark pink.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.	locally frequent.		UNK	3	9/11/1985
11224	4980441	16313	Boronia anceps	3	Erect herb, ca 0.6 m high x ca 0.3 m wide.	Seasonally inundated flats. Dry white-grey sand.	Open Low Woodland B, Dense Low Heath C. Hypocalymma sp.		Abundance: frequent.	GPS	1	22/10/1997
11225	4980425	16313	Boronia anceps	3	Erect herb, ca 0.4 m high x ca 0.2 m wide.	Seasonally inundated flats. Dry white-grey sand.	Open Low Woodland B, Dense Low Heath C.		Abundance: frequent.	GPS	1	22/10/1997
11227	946273	16313	Boronia anceps	3	Flowers bright pink.	Freshwater marsh.				MAN	0	16/11/1982
11228	943843	16313	Boronia anceps	3	Flowers deep pink-purple. Shrub 30 cm high.	Growing in recently flooded roadside drains.				AUTO	3	8/09/1971
11229	6227260	16313	Boronia anceps	3	Shrub 30 cm tall, low spreading at base with erect flower stalks. Flowers dark pink.	Flat plain. At road side with wet sand. Black sand below white.	Very open heath with sedges.	locally frequent.	Living coll. no.: 852544 [NSW]	MAN	3	9/11/1985
11230	6031706	16313	Boronia anceps	3	Erect, open, perennial shrub 35 cm high x 30 cm wide. Flowers pink. Fruits absent.	Plain - wetland. Open site. W aspect. Erosion present. Road verge. Brown loam.	Shrubland. Adenanthos detmoldii, Nuytsia floribunda, Agonis flexuosa.	locally frequent.	Weeds abundant.	GPS	1	3/10/2001
11231	5351693	16313	Boronia anceps	3	Erect, open, perennial shrub 30 cm high x 35 cm wide. Flowers pink.	Swamp - wetland. Open N-S aspect. Moist brown sandy-loam over laterite, bare.	Open woodland - heath. Agonis flexuosa, Adenanthos detmoldii, Xanthorrhoea preissii, Pericalymma elliptica, Eucalyptus marginata.	frequent.	Percentage of population flowering 20%. Percentage of dead plants in area 30% of population.	GPS	1	11/10/2000

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11232	5351812	16313	Boronia anceps	3	Erect open perennial shrub, height to 70 cm, width to 45 cm; flowers pink.	Wetland; road verge; brown clayey sand.	Shrubland.	locally frequent.	30% of population flowering. Floristic richness: 0-20 species.	GPS	1	11/10/2000
11234	7643403	16313	Boronia anceps	3	Perennial shrub 0.3 m high. Pink flowers.	Recontoured landform, revegetated minesite. Grey wet soil.	Within BHP Beenup revegetation.	50+ plants.	Percentage of population flowering 90%	GPS	1	10/01/2007
11235	3053393	16313	Boronia anceps	3	Spindly shrub, 550mm high, flowers pink.	Sandy flats.	Wet heath.		Abundance: uncommon.	MAN	0	3/12/1990
11394	3054810	16318	Boronia exilis	T	Spindly shrub, 500mm high, flowers pink	Sandy flats	Wet heath Homalospermum firmum Beaufortia sparsa Evandra aristata		uncommon	MAN	0	17/09/1990
11395	3054829	16318	Boronia exilis	T	Spindly shrub, 500 mm high, flowers pink.	Sandy flats.	Wet heath - Homalospermum firmum, Beaufortia sparsa.		Abundance: uncommon.	MAN	0	17/09/1990
11396	5412625	16318	Boronia exilis	T	Low, erect habit.	Swamp. Grey-white soil.	Heath B over Tall Sedges.	40-60 plants.		GPS	1	27/09/1999
11399	957615	16318	Boronia exilis	T						AUTO	3	8/09/1965
11400	5527937	16318	Boronia exilis	T	Spindly shrub 50 cm high with pink flowers. Fruit 4-loculed capsule with 1-2 seed per section.	Flat. Grey sand over laterite.	Winter-wet heathland. Associated species: Anarthrium spp., heathland spp.			MAN	0	25/11/1999
11401	5543231	16318	Boronia exilis	T	Erect shrub 1 m high x 5 cm wide.	Flat plain swamp. Grey sand over ?laterite.	Heath A over tall sedges. Characteristic species: tall sedgeland of Leptocarpus, Restio and Schoenus spp.	sparse dispersal 50-100 plants.	Taller specimen than at population 1 c. Due to taller associated species, a lot more slender.	GPS	1	17/09/1999
11402	6017479	16318	Boronia exilis	T	Spindly shrub 50 cm high with pink flowers.	Flat, winter wet lowland. Grey sand over laterite.	Winter wet heathland. Associated species: Anarthrium spp., heathland spp., Leucopogon sp., Sphenotoma sp., Melaleuca sp.	hundreds.		GPS	1	11/12/2001
11403	4469275	16318	Boronia exilis	T	Tall, very spindly, single stemmed shrub. 50 cm high x 3 cm wide. Large, bright pink flowers.	Plain. Grey sand, dry but beside saturated areas.	Dense Hummock Grass. Anarthrium.	infrequent.	Area burnt 18 months ago - Boronia found within this area also but not in large numbers.	GPS	1	19/09/1996
11404	5543223	16318	Boronia exilis	T	Low, erect habit 50 cm high x 15 cm wide.	Flat plain, swamp. Grey sandy soil over laterite?	Heath B over Low Sedges. Characteristic species: sedgeland of Anarthria spp. with emergent pockets of Proteaceae and Myrtaceae shrub spp.	large numbers of plants.	Distinct population boundary.	GPS	1	17/09/1999
12427	2389797	13852	Caladenia abbreviata	3		Sand white to grey.	Marri and Jarrah coastal scrub.			AUTO	3	/11/1991
12428	1935135	13852	Caladenia abbreviata	3	An erect tuberous herb to 25 cm high. Flowers yellow with short dark petals and sepals.	In open sandy clearings - deep sand. On slopes of consolidated sand dunes.	Amongst dense thickets of Agonis flexuosa.	50+ plants in early flower.		MAN	3	11/11/1986
12429	1751565	13852	Caladenia abbreviata	3	An erect, tuberous herb to 25 cm high. Flowers yellow with short, dark petals and sepals.	In open sandy clearings - deep sand. On slopes of consolidated sand dunes.	Amongst dense thickets of Agonis flexuosa.	50+ plants in early flower.		MAN	3	11/11/1986
12430	5907209	13852	Caladenia abbreviata	3	Most plants with a yellowish colouration and red hairs on the end of all perianth segments.	Sandy-loam soil.	Tall Eucalyptus diversicolor - Agonis woodland; scattered Eucalyptus calophylla and Banksia grandis over dense shrubs of Templetonia retusa, Hibbertia cuneata, Chorolaena, Pimelea, etc.	16 plants, 6 in flower, most in bud.		MAN	2	11/11/1986

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12432	7501102	13852	Caladenia abbreviata	3		E facing slope.	Dense Agonis woodland.		Most finished however some still in full flower. eg. 20+ in full flower.	UNK	3	2/12/1986
12433	7109539	13852	Caladenia abbreviata	3		On winter wet run off with open granite.	Open heathland.	small colony of 15 plants.		GPS	1	13/11/2004
12436	5536251	13852	Caladenia abbreviata	3		White sand, consolidated dunes.	Banksia woodland with grass trees and native grasses.	small colonies.		GPS	1	1/11/1998
12439	6283535	44910	Caladenia ambusta	2	Orchid 400 mm high x 70 mm wide. Flower length 100 mm. Flowers pale green-red with maroon labellum.	Flat - gentle slope. Brown soil. Possibly burnt 1999.	Xanthorrhoea preissii over dense low heath. Melaleuca sp., ? Acacia pulchella, Senecio lautus, Pimelea sp., Spyridium globulosum.	21-50 plants over > 1 ha.	Adult population, 95% flowering. Grows within vegetation rather than bare areas. Wasp pollinator.	GPS	1	7/11/2002
12440	7111061	44910	Caladenia ambusta	2		Above open wetland. Consolidated dunes.	With grass trees and open heath.	common.		GPS	1	28/10/2004
12606	404373	13619	Caladenia excelsa	T	Erect tuberous herb ca 40 cm high. Flowers large, cream with red tipped labella.					MAN	4	//
12619	237272	13619	Caladenia excelsa	T		In sandy undulating country.	Growing in low woodland of Eucalyptus marginata, Banksia ilicifolia and Agonis flexuosa over low heath.	two plants in bud and flower.		MAN	3	4/10/1983
12788	8604320	18037	Caladenia lodgeana	T		Open granite with brown clay loam.	Open heathland. Dodonea ceratocarpa, Davesia horrida, Lepidosperma sp., Hypocalymma angustifolium, Phyllanthus sp.	40 in flower or bud.	Used for pollinator baiting study. Attracted thynnine wasps (vouchers KP 338, KP 339, KP 340).	GPS	1	4/11/2009
12790	7109547	18037	Caladenia lodgeana	T		On winter wet run off with open granite.	Open heathland.	common.		GPS	1	13/11/2004
12791	404349	18037	Caladenia lodgeana	T	Erect tuberous herb with white flowers.	In black loam/	With Blackboys and Red Gum, amongst herbs.			MAN	0	26/10/1984
12850	908010	18034	Caladenia pholcoidea subsp. augustensis	1	Last flowers, some in seed.	In peaty sand on flat swampy floor of broad valley.	Regenerating low heath, Pimelea rosea, sedges etc., fringing Melaleuca rhaphiophylla low woodland B.	500+, last flowers, some in seed.		MAN	0	11/12/1985
12851	7109717	18034	Caladenia pholcoidea subsp. augustensis	1		Burnt in summer. Swampland.	Open heath.	12 plants.		GPS	1	13/11/2004
13416	3129357	35799	Calothamnus lateralis var. crassus	3	Shrub to 1.5 m high, flowers red.	Gravel/clay.	Jarrah/Marri forest, Agonis parviceps, Dasypogon bromeliifolius.			MAN	0	27/08/1991
13418	1617745	35799	Calothamnus lateralis var. crassus	3	Flowers crimson, embedded in soft, corky tissue. Shrub brittle, ca 2 m tall.	Growing in wet depression at roadside.				MAN	0	20/08/1982
13419	1074806	35799	Calothamnus lateralis var. crassus	3						MAN	4	17/01/1945
13420	4231562	35799	Calothamnus lateralis var. crassus	3	Shrub to ca 2 m, flowers red.	Red loam over ironstone outcropping.	Roadside remnant of Viminaria juncea, Melaleuca incana, Hakea sp., Loxocarya sp. and other shrubs, sedges and Restionaceae.		Abundance: uncommon.	MAN	0	1/06/1995

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
13421	4349814	35799	Calothamnus lateralis var. crassus	3	1 m high, with red flowers.	Peaty sandy swamp.	In association with Melaleuca sp. and Kunzea vestita.			AUTO	3	16/10/1986
13424	4608895	35799	Calothamnus lateralis var. crassus	3	Diffuse shrub 1.5 m, flowers deep red, large leaves, terete 15 cm.	Sand - wet.				MAN	3	15/09/1982
13425	4614615	35799	Calothamnus lateralis var. crassus	3	Erect open shrub 1 m x 50 cm, flowers red, stems corky.	Grey peaty sand, swamp.	Shrubland.		Abundance: occasional.	MAN	0	19/09/1995
13426	4406559	35799	Calothamnus lateralis var. crassus	3	Erect open shrub 2 m x 70 cm, flowers red.	Grey peaty sand, swamp.	Heath.		Abundance: frequent.	GPS	1	19/09/1995
13427	6031803	35799	Calothamnus lateralis var. crassus	3	Erect, open, perennial shrub 1.1 m high x 1 m wide. Flowers red. Fruit exposed.	Plain. E-W aspect. Brown-yellow clayey sand.	Tall woodland over shrubland. Agonis flexuosa, Eucalyptus marginata, Corymbia calophylla, Meeboldinia scariosa, Kunzea recurva.	locally occasional.	70% of population flowering. Weeds few.	GPS	1	3/10/2001
13429	6996515	35799	Calothamnus lateralis var. crassus	3	Shrub to 2 m, without lignotuber; stamens dull red.	In sandy peat on winter-wet flat.				UNK	2	24/09/2004
13430	6996507	35799	Calothamnus lateralis var. crassus	3	Shrub 2 m, without lignotuber; stamens bright reddish pink; flowers scented.	In sandy peat on winter-wet flat.	In shrubland.			UNK	2	24/09/2004
13431	3053857	35799	Calothamnus lateralis var. crassus	3	erect to decumbant perennial shrub, 700mm high, flowers red	sandy depression	leptocarpus pericalymma swamp			MAN	0	17/09/1990
14822	4723317	17686	Chordifex gracilior	3	Herb 50 cm high.	Drainage line, swamp.	With low sedge and shrubland, Hypolaena exulca, Leptocarpus sp., Hakea ceratophylla, Melaleuca sp. Associated species: Calothamnus sp., Cassytha sp., Beaufortia sparsa, Diapsis filifolius.			MAN	0	29/01/1997
14829	2176351	17686	Chordifex gracilior	3	Female. Large tussocks.	Extensive area of swampy grey sand.	With abundant Restionaceae, and small shrubs, occasional stands of Jarrah in area. Leptocarpus diffusus and L. scariosus present.			MAN	0	6/10/1984
14830	2176343	17686	Chordifex gracilior	3	Male.	Extensive area of swampy grey sand.	With abundant Restionaceae, and small shrubs, occasional stands of Jarrah in area. Leptocarpus diffusus and L. scariosus present.		Abundant.	MAN	0	6/10/1984
14835	4849442	17686	Chordifex gracilior	3	Perennial. Rhizomatous restiad, 40 cm high. Multistemmed underground. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: locally frequent.	GPS	1	26/08/1997
14840	1620312	17686	Chordifex gracilior	3	Rhizomatous herb 30-50 cm x 70 cm. Brown flowers.	Winter wet flats in black peaty sand over clay.	Restio ustulatus sedgeland.		Abundance: very common.	MAN	0	24/09/1990
14841	3141772	17686	Chordifex gracilior	3	Sedge.	Soil: Light grey/grey sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Restio spp., Leptocarpus spp. Dense Tall Sedges over Pericalymma ellipticum Dense Low Heath D.			MAN	0	7/04/1990
14874	9400613	17675	Chordifex jacksonii	3	Rush to 70 cm.	In annual swamp over ironstone.	Low heath.	uncommon.		GPS	1	29/05/2002
15367	4225880	14003	Conospermum quadripetalum	2	Lax plant 30 cm high, flowers pale blue.	Swampy grey sand.	With sedges.	not common.		MAN	2	4/09/1985
15372	3052419	14003	Conospermum quadripetalum	2	Diffuse shrub, 450 mm high, flowers pale blue.	Sandy clay flats.	Jarrah paperbark flats.			MAN	0	9/11/1990

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
16514	3142876	16262	Cyathochaeta stipoides	3	Clumped perennial herb 1.7m.	Soil: Dark reddish brown sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Agonis floribunda, A. parviceps Dense Heath A.			MAN	0	24/10/1990
16518	4850017	16262	Cyathochaeta stipoides	3	Perennial. Caespitose sedge, 10 cm high. Multistemmed underground. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.	occasional.		GPS	1	26/08/1997
16520	3133907	16262	Cyathochaeta stipoides	3	Clumped perennial herb 1.7m.	Soil: Dark reddish brown sand. Topography: Seasonally wet flat . Geology: Pleistocene quartz sand.	Vegetation: Agonis floribunda, A. parviceps Dense Heath A.		PERTH 04741382 is also housed with this specimen.	MAN	0	9/04/1990
16521	6126065	16262	Cyathochaeta stipoides	3	Tussocks. Culms yellow-green.	Restiad heath on swampy coastal plain. Sandy soil.	Isolepis nodosa (beside road), Tricostularia neesii (8973), Evandra aristata (8974), Gymnoschoenus anceps (8975).	frequent.		MAN	2	20/11/1994
16788	2542722	7446	Dampiera heteroptera	3	Straggling perennial 12-18 inches tall.					AUTO	3	28/10/1947
16792	1606735	7446	Dampiera heteroptera	3		In swamp.				AUTO	3	21/10/1970
16797	4318846	7446	Dampiera heteroptera	3	30 cm high, with blue flowers.	Sandy soil.	In association with Stackhousia sp. and Eriostemon sp.			MAN	3	16/10/1984
17086	1044125	34774	Darwinia ferricola	T		On road verge on N side of road. On iron spongolite.	In dense thicket of Melaleuca thymoides, Loxocarya sp., Grevillea manglesioides, Microtis unifolia, Anigozanthos viridis, Calothamnus sp, Viminaria juncea.			MAN	3	11/12/1985
18598	5127165	298	Deyeuxia inaequalis	1	Spreading rhizomatous grass, to 70 cm. Flowers green.	Black sandy clay. Creekline.	Eucalyptus diversicolor forest.	locally common.		AUTO	3	14/12/1994
22269	1136534	20250	Eucalyptus calcicola subsp. calcicola	4	A low stunted tree to 2 m. Flowering when collected.	Growing on the seaward slope of a large dune (which has its peak 3 miles from the coast).			Abundance: restricted in occurrence; patch ca 2 hectares.	MAN	3	//1971
22270	1157388	20250	Eucalyptus calcicola subsp. calcicola	4	A several stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22271	1136488	20250	Eucalyptus calcicola subsp. calcicola	4						MAN	4	16/11/1981
22272	1136011	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 3 m tall, smooth grey bark, bright green slightly glossy leaves.				Oil collection 46.	MAN	3	24/03/1983
22273	1136518	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 3 m tall, smooth grey bark, bright green slightly glossy leaves.				Oil collection 46.	MAN	3	24/03/1983
22274	1135996	20250	Eucalyptus calcicola subsp. calcicola	4	Small mallee, 8 to 10 ft high.	Sand overlying limestone.	Coastal heath.			MAN	3	30/01/1973
22275	1157426	20250	Eucalyptus calcicola subsp. calcicola	4	A spreading mallee 4 m high, d.b.h. 6 cm, with smooth grey stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22276	1136496	20250	Eucalyptus calcicola subsp. calcicola	4	2.4 m tall smooth barked mallee.	Gradual slope, W aspect. Sand and outcropping limestone.	Forming open shrub mallee over Acacia truncata, Diplolaena, Scaevola, Oleria axillaris, Xanthorrhoea heath.			MAN	3	9/10/1984

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
22277	1157418	20250	Eucalyptus calcicola subsp. calcicola	4	A spreading mallee 4 m high, d.b.h. 6 cm, with smooth grey stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22278	1157396	20250	Eucalyptus calcicola subsp. calcicola	4	A several stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow, sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22279	3125467	20250	Eucalyptus calcicola subsp. calcicola	4	Tree mallee 3-5m, bark smooth.	Soil: Reddish brown sand. Topography: Well drained slight SW facing slope. Geology: Late Pleistocene coastal limestone.	Vegetation: Eucalyptus calcicola Shrub Mallee over Hakea spp., Spyridium globulosum Heath A.			MAN	0	28/11/1989
22280	1136437	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee to 3.5 m. Flowers white.	Calcareous ridge with westerly aspect.				MAN	3	22/05/1982
22281	1165305	20250	Eucalyptus calcicola subsp. calcicola	4	A several-stemmed mallee 3 m high, d.b.h. 5 cm, with smooth grey/green mottled stems.	Growing in shallow sandy soil on coastal limestone dunes.				MAN	3	24/09/1978
22282	1151053	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22283	1151037	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22284	1151045	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee up to 8 feet high. Many stemmed. Stems up to 1.5 inches in diam. Bark smooth greenish grey. Flower white.	On limestone close to coast.				MAN	3	18/06/1971
22285	9190228	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee, 3 m high. Bark rough, thin at base, smooth above. Juvenile leaves bright green.	Seaward limestone dune slope.	Heath.	common.		GPS	1	21/01/2017
22286	5999456	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee 4 m tall. Bark smooth, grey over yellow tan. Leaves glossy, light green.	On sand over limestone.	Eucalyptus megacarpa.			MAN	2	27/01/1996
22287	5895510	20250	Eucalyptus calcicola subsp. calcicola	4	Dense mallee to 4 m tall with smooth bark and bright green glossy leaves. Corrugated buds and fruits.	Ridge. Grey sand over limestone.	Mallee heath. Associated species: Spyridium globulosum, Olearia axillaris, Eucalyptus megacarpa, Agonis flexuosa, Dryandra sessilis, Templetonia retusa, Xanthorrhoea.	100's of plants. Plants occur in dense stands.		GPS	1	7/11/2001
22288	9359869	20250	Eucalyptus calcicola subsp. calcicola	4	Large mallee to 5 m tall. White flowers. Smooth grey bark, peeling at base.	W slope. Soil: pale brown sand.	Dense mallee shrubland. Associated species: Spyridium sp., Hakea sp., Templetonia retusa, Agonis flexuosa.	>25 plants.		GPS	1	10/03/2021
22289	1136038	20250	Eucalyptus calcicola subsp. calcicola	4					Oil collection 47.	MAN	3	24/03/1983

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
22290	8803978	20250	Eucalyptus calcicola subsp. calcicola	4	Mallee, 4 m tall. Bark rough, thin grey to 1 m, smooth cream-grey above.	W facing coastal slope, out-cropping limestone.	Coastal heath.	common on track.	Occurs within 200 m of Boranup Beach, occurs with Eucalyptus megacarpa other locations.	GPS	1	28/01/2015
22291	1136445	20250	Eucalyptus calcicola subsp. calcicola	4	A mallee 2.5 m tall with light grey or greenish-grey stems. Fruits conspicuously clustered in many specimens about half-way up around the main stem or main axis.	Outcropping limestone.	Growing in a pure dense stand.		Abundance: pure dense stand.	MAN	3	8/05/1972
22292	9359877	20250	Eucalyptus calcicola subsp. calcicola	4	Large mallee to 5 m tall. White flowers. Smooth grey bark, peeling at base.	W slope. Soil: pale brown sand.	Dense mallee shrubland. Associated species: Spyridium sp., Hakea sp., Templetonia retusa, Agonis flexuosa.	>25 plants.		GPS	1	10/03/2021
23731	4642864	16888	Eucalyptus marginata x megacarpa	4	Umbrageous tree 8 m tall with thin non-decorticated grey bark.	On 0.4 m of brown loamy sand over lateritic sand.				MAN	0	11/10/1975
25886	1676415	1945	Franklandia triaristata	4						AUTO	3	//
26164	1047671	20504	Gastrolobium formosum	3	Erect, multistemmed shrub. Flowers red.	Grey sand. Edges of river.	Jarrah/Marri forest, forms thickets.	common.		MAN	3	4/11/1978
26173	1047663	20504	Gastrolobium formosum	3	Flowers crimson.					MAN	3	28/12/1922
26174	1047655	20504	Gastrolobium formosum	3						MAN	3	28/12/1922
26176	1879693	20504	Gastrolobium formosum	3	Erect shrub 750 mm high, flowers red.	Sloped bank, soil variable.	Thick river vegetation.		Abundance: common along river	AUTO	4	26/09/1990
26178	1048198	20504	Gastrolobium formosum	3	Shrub 1-3 m. Flowers deep red; bracts rusty brown.	Ironstone. Swampy forest and thicket by the river.	Forest.			MAN	3	16/11/1982
26181	4406567	20504	Gastrolobium formosum	3	Erect open shrub 2 m x 2 m.	Grey peaty sand, swamp.	Heath.		Abundance: occasional.	GPS	1	19/09/1995
26184	7488874	20504	Gastrolobium formosum	3	Erect, spreading shrub; 0.5-3 m high, to 2 m wide; flowers red, Sep-Dec.			100+		TOPO	3	15/06/2001
26191	7892594	20504	Gastrolobium formosum	3	Sprawling shrub to 1.2 m high x 4 m diam. Inflorescences pendent, comprising 4 dark red flowers surrounded by 4 brownish-pubescent decussate bracts.	Swamy roadside on loamy soil.	Swamp-heath with Adenanthos detmoldii, Grevillea diversifolia.	abundant but localised.		GPS	1	5/08/2007
27159	3494438	6162	Gonocarpus pusillus	4		On shoulder of road half buried in drifting sand.			Same as A.E.Orchard 4340 but from wetter locality.	AUTO	3	8/12/1974
27163	3762343	6162	Gonocarpus pusillus	4	Low, rather compact herb with reddish upper stems and greenish flowers.	Grey sand.	Heathy fenland.			AUTO	4	8/12/1974
27176	4621395	6162	Gonocarpus pusillus	4	Low spreading perennial subshrub. In flower.	Winter wet flat. Brown loamy clay.	Eucalyptus calophylla woodland over sedges.		Abundance: locally common.	MAN	0	7/02/1997
28433	1459066	14010	Grevillea brachystylis subsp. australis	T						AUTO	3	24/04/1977

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
28435	8285632	14010	Grevillea brachystylis subsp. australis	T	Plants to 1 m tall, erect with lanceolate leaves. Flowers red and immature fruits pink-red.	Swamp. Flat, low lying. Winter wet clay soil over laterite.	Agonis flexuosa, Agonis parviceps, Grass weeds, Juncus sp., weed.	<20 plants seen.		GPS	1	30/11/2009
28437	1459074	14010	Grevillea brachystylis subsp. australis	T						AUTO	3	24/04/1977
28441	4357256	14010	Grevillea brachystylis subsp. australis	T	Upright generally single stemmed shrub. Pale green foliage. Occasional red flowers. Appears to be new growth (burnt 1992).	Swamp, dry, wet in winter. Grey sandy clay.	Heath B. Viminaria sp.		Abundance: in localised area, common. Does not appear to extend into Jarrah/Marri woodland fringing the swamp.	MAN	0	20/01/1996
28442	4357272	14010	Grevillea brachystylis subsp. australis	T	Upright, open to sprawling, straggly shrub 1 m x 60 cm. Bright red flowers with purple style. Pale dull green leaves. Many with insect predation.	Plain, dry, grey sandy-clay.	Woodland, Marri, Jarrah, Agonis, Viminaria sp.		Abundance: localised area frequent. Very restricted distribution. Road verge increasing weed invasion.	GPS	1	20/01/1996
28443	1071890	14010	Grevillea brachystylis subsp. australis	T	Prostrate shrub 10-15 cm x 40 cm high. Flower red, style purple.	Road verge, flats. Grey clay over clay.	Eucalyptus calophylla over Viminaria.	common.		MAN	3	28/01/1988
28444	1071882	14010	Grevillea brachystylis subsp. australis	T	Erect or spreading shrub 50 cm - 1.2 m high. Flower red, style purple.	Edges swamp or edges creek. Sandy clay over clay.	Eucalyptus calophylla over Agonis.		Common.	MAN	3	29/01/1988
28445	6784895	14010	Grevillea brachystylis subsp. australis	T	Sprawling, spreading shrub to 1 m wide, 10 cm high. Lignotuberous. Red perianth, blue style.	Undulating plain. Yellow sand. Moist depressions.	Wet heath.	locally frequent. Plentiful seedlings in area (see 1035A).		MAN	3	2/11/1986
28446	5467071	14010	Grevillea brachystylis subsp. australis	T	Sprawling shrub to 0.3 m tall with red flowers.	On ? reddish soil.	Dense low heath D.			MAN	0	3/05/1989
29754	4397401	18436	Grevillea manglesioides subsp. ferricola	3	Erect open shrub 2 m x 1 m, flowers greenish yellow.	Grey peaty sand, swamp.	Heath.	frequent.		GPS	1	19/09/1995
29756	5074355	18436	Grevillea manglesioides subsp. ferricola	3	Erect or spreading shrub 1.5 x 1.5 m; flowers red, green or red-green, in full flower.	Winter wet flats, red sandy clay over ironstone.	Shrubland over sedges Hakea tuberculata, Grevillea manglesioides, Melaleuca incana, Restio isomorphus.	abundant.		TOPO	3	5/10/1997
29758	6455867	18436	Grevillea manglesioides subsp. ferricola	3	Erect, compact perennial shrub 1.6 m high x 1.2 m wide. Flowers yellow-green.	Plain, open wetland. Soggy brown clayey sand, bare.	Road verge remnant.	ca 45 plants.	Percentage of population flowering 70%.	GPS	1	11/10/2000
29761	5443091	18436	Grevillea manglesioides subsp. ferricola	3	Open bush to 1.8m, flowers greenish.	lyBLS near drain line.	Denase low Heath (on road verge).			MAN	0	3/05/1989
29954	2143674	14911	Grevillea papillosa	3						AUTO	3	24/10/1948
29957	4396618	14911	Grevillea papillosa	3	Sprawling shrub 1 m x 2 m. Flowers white, style red, tip green.	Grey peaty sand, swamp.	Shrubland.		Abundance: frequent.	GPS	1	19/09/1995
29961	5443067	14911	Grevillea papillosa	3						MAN	0	30/04/1992

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
29969	6051545	14911	Grevillea papillosa	3	Erect, compact, perennial shrub 90 cm high x 1.6 m wide. Flowers reddish green. Fruit absent.	Watercourse - wetland. Soggy. W aspect.	Shrubland. Nuytsia floribunda, Meeboldina spp., Agonis parviceps, Adenanthos detmoldii.	locally abundant.	80% of population flowering. Weeds abundant.	GPS	1	3/10/2001
29970	6031595	14911	Grevillea papillosa	3	Prostrate, decumbent, compact, perennial shrub 1 m high x 1.5 m wide. Flowers reddish-green.	Plain - wetland. Open site. W aspect. Erosion present. Road verge. Brown loam.	Shrubland. Adenanthos detmoldii, Nuytsia floribunda, Agonis flexuosa.	locally abundant.	10% of population flowering. Weeds abundant.	GPS	1	3/10/2001
29973	7892292	14911	Grevillea papillosa	3	Prostrate shrub. Tepals whitish shading to dull plum-coloured at base and on limb; pollen-presenters green.	Swamy roadside on loamy soil.	Swamp-heath with Adenanthos detmoldii, Gastrolobium formosum.	frequent but localised.		GPS	1	5/08/2007
29974	1820893	14911	Grevillea papillosa	3						AUTO	4	24/10/1948
29975	3911217	14911	Grevillea papillosa	3	rounded shrub, 1.0M high, flowers yellow flushed red	sandy clay flat	wet heath-sedgeland			MAN	0	17/09/1990
29976	3055485	14911	Grevillea papillosa	3	rounded shrub, 1.0M high, flowers yellow flushed red	sandy clay flat	wet heath-sedgeland			MAN	0	17/09/1990
29977	3053873	14911	Grevillea papillosa	3	erect shrub, 600mm high, flowers red and yellow	flat sandy clay	jarrah marri			MAN	0	20/09/1990
32134	5577225	38322	Hemiandra sp. Windy Harbour (B.J. Conn & J.A. Scott BJC 3344)	3	Branched upright shrub 60 cm high x 40 cm wide. Mauve, reddish sepals.	Gentle slope. Light litter. Yellow-brown sand over granite.	Open Low Scrub A. Dodonoea ceratocarpa, Xanthorrhoea preissii, Hibbertia hypericoides, Hypocalymma angustifolium.	occasional.	Large granite outcrop surrounded by Jarrah-Marri forest.	MAN	0	13/11/1999
32231	1257323	6860	Hemigenia obovata	1	Erect compact shrub to 40 cm. Mauve flowers.	Flat plain. At roadside in wet sand. Black sand below white.	Very open heath with sedges.		Abundance: occasional	MAN	0	9/11/1985
32294	3777103	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Flowers mauve; straggling succulent herb or undershrub.	Gravelly soil.				AUTO	3	19/01/1945
32295	1811673	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Diffuse under shrub, 40 mm high. Flowers lilac.	Slopes, sandy.	Bossiaea - Mirbelia.		Abundance: uncommon.	MAN	0	2/01/1991
32297	4542479	49235	Hemigenia sp. Nillup (R.D. Royce 98)	2	Twining delicate herb. Pale mauve or lilac flowers, small.	Swamp. Dry grey sand. Inundated in winter.	Woodland over dense thicket with Eucalyptus marginata, Xanthorrhoea preissii, Mirbelia densiflora, Acacia pulchella, Dampiera diversifolia, Sedges, Hypocalymma cordifolium.	not common.	Growing in amongst dense vegetation close to swamp. Difficult to locate.	GPS	1	20/01/1996
33327	1846116	5222	Hybanthus volubilis	2	Twining perennial 500 mm high, flowers pale purple.	Gentle slope, sandy.	Jarrah - Marri.		Abundance: c. 50 plants in immediate vicinity.	AUTO	3	17/09/1990
33330	3508366	5222	Hybanthus volubilis	2	Scandent soft shrub 2-4 m, flowers pale blue.	Creekline, grey sandy clay over clay.	Eucalyptus patens woodland.	locally common.		MAN	0	25/09/1990
33724	8071292	17622	Hypolaena robusta	4	Male plant.	On grey sand with humus, somewhat poorly drained.	Banksia attenuata - Eucalyptus todtiana woodland with shrub undergrowth.			UNK	2	22/10/2008
34156	1903861	16522	Isopogon formosus subsp. dasylepis	3	Erect shrub to 1 m high. Flowers pink. Leaves pungent.	Brown-black sandy clay at roadside to flat topography.	Shrubland rising to woodland.			MAN	0	29/10/1985
34187	3054128	16522	Isopogon formosus subsp. dasylepis	3	low shrub, 400mm high, flowers red and grey	sandy flats	jarrah marri			MAN	0	17/09/1990
34830	4575024	14631	Juncus meianthus	3	Small sedge, height to 30 cm.	Valley floor.	Agonis linearifolia, Dampiera hederacea, Pteridium esculentum, Lepidosperma tetraquetrum, Astartea fasciularis, Bossiaea rufa.			MAN	0	2/12/1992

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
34901	8575282	33518	Kennedia lateritia	T	Climbing shrub to 1.5 m. Rounded glossy leaflets in groups of three. Pods brown-black.	S-E slope. Dark brown loam over granite.	In heath growing tangled amongst other shrubs and Eucalyptus. With agonis flexuosa, bracken fern, bridal creeper, Coprosma, Eucalyptus sp., Hardenbergia comptoniana, kikuyu, Lonicera japonica.	? 10 plants.	Many fruits with tiny aborted seeds.	GPS	1	22/12/2009
34903	456470	33518	Kennedia lateritia	T	Scandens, usque 3 m. alt., folia laete viridia, corolla rubra.					MAN	4	/10/1965
34904	4085140	33518	Kennedia lateritia	T						AUTO	3	//
34905	456454	33518	Kennedia lateritia	T						MAN	3	/11/1962
34908	1040146	33518	Kennedia lateritia	T	Twiner to 10 feet, flowers orange-yellow.	Granitic soil.				MAN	4	21/10/1972
34909	4135725	33518	Kennedia lateritia	T	Climbing shrub to 1.5 m. Rounded glossy leaflets in groups of three. Pods brown-black.	SE slope. Dark brown loam.	In heath, growing tangled amongst other shrubs with Eucalyptus diversicolor, Hardenbergia comptoniana, Macrozamia riedlei, bracken fern, bridal creeper.		Abundance: ca 10 plants (?).	GPS	1	14/12/1995
35182	8285543	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Shrub to 3.5 m with dense crown branching at 40-60 cm. Forming a clumped pure stand (constituting 1-3 families?).	Gently undulating plain. Sandy loam with well developed O horizon. Laterite.	Closed shrubland amid open woodland. With Acacia sp., Agonis flexuosa, Calothamnus sp. Scott River (R.D. Royce 84), Grevillea sp., weeds, Xanthorrhoea preissii.	>30 plants 10+ seedlings.		GPS	1	30/11/2009
35183	5428831	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Erect shrub to 2 m tall. A 3.5 m shrub with 8 cm diameter, trunk and large rootstock has existed.					MAN	0	15/08/1984
35197	8160465	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Plant in flower.	Roadside.				TOPO	2	27/03/2008
35200	3125823	19186	Lambertia orbifolia subsp. Scott River Plains (L.W. Sage 684)	T	Shrub to 3 m with sparse crowns branching from ca 60 cm.	Gentle slopes of riverbank. Parent material: alluvium. Loamy sand, pH: 6.0.	Riparian woodland/shrubland. Agonis juniperina, Agonis flexuosa, Banksia sp.		Abundance: ca 25 mature ca 35 seedlings.	MAN	0	15/05/1993
36702	434035	8100	Leptinella drummondii	3	Flowers yellow; rhizomatose and stoloniferous perennial.	Red clay loam on banks of river.				AUTO	3	20/02/1973
36712	4123530	17702	Leptomeria furtiva	2	Shrub. Fine, single stemmed, branching into terete branchlets. Pale green to yellow. Reddish colour to flowers. Flowers minute. Tuberous. Grows within shelter of other vegetation.	Swamp. Dry, winter wet. Grey sand.	Tall sedge. Anarthria scabra, sedges, Xanthorrhoea preissii, Beaufortia sparsa.	rare.	Hard to find.	GPS	1	21/01/1996
36714	4734424	17702	Leptomeria furtiva	2	Shrub. Fine, single stemmed, branching into terete branchlets. Pale green to yellow. Reddish colour to flowers. Flowers minute. Tuberous. Grows within shelter of other vegetation.	Swamp. Dry, winter wet. Grey sand.	Tall sedge. Anarthria scabra, sedges, Xanthorrhoea preissii, Beaufortia sparsa.	rare.	Hard to find.	GPS	1	21/01/1996
36805	2138085	17954	Lepyrodia extensa	2	Male.	Swamp, largely cleared, on moist peat.	In Melaleuca-Agonis swamp.		Abundance: common (see 722 female).	AUTO	3	20/09/1966
37697	1024477	33397	Leucopogon wheelerae	3						MAN	3	8/09/1965

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
37698	1841785	33397	Leucopogon wheelerae	3	Diffuse shrub, elegant, 450 mm, flowers pink-white.	Gentle slope, sand over laterite.	Wet heath.		Abundance: Common.	AUTO	4	25/09/1990
37700	1024485	33397	Leucopogon wheelerae	3	20 cm high shrub, spreading from short stem at base. Flowers white, buds pink.	On flat area over dark grey sand (white when dry). Disturbed roadside site.	Sedge-heath.		Abundance: locally abundant.	MAN	0	24/08/1986
37701	4396804	33397	Leucopogon wheelerae	3	Erect tangled shrub 70 x 50 cm, flowers white.	Grey sand, plain.	Shrubland.		Abundance: occasional.	GPS	1	19/09/1995
37702	4478584	33397	Leucopogon wheelerae	3	Erect open 70 cm high, 40 cm wide, sterile, tap roots.	Plain near swamp, grey sand.	Woodland.		Abundance: frequent.	GPS	1	12/06/1996
37704	1556355	33397	Leucopogon wheelerae	3	Shrub 40 cm, very spreading open growth, young branches bright red, flowers white, buds pink tipped.	Wet sand flat; roadside, flat plain.	Open sedge heath.	rare.		MAN	0	9/11/1985
37705	1024434	33397	Leucopogon wheelerae	3	Finely branched, woody shrub to 50 cm. Buds pink, flowers white.	White sand.	Low open heath.		Abundance: locally occasional.	MAN	0	24/08/1986
37706	5073790	33397	Leucopogon wheelerae	3	Highly branched shrub 50 cm tall; with multiple stems from base of plant; buds pink, corolla white, sepals and bracts deep pink/red; fruit green with red patches; young stems red with young growth forming very swollen buds before expansion; leaf apex ref	Roadside embankment; surrounding area a plain. Sand with high organic content.	Tussock vegetation less than 1 m tall; Cyperaceae, Juncaceae, Grevillea, Sphenotoma. Disturbed.	common.		MAN	0	10/10/1997
37707	5558042	33397	Leucopogon wheelerae	3						MAN	0	28/04/1992
37708	6051537	33397	Leucopogon wheelerae	3	Erect, compact, perennial shrub 45 cm high x 70 cm wide. Flowers white suffused pink. Fruit absent.	Plain, wetland. E-W aspect. Soggy, grey peaty sand. Road verge.	Disturbed area. Homalospermum firmum, Anarthria scabra, Meeboldina scariosa.	frequent.	80% of population flowering. Weeds abundant.	GPS	1	3/10/2001
37709	7467605	33397	Leucopogon wheelerae	3	Sprawling shrub 70 cm high x 70 cm wide. Plants single stemmed at ground level, fruiting.	Low winter wet flat. Seasonally damp or wet grey, sandy loam.	Heath mostly 1 - 1.5 m. Associated vegetation: Taxandria parviceps, Adenanthos obovatus, Boronia spathulata, numerous restiads.	occasional.		GPS	1	26/11/2006
37711	1024469	33397	Leucopogon wheelerae	3	Flowers white and pink, rounded delicately branched shrub, 3 ft. tall.					MAN	3	8/09/1971
37998	8245711	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub heath.	locally abundant.		UNK	3	11/09/1990
38002	8506418	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub heath.	locally abundant.		UNK	3	11/09/1990
38006	2528347	13779	Loxocarya magna	3	Very large clumps to 1.5 m.	Sand over ironstone pavement.	Wet scrub-heath.	locally abundant.		MAN	0	11/09/1990
38031	3052710	13779	Loxocarya magna	3	Perennial sedge, 500 mm high, flowers.	Shallow loam over laterite, flat.	Wet laterite heath.		Common on this laterite flat.	MAN	0	10/09/1990
38033	3050564	13779	Loxocarya magna	3	Tall sedge 1m.	Soil: Skeletal red loamy sand. Topography: Seasonally wet slight SW facing slope on ironstone.	Vegetation: Melaleuca preisianna Low Woodland B over Calothamnus lateralis Heath B.			MAN	0	19/11/1991
38475	1824503	5877	Melaleuca basicephala	4	Erect shrub 400 mm, flowers mauve.	Flats, depressions, sandy clay. Large wetlands.	Wet heath.		Abundance: common	AUTO	3	2/01/1991

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
38476	1081462	5877	Melaleuca basicephala	4	Flowers mauve-pink. Straggling undershrub to 60 cm.	Dense swamp.	Undershrub.			MAN	4	9/12/1978
38482	4986164	5877	Melaleuca basicephala	4	Low spreading multistemmed shrub, from a single base. Flowers purple, in full flower.	Brown clay loam.	Leptocarpus sedgeland.	locally common.		MAN	0	7/02/1997
38489	5797586	5877	Melaleuca basicephala	4	Spreading, woody sub shrub 50 cm high x 50 cm wide. Pink-violet flowers.	Flat, winter wet swamp. Light litter. Grey-black sandy peat. Underlying geology sediments.	Dwarf Scrub D. Velvet rush, sedges, Xyris flexiflora, Eutaxia virgata.	frequent in wet area of swamp.	Swamp starting to dry out, central area still wet.	GPS	1	28/11/2000
38490	8032130	5877	Melaleuca basicephala	4	Slender decumbent shrub, 20 cm high x 30 cm wide. Flowers light purple; in full flower.	Winter wet flat. Brown sandy clay.	Melaleuca low shrubland over low dense shrubland.	locally common.		GPS	1	17/11/2007
38491	8058520	5877	Melaleuca basicephala	4	Spreading few branched shrub 40 cm high x 40 cm wide. Flowers purple, in full flower.	Winter wet flats. Black peaty over clay.	Beaufortia sparsa, Agonis, Homalospermum firmum shrubland.	common.		GPS	1	17/11/2007
40153	4738349	50569	Netrostylis sp. Blackwood River (A.R. Annels 3043)	3	Sedge, height to 40 cm.	Valley floor.	Agonis flexuosa. A. linearifloia, Oxylobium lanceolatum, Lepidosperma tetraquetrum, Dampiera hederacea, Acacia alata.			MAN	0	18/11/1992
40162	4738322	50564	Netrostylis sp. Nannup (P.A. Jurjevich 1133)	1	Rush, height to 60 cm.	Valley floor.	Agonis linearifloia, Acacia pulchella, Lepidosperma tetraquetrum, Stylidium scandens, Dampiera hederaceae, Comesperma confertum, Gahnia trifida, Hovea elliptica.			MAN	0	18/11/1992
41686	1934848	11860	Philydrella pygmaea subsp. minima	1	Slender reddish plant.	In damp hollows.				MAN	0	8/12/1974
41949	5121981	12077	Pimelea ciliata subsp. longituba	3	Slender erect open shrub to 80 cm. Flowers pink, in full flower.	Grey sand.	Eucalyptus marginata woodland over Agonis.		Abundance: locally common.	MAN	0	30/10/1996
43424	572578	4179	Pultenaea pinifolia	3						MAN	3	/10/1905
43479	635138	4183	Pultenaea skinneri	4						MAN	3	//1873
43533	1127144	958	Reedia spathacea	T	Scapes up to 8 ft tall. Basal leaves eaten by cattle.	Moist, dark grey loam soil.				MAN	3	14/02/1971
43538	1127152	958	Reedia spathacea	T	Leaves 3-4 feet long, flowering stem to 8-9 inches long.	In spongy, wet swampy soil.				MAN	3	14/01/1945
43543	7886713	958	Reedia spathacea	T	Robust, tufted perennial sedge, 2-4m high, clumps 1.5-2m wide; flower brown, November-January.					GPS	1	12/10/2005
43550	5305195	958	Reedia spathacea	T	Ls 1.2 m long on basal stem to 0.4 m long x 0.1 m. Scape 3.3 m long, spathes 330 mm long, young flowers not seen.	Restricted occurance in swamp on lower parts of 5 degree to 10 degree slope. Soil organic over pale sandy loam.	Agonis linearfolia and monocots.			MAN	0	13/10/1983
44655	2263270	995	Schoenus indutus	1	Rhizomatous herb 10 cm x 20 cm, flowers brown.	Edges swamp, black sand over clay.	Marri over Kunzea.		Abundance: Common.	AUTO	4	28/01/1988
44657	3052826	999	Schoenus loliaceus	2	small aquatic sedge, 100mm high, flowers	sandy clay,flat	inundated cleared firebreak			MAN	0	20/11/1990
44658	3054780	999	Schoenus loliaceus	2	annual aquatic, 100mm high, flowers green	sandy depression	seasonally inundated depressions open firebreaks			MAN	0	26/09/1990

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
44797	6972985	16269	Schoenus sp. Grassy (E. Gude & J. Harvey 250)	2	Grasslike sprawling. Herb appears perennial 5-10 cm high and 30-40 cm wide. Pale green leaves and stems with large heads, red-brown leaf sheaths and plant bases.	Low seasonal wet area. Moist grey sandy loam.	Low forest B, over low heath C, over dense tall sedges, Melaleuca rhaphiophylla M. incana, Xanthorrhoea preissii, Rhadinothamnus anceps, Acacia alata, Lepidosperma spp. Baumea juncea.	only one plant noted.	Plant is growing around edges of small water hole dug in vegetation, it was collected for identification purposes and unfortunately its abundance was not noted.	MAN	2	17/06/2004
44801	4723201	16269	Schoenus sp. Grassy (E. Gude & J. Harvey 250)	2	Herb 50 cm high.	In peaty swamp.	Thick sedgeland dominated by Baumea spp. to 2.5 m. Associated species: Baumea spp., Gahnia trifida, Phlebalium sp., Lepidosperma sp.			GPS	1	18/12/1996
46584	4849353	19704	Stenanthemum sublineare	2	Perennial. Low open shrub, 5 cm high. Multistemmed at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: occasional.	GPS	1	26/08/1997
47094	8526788	20691	Stylidium gloeophyllum	4	Erect perennial herb, 15 cm high x 5 - 7 cm wide. Glandular sticky leaves and pale pink flowers.	Upland granite outcrop with brown loam over granite rock at shallow depth.	Verticordia plumosa, Darwinia citriodora, Pimelia imbricata, Stypandra glauca low shrubland, over Amphipogon sp., Neurachne alopecuroides grasses.	uncommon.		UNK	2	5/12/2013
47180	5849047	17850	Stylidium ireneae	4	Flowers pink. All plants in flower, some in juvenile fruit.	Growing in brown loamy soils.	Under Agonis flexuosa, Eucalyptus calophylla, Xanthorrhoea preissii.	Large population of multi-rosetted plants seen throughout natural bush.	Many specimens colonizing road side on man-made road verges, embankments and drainage road runoff lines. This Augusta collection is significant. This gathering is 185 km distance SW of the type location. *	GPS	1	19/11/2000
47213	4478517	17411	Stylidium leeuwinense	4	Erect dwarf shrub 30 cm high, 5 cm wide, fertile, flowers pink.	Plain near swamp, grey sand.	Woodland.		Abundance: occasional.	GPS	1	12/06/1996
47262	3051080	17411	Stylidium leeuwinense	4	Erect herb flowers dark pink.	Soil: Dark grey sand. Topography: Well drained flat. Geology: Pleistocene quartz sand.	Vegetation: Homalospermum firmum Low Heath C.			MAN	0	4/04/1991
47379	4840259	12590	Stylidium lowrieanum	3	Perennial. Rosulate herb, 2 cm high. Multistemmed at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Littered. Soil Colour: Pale Grey Soil Texture: Sand Comments: None pH: 5.00 Very Slightly Rocky 2% Exposed Limestone Fire History: 1992-93 Season: Unknown Type: Unknown	Open forest.	frequent.		GPS	1	28/08/1997

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
47383	2955792	12590	Stylidium lowrieanum	3						AUTO	3	/10/1905
47387	7751036	12590	Stylidium lowrieanum	3	Perennial herb 6-15 cm high with one whorl of scape bracts. Corolla lobes vertically-paired, white to pale pink.	Brown sand over limestone.	Agonis shrubland with Stylidium fasciculatum.	occasional.		GPS	2	28/11/1995
47392	3056651	12590	Stylidium lowrieanum	3	Tall trigger plant to 50 cm; leaves in basal rosette; corolla pale pink.		In Karri forest.			MAN	3	13/11/1993
47393	3051188	12590	Stylidium lowrieanum	3	Perennial herb.	Soil: Dark brown sand. Topography: Well drained slight WNW facing slope. Geology: Late Pleistocene coastal limestone.	Vegetation: Agonis flexuosa, Xanthorrhoea preissii Scrub over mixed Low Heath C.			MAN	2	25/11/1989
47971	7239785	33105	Stylidium sp. Scott River Plain (N.G. Marchant 74/23)	1						TOPO	3	22/01/1974
48150	3055728	20603	Stylidium trudgenii	3	tufted perennial herb, 500mm high, flowers pink mauve	sand depression	leptocarpus agonis wetland		uncommon	MAN	0	2/01/1991
49099	8285527	17271	Synaphea macrophylla	1	Prostrate plant with very large lobed leaves, pale green. Yellow flowers on tall stems.	Slight slope. Orange gravelly clay loam over laterite.	Woodland. With Corymbia calophylla, Daviesia cordata, Eucalyptus marginata, Leucopogon verticillatus, Mirbelia dilata.			GPS	1	30/11/2009
49105	4422643	17271	Synaphea macrophylla	1	Clumped shrub with ascending stems; rachis reddish green or green; flowers bright yellow; no scent.	In gravelly loam.	In Jarrah/Marri forest.			AUTO	4	21/10/1993
49106	5351758	17271	Synaphea macrophylla	1	Erect compact perennial shrub, height to 40 cm, width to 35 cm; flowers yellow; immature fruits present; deep tap root.	Hill; bare to littered yellow sandy loam.	Road culvert.		Population flowering: 70%. (91+ plants)	GPS	1	11/10/2000
49107	5351596	17271	Synaphea macrophylla	1	Erect compact perennial shrub, height to 40 cm, width to 40 cm; flowers yellow; deep tap root.	Undulating plain; bare to littered brown sandy clay over laterite.	Open forest with Corymbia calophylla, Agonis flexuosa, Daviesia cordata, Mirbelia dilatata, Eucalypus marginata.	locally frequent.	80% of population flowering.	GPS	1	11/10/2000
49109	7224575	17271	Synaphea macrophylla	1	Prostrate plant with very large lobed leaves, pale green. Yellow flowers on tall stems.	Slight slope. Orange gravelly clay loam. Laterite. Plants located on disturbed road edge and into bushland.	Woodland. Eucalyptus marginata, E. calophylla, Mirbelia dilata, Astroloma sp. Nannup, Leucopogon verticillatus, Daviesia cordata.	100+ plants.	Most fruits predated or aborted. Otherwise population is very healthy.	GPS	1	11/12/2001
49110	7836872	17271	Synaphea macrophylla	1	Leaves dark green, very broad with tapering base. Inflorescences with old flowers and second set of buds developing. Flowers opening narrowly and stigma oblong.	Strongly undulating topography, mid-slope. Laterite substrate with grey sand.	Eucalyptus woodland.	infrequent.		UNK	3	12/10/2000
49114	4422694	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
49115	5351731	17270	Synaphea nexosa	1	Erect, open to compact, perennial shrub, height to 40 cm, width to 40 cm; flowers yellow; plant overgrown and stressed.	Wetland; soggy brown sandy loam; disturbance (weeds) from powerline and road verge.	Weedy road verge.	locally occasional.	Population flowering: 100%. (12 plus plants).	GPS	1	11/10/2000
49116	5351820	17270	Synaphea nexosa	1	Erect perennial shrub, height to 40 cm, width to 40 cm.	Wetland; road verge, brown clayey sand.	Shrubland.	locally occasional.	Population flowering:100%.(9 plants). Floristic richness: 0-20 species.	GPS	0	11/10/2000
49117	8035776	17270	Synaphea nexosa	1	Erect, clumped shrub. Inflorescences greatly exceeding leaves, late flowering stage. Fruits developing, red on one side, neck prominent. Flowers somewhat compressed laterally, opening more narrowly than S. petiolaris, apices of tepals not strongly reflex	Clayey, flat area; Scott Plain. Degraded.	Remnant; Jarrah, Agonis flexuosa, Viminaria juncea, Xanthorrhoea preissii, Lepidosperma, Synaphea ?petiolaris.	occasional, <20 plants.		GPS	1	9/12/2008
49118	8114013	17270	Synaphea nexosa	1	Dwarf shrub 60 cm tall. Flowers opening widely. Juvenile leaves red-brown and glabrous. Fruits glabrous, reddening. Inflorescence exceeding leaves. Stigma distinctly forned with more or less incurved lobes.	Flat, seasonally wet area, lying below level of road. Grey-brown sand.	Disturbed roadside remnant. Xanthorrhoea preissii, Restionaceae, Fabaceae.	rare, ca 5 plants seen.		GPS	1	12/10/1997
49119	4422708	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993
49120	4422686	17270	Synaphea nexosa	1	Clumped, very dense; inflorescences held well above foliage; rachis red; flowers mid-yellow.	On clay-loam flat.	In mixed scrub.			MAN	0	21/10/1993
49498	4634659	18591	Synaphea sp. Redgate Road (J. Scott 16)	1	Sprawling, with many stems; rachis green; perianth yellow.	In gravel-loam.	In Marri forest.			MAN	0	21/10/1993
49500	5145627	18591	Synaphea sp. Redgate Road (J. Scott 16)	1	Compact, spreading shrub 50 cm high x 50 cm wide.	Wetland - road verge, winter wet. Litter, grey clay.	Woodland, Dense Low Heath D, Jarrah, Marri, Hibbertia hypericoides.		Abundance: locally abundant. Grows in wet conditions along roadside ditches.	MAN	0	17/07/1998
51516	8032157	1327	Thysanotus cymosus	3	Tuberous perennial herb, 20/40 cm high. Flowers purple, anthers black, in full flower.	Winter wet flats - sandy rise. Black peaty sand over clay.	Kunzea shrubland over Anarthria scabra sedgeland.	scattered.		GPS	1	17/11/2007
52341	1984772	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4	Tall herb, 650 mm high, flowers green-yellow.	Depression shallow, sandy clay.	Pericalymma - Leptocarpus woodland.		Abundance: Uncommon.	AUTO	3	2/01/1991
53554	5508401	6093	Verticordia lehmannii	4						MAN	0	30/04/1992

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Geo_Method	Precision	Date
53565	4849434	6093	Verticordia lehmannii	4	Perennial. Erect open shrub, 40 cm high. Flowers pink. Single stem at ground level. Plant active, healthy.	Site: Lowland. Soil Surface: Covered in swamp vegetation, sandy. Soil Colour: Dark Grey Soil Texture: Sand Comments: None pH: 5.00 No Rock Outcrop Fire History: 1993-94 Season: Unknown Type: Unknown	Low open woodland.		Abundance: locally frequent. Ca 2% of population flowering.	GPS	1	26/08/1997
53573	1086502	6093	Verticordia lehmannii	4	Shrub 30-60 cm x 10-30 cm. Flowers pinkish-purple with white reflexed lobes.	Grey sand and clay.			Abundance: 50-100 plants in a very small area (20 x 10 m). This specimen was collected for painting.	MAN	3	23/04/1983
53574	2579642	6093	Verticordia lehmannii	4	Flowers pink.	Base of grey sand ridge.	Low heath D and Low sedges in 5-10 m zone.			MAN	3	28/04/1992

APPENDIX 2

Atlas of Living Australia Report

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2891427	Caladenia huegelii	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Western Australia ; Conservation status | EPBC Act Threatened Species	
https://id.biodiversity.org.au/name/apni/129100	Caladenia interjacens	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2901628	Dampiera heteroptera	Rajput & Carolin	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2893323	Hydrocotyle sp. Hamelinensis (G.J.Keighery s.n. (PERTH 02391325))	WA Herbarium	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2908083	Lepyrodia extensa	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2914568	Meeboldina thysanantha MS	L.A.S.Johnson & B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2901117	Stylidium gloeophyllum	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae		Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2899602	Cardamine moirensis	I.Thomps.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Riverina Bitter-cress	Victoria : Conservation Status	
https://id.biodiversity.org.au/name/apni/81674	Corybas despectans	D.L.Jones & R.C.Nash	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Sandhill Helmet Orchid	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2905235	Deyeuxia quadriseta	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Bent grass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10070703	Dicranoloma diaphanoneuron	(Hampe) Paris	species	Plantae	Bryophyta	Bryopsida	Dicranales	Dicranaceae	Diaphanous Fork-moss	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891342	Levenhookia pusilla	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae	Midget Stylewort	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907149	Pelargonium littorale	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Coast Stork's-bill	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902063	Poa poiformis	(Labill.) Druce	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Blue Tussock Grass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891336	Triglochin trichophora	Nees	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae	Torpedo Arrowgrass	Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912261	Acrotriche cordata	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae	Coast Ground Berry	Tasmania : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888724	Parietaria debilis	G.Forst.	species	Plantae	Charophyta	Equisetopsida	Rosales	Urticaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2916674	Centipeda cunninghamii	(DC.) A.Braun & Asch.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51291672	Persicaria decipiens	(R.Br.) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/7386160	Schenkia australis	(R.Br.) G.Mans.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Gentianaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920067	Sporobolus virginicus	(L.) Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Seashore dropseed	Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893374	Tricoryne elatior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae		Tasmania : Conservation Status | Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51266490	Alternanthera denticulata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae	Lesser joyweed	Tasmania : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2906496	Chorizandra enodis	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	Black Bristle Rush	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892738	Lobelia rhombifolia	de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Tufted Lobelia	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914299	Phyllangium divergens	(Hook.f.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae	Wiry Mitrewort	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886928	Podotheca angustifolia	(Labill.) Less.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Sticky Heads	Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/8453517	Utricularia tenella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Pink Bladderwort	Tasmania : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51316831	Pterostylis tasmanica	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		South Australia : Conservation Status | Victoria : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2917094	Leptorhynchos scaber	(Benth.) Haegi	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Annual Buttons	South Australia : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2898687	Picris squarrosa	Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Squat Picris	South Australia : Conservation Status | Victoria : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886180	Poa drummondiana	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Knotted Poa	South Australia : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2896373	Asplenium trichomanes	L.	species	Plantae	Charophyta	Equisetopsida	Polypodiales	Aspleniaceae	Common Spleenwort	South Australia : Conservation Status | Tasmania : Conservation Status | Victoria : Conservation Status | ACT Rare Plant List | New Zealand Sensitive Species List for Vascular Plants	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2905984	Utricularia violacea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae	Violet Bladderwort	South Australia : Conservation Status | Tasmania : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2904505	Viminaria juncea	(Schrad. & J.C.Wendl.) Hoffmanns.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		South Australia : Conservation Status | Tasmania : Conservation Status | Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911719	Gratiola pubescens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	Austral Brooklime	South Australia : Conservation Status | Tasmania : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892177	Stypandra glauca	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae		South Australia : Conservation Status | Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903464	Lobelia heterophylla	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Wing-seeded Lobelia	South Australia : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2908930	Hydrocotyle diantha	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae	Kangaroo Island Pennywort	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886608	Isotoma scapigera	(R.Br.) G.Don	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Long-scaped Isotome	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2899003	Meionectes brownii	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	Swamp Raspwort	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893288	Phyllanthus calycinus	Labill.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae	False Boronia	South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914852	Polypogon tenellus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		South Australia : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/87231	Prasophyllum calcicola	R.J.Bates	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		South Australia : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903041	Kennedia lateritia	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status | EPBC Act Threatened Species	
https://id.biodiversity.org.au/node/apni/2897673	Acacia inops	Maiden & Blakely	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2896685	Acacia subracemosa	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Western Karri Wattle	Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2910812	Bossiaea disticha	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Western Australia ; Conservation status	
https://id.biodiversity.org.au/node/apni/2895742	Pteris vittata	L.	species	Plantae	Charophyta	Equisetopsida		Pteridaceae	Chinese brake	Queensland : Conservation Status | Victoria : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51311522	Roepera similis	(H.Eichler) Beier & Thulin	species	Plantae	Charophyta	Equisetopsida	Zygophyllales	Zygophyllaceae		Queensland : Conservation Status | Victoria : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886585	Beyeria viscosa	(Labill.) Miq.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae		Queensland : Conservation Status | Victoria : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920854	Isolepis cernua	(Vahl) Roem. & Schult.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Victoria : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901796	Daucus glochidiatus	(Labill.) Fisch., C.A.Mey. & Ave-Lall.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Pinaki	Queensland : Conservation Status | Northern Territory : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/ausmoss/10059274	Barbula calycina	SchwÃ¤gr.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51267823	Brachyscome iberidifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10066620	Campylopus introflexus	(Hedw.) Brid.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911592	Carex fascicularis	Sol. ex Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2916573	Cyperus laevigatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2898676	Exocarpos sparteus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10086811	Gymnostomum calcareum	Nees & Hornsch.	species	Plantae	Bryophyta	Bryopsida	Pottiales	Pottiaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2919217	Lachnagrostis filiformis	(G.Forst.) Trin.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Perehia	Queensland : Conservation Status | Northern Territory : Conservation Status	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2920431	Lobelia gibbosa	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907634	Medicago polymorpha	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2886103	Melilotus indicus	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2894269	Oxalis perennans	Haw.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2905928	Poranthera microphylla	Brongn.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/7061040	Pseudognaphalium luteoalbum	(L.) Hilliard & B.L.Burtt	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Pukatea	Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915568	Streptoglossa liatroides	(Turcz.) Dunlop	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912188	Actites megalocarpus	(Hook.f.) Lander	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2896508	Senecio hispidulus	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status | New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/node/apni/2908591	Sphaerolobium vimineum	Sm.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/name/apni/116042	Thelymitra nuda	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Queensland : Conservation Status | ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2905053	Acacia alata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889160	Acacia browniana	H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2908914	Acacia cochlearis	(Labill.) H.L.Wendl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888190	Acacia cyclops	A.Cunn. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2897063	Acacia divergens	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2904648	Acacia extensa	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2900213	Acacia gilbertii	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914671	Acacia littorea	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51286955	Acacia longifolia	(Andrews) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901160	Acacia myrtifolia	(Sm.) Willd.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51287044	Acacia pulchella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Prickly Moses	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2886690	Acacia rostellifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907533	Acacia uliginosa	Maslin	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2894580	Acacia urophylla	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51299839	Aotus cordifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915386	Bossiaea eriocarpa	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888058	Bossiaea linophylla	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893021	Bossiaea rufa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2893560	Bulbine semibarbata	(R.Br.) Haw.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2890796	Burchardia umbellata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893819	Callistachys lanceolata	Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2891269	Centrolepis fascicularis	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/2893573	Cephaloziella hirta	(Steph.) R.M.Schust.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Cephaloziellaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903296	Chorizandra cymbaria	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/8354183	Chorizema cordatum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902156	Chorizema diversifolium	A.DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914322	Chorizema ilicifolium	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920473	Chorizema rhombeum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/120752	Cladia aggregata	(Sw.) Nyl.	species	Plantae						Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/122517	Cladia schizopora	(Nyl.) Nyl.	species	Plantae						Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/127339	Collema glaucophthalmum	Nyl.	species	Plantae				Collemataceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/6979038	Craspedia variabilis	J.Everett & Doust	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Queensland : Conservation Status	
55095017	Cryptonemia undulata	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae		Queensland : Conservation Status	
55106001	Curdiea angustata	(Sonder) A.J.K.Millar	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2892431	Daviesia inflata	Crisp	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2901294	Dichelachne crinita	(L.f.) Hook.f.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Plume grass	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886410	Dichondra repens	J.R.Forst. & G.Forst.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae	Creeping dichondra	Queensland : Conservation Status	
NZOR-6-137124	Dichotomaria marginata	(J.Ellis & Sol.) Lam.	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Galaxauraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2898321	Dipogon lignosus	(L.) Verdc.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	mile-a-minute	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55130002	Euptilota articulata	(J.Agardh) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Callithamniaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51300117	Eutaxia epacridoides	Meisn.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2911963	Eutaxia myrtifolia	(Sm.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2909747	Ficinia nodosa	(Rottb.) Goetgh., Muasya & D.A.Simpson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2899214	Genista monspessulana	(L.) L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Weeds of National Significance (WoNS) as at Feb. 2013 | Weeds listing Queensland Government | National Weeds Lists | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2917378	Gompholobium polymorphum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
55106020	Gracilaria preissiana	(Sonder) Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae		Queensland : Conservation Status	
55121022	Haliptilon roseum	(Lamarck) Garbary & Johansen	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912367	Hardenbergia comptoniana	(Andrews) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/instance/ausmoss/10144112	Hedwigidium integrifolium	(P.Beauv.) Dixon	species	Plantae	Bryophyta	Bryopsida	Hedwigiales	Hedwigiaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903052	Hovea chorizemifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2915992	Hovea elliptica	(Sm.) DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/9442728	Isotropis cuneifolia	(Sm.) Walp.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2902225	Jacksonia horrida	DC.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2910276	Juncus planifolius	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893596	Kennedia carinata	(Benth.) Van Houtte	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/7238218	Kennedia coccinea	(Curtis) Vent.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2919218	Lathyrus latifolius	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
NZOR-6-64256	Laurencia brongniartii	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae		Queensland : Conservation Status	
55133011	Lenormandia spectabilis	Sonder	species	Plantae	Rhodophyta			Rhodomelaceae		Queensland : Conservation Status	

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2905839	Leptospermum laevigatum	(Gaertn.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	coast tea tree	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2886078	Leucopogon parviflorus	(Andrews) Lindl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2891182	Linum marginale	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Linaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2909260	Lobelia anceps	L.f.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae	Punakuru	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886127	Lotus angustissimus	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2893373	Lotus subbiflorus	Lag.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/74195	Microtis unifolia	(G.Forst.) Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae	Common onion orchid	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886391	Mirbelia dilatata	R.Br. ex Dryand.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920461	Oxalis exilis	A.Cunn.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/taxon/apni/51286820	Paraserianthes lophantha	(Willd.) I.C.Nielsen	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae	Plume albizia	Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2911110	Pelargonium australe	Willd.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
NZOR-6-111160	Peyssonnelia capensis	Mont.	species	Plantae	Rhodophyta	Florideophyceae	Peyssonneliales	Peyssonneliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51249803	Pteridium esculentum	(G.Forst.) Cockayne	species	Plantae	Charophyta	Equisetopsida	Polypodiales	Dennstaedtiaceae	Manehu	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889274	Pultenaea brachytropis	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2888651	Pultenaea ericifolia	Benth. ex Lindl.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51285711	Pultenaea reticulata	(Sm.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10110301	Rosulabryum albolimbatum	(Hampe) J.R.Spence	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2895388	Samolus repens	(J.R.Forst. & G.Forst.) Pers.	species	Plantae	Charophyta	Equisetopsida	Ericales	Primulaceae	MÄ koako	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903774	Schoenus nitens	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2920819	Sigesbeckia orientalis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Punawaru	Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907453	Sphaerolobium hygrophilum	R.Butcher	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2893196	Sphaerolobium nudiflorum	(Meisn.) Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2897832	Sphaerolobium racemulosum	Benth.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2912060	Stackhousia monogyna	Labill.	species	Plantae	Charophyta	Equisetopsida	Celastrales	Celastraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/ausmoss/10117643	Tayloria octoblepharum	(Hook.) Mitt.	species	Plantae	Bryophyta	Bryopsida	Splachnales	Splachnaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2896952	Templetonia retusa	(Vent.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2914196	Tetraria capillaris	(F.Muell.) J.M.Black	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae		Queensland : Conservation Status	
NZOR-6-89979	Thelymitra pauciflora sensu	Cheeseman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/122570	Thysanothecium scutellatum	(Fr.) D.J.Galloway	species	Plantae				Cladoniaceae		Queensland : Conservation Status	
NZOR-6-17611	Tricleocarpa cylindrica	(J.Ellis & Sol.) Huisman & Borow.	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Galaxauraceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/node/apni/2886977	Trifolium campestre	Schreb.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2905033	Trifolium subterraneum	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2893781	Triglochin striata	Ruiz & Pav.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/taxon/apni/51285764	Vicia sativa	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Fabaceae		Queensland : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/taxon/apni/51267241	Arctotheca calendula	(L.) K.Lewin	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2908064	Briza maxima	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	Great quaking grass	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2891835	Bromus diandrus	Roth	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2893162	Cardamine hirsuta	L.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae	Bitter cress	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2902145	Cenchrus clandestinus	(Hochst. ex Chiov.) Morrone	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/ausmoss/2896833	Chiloscyphus semiteres	(Lehm. & Lindenb.) Lehm. & Lindenb.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Lophocoleaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2897232	Crassula colorata	(Nees) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2889451	Echium plantagineum	L.	species	Plantae	Charophyta	Equisetopsida		Boraginaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests | National Weeds Lists | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/ausmoss/10075601	Entosthodon subnudus	(Taylor) Fife	species	Plantae	Bryophyta	Bryopsida	Funariales	Funariaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2903803	Erodium cicutarium	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2894434	Hordeum glaucum	Steud.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907367	Hypochaeris glabra	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	smooth catsear	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2904997	Juncus bufonius	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900900	Juncus kraussii	Hochst.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2909588	Oxalis corniculata	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2899343	Plantago lanceolata	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae	English plantain	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913511	Rhodanthe citrina	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	
https://id.biodiversity.org.au/node/apni/2907494	Silene nocturna	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912741	Solanum nigrum	L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae	Poroporo	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2895772	Sonchus oleraceus	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	Pororua	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2907105	Sporobolus africanus	(Poir.) Robyns & Tournay	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	ratstail	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
https://id.biodiversity.org.au/node/apni/2896776	Stellaria media	(L.) Vill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae	Kohukohu	Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2887197	Vulpia fasciculata	(Forssk.) Fritsch	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2891029	Xerochrysum bracteatum	(Vent.) Tzvelev	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae		Northern Territory : Conservation Status	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901610	Geranium retrorsum	L'HÃ©r. ex DC.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Matua-kÅ«mara	New Zealand Sensitive Species List for Vascular Plants	Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/7387836	Geranium solanderi	Carolin	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Matua-kÅ«mara	New Zealand Sensitive Species List for Vascular Plants	GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2887979	Juncus pauciflorus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae	Common rush	New Zealand Sensitive Species List for Vascular Plants	
https://id.biodiversity.org.au/name/apni/179292	Linguella nana	(R.Br.) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae		ACT Rare Plant List	
https://id.biodiversity.org.au/node/apni/2896012	Acanthocarpus preissii	Lehm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/name/apni/73211	Acianthus reniformis	(R.Br.) Schltr.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2896596	Actinotus glomeratus	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
55050002	Adelophycus corneus	(J.Agardh) Kraft	species	Plantae	Rhodophyta	Florideophyceae		Nemastomataceae			
https://id.biodiversity.org.au/node/apni/2897492	Adenanthos obovatus	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2912734	Agonis flexuosa	(Willd.) Sweet	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae	Peppermint willow		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896402	Agrostocrinum hirsutum	(Lindl.) Keighery	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2899616	Agrostocrinum scabrum	(R.Br.) Baill.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2915129	Aira cupaniana	Guss.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2890667	Alternanthera philoxeroides	(Mart.) Griseb.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Weeds of National Significance (WoNS) as at Feb. 2013 | Weeds listing Queensland Government | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913921	Amaryllis belladonna	L.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Amaryllidaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2889364	Ammi majus	L.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2913418	Ammophila arenaria	(L.) Link	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	European beachgrass		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2894932	Amperea simulans	R.J.F.Hend.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			
https://id.biodiversity.org.au/node/apni/2908821	Amphibolis griffithii	(J.M.Black) Hartog	species	Plantae	Charophyta	Equisetopsida	Alismatales	Cymodoceaceae	sea-nymph		
55121006	Amphiroa anceps	(Lamarck) Decaisne	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
NZOR-6-19303	Amphiroa anceps	(Lam.) Decne.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2901458	Anarthria prolifera	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae			
https://id.biodiversity.org.au/node/apni/2911540	Anarthria scabra	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Anarthriaceae			
https://id.biodiversity.org.au/node/apni/2900260	Andersonia caerulea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2897618	Andersonia geniculata	Lemson	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2889252	Anigozanthos flavidus	RedoutÃ©	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae	Evergreen kangaroo paw		
https://id.biodiversity.org.au/node/apni/2900204	Anigozanthos humilis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2900921	Anigozanthos manglesii	D.Don	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/taxon/apni/51299833	Anthocercis littorea	Labill.	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae			
55130032	Antithamnion hanovioides	(Sonder) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2891037	Aphelia cyperoides	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae			
https://id.biodiversity.org.au/node/apni/2914809	Apium annuum	P.S.Short	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2912609	Apium prostratum	Vent.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae	Sea celery		
https://id.biodiversity.org.au/name/apni/182319	Arachnorchis brownii	(Hopper) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2898204	Arctotheca populifolia	(P.J.Bergius) Norl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
NZOR-6-120100	Asparagopsis armata	Harv.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/taxon/apni/51288759	Astartea pulchella	(DC.) Rye	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2917694	Astroloma ciliatum	(Lindl.) Druce	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2909103	Astroloma pallidum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2902954	Austrostipa flavescens	(Labill.) S.W.L.Jacobs & J.Everett	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915032	Avellinia michelii	(Savi) Parl.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			Non-native species
https://id.biodiversity.org.au/node/apni/5040372	Banksia dallanneyi	A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2896043	Banksia grandis	Willd.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2905735	Banksia ilicifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2913977	Banksia littoralis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2905445	Banksia sessilis	(Knight) A.R.Mast & K.R.Thiele	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2913181	Baumea vaginalis	(Benth.) S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/taxon/apni/51291052	Bellardia trixago	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/6945171	Berkheya rigida	(Thunb.) Bolus & Wolley-Dod	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae	African thistle		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests
https://id.biodiversity.org.au/node/apni/2901234	Billardiera floribunda	(Putt.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2899057	Billardiera heterophylla	(Lindl.) L.Cayzer & Crisp	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2900860	Billardiera laxiflora	(Benth.) E.M.Benn.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2910549	Billardiera variifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2908511	Boronia alata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51311636	Boronia crenulata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2920563	Boronia denticulata	Sm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915094	Boronia heterophylla	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2907267	Boronia molloyae	J.Drumm.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913525	Boronia tenuior	Domin	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
55110001	Botryocladia sonderi	P.C.Silva	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2920944	Briza minor	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912917	Burchardia congesta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae			
https://id.biodiversity.org.au/node/apni/2904117	Caesia micrantha	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2919041	Cakile maritima	Scop.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2911277	Caladenia arrecta	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/135730	Caladenia attingens	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/90685	Caladenia bicalliata	R.S.Rogers	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/123015	Caladenia brownii	Hopper	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/90748	Caladenia cairnsiana	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91032	Caladenia corynephora	A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91238	Caladenia elongata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91294	Caladenia ferruginea	Nicholls	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91452	Caladenia flava	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/129096	Caladenia gardneri	Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91601	Caladenia hirta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91664	Caladenia infundibularis	A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91701	Caladenia latifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91784	Caladenia longicauda	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91880	Caladenia macrostylis	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91912	Caladenia marginata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/91994	Caladenia nana	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/92356	Caladenia rhomboidiformis	(E.Coleman) M.A.Clem. & Hopper	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/92397	Caladenia sericea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2902353	Calandrinia brevipedata	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Portulacaceae			
https://id.biodiversity.org.au/node/apni/2905552	Callistemon phoeniceus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51302262	Calothamnus quadrifidus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/ausmoss/10065951	Campylopus bicolor	(MÃ¼ll.Hal.) Wilson	species	Plantae	Bryophyta	Bryopsida	Dicranales	Leucobryaceae			
https://id.biodiversity.org.au/node/apni/2888650	Carex thecata	Boott	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2911970	Carpobrotus virescens	(Haw.) Schwantes	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae			
55095005	Carpopeltis elata	(Harvey) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
55095007	Carpopeltis spongeaplexus	Womersley & J.A. Lewis	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2899088	Cassytha flava	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2907668	Cassytha glabella	R.Br.	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2906672	Cassytha racemosa	Nees	species	Plantae	Charophyta	Equisetopsida	Laurales	Lauraceae			
https://id.biodiversity.org.au/node/apni/2887652	Catapodium rigidum	(L.) C.E.Hubb.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2912379	Centaurium erythraea	Rafn	species	Plantae	Charophyta	Equisetopsida	Gentianales	Gentianaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896375	Centranthus ruber	(L.) DC.	species	Plantae	Charophyta	Equisetopsida	Dipsacales	Caprifoliaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2899294	Centrolepis polygyna	(R.Br.) Hieron.	species	Plantae	Charophyta	Equisetopsida	Poales	Centrolepidaceae			
https://id.biodiversity.org.au/node/ausmoss/2895141	Cephaloziella varians	(Gottsche) Steph.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Cephaloziellaceae			
https://id.biodiversity.org.au/node/ausmoss/2890287	Chaetophyllopsis whiteleggei	(Carrington & Pearson) R.M.Schust.	species	Plantae	Marchantiophyta	Jungermanniopsida	Jungermanniales	Scapaniaceae			
https://id.biodiversity.org.au/node/apni/2920316	Chamaescilla corymbosa	(R.Br.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
55111014	Champia zostericola	(Harvey) Reedman & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Champiaceae			
55131019	Chauviniella coriifolia	(Harvey) Papenfuss	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae			
https://id.biodiversity.org.au/node/apni/2908384	Cheiranthera parviflora	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
55133032	Chondria curdieana	(J.Agardh) Falkenberg	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2909734	Chorilaena quercifolia	Endl.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/127705	Cladonia cervicornis	(Ach.) Flot.	species	Plantae				Cladoniaceae			
https://id.biodiversity.org.au/name/apni/137726	Cladonia enantia	Nyl.	species	Plantae				Cladoniaceae			
NZOR-6-2064	Cladonia neozelandica	Vain.	species	Plantae				Cladoniaceae			
https://id.biodiversity.org.au/name/apni/129474	Cladonia rigida	(Hook.f. & Taylor) Hampe	species	Plantae				Cladoniaceae			
55057005	Claviclonium ovatum	(J.V.Lamouroux) Kraft & Min-Thein	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae			
https://id.biodiversity.org.au/node/apni/2901148	Clematis linearifolia	Steud.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
https://id.biodiversity.org.au/node/apni/2887834	Clematis pubescens	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
55133051	Cliftonaea pectinata	(Harvey) Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55095009	Codiophyllum flabelliforme	(Sonder) F.Schmitz	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
https://id.biodiversity.org.au/node/apni/2919145	Comesperma calymega	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/2916907	Comesperma confertum	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/2897625	Comesperma virgatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			
https://id.biodiversity.org.au/node/apni/6283310	Conostylis aculeata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2918878	Coprosma repens	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2915629	Cortaderia selloana	(Schult. & Schult.f.) Asch. & Graebn.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/117409	Corybas recurvus	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2892673	Corymbia calophylla	(Lindl.) K.D.Hill & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2899137	Crassula glomerata	P.J.Bergius	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2894404	Crassula thunbergiana	Schult.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Crassulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55095012	Cryptonemia kallymenioides	(Harvey) Kraft	species	Plantae	Rhodophyta	Florideophyceae	Halymeniales	Halymeniaceae			
https://id.biodiversity.org.au/name/apni/89039	Cryptostylis ovata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
55106011	Curdiea irvineae	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae			
55106012	Curdiea obesa	(Harvey) Kylin	species	Plantae	Rhodophyta	Florideophyceae	Gracilariales	Gracilariaceae			
https://id.biodiversity.org.au/taxon/apni/51270683	Cuscuta epithymum	(L.) L.	species	Plantae	Charophyta	Equisetopsida	Solanales	Convolvulaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/174223	Cyanicula sericea	(Lindl.) Hopper & A.P.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2906808	Cyathochaeta avenacea	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2901642	Cycnogeton huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Juncaginaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2912620	Cynosurus echinatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	rough dogstail		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/taxon/apni/51283097	Cyperus congestus	Vahl	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/100165	Cyrtostylis huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2894031	Dampiera hederacea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2893089	Dampiera leptoclada	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2888259	Dampiera linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2897369	Dampiera tenuicaulis	E.Pritz.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2903276	Darwinia citriodora	(Endl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
55130128	Dasyphila preissii	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2895292	Dasypogon hookeri	J.Drumm.	species	Plantae	Charophyta	Equisetopsida	Dasypogonales	Dasypogonaceae			
https://id.biodiversity.org.au/node/apni/2887451	Desmocladus fasciculatus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2900824	Desmocladus flexuosus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2907521	Diaspasis filifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
55133061	Dictyomenia harveyana	Sonder	species	Plantae	Rhodophyta			Rhodomelaceae			
55133062	Dictyomenia sonderi	Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55133002	Dictyomenia tridens	(Mertens ex Turner) Greville	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/name/apni/182752	Dictyosphaeria sericea	Harv.	species	Plantae							
https://id.biodiversity.org.au/name/apni/179327	Diplodium rogersii	(E.Coleman) D.L.Jones & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2920924	Diplolaena dampieri	Desf.	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2914410	Dischisma arenarium	E.Mey.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/245525	Diuris jonesii	C.J.French & G.Brockman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/79346	Diuris longifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/83741	Drakaea glyptodon	Fitzg.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2897353	Drosanthemum candens	(Haw.) Schwantes	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Aizoaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/taxon/apni/51283539	Drosera drummondii	Planch.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2909880	Drosera enodes	N.G.Marchant & Lowrie	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51283567	Drosera indumenta	Lowrie & Conran	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51283580	Drosera macrantha	Endl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/taxon/apni/51298315	Drosera menziesii	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2889387	Drosera pallida	Lindl.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2908653	Drosera platypoda	Turcz.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2903335	Drosera pulchella	Lehm.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Droseraceae			
https://id.biodiversity.org.au/node/apni/2911051	Ehrharta erecta	Lam.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/name/apni/68104	Elythranthera brunonis	(Endl.) A.S.George	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2904092	Empodisma gracillimum	(F.Muell.) L.A.S.Johnson & D.F.Cutler	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/6987629	Erigeron canadensis	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/6990396	Erigeron sumatrensis	Retz.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/name/apni/89541	Eriochilus dilatatus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2891467	Erodium moschatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2899692	Eryngium pinnatifidum	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
55113002	Erythrymenia minuta	Kylin	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Faucheaceae			
https://id.biodiversity.org.au/node/apni/2916354	Eucalyptus calcicola	Brooker	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2886613	Eucalyptus cornuta	Labill.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2918255	Eucalyptus diversicolor	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51302290	Eucalyptus marginata	Donn ex Sm.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2893392	Eucalyptus megacarpa	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2897219	Eucalyptus patens	Benth.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2895139	Euphorbia helioscopia	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2906911	Euphorbia paralias	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Sea spurge		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
55130140	Euptilocladia spongiosa	Wollaston	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
55130142	Euptilota coralloidea	(J.Agardh) Ki¿½tzing	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Callithamniaceae			
https://id.biodiversity.org.au/node/apni/2887774	Exocarpos odoratus	(Miq.) A.DC.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2905672	Ferraria crispa	Burm.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/ausmoss/10083595	Fissidens taylorii	MÃ¼ll.Hal.	species	Plantae	Bryophyta	Bryopsida	Dicranales	Fissidentaceae			
https://id.biodiversity.org.au/node/apni/2900534	Galium murale	(L.) All.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae	Small bedstraw		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/name/apni/117457	Gastrodia lacista	D.L.Jones	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2904887	Geranium gardneri	de Lange	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			
https://id.biodiversity.org.au/node/apni/2902330	Geranium molle	L.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae	Namunamu		GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913312	Gladiolus cardinalis	Curtis	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2886541	Gnaphalium indutum	Hook.f.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2910332	Gonocarpus benthamii	Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2905790	Gonocarpus diffusus	(Diels) Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2902844	Gonocarpus micranthus	Thunb.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae	Piripiri		
https://id.biodiversity.org.au/node/apni/2919002	Goodenia pusilla	(de Vriese) de Vriese	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2901342	Grevillea brachystylis	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/taxon/apni/51300172	Grevillea manglesioides	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2891344	Gymnoschoenus anceps	(R.Br.) C.B.Clarke	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2891615	Haemodorum laxum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2895963	Haemodorum spicatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2910790	Hakea amplexicaulis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2896542	Hakea lasianthoides	Rye	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2903955	Hakea linearis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2916495	Hakea lissocarpha	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae	Honey bush		
https://id.biodiversity.org.au/node/apni/7823819	Hakea oleifolia	(Sm.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/taxon/apni/51300183	Hakea pandanicarpa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2893007	Hakea prostrata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2900733	Hakea ruscifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2919591	Hakea tuberculata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
55130004	Haloplegma preissii	(Harvey) Montagne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2908815	Haloragis digyna	Labill.	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2918338	Heliophila pusilla	L.f.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900200	Hemarthria uncinata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2904766	Hemiandra pungens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			
55057006	Hennedya crispa	Harvey	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Acrotylaceae			
55132038	Heterosiphonia muelleri	(Sonder) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
55132044	Heterosiphonia wrangelioides	(Harvey) Reinbold	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
https://id.biodiversity.org.au/node/apni/2901311	Hibbertia amplexicaulis	Steud.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2908888	Hibbertia cuneiformis	(Labill.) Sm.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2903911	Hibbertia diamesogenos	(Steud.) J.R.Wheeler	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/taxon/apni/51300216	Hibbertia grossulariifolia	(Salisb.) Salisb.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/taxon/apni/51298304	Hibbertia hypericoides	(DC.) Benth.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2893275	Hibbertia perfoliata	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2894620	Hibbertia pilosa	Steud.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2896141	Hibbertia racemosa	(Endl.) Gilg	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/name/apni/51306673	Hibbertia semipilosa	K.R.Thiele	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2914214	Hibbertia serrata	Hotchk.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2908255	Hibbertia stellaris	Endl.	species	Plantae	Charophyta	Equisetopsida		Dilleniaceae			
https://id.biodiversity.org.au/node/apni/2892036	Hirschfeldia incana	(L.) Lagr.-Foss.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2907479	Holcus lanatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2898345	Homalosciadium homalocarpum	(F.Muell.) H.Eichler	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2896476	Homalospermum firmum	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2903011	Hornungia procumbens	(L.) Hayek	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2887643	Hyalosperma cotula	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2918303	Hybanthus debilissimus	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Violaceae			
https://id.biodiversity.org.au/node/apni/2897882	Hydrocotyle algida	N.A.Wakef.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2897655	Hydrocotyle blepharocarpa	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2894173	Hydrocotyle callicarpa	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2914728	Hydrocotyle hirta	R.Br. ex A.Rich.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2887633	Hydrocotyle hispidula	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/instance/apni/761215	Hydrocotyle intertexta	R.Br. ex A.Rich.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2915098	Hydrocotyle pilifera	Turcz.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2898261	Hydrocotyle scutellifera	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2904119	Hydrocotyle tetragonocarpa	Bunge	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
55113014	Hymenocladia chondricola	(Sonder) J.Lewis	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
55113020	Hymenocladia usnea	(R.Brown ex Turner) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2898411	Hypericum perforatum	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Hypericaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | WA State Notifiable Pests | Weeds listing Queensland Government | Global Invasive Species Information Network (GISIN)
55061001	Hypnea ramentacea	(C.Agardh) J. Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Gloiosiphoniaceae			
https://id.biodiversity.org.au/node/ausmoss/10089505	Hypnum cupressiforme	Hedw.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Hypnaceae			
https://id.biodiversity.org.au/node/apni/2918204	Hypocalymma robustum	(Endl.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
55131034	Hypoglossum revolutum	(Harvey) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Delesseriaceae			
https://id.biodiversity.org.au/node/apni/2902062	Hypolaena exsulca	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2908047	Hypolaena pubescens	(R.Br.) Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2912929	Hypolaena viridis	L.A.S.Johnson & B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2920942	Isolepis levynsiana	Muasya & D.A.Simpson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			Non-native species
https://id.biodiversity.org.au/node/apni/2891248	Isolepis prolifera	(Rottb.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae	three-square		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2917276	Isotoma hypocrateriformis	(R.Br.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
NZOR-6-26225	Jania affinis	Harv.	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2905697	Johnsonia lupulina	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hemerocallidaceae			
https://id.biodiversity.org.au/node/apni/2900324	Juncus microcephalus	Kunth	species	Plantae	Charophyta	Equisetopsida	Poales	Juncaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55042010	Kraftia dichotoma	Shepley & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dumontiaceae			
55133088	Kuetzingia angusta	Harvey	species	Plantae	Rhodophyta			Rhodomelaceae			
55133089	Kuetzingia canaliculata	(Greville) Sonder	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2893469	Lagenophora huegelii	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2917995	Lagurus ovatus	L.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2902376	Lasiopetalum floribundum	Benth.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/name/apni/9349594	Lasiopetalum occidentale	K.A.Sheph. & C.F.Wilkins	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
NZOR-6-37652	Laurencia elata	(C.Agardh) Hook.f. & Harv.	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
55133008	Laurencia filiformis	(C.Agardh) Montagne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2897938	Lemna disperma	Hegelm.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Araceae			
https://id.biodiversity.org.au/node/apni/2913538	Lepidium rotundum	(Desv.) DC.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			
https://id.biodiversity.org.au/node/apni/2907847	Lepidosperma angustatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/7121288	Lepidosperma calcicola	R.L.Barrett & K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2914832	Lepidosperma effusum	Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2896726	Lepidosperma gladiatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2895560	Lepidosperma leptostachyum	Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2919436	Lepidosperma squamatum	Labill.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2900500	Lepidosperma tetraquetrum	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/taxon/apni/51293740	Leptocarpus coangustatus	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/taxon/apni/51293793	Leptocarpus scariosus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/name/apni/247171	Leptocarpus thysananthus	B.G.Briggs	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/name/apni/60226	Leptoceras menziesii	(R.Br.) Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2909051	Leptomeria scrobiculata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2917266	Leptomeria squarrulosa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Santalales	Santalaceae			
https://id.biodiversity.org.au/node/apni/2895169	Leptospermum erubescens	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2914117	Leucophyta brownii	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2896873	Leucopogon australis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2888913	Leucopogon capitellatus	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2888147	Leucopogon gilbertii	Stschegl.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/taxon/apni/51284002	Leucopogon glabellus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2886450	Leucopogon interstans	Hislop	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/3601859	Leucopogon obovatus	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2919524	Leucopogon pendulus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2905202	Leucopogon propinquus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2898177	Leucopogon racemulosus	DC.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2908100	Leucopogon verticillatus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2911951	Levenhookia pauciflora	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
55025020	Liagora wilsoniana	Zeh	species	Plantae	Rhodophyta	Florideophyceae	Nemaliales	Liagoraceae			
https://id.biodiversity.org.au/node/apni/2886820	Limonium sinuatum	(L.) Mill.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Plumbaginaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2904282	Liparophyllum lasiospermum	(F.Muell.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/taxon/apni/51288662	Liparophyllum latifolium	(Benth.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/node/apni/2915025	Lobelia tenuior	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
https://id.biodiversity.org.au/node/apni/2911683	Lobularia maritima	(L.) Desv.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915625	Logania vaginalis	(Labill.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae			
https://id.biodiversity.org.au/node/apni/2888174	Lomandra caespitosa	(F.Muell. ex Benth.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2894809	Lomandra integra	T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2911793	Lomandra nigricans	T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2913413	Lomandra pauciflora	(R.Br.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2893609	Lomandra sericea	(Endl.) Ewart	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/name/apni/101016	Lyperanthus serratus	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2915937	Macrozamia riedlei	(Fisch. ex Gaudich.) C.A.Gardner	species	Plantae	Charophyta	Equisetopsida	Cycadales	Zamiaceae			
https://id.biodiversity.org.au/node/apni/2914187	Marianthus candidus	HÃ¼gel ex Endl.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
https://id.biodiversity.org.au/node/apni/2903542	Marianthus tenuis	Benth.	species	Plantae	Charophyta	Equisetopsida	Apiales	Pittosporaceae			
55130191	Medeiothamnion halurus	(Harvey) E.Gordon	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Wrangeliaceae			
https://id.biodiversity.org.au/node/apni/2915205	Melaleuca huegelii	Endl.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2913065	Melaleuca incana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2896656	Melaleuca preissiana	Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2915917	Melaleuca systena	Craven	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2915420	Mentha aquatica	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2896543	Mentha pulegium	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lamiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2921022	Mercurialis annua	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae	Dog's mercury		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2887332	Mesomelaena graciliceps	(C.B.Clarke) K.L.Wilson	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2903256	Mesomelaena tetragona	(R.Br.) Benth.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
55121069	Metagoniolithon chara	(Lamarck) Ducker	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121070	Metagoniolithon radiatum	(Lamarck) Ducker	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121003	Metagoniolithon stelliferum	(Lamarck) Weber-van Bosse	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
55121071	Metamastophora flabellata	(Sonder) Setchell	species	Plantae	Rhodophyta	Florideophyceae	Corallinales	Corallinaceae			
https://id.biodiversity.org.au/node/apni/2916956	Microlaena stipoides	(Labill.) R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae	PÄ‚Ã«tÃ«		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/name/apni/73792	Microtis alba	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/73914	Microtis brownii	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/73920	Microtis densiflora	(Benth.) M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/74001	Microtis media	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2906267	Millotia myosotidifolia	(Benth.) Steetz	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2904122	Millotia tenuifolia	Cass.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2904253	Monotaxis occidentalis	Endl.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Euphorbiaceae			
https://id.biodiversity.org.au/node/apni/4750977	Muehlenbeckia adpressa	(Labill.) Meisn.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Polygonaceae			
https://id.biodiversity.org.au/node/apni/2904981	Myoporum insulare	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2908996	Myoporum oppositifolium	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			
https://id.biodiversity.org.au/node/apni/2919702	Myriophyllum salsugineum	Orchard	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
55059001	Nizymenia conferta	(Sonder) Chiovitti, Saunders & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Nizymeniaceae			
55059002	Nizymenia furcata	(Harvey) Chiovitti, Saunders & Kraft	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Nizymeniaceae			
https://id.biodiversity.org.au/node/apni/2889663	Nuytsia floribunda	(Labill.) R.Br. ex G.Don	species	Plantae	Charophyta	Equisetopsida	Santalales	Loranthaceae	Western Australian Christmas tree		
https://id.biodiversity.org.au/node/apni/2915964	Olearia axillaris	(DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2898016	Olearia elaeophila	(A.Cunn. ex DC.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2903906	Olearia paucidentata	(Steetz) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2905512	Olearia rudis	(Benth.) F.Muell. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2886612	Oncosiphon suffruticosum	(L.) Kallersjo	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2891338	Opercularia echinocephala	Benth.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2912636	Opercularia hispidula	Endl.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2913924	Opercularia scabrida	Schltdl.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2893649	Opercularia vaginata	Labill. ex Juss.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/node/apni/2914900	Opercularia volubilis	R.Br. ex Benth.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			
https://id.biodiversity.org.au/taxon/apni/51288225	Orianthera serpyllifolia	(R.Br.) C.S.P.Foster & B.J.Conn	species	Plantae	Charophyta	Equisetopsida	Gentianales	Loganiaceae			
https://id.biodiversity.org.au/taxon/apni/51288688	Ornduffia parnassifolia	(Labill.) Tippery & Les	species	Plantae	Charophyta	Equisetopsida	Asterales	Menyanthaceae			
https://id.biodiversity.org.au/node/apni/2903083	Orobanche minor	Sm.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55133148	Osmundaria prolifera	J.V.Lamouroux	species	Plantae	Rhodophyta			Rhodomelaceae			
https://id.biodiversity.org.au/node/apni/2917706	Oxalis incarnata	L.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Oxalidaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/taxon/apni/51291069	Parentucellia latifolia	(L.) Caruel	species	Plantae	Charophyta	Equisetopsida	Lamiales	Orobanchaceae	Sticky bartsia		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2904580	Patersonia occidentalis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			
https://id.biodiversity.org.au/node/apni/2908467	Patersonia umbrosa	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			
https://id.biodiversity.org.au/node/apni/7455751	Pauridia glabella	(R.Br.) Snijman & Kocyan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Hypoxidaceae			
https://id.biodiversity.org.au/node/apni/2908379	Pelargonium alchemilloides	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | National Weeds Lists
https://id.biodiversity.org.au/node/apni/2908333	Pelargonium capitatum	(L.) L'HÃ©r.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2901876	Pelargonium drummondii	Turcz.	species	Plantae	Charophyta	Equisetopsida	Geraniales	Geraniaceae			
https://id.biodiversity.org.au/node/apni/2894633	Pentapeltis silvatica	(Diels) Domin	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2892102	Persoonia longifolia	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2886251	Petrophile axillaris	Meisn.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2898563	Petrophile serruriae	R.Br.	species	Plantae	Charophyta	Equisetopsida	Proteales	Proteaceae			
https://id.biodiversity.org.au/node/apni/2900642	Petrorhagia dubia	(Raf.) G.Lopez & Romo	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
55058003	Phacelocarpus apodus	J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			
55058002	Phacelocarpus peperocarpos	(Poiret) M.J. Wynne, Ardriï¿½ & P.C. Silva	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			
NZOR-6-119784	Phacelocarpus sessilis	Harv. ex J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Phacelocarpaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886300	Philotheca spicata	(A.Rich.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2915837	Philydrella pygmaea	(R.Br.) Caruel	species	Plantae	Charophyta	Equisetopsida	Commelinales	Philydraceae			
https://id.biodiversity.org.au/node/apni/2903217	Phlebocarya ciliata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/node/apni/2916353	Picris angustifolia	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2913302	Pimelea clavata	Labill.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2906270	Pimelea ferruginea	Labill.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2888598	Pimelea hispida	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2890451	Pimelea imbricata	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2908504	Pimelea rosea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2892341	Pimelea spectabilis	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/2905275	Pimelea sylvestris	R.Br.	species	Plantae	Charophyta	Equisetopsida	Malvales	Thymelaeaceae			
https://id.biodiversity.org.au/node/apni/7056827	Pithocarpa cordata	(DC.) Schmidt-Leb. & R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/7057513	Pithocarpa ramosa	(DC.) Schmidt-Leb. & R.L.Barrett	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2907927	Plantago exilis	Decne.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			
https://id.biodiversity.org.au/node/apni/2889667	Platysace compressa	(Labill.) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2903788	Platysace filiformis	(Bunge) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2896233	Platysace juncea	(Bunge) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2920858	Platysace tenuissima	(Benth.) C.Norman	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
NZOR-6-33381	Plocamium cartilagineum	(L.) P.S.Dixon	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
55090004	Plocamium mertensii	(Greville) Harvey	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
55090009	Plocamium preissianum	Sonder	species	Plantae	Rhodophyta	Florideophyceae	Plocamiales	Plocamiaceae			
https://id.biodiversity.org.au/name/apni/9605937	Plumatichilos serotinus	D.L.Jones, C.J.French & M.A.Clem.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2914796	Poa homomalla	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915173	Poa porphyroclados	Nees	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2894055	Podocarpus drouynianus	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Pinales	Podocarpaceae			
https://id.biodiversity.org.au/node/apni/2891893	Podolepis gracilis	Graham	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2890292	Podolepis lessonii	(Cass.) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2895392	Polygala myrtifolia	L.	species	Plantae	Charophyta	Equisetopsida	Fabales	Polygalaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2910698	Poranthera drummondii	Klotzsch	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae			
https://id.biodiversity.org.au/node/apni/2920874	Poranthera huegelii	Klotzsch	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Phyllanthaceae			
https://id.biodiversity.org.au/name/apni/104509	Prasophyllum fimbria	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/105032	Prasophyllum hians	Rchb.f.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/106157	Prasophyllum regium	R.S.Rogers	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/3707332	Prasophyllum sp. early (G.Brockman GBB 1626)		species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
NZOR-6-59550	Pterocladia lucida	(Turner) J.Agardh	species	Plantae	Rhodophyta			Pterocladiaceae			
https://id.biodiversity.org.au/name/apni/237084	Pterostylis brevisepala	J.R.Wheeler, N.G.Marchant & M.Lewington	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/51258529	Pterostylis ectypha	(D.L.Jones & C.J.French) D.L.Jones & C.J.French	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/74992	Pterostylis nana	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/75560	Pterostylis rogersii	E.Coleman	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/75971	Pterostylis vittata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
55130221	Ptilocladia vestita	(Harvey) Wollaston	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2920050	Ptilotus drummondii	(Moq.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/apni/2891179	Ptilotus sericostachyus	(Nees) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/apni/2891611	Ptilotus stirlingii	(Lindl.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Amaranthaceae			
https://id.biodiversity.org.au/node/ausmoss/10107316	Ptychostomum angustifolium	(Brid.) J.R.Spence & H.P.Ramsay	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae			
https://id.biodiversity.org.au/node/ausmoss/10108619	Racopilum cuspidigerum	(SchwÃ¤gr.) Ã...ngstr.	species	Plantae	Bryophyta	Bryopsida	Hypnodendrales	Racopilaceae			
https://id.biodiversity.org.au/node/apni/2890275	Ranunculus colonorum	Endl.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			
https://id.biodiversity.org.au/node/apni/2907093	Ranunculus muricatus	L.	species	Plantae	Charophyta	Equisetopsida	Ranunculales	Ranunculaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2888230	Rhadinothamnus anceps	(DC.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Sapindales	Rutaceae			Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2913396	Rhagodia baccata	(Labill.) Moq.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
55053003	Rhodoglossum gigartinoides	(Sonder) Edyvane & Womersley	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Gigartinaceae			
55042011	Rhodopeltis australis	(Harvey) Harvey	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dumontiaceae			
NZOR-6-28285	Rhodymenia sonderi	P.C.Silva	species	Plantae	Rhodophyta	Florideophyceae	Rhodymeniales	Rhodymeniaceae			
https://id.biodiversity.org.au/node/apni/2896357	Romulea rosea	(L.) Eckl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Iridaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/ausmoss/10110398	Rosulabryum campylothecium	(Taylor) J.R.Spence	species	Plantae	Bryophyta	Bryopsida	Bryales	Bryaceae			
https://id.biodiversity.org.au/node/apni/2908709	Rubus laudatus	A.Berger	species	Plantae	Charophyta	Equisetopsida	Rosales	Rosaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | WA State Notifiable Pests
https://id.biodiversity.org.au/node/apni/2911607	Rytidosperma pilosum	(R.Br.) Connor & Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2915685	Rytidosperma setaceum	(R.Br.) Connor & Edgar	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2908785	Sarcocornia blackiana	(Ulbr.) A.J.Scott	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
https://id.biodiversity.org.au/node/apni/2906539	Scaevola anchusifolia	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2918481	Scaevola calliptera	Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2893977	Scaevola crassifolia	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2917770	Scaevola glandulifera	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2889975	Scaevola globulifera	Labill.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2911395	Scaevola microphylla	(de Vriese) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2916912	Scaevola nitida	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2913099	Schoenus bifidus	(Nees) Boeckeler	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2893349	Schoenus curvifolius	(R.Br.) Poir.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2918334	Schoenus grandiflorus	(Nees ex Lehm.) F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2896412	Schoenus latitans	S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2888386	Schoenus rigens	S.T.Blake	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2916328	Schoenus sublateralis	(Steud.) C.B.Clarke	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/ausmoss/10113352	Sematophyllum subhumile	(MÃ¼ll.Hal.) M.Fleisch.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Sematophyllaceae			
https://id.biodiversity.org.au/node/apni/2910676	Senecio elegans	L.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/name/apni/242122	Senecio lautus	G.Forst.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2888279	Senecio multicaulis	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2917792	Senecio pinnatifolius	A.Rich.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2893478	Senecio ramosissimus	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2898986	Sherardia arvensis	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Rubiaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2900859	Silene gallica	L.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Caryophyllaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2892966	Siloxerus filifolius	(Benth.) Ostenf.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2886532	Solanum symonii	H.Eichler	species	Plantae	Charophyta	Equisetopsida	Solanales	Solanaceae			
https://id.biodiversity.org.au/node/apni/2896184	Sowerbaea laxiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
55130233	Spermothamnion cymosum	(Harvey) De Toni	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2899600	Sphenotoma gracilis	(R.Br.) Sweet	species	Plantae	Charophyta	Equisetopsida	Ericales	Ericaceae			
https://id.biodiversity.org.au/node/apni/2897920	Sporadanthus rivularis	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2908206	Sporadanthus strictus	(R.Br.) B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2900587	Spyridium globulosum	(Labill.) Benth.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
https://id.biodiversity.org.au/node/apni/2917529	Stenopetalum robustum	Endl.	species	Plantae	Charophyta	Equisetopsida	Brassicales	Brassicaceae			
https://id.biodiversity.org.au/node/apni/2910515	Stenotaphrum secundatum	(Walter) Kuntze	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2921108	Stylidium acuminatum	(Carlquist) Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2890737	Stylidium adnatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2917156	Stylidium amoenum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2888659	Stylidium androsaceum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2902939	Stylidium caespitosum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2909592	Stylidium fasciculatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/taxon/apni/51294367	Stylidium hesperium	Wege	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2901489	Stylidium junceum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2891766	Stylidium lowrieanum	Carlquist	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2904168	Stylidium pygmaeum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2911942	Stylidium rhynchocarpum	Sond.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2916440	Stylidium scandens	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2920123	Stylidium spathulatum	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asterales	Stylidiaceae			
https://id.biodiversity.org.au/node/apni/2910072	Taraxis grossa	B.G.Briggs & L.A.S.Johnson	species	Plantae	Charophyta	Equisetopsida	Poales	Restionaceae			
https://id.biodiversity.org.au/node/apni/2916557	Taxandria fragrans	(J.R.Wheeler & N.G.Marchant) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51300349	Taxandria juniperina	(Schauer) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2894898	Taxandria linearifolia	(DC.) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/apni/2900496	Taxandria parviceps	(Schauer) J.R.Wheeler & N.G.Marchant	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/taxon/apni/51283213	Tetraria octandra	(Nees) KÃ¾k.	species	Plantae	Charophyta	Equisetopsida	Poales	Cyperaceae			
https://id.biodiversity.org.au/node/apni/2902391	Tetrarrhena laevis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Poales	Poaceae			
https://id.biodiversity.org.au/node/apni/2920211	Tetratheca filiformis	Benth.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2896026	Tetratheca hirsuta	Lindl.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2886663	Tetratheca setigera	Endl.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2899487	Thalassodendron pachyrhizum	Hartog	species	Plantae	Charophyta	Equisetopsida	Alismatales	Cymodoceaceae			
https://id.biodiversity.org.au/name/apni/97103	Thelymitra crinita	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115296	Thelymitra fuscolutea	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115384	Thelymitra graminea	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/115854	Thelymitra macrophylla	Lindl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/name/apni/188214	Thelymitra vulgaris	Jeanes	species	Plantae	Charophyta	Equisetopsida	Asparagales	Orchidaceae			
https://id.biodiversity.org.au/node/apni/2893885	Thomasia grandiflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2894817	Thomasia paniculata	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2908597	Thomasia pauciflora	Lindl.	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2892440	Thomasia triphylla	(Labill.) J.Gay	species	Plantae	Charophyta	Equisetopsida	Malvales	Malvaceae			
https://id.biodiversity.org.au/node/apni/2896155	Threlkeldia diffusa	R.Br.	species	Plantae	Charophyta	Equisetopsida	Caryophyllales	Chenopodiaceae			
https://id.biodiversity.org.au/node/apni/2899134	Thryptomene saxicola	(A.Cunn. ex Hook.) Schauer	species	Plantae	Charophyta	Equisetopsida	Myrtales	Myrtaceae			
https://id.biodiversity.org.au/node/ausmoss/10118616	Thuidiopsis furfurosa	(Hook.f. & Wilson) M.Fleisch.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Thuidiaceae			
https://id.biodiversity.org.au/node/ausmoss/10119041	Thuidiopsis sparsa	(Hook.f. & Wilson) Broth.	species	Plantae	Bryophyta	Bryopsida	Hypnales	Thuidiaceae			
55132003	Thuretia quercifolia	Decaisne	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Dasyaceae			
https://id.biodiversity.org.au/node/apni/2912118	Thysanotus arenarius	Brittan	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2894540	Thysanotus gracilis	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/taxon/apni/51267100	Thysanotus multiflorus	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2915505	Thysanotus patersonii	R.Br.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asparagaceae			
https://id.biodiversity.org.au/node/apni/2913946	Trachyandra divaricata	(Jacq.) Kunth	species	Plantae	Charophyta	Equisetopsida	Asparagales	Asphodelaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2886346	Trachymene coerulea	Graham	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2916273	Trachymene pilosa	Sm.	species	Plantae	Charophyta	Equisetopsida	Apiales	Araliaceae			
https://id.biodiversity.org.au/node/apni/2893326	Tremandra diffusa	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2916077	Tremandra stelligera	R.Br. ex DC.	species	Plantae	Charophyta	Equisetopsida	Oxalidales	Elaeocarpaceae			
https://id.biodiversity.org.au/node/apni/2895152	Tribonanthes australis	Endl.	species	Plantae	Charophyta	Equisetopsida	Commelinales	Haemodoraceae			
https://id.biodiversity.org.au/taxon/apni/51269051	Trichocline spathulata	(A.Cunn. ex DC.) J.H.Willis	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
https://id.biodiversity.org.au/node/apni/2910345	Trihaloragis hexandra	(F.Muell.) M.L.Moody & Les	species	Plantae	Charophyta	Equisetopsida	Saxifragales	Haloragaceae			
https://id.biodiversity.org.au/node/apni/2913192	Trymalium ledifolium	Fenzl	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
https://id.biodiversity.org.au/node/apni/2891523	Trymalium odoratissimum	Lindl.	species	Plantae	Charophyta	Equisetopsida	Rosales	Rhamnaceae			
55055003	Tylotus obtusatus	(Sonder) J.Agardh	species	Plantae	Rhodophyta	Florideophyceae	Gigartinales	Dicranemataceae			
https://id.biodiversity.org.au/node/apni/2895958	Ursinia speciosa	DC.	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2904814	Utricularia paulineae	Lowrie	species	Plantae	Charophyta	Equisetopsida	Lamiales	Lentibulariaceae			
https://id.biodiversity.org.au/node/apni/2911448	Velleia macrophylla	(Lindl.) Benth.	species	Plantae	Charophyta	Equisetopsida	Asterales	Goodeniaceae			
https://id.biodiversity.org.au/node/apni/2892131	Verbascum creticum	(L.) Cav.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2920526	Verbascum virgatum	Stokes	species	Plantae	Charophyta	Equisetopsida	Lamiales	Scrophulariaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2897057	Veronica arvensis	L.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species
https://id.biodiversity.org.au/node/apni/2913390	Veronica distans	R.Br.	species	Plantae	Charophyta	Equisetopsida	Lamiales	Plantaginaceae			
https://id.biodiversity.org.au/node/apni/2908818	Vinca major	L.	species	Plantae	Charophyta	Equisetopsida	Gentianales	Apocynaceae	Periwinkle		GRIIS - Global Register of Introduced and Invasive Species - Australia | Global Invasive Species Information Network (GISIN)
https://id.biodiversity.org.au/node/apni/2901926	Viola odorata	L.	species	Plantae	Charophyta	Equisetopsida	Malpighiales	Violaceae	Violet		GRIIS - Global Register of Introduced and Invasive Species - Australia
https://id.biodiversity.org.au/node/apni/2913788	Wahlenbergia gracilenta	Lothian	species	Plantae	Charophyta	Equisetopsida	Asterales	Campanulaceae			
https://id.biodiversity.org.au/node/apni/2918789	Waitzia suaveolens	(Benth.) Druce	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			
55130255	Wollastoniella myriophylloides	(Harvey) E.Gordon	species	Plantae	Rhodophyta	Florideophyceae	Ceramiales	Ceramiaceae			
https://id.biodiversity.org.au/node/apni/2912176	Wurmbea monantha	(Endl.) T.D.Macfarl.	species	Plantae	Charophyta	Equisetopsida	Liliales	Colchicaceae			
https://id.biodiversity.org.au/node/apni/2905888	Xanthorrhoea preissii	Endl.	species	Plantae	Charophyta	Equisetopsida	Asparagales	Xanthorrhoeaceae			
https://id.biodiversity.org.au/node/apni/2910094	Xanthosia atkinsoniana	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/node/apni/2910279	Xanthosia candida	(Benth.) Steud.	species	Plantae	Charophyta	Equisetopsida	Apiales	Apiaceae			
https://id.biodiversity.org.au/taxon/apni/51311057	Xerochrysum macranthum	(Benth.) Paul G.Wilson	species	Plantae	Charophyta	Equisetopsida	Asterales	Asteraceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
https://id.biodiversity.org.au/node/apni/2917018	Xyris gracillima	F.Muell.	species	Plantae	Charophyta	Equisetopsida	Poales	Xyridaceae			
https://id.biodiversity.org.au/node/apni/6917219	Zantedeschia aethiopica	(L.) Spreng.	species	Plantae	Charophyta	Equisetopsida	Alismatales	Araceae	Arum lily		GRIIS - Global Register of Introduced and Invasive Species - Australia | Non-native species | WA State Notifiable Pests | Global Invasive Species Information Network (GISIN)
eb326170-b652-4a0f-80e8-26e0cd0943b6	Crucibulum laeve	(Huds.) Kambly	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Agaricaceae		Queensland : Conservation Status | Northern Territory : Conservation Status	
9e396944-1d26-4895-afce-8219ded08f38	Amanita xanthocephala	(Berk.) D.A.Reid & R.N.Hilton	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Amanitaceae		Queensland : Conservation Status	
2a309a7e-20d9-479f-b835-db4530273301	Anthracophyllum archeri	(Berk.) Pegler	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
e6d2b97e-bcd0-4f47-8a21-ad935fce79da	Armillaria luteobubalina	Watling & Kile	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Physalacriaceae		Queensland : Conservation Status	
23190e80-b492-4c2d-95a2-8887fdba7eac	Austroboletus occidentalis	Watling & N.M.Greg.	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae		Queensland : Conservation Status	
011002b7-08bb-43cb-904e-382156827125	Boletellus obscurecoccineus	(HÃ¶hn.) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Boletaceae		Queensland : Conservation Status	
005d003c-ef61-49d7-a707-89407c058550	Cortinarius archeri	Berk.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae		Queensland : Conservation Status	
89d7d3c7-0b38-41a7-aaf7-2845a1ca0f03	Cortinarius persplendidus	Gasparini	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Cortinariaceae		Queensland : Conservation Status	
2d643cea-1812-4e1f-bb18-83238a40b5d9	Cystangium balpineum	Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae		Queensland : Conservation Status	
22adf4ab-cb28-4b05-afe2-ea55c7531f85	Fistulina hepatica	(Schaeff.) With.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Fistulinaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/120868	Flavoparmelia haysomii	(C.W.Dodge) Hale	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
58ab8571-0cb8-49c7-9632-282d5486d0e8	Geastrum triplex	Jungh.	species	Fungi	Basidiomycota	Agaricomycetes	Geastrales	Geastraceae		Queensland : Conservation Status	
NZOR-6-21771	Hyperphyscia adglutinata	(FlÃ¶rke) H.Mayrhofer & Poelt	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae		Queensland : Conservation Status	
61895931-343b-47cc-b12a-2c8589c71e73	Hypholoma fasciculare	(Huds.) P.Kumm.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Strophariaceae		Queensland : Conservation Status	
5883002e-7bc1-46f9-b926-658797ceb30c	Labyrinthomyces varius	(Rodway) Trappe	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Tuberaceae		Queensland : Conservation Status	
8ee91933-e091-4a64-87f4-fa494a05b9f9	Laccocephalum mylittae	(Cooke & Massee) NÃºÃ±ez & Ryvarden	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/155362	Marasmius crinisequi	F.Muell.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
500cdc4e-c73b-4c34-aaf1-829da78dce54	Marasmius elegans	(Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
NZOR-6-70219	Notoparmelia erumpens	(Kurok.) A.Crespo, Ferencova & Divakar	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
880abd7a-b60f-44b6-8c08-ea72f832d2e0	Omphalotus nidiformis	(Berk.) O.K.Mill.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae		Queensland : Conservation Status	
NZOR-6-1965	Panaeolus papilionaceus	(Bull.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Bolbitiaceae		Queensland : Conservation Status	
NZOR-6-97062	Phellinus gilvus	(Schwein.) Pat.	species	Fungi	Basidiomycota	Agaricomycetes	Hymenochaetales	Hymenochaetaceae		Queensland : Conservation Status	
1c30b8f8-617c-465b-8e44-8594b64170b8	Piptoporus australiensis	(Wakef.) G.Cunn.	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Fomitopsidaceae		Queensland : Conservation Status	
628f718d-28dc-4ad6-97a6-b91fa02927ea	Psathyrella echinata	(Cleland) Grgur.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Psathyrellaceae		Queensland : Conservation Status	
NZOR-6-113645	Pyxine subcinerea	Stirt.	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae		Queensland : Conservation Status	
590a6784-9633-4fd1-b273-52eaca4ad604	Russula persanguinea	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae		Queensland : Conservation Status	
NZOR-6-1856	Tephromela atra	(Huds.) Hafellner	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Tephromelataceae		Queensland : Conservation Status	
NZOR-6-47855	Usnea inermis	Motyka	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/125583	Xanthoparmelia isidiigera	(MÃ¾ll.Arg.) Elix & J.Johnst.	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
https://id.biodiversity.org.au/name/apni/135979	Xanthoparmelia neorimalis	(Elix & P.M.Armstr.) Elix & T.H.Nash	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae		Queensland : Conservation Status	
fbde5899-a023-4d4f-9c9f-d33c90647714	Batrachochytrium dendrobatidis	Longcore, Pessier & D.K.Nichols	species	Fungi	Chytridiomycota	Chytridiomycetes	Rhizophydiales				GRIIS - Global Register of Introduced and Invasive Species - Australia
NZOR-6-11980	Buellia albula	(Nyl.) MÃ¾ll.Arg.	species	Fungi	Ascomycota	Lecanoromycetes	Teloschistales	Physciaceae			
1bad8470-6db3-46ae-b38a-8a1d5697c1cb	Hemimycena cephalotricha	(Redhead) Singer	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae			
NZOR-6-4547	Henningsomyces candidus	(Pers.) Kuntze	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Porotheleaceae			
NZOR-6-25837	Hohenbuehelia ligulata	(E. Horak) J.A. Cooper	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Pleurotaceae			
4f039d30-04d7-42eb-9d47-14da0199f1fc	Laccocephalum sclerotinium	(Rodway) NÃºÃ±ez & Ryvarden	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae			
1c5bd30e-b3b9-400c-a99c-f43b260bf012	Macrotyphula juncea	(Alb. & Schwein.) Berthier	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Typhulaceae			
db8c1ea7-6a61-4470-9b3b-e3abce97c5b7	Marasmius alveolaris	Cleland	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Marasmiaceae			
2b810ccb-cdba-490d-bccc-801952d533ad	Mesophellia labyrinthina	Trappe et al.	species	Fungi	Basidiomycota	Agaricomycetes	Hysterangiales	Mesophelliaceae			

Species	Species Name	Scientific Name Authorship	Taxon Rank	Kingdom	Phylum	Class	Order	Family	Vernacular Name	Conservation	Invasive
39997875-a008-4234-ab60-1dd5a5f94d59	Mycena tenerrima	(Berk.) QuÃ©l.	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Mycenaceae			
d486f280-ff62-4c22-8525-a0d0869a1b20	Neolentinus dactyloides	(Cleland) Redhead & Ginns	species	Fungi	Basidiomycota	Agaricomycetes	Polyporales	Polyporaceae			
NZOR-6-127069	Phaeosphaeriopsis glaucopunctata	(Grev.) M.P.S. CÃ¢mara, M.E. Palm & A.W. Ramaley	species	Fungi	Ascomycota	Dothideomycetes	Pleosporales	Phaeosphaeriaceae			
94f154b9-2cf0-415a-9f34-cfed1815ced2	Plectania rhytidia	(Berk.) Nannf. & Korf	species	Fungi	Ascomycota	Pezizomycetes	Pezizales	Sarcosomataceae			
6086df2b-e495-4c65-914c-cab7c16d23fc	Pleuroflammula praestans	E.Horak	species	Fungi	Basidiomycota	Agaricomycetes	Agaricales	Inocybaceae			
NZOR-6-30170	Ramaria capitata	Corner	species	Fungi	Basidiomycota	Agaricomycetes	Gomphales	Gomphaceae			
NZOR-6-134409	Ramboldia stuartii	(Hampe) Kantvilas & Elix	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Lecanoraceae			
3880e427-e351-41af-8d3c-2d27ffee799b	Russula pumicoidea	T.Lebel	species	Fungi	Basidiomycota	Agaricomycetes	Russulales	Russulaceae			
68027715-7d73-4ed8-a777-051e63139ae5	Scleroderma paradoxum	G.W.Beaton	species	Fungi	Basidiomycota	Agaricomycetes	Boletales	Sclerodermataceae			
https://id.biodiversity.org.au/name/apni/121823	Xanthoparmelia parvoincerta	Elix & J.Johnst.	species	Fungi	Ascomycota	Lecanoromycetes	Lecanorales	Parmeliaceae			

APPENDIX 3

Protected Matters Search Tool Report

Australian Government
Department of Agriculture, Water and the Environment

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 10-Feb-2022

Summary
Details
- Matters of NES
- Other Matters Protected by the EPBC Act
- Extra Information

Caveat
Acknowledgements

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the Administrative Guidelines on Significance.

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	1
Listed Threatened Species:	52
Listed Migratory Species:	42

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at http://www.environment.gov.au/heritage

A permit may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	64
Whales and Other Cetaceans:	12
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	3
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	8
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities [Resource Information]

For threatened ecological communities where the distribution is well known, maps are derived from recovery plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.
Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Aquatic Root Mat Community 2 in Caves of the Leeuwin Naturaliste Ridge	Endangered	Community known to occur within area	In buffer area only

Listed Threatened Species [Resource Information]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.
Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anous tenuirostris melanops Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Diomedea amsterdamensis](#) Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
[Diomedea dabbenena](#) Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
[Diomedea epomophora](#) Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Diomedea exulans](#) Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Diomedea sanfordi](#) Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Halobaena caerulea](#) Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Limosa lapponica menzbieri](#) Northern Siberian Bar-tailed Godwit, Russkoye Bar-tailed Godwit [86432]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
[Macronectes giganteus](#) Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
[Macronectes halli](#) Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Numenius madagascariensis](#) Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Pachyptila turtur subantarctica](#) Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Pterodroma mollis Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area	In feature area
Thalassarche carteri Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Zanda baudinii listed as Calyptorhynchus baudinii Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Breeding known to occur within area	In feature area
Zanda latirostris listed as Calyptorhynchus latirostris Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat likely to occur within area	In feature area
FISH			
Thunnus maccoyii Southern Bluefin Tuna [69402]	Conservation Dependent	Species or species habitat likely to occur within area	In buffer area only
FROG			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Geocrinia alba](#) White-bellied Frog, Creek Frog [26181]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
MAMMAL			
[Balaenoptera musculus](#) Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
[Dasyurus geoffroii](#) Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area
[Eubalaena australis](#) Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
[Megaptera novaeangliae](#) Humpback Whale [38]	Vulnerable	Congregation or aggregation known to occur within area	In buffer area only
[Neophoca cinerea](#) Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
[Pseudocheirus occidentalis](#) Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area	In feature area
[Setonix brachyurus](#) Quokka [229]	Vulnerable	Species or species habitat likely to occur within area	In feature area
OTHER			
[Westralunio carteri](#) Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
PLANT			
[Banksia nivea subsp. uliginosa](#) Swamp Honeypot [82766]	Endangered	Species or species habitat likely to occur within area	In feature area
[Banksia squarrosa subsp. argillacea](#) Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Caladenia hoffmanii Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat may occur within area	In feature area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area	In feature area
Gastrolobium papilio Butterfly-leaved Gastrolobium [78415]	Endangered	Species or species habitat may occur within area	In feature area
Lambertia echinata subsp. occidentalis Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat may occur within area	In feature area
Reedia spathacea Reedia [2995]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
REPTILE			
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Natator depressus Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
SHARK			
Carcharias taurus (west coast population) Grey Nurse Shark (west coast population) [68752]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Rhincodon typus			
Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Sphyrna lewini			
Scalloped Hammerhead [85267]	Conservation Dependent	Species or species habitat may occur within area	In buffer area only

Listed Migratory Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Ardenna carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea amsterdamensis			
Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena			
Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora			
Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans			
Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi			
Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hydroprogne caspia			
Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Macronectes giganteus			
Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli			
Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Onychoprion anaethetus			
Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Phoebetria fusca			
Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche carteri			
Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Thalassarche cauta			
Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Thalassarche impavida			
Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche melanophris			
Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Thalassarche steadi			
White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Migratory Marine Species			

Scientific Name	Threatened Category	Presence Text	Buffer Status
Balaenoptera edeni Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
Balaenoptera musculus Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Caperea marginata Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
Carcharhinus longimanus Oceanic Whitetip Shark [84108]		Species or species habitat may occur within area	In buffer area only
Carcharodon carcharias White Shark, Great White Shark [64470]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In buffer area only
Caretta caretta Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
Chelonia mydas Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Dermochelys coriacea Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
Eubalaena australis as Balaena glacialis australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Lamna nasus Porbeagle, Mackerel Shark [83288]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Congregation or aggregation known to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Mobula alfredi as Manta alfredi](#) Reef Manta Ray, Coastal Manta Ray [90033]		Species or species habitat may occur within area	In buffer area only
[Mobula birostris as Manta birostris](#) Giant Manta Ray [90034]		Species or species habitat may occur within area	In buffer area only
[Natator depressus](#) Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
[Orcinus orca](#) Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
[Rhincodon typus](#) Whale Shark [66680]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Migratory Wetlands Species			
[Actitis hypoleucos](#) Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
[Calidris acuminata](#) Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
[Calidris canutus](#) Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In feature area
[Calidris ferruginea](#) Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
[Calidris melanotos](#) Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
[Charadrius leschenaultii](#) Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Limosa lapponica			
Bar-tailed Godwit [844]		Species or species habitat may occur within area	In buffer area only
Numenius madagascariensis			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area

Other Matters Protected by the EPBC Act

Commonwealth Lands [Resource Information]

The Commonwealth area listed below may indicate the presence of Commonwealth land in this vicinity. Due to the unreliability of the data source, all proposals should be checked as to whether it impacts on a Commonwealth area, before making a definitive decision. Contact the State or Territory government land department for further information.

Commonwealth Land Name	State	Buffer Status
Unknown		
Commonwealth Land - [51482]	WA	In buffer area only

Listed Marine Species [Resource Information]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Anous tenuirostris melanops			
Australian Lesser Noddy [26000]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Apus pacificus			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Ardenna carneipes as Puffinus carneipes			
Flesh-footed Shearwater, Fleshy-footed Shearwater [82404]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Bubulcus ibis as Ardea ibis			
Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Charadrius leschenaultii Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Diomedea amsterdamensis Amsterdam Albatross [64405]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea dabbenena Tristan Albatross [66471]	Endangered	Species or species habitat may occur within area	In buffer area only
Diomedea epomophora Southern Royal Albatross [89221]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea exulans Wandering Albatross [89223]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Diomedea sanfordi Northern Royal Albatross [64456]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
Halobaena caerulea Blue Petrel [1059]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hydroprogne caspia as Sterna caspia Caspian Tern [808]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
Limosa lapponica Bar-tailed Godwit [844]		Species or species habitat may occur within area	In buffer area only
Macronectes giganteus Southern Giant-Petrel, Southern Giant Petrel [1060]	Endangered	Species or species habitat may occur within area	In buffer area only
Macronectes halli Northern Giant Petrel [1061]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
Onychoprion anaethetus as Sterna anaethetus Bridled Tern [82845]		Foraging, feeding or related behaviour likely to occur within area	In buffer area only
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area	In buffer area only
Phoebetria fusca Sooty Albatross [1075]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Pterodroma mollis](#) Soft-plumaged Petrel [1036]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Puffinus assimilis](#) Little Shearwater [59363]		Foraging, feeding or related behaviour known to occur within area	In buffer area only
[Stercorarius skua as Catharacta skua](#) Great Skua [823]		Species or species habitat may occur within area	In buffer area only
[Thalassarche carteri](#) Indian Yellow-nosed Albatross [64464]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
[Thalassarche cauta](#) Shy Albatross [89224]	Endangered	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Thalassarche impavida](#) Campbell Albatross, Campbell Black-browed Albatross [64459]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Thalassarche melanophris](#) Black-browed Albatross [66472]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Thalassarche steadi](#) White-capped Albatross [64462]	Vulnerable	Foraging, feeding or related behaviour likely to occur within area	In buffer area only
[Thinornis cucullatus as Thinornis rubricollis](#) Hooded Dotterel, Hooded Plover [87735]		Species or species habitat known to occur within area overfly marine area	In buffer area only
Fish			
[Acentronura australe](#) Southern Pygmy Pipehorse [66185]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Campichthys galei Gale's Pipefish [66191]		Species or species habitat may occur within area	In buffer area only
Heraldia nocturna Upside-down Pipefish, Eastern Upside-down Pipefish, Eastern Upside-down Pipefish [66227]		Species or species habitat may occur within area	In buffer area only
Hippocampus angustus Western Spiny Seahorse, Narrow-bellied Seahorse [66234]		Species or species habitat may occur within area	In buffer area only
Hippocampus breviceps Short-head Seahorse, Short-snouted Seahorse [66235]		Species or species habitat may occur within area	In buffer area only
Hippocampus subelongatus West Australian Seahorse [66722]		Species or species habitat may occur within area	In buffer area only
Histiogamphelus cristatus Rhino Pipefish, Macleay's Crested Pipefish, Ring-back Pipefish [66243]		Species or species habitat may occur within area	In buffer area only
Lissocampus caudalis Australian Smooth Pipefish, Smooth Pipefish [66249]		Species or species habitat may occur within area	In buffer area only
Lissocampus fatiloquus Prophet's Pipefish [66250]		Species or species habitat may occur within area	In buffer area only
Lissocampus runa Javelin Pipefish [66251]		Species or species habitat may occur within area	In buffer area only
Maroubra perserrata Sawtooth Pipefish [66252]		Species or species habitat may occur within area	In buffer area only
Mitotichthys meraculus Western Crested Pipefish [66259]		Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Nannocampus subosseus Bonyhead Pipefish, Bony-headed Pipefish [66264]		Species or species habitat may occur within area	In buffer area only
Phycodurus eques Leafy Seadragon [66267]		Species or species habitat may occur within area	In buffer area only
Phyllopteryx taeniolatus Common Seadragon, Weedy Seadragon [66268]		Species or species habitat may occur within area	In buffer area only
Pugnaso curtirostris Pugnose Pipefish, Pug-nosed Pipefish [66269]		Species or species habitat may occur within area	In buffer area only
Solegnathus lettiensis Gunther's Pipehorse, Indonesian Pipefish [66273]		Species or species habitat may occur within area	In buffer area only
Stigmatopora argus Spotted Pipefish, Gulf Pipefish, Peacock Pipefish [66276]		Species or species habitat may occur within area	In buffer area only
Stigmatopora nigra Widebody Pipefish, Wide-bodied Pipefish, Black Pipefish [66277]		Species or species habitat may occur within area	In buffer area only
Urocampus carinirostris Hairy Pipefish [66282]		Species or species habitat may occur within area	In buffer area only
Vanacampus margaritifer Mother-of-pearl Pipefish [66283]		Species or species habitat may occur within area	In buffer area only
Vanacampus phillipi Port Phillip Pipefish [66284]		Species or species habitat may occur within area	In buffer area only
Vanacampus poecilolaemus Longsnout Pipefish, Australian Long-snout Pipefish, Long-snouted Pipefish [66285]		Species or species habitat may occur within area	In buffer area only
Mammal			

Scientific Name	Threatened Category	Presence Text	Buffer Status
[Arctocephalus forsteri](#) Long-nosed Fur-seal, New Zealand Fur-seal [20]		Species or species habitat likely to occur within area	In buffer area only
[Neophoca cinerea](#) Australian Sea-lion, Australian Sea Lion [22]	Endangered	Species or species habitat may occur within area	In buffer area only
Reptile			
[Caretta caretta](#) Loggerhead Turtle [1763]	Endangered	Breeding likely to occur within area	In buffer area only
[Chelonia mydas](#) Green Turtle [1765]	Vulnerable	Species or species habitat may occur within area	In buffer area only
[Dermochelys coriacea](#) Leatherback Turtle, Leathery Turtle, Luth [1768]	Endangered	Breeding likely to occur within area	In buffer area only
[Natator depressus](#) Flatback Turtle [59257]	Vulnerable	Species or species habitat known to occur within area	In buffer area only

Whales and Other Cetaceans [Resource Information]

Current Scientific Name	Status	Type of Presence	Buffer Status
Mammal			
[Balaenoptera acutorostrata](#) Minke Whale [33]		Species or species habitat may occur within area	In buffer area only
[Balaenoptera edeni](#) Bryde's Whale [35]		Species or species habitat may occur within area	In buffer area only
[Balaenoptera musculus](#) Blue Whale [36]	Endangered	Species or species habitat likely to occur within area	In buffer area only
[Caperea marginata](#) Pygmy Right Whale [39]		Species or species habitat may occur within area	In buffer area only
[Delphinus delphis](#) Common Dolphin, Short-beaked Common Dolphin [60]		Species or species habitat may occur within area	In buffer area only

Current Scientific Name	Status	Type of Presence	Buffer Status
Eubalaena australis Southern Right Whale [40]	Endangered	Breeding known to occur within area	In buffer area only
Grampus griseus Risso's Dolphin, Grampus [64]		Species or species habitat may occur within area	In buffer area only
Lagenorhynchus obscurus Dusky Dolphin [43]		Species or species habitat may occur within area	In buffer area only
Megaptera novaeangliae Humpback Whale [38]	Vulnerable	Congregation or aggregation known to occur within area	In buffer area only
Orcinus orca Killer Whale, Orca [46]		Species or species habitat may occur within area	In buffer area only
Tursiops aduncus Indian Ocean Bottlenose Dolphin, Spotted Bottlenose Dolphin [68418]		Species or species habitat likely to occur within area	In buffer area only
Tursiops truncatus s. str. Bottlenose Dolphin [68417]		Species or species habitat may occur within area	In buffer area only

Extra Information

State and Territory Reserves [Resource Information]

Protected Area Name	Reserve Type	State	Buffer Status
Leeuwin-Naturaliste	National Park	WA	In feature area
Ngari Capes	Marine Park	WA	In buffer area only
NTWA Bushland covenant (0155)	Conservation Covenant	WA	In buffer area only

Regional Forest Agreements [Resource Information]

Note that all areas with completed RFAs have been included.

RFA Name	State	Buffer Status
South West WA RFA	Western Australia	In feature area

EPBC Act Referrals [Resource Information]

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
Controlled action				
Vlam Road Gravel Pit, Vlam Road, Karridale, WA	2014/7141	Controlled Action	Post-Approval	In buffer area only
Not controlled action				
Busselton to Flinders Bay Rails to Trails Project, WA	2013/6835	Not Controlled Action	Completed	In feature area
Geo-science Investigations	2005/2069	Not Controlled Action	Completed	In feature area
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area

Biologically Important Areas			
Scientific Name	Behaviour	Presence	Buffer Status
Seabirds			
Ardenna carneipes			
Flesh-footed Shearwater [82404]	Foraging (in high numbers)	Known to occur	In buffer area only
Onychoprion anaethetus			
Bridled Tern [82845]	Foraging (in high numbers)	Known to occur	In buffer area only
Puffinus assimilis tunneyi			
Little Shearwater [59363]	Foraging (in high numbers)	Known to occur	In buffer area only
Sharks			
Carcharodon carcharias			
White Shark [64470]	Foraging	Known to occur	In buffer area only
Whales			
Balaenoptera musculus brevicauda			
Pygmy Blue Whale [81317]	Distribution	Known to occur	In buffer area only

Scientific Name	Behaviour	Presence	Buffer Status
Eubalaena australis Southern Right Whale [40]	Calving buffer	Known to occur	In buffer area only
Eubalaena australis Southern Right Whale [40]	Seasonal calving habitat	Known to occur	In buffer area only
Megaptera novaeangliae Humpback Whale [38]	Migration (north and south)	Known to occur	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data are available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

-Office of Environment and Heritage, New South Wales
-Department of Environment and Primary Industries, Victoria
-Department of Primary Industries, Parks, Water and Environment, Tasmania
-Department of Environment, Water and Natural Resources, South Australia
-Department of Land and Resource Management, Northern Territory
-Department of Environmental and Heritage Protection, Queensland
-Department of Parks and Wildlife, Western Australia
-Environment and Planning Directorate, ACT
-Birdlife Australia
-Australian Bird and Bat Banding Scheme
-Australian National Wildlife Collection
-Natural history museums of Australia
-Museum Victoria
-Australian Museum
-South Australian Museum
-Queensland Museum
-Online Zoological Collections of Australian Museums
-Queensland Herbarium
-National Herbarium of NSW
-Royal Botanic Gardens and National Herbarium of Victoria
-Tasmanian Herbarium
-State Herbarium of South Australia
-Northern Territory Herbarium
-Western Australian Herbarium
-Australian National Herbarium, Canberra
-University of New England
-Ocean Biogeographic Information System
-Australian Government, Department of Defence
Forestry Corporation, NSW
-Geoscience Australia
-CSIRO
-Australian Tropical Herbarium, Cairns
-eBird Australia
-Australian Government – Australian Antarctic Data Centre
-Museum and Art Gallery of the Northern Territory
-Australian Government National Environmental Science Program
-Australian Institute of Marine Science
-Reef Life Survey Australia
-American Museum of Natural History
-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania
-Tasmanian Museum and Art Gallery, Hobart, Tasmania
-Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the Contact Us page.

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APPENDIX 4

Conservation Codes

Conservation Codes for Western Australian Flora and Fauna

Specially protected fauna or flora are species* which have been adequately searched for and are deemed to be, in the wild, either rare, at risk of extinction, or otherwise in need of special protection, and have been gazetted as such. Conservation codes have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018.*

T Threatened species – Schedules 1-4

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

- **Threatened fauna** is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.
- **Threatened flora** is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR Critically endangered species

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*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN Endangered species

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*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU Vulnerable species

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*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife*

Conservation (Specially Protected Fauna) Notice 2018 for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

EX Presumed extinct species

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 (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

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 fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI Migratory species

Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018.*

CD Species of special conservation interest (conservation dependent fauna)

Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS Other specially protected species

Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P Priority species

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

Priority 1: 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: 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: 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: 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.

*Species includes all taxa (plural of taxon - a classificatory group of any taxonomic rank, e.g. a family, genus, species or any infraspecific category i.e. subspecies or variety, or a distinct population).

Western Australian Ecological Communities

Threatened Ecological Communities

The BC Act provides for the statutory listing of threatened ecological communities (TECs) by the Minister.

Presumed Totally Destroyed (PD)

An ecological community that has been adequately searched for but for which no representative occurrences have been located. The community has been found to be totally destroyed or so extensively modified throughout its range that no occurrence of it is likely to recover its species composition and/or structure in the foreseeable future.

Critically Endangered (CR)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or that was originally of limited distribution and is facing severe modification or destruction throughout its range in the immediate future, or is already severely degraded throughout its range but capable of being substantially restored or rehabilitated.

Endangered (EN)

An ecological community that has been adequately surveyed and found to have been subject to a major contraction in area and/or was originally of limited distribution and is in danger of significant modification throughout its range or severe modification or destruction over most of its range in the near future.

Vulnerable (VU)

An ecological community that has been adequately surveyed and is found to be declining and/or has declined in distribution and/or condition and whose ultimate security has not yet been assured and/or a community that is still widespread but is believed likely to move into a category of higher threat in the near future if threatening processes continue or begin operating throughout its range.

Priority Ecological Communities

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the Priority Ecological Community List under priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community. Ecological communities that are adequately known, and are rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list, are placed in Priority 4. These ecological communities require regular monitoring. Conservation Dependent ecological communities are placed in Priority 5.

Priority One: 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.

Priority Two: 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 Three: 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) munities made up of large, and/or widespread occurrences, that 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 Four: 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 Five: 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.

Commonwealth of Australia Conservation Codes

Threatened Flora and Fauna

Threatened fauna and flora may be listed under Section 178 of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) in any one of the following six categories:

Extinct

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

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

A taxon is Critically Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing an extremely high risk of extinction in the wild.

Endangered

A taxon is Endangered when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a very high risk of extinction in the wild.

Vulnerable

A taxon is Vulnerable when the best available evidence indicates that it meets any of the five criteria for the category identified in Part 7.01 of the EPBC Regulations, and it is therefore considered to be facing a high risk of extinction in the wild.

Conservation dependent

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;
iv. cessation of the plan of management would adversely affect the conservation status of the species.

The EPBC Act does not provide for listing in a data deficient category. Where sufficient data (evidence) is unavailable to allow assessment by the Threatened Species Scientific Committee against the criteria for listing, the species are found to be ineligible. A recommendation is made to the Minister to not include the species in any category under the EPBC Act. For reasons of transparency and to inform future research, the Threatened Species Scientific Committee publishes the names of those species found to be data deficient. As data deficient is not a listing category under the EPBC Act, this has no statutory implications and the species is not considered to be listed under the EPBC Act.

Threatened Ecological Communities

Threatened Ecological communities under the EPBC Act are listed in three categories.

Critically endangered

If, at that time, an ecological community is facing an extremely high risk of extinction in the wild in the immediate future (indicative timeframe being the next 10 years).

Endangered

If, at that time, an ecological community is not critically endangered but is facing a very high risk of extinction in the wild in the near future (indicative timeframe being the next 20 years).

Vulnerable

If, at that time, an ecological community is not critically endangered or endangered, but is facing a high risk of extinction in the wild in the medium–term future (indicative timeframe being the next 50 years).

APPENDIX 5

Flora Species List

SPECIES LIST – Boranup

MONOCOTYLEDONS

ASPARAGACEAE
Thysanotus patersonii

CYPERACEAE
Ficinia nodosa
Isolepis marginata
Lepidosperma gladiatum
Morelotia octandra

HAEMODORACEAE
Conostylis aculeata subsp. *aculeata*

ORCHIDACEAE
Caladenia latifolia
Cyrtostylis huegelii

POACEAE
Austrostipa sp

DICOTYLEDONS

AIZOACEAE
Carpobrotus virescens

APIACEAE
Daucus glochidiatus

ARALIACEAE
Hydrocotyle intertexta
Trachymene pilosa

ASTERACEAE
Hyalosperma cotula
Olearia axillaris
**Podotheca angustifolia*
Rhodanthe citrina
**Senecio elegans*
Senecio pinnatifolius

BRASSICACEAE
**Heliophila pusilla*

CAMPANULACEAE
Isotoma hypocrateriformis

CHENOPODIACEAE
Rhagodia baccata subsp. *baccata*

CRASSULACEAE
Crassula colorata

DILLENIACEAE
Hibbertia cuneiformis

ERICACEAE
Acrotriche cordata
Leucopogon parviflorus

FABACEAE
Acacia littorea

GOODENIACEAE
Scaevola nitida

LAURACEAE
Cassytha racemosa

MYRTACEAE
Agonis flexuosa

OROBANCHACEAE
**Orobanche minor*
**Parentucellia latifolia*

PITTOSPORACEAE
Billardiera fusiformis

POLYGALACEAE
Comesperma confertum

POLGONACEAE
Muehlenbeckia adpressa

PROTEACEAE
Banksia sessilis var. *cordata* **P4**
Hakea oleifolia

RANUNCULACEAE
Clematis pubescens

RHAMNACEAE
Spyridium globulosum

RUTACEAE
Boronia alata

SCROPHULARIACEAE
**Dischisma arenarium*

THYMELEACEAE
Pimelea ferruginea

APPENDIX 6

Quadrat Data

QUADRAT B1

50 322534 E 6215467 N

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata* Open Low Heath
Condition: Excellent
Soil Type: Cream sand
Landform: Undulating
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	4	2
Spyridium globulosum	1-2	20
Hibbertia cuneiformis	1.6	1
Ficinia nodosa	0.6	1
Olearia axillaris	0.5	1
Lepidosperma gladiatum	0.5	<1
Acrotriche cordata	0.5	30
Acacia littorea	0.5	<1
Pimelea ferruginea	0.4	1
Leucopogon parviflorus	0.4	1
Comesperma confertum	0.3	<1
Senecio pinnatifolius	0.3	<1
Rhagodia baccata	0.2	<1
Rhodanthe citrina	0.1	1
Hyalosperma cotula	0.1	1
Isotoma hypocrateriformis	0.1	<1
Conostylis aculeata	0.1	<1
Podotheca angustifolia	0.1	<1

SPECIES	HEIGHT (m)	COVER (%)
**Heliophila pusilla*	0.1	<1
Trachymene pilosa	<0.1	<1
Crassula colorata	<0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B2

50 322388 E 6215635 N

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Condition: Excellent
Soil Type: Light brown-grey sand
Landform: Undulating
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	10	10
Spyridium globulosum	4	25
Leucopogon parviflorus	1.8	20
Lepidosperma gladiatum	1	1
Acrotriche cordata	0.8	25
Cyrtostylis huegelii	Flat	<1
Cassytha racemosa	Climber	<1
Billardiera fusiformis	Climber	<1

* introduced species

QUADRAT B3

50 322414 E 6215553N

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acacia littorea/Acrotriche cordata* Open Low Heath
Condition: Excellent
Soil Type: Dark cream sand
Landform: Slight depression
Date: 22.10.21
Recorder: Paul van der Moezel



Quadrat (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	2	1
Acacia littorea	1.6	5
Spyridium globulosum	1.5	10
Rhagodia baccata	1	2
Scaevola nitida	0.7	<1
Lepidosperma gladiatum	0.6	1
Ficinia nodosa	0.5	1
Austrostipa sp	0.5	<1
Acrotriche cordata	0.4	25
Pimelea ferruginea	0.4	2
Comesperma confertum	0.4	<1
Leucopogon parviflorus	0.3	2
Morelotia octandra	0.2	<1
Podotheca angustifolia	0.2	<1
**Heliophila pusilla*	0.1	<1
Isotoma hypocrateriformis	0.1	<1
Senecio pinnatifolius	0.1	<1
Conostylis aculeata	0.1	<1

SPECIES	HEIGHT (m)	COVER (%)
Carpobrotus virescens	0.1	<1
**Parentucellia latifolia*	0.1	<1
Hyalosperma cotula	<0.1	<1
**Dischisma arenarium*	<0.1	<1
Trachymene pilosa	<0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B4

50 322424 E 6215370 N

Vegetation: *Banksia sessilis* var. *cordata/Agonis flexuosa* Low Open Woodland over *Spyridium globulosum/Acacia littorea* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Condition: Excellent
Soil Type: Dark orange-brown sand
Landform: Flat
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Banksia sessilis var. *cordata*	5	5
Agonis flexuosa	1.5-2	30
Spyridium globulosum	1.9	5
Acacia littorea	1.7	5
Leucopogon parviflorus	1.5	10
Acrotriche cordata	0.5	25
Pimelea ferruginea	0.4	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B5

50 322340 E 6215263 N

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Condition: Excellent
Soil Type: Dark cream sand
Landform: Undulating
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	5	20
Spyridium globulosum	2.1	10
Leucopogon parviflorus	1.7	20
Acacia littorea	1.4	2
Lepidosperma gladiatum	0.8	2
Acrotriche cordata	0.5	30
Pimelea ferruginea	0.5	<1
Conostylis aculeata	0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B6

50 322279 E 6215273 N

Vegetation: *Agonis flexuosa/Hibbertia cuneiformis/Spyridium globulosum* Tall Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Condition: Excellent
Soil Type: Cream sand
Landform: Top of hill
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	3	2
Hibbertia cuneiformis	2.5	15
Spyridium globulosum	1.8	10
Acacia littorea	1.7	1
Scaevola nitida	1.4	1
Leucopogon parviflorus	1.1	10
Acrotriche cordata	1	10
Lepidosperma gladiatum	0.8	2
Pimelea ferruginea	0.5	<1
Conostylis aculeata	0.1	<1
Trachymene pilosa	<0.1	<1
Cassytha racemosa	Climber	<1

* introduced species

QUADRAT B7

50 322596 E 6215287 N

Vegetation: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acacia littorea/Acrotriche cordata* Open Low Heath
Condition: Excellent
Soil Type: Dark cream sand
Landform: Undulating
Date: 22.10.21
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
Agonis flexuosa	4.5	20
Spyridium globulosum	2	15
Leucopogon parviflorus	1.5-2	20
Acacia littorea	1.5-2	5
Pimelea ferruginea	0.8	<1
Lepidosperma gladiatum	0.7	1
Acrotriche cordata	0.6	35
Comesperma confertum	0.6	<1
Ficinia nodosa	0.5	<1
Daucus glochidiatus	0.1	<1
Isotoma hypocrateriformis	0.1	<1
Trachymene pilosa	<0.1	<1
Isolepis marginata	<0.1	<1
Hydrocotyle intertexta	<0.1	<1
Cassytha racemosa	Climber	<1
Billardiera fusiformis	Climber	<1

* introduced species

BORANUP LIMESAND
SOUTH-WEST MINERAL FIELD

Extraction of Limesand for Lime

ENMIC PTY LTD

ATTACHMENT 2
FAUNA ASSESSMENT

Western Ringtail Possum Assessment



M 70/1302 (Part)

Caves Road

Boranup

February 2026
Version 1

On behalf of:
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APPENDIX A: Fauna Observed within Survey Area

SUMMARY

This report details the results of a western ringtail possum assessment over a section of a mining lease (M 70/1302) located adjacent to Caves Road, Boranup (the survey area).

It is understood that the landowners (Enmic Pty Ltd/Lime Industries) are proposing to expand sand extraction activities into the survey area and the clearing of up to about 4.6 hectares of vegetation maybe required.

As the vegetation present contains some peppermint (*Agonis flexuosa*) the potential presence of western ringtail possums (*Pseudocheirus occidentalis*) has been identified as an issue for consideration during the ongoing planning and approval process.

To fulfil knowledge gaps, a targeted survey for western ringtail possums has therefore been carried out with the aim of identifying their distribution and abundance within the survey area along with an assessment of habitat quality. This report details the results of this survey.

A daytime survey of the survey area was carried on the 4 October 2025. A nocturnal spotlighting survey was carried out on the 18 February 2026. All survey work and reporting has been completed by Greg Harewood (Zoologist) who has over 23 years' experience surveying for western ringtail possums in southwest Western Australia.

Key Findings

No evidence of western ringtail possums was observed during the day or nighttime surveys.

The WRP habitat assessment suggests that the survey area represents very poor-quality western ringtail possum habitat. As a consequence, they are very unlikely to utilise the area except possibly on rare occasions when moving between areas of more favourable habitat.

No fauna species of conservation significance were recorded. Some fauna species of conservation significance have been reported occurring in the wider area in the past but it is difficult to predict if any would utilise the survey area itself. The habitats present are unremarkable in many respects, for example there are not true woodland components and therefore no hollow bearing trees or fallen hollow logs. It is considered unlikely that fauna species of conservation significance would be specifically attracted to this area of vegetation given the presence of a wider range of more diverse habitats in the wider area.

1. INTRODUCTION

This report details the results of a western ringtail possum assessment over a section of a mining lease (M 70/1302) located adjacent to Caves Road, Boranup (the survey area).

It is understood that the landowners (Enmic Pty Ltd/Lime Industries) are proposing to expand sand extraction activities into the survey area and the clearing of up to about 4.6 hectares of vegetation maybe required.

As the vegetation present contains some peppermint (*Agonis flexuosa*) the potential presence of western ringtail possums (*Pseudocheirus occidentalis*) has been identified as an issue for consideration during the ongoing planning and approval process.

To fulfil knowledge gaps, a targeted survey for western ringtail possums has therefore been carried out with the aim of identifying their distribution and abundance within the survey area along with an assessment of habitat quality. This report details the results of this survey.

2. SCOPE OF WORKS

The assessment has involved:

- Targeted day and night searches for western ringtail possum habitat/site use (foraging, refuge and dispersal habitat and individuals),
- Opportunistic recording of other fauna encountered, with comments on the likelihood of other fauna of conversation significance occurring provided.
- Report summarising methods, results and management recommendations.

3. METHODS

A daytime survey of the survey area was carried on the 4 October 2025. A nocturnal spotlighting survey was carried out on the 18 February 2026. All survey work and reporting has been completed by Greg Harewood (Zoologist) who has over 23 years' experience surveying for western ringtail possums in southwest Western Australia.

3.1 WESTERN RINGTAIL POSSUM ASSESSMENT

3.1.1 Daytime Survey

A day time survey to locate and record dreys, obvious tree hollows, scats and individual WRPs was carried out and involved a transect on foot across the survey area.

3.1.2 Night Time Survey

A single night time survey was carried out. This survey involved a transect on foot across the survey area while searching for individual possums using a headtorch to detect eyeshine.

3.1.3 Habitat Assessment

In forest areas of the southwest western ringtail possums have been found to prefer woodland areas where midstorey vegetation is present (either as the dominant vegetation type or as subdominant component) and in particular where canopy connectivity is coherent and near continuous (G. Harewood, personal observation).

Abundance has been found to be greatest in predominantly unlogged landscapes and in forests that had been regrowing for an average of 40 years since the landscape was most recently logged, in other words, where logging was historically least intense. At the local-scale, WRP abundance is negatively associated with greater fire intensity (Wayne *et al.* 2006).

While there is a common held belief that western ringtail possums prefer vegetation containing peppermint (*Agonis flexuosa)* they do occur in other vegetation types despite the absence of this species as they have the capacity to utilise a range of other plants as a food source such as *Nuytsia floribunda, Acacia saligna, Hardenbergia comptoniana, Allocasuarina fraseriana, Eucalyptus rudis, Corymbia calophylla, Melaleuca viminea, M. cuticularis, M. rhaphiophylla, Kunzea glabrescens* and *Xylomelum occidentale* (G. Harewood, personal observation).

Comments on the amount and quality of habitat suitable for WRPs observed within the survey area based on the above documented habitat preferences are provided.

3.2 OPPORTUNISTIC FAUNA OBSERVATIONS

Evidence of the presence or likely presence of other fauna species including those of conservation significance (or their habitat) was searched for and recorded concurrent with the western ringtail possum assessment.

Apart for direct observation, secondary evidence of a species presence such as tracks, scats, skeletal remains, foraging evidence or calls were also noted if observed/heard.

4. RESULTS

4.1 WESTERN RINGTAIL POSSUM ASSESSMENT

4.1.1 Daytime Survey

No evidence of western ringtail possums utilising the survey area was found during the daytime survey.

4.1.2 Night Time Survey

No evidence of western ringtail possums utilising the survey area was found during the single nocturnal spotlight survey.

4.1.3 Habitat Assessment

A flora and vegetation survey was conducted over vegetation directly adjoining the current survey area in 2021 by PGV Environmental during October 2021 (PGV 2021). Observations made indicate that the primary vegetation type identified by PGV also makes up most of the current survey area (excluding existing cleared areas) and is described as:

AfSg^2 - Peppermint (*Agonis flexuosa*) Low Open Woodland over Basket Bush (*Spyridium globulosum*) Shrubland over Coast Groundberry (*Acrotriche cordata*)/Coastal Beard-heath (*Leucopogon parviflorus*) Open Low Heath

Considerable variation exists in the density of the vegetation and the component species. The peppermint component is highly variable both in density and size with much of area only containing shrub sized specimens (<2 metres high), with taller peppermint individuals are uncommon and are generally no more than about 3 metres in height. There is also a single very small karri (*Eucalyptus diversicolor*) tree present in the central section of the survey area.

Given the absence of a true midstorey component and the dominance of low heath with a lack actual trees, the vegetation present represents poor quality habitat for western ringtail possums. Any individuals utilising this vegetation would be prone to predation by foxes and feral cats given their proximity to ground level. The vegetation does represent dispersal habitat for WRPs which may persist in the wider area but the area is considered very unlikely to be utilised by resident individuals.

This conclusion is consistent comments previously provided by the Department of Water and Environmental Regulation in relation to the same vegetation type (and another similar type) in adjoining sections of the mining lease area where they state: “Given the low height and sparseness of the vegetation it is unlikely the application area contains significant habitat for conservation significant fauna” (DWER 2024).

To put the ~4.6 ha area of vegetation present in perspective it should be note that there is about 12,000 ha of remnant native vegetation within 12 kilometres of the survey area, much of which is in national park.

Some example images of vegetation with the survey area are provided on Table 1.

Table 1: Example Images of Vegetation within the Survey area

Vegetation Description	Example Images
Peppermint Low Open Woodland over Basket Bush Shrubland over Coast Groundberry / Coastal Beard-heath Open Low Heath	    

4.2 OPPORTUNISTIC FAUNA OBSERVATIONS

Eleven fauna species were observed within/over the survey area during the survey period. The majority (9) of the species recorded were common widespread bird species (see Appendix A). It should be note that some species were recorded overhead or heard calling and therefore may not actually utilise the survey area for any purpose.

No fauna species of conservation significance were recorded. Some fauna species of conservation significance have been reported occurring in the wider area in the past but it is difficult to predict if any would utilise the survey area itself. The habitats present are unremarkable in many respects, for example there are not true woodland components and therefore no hollow bearing trees or fallen hollow logs. It is considered unlikely that fauna species of conservation significance would be specifically attracted to this area of vegetation given the presence of a wider range of more diverse habitats in the wider area.

5. CONCLUSION

The fauna assessment within the survey area was primarily undertaken to identifying western ringtail possum distribution and abundance within the survey area along with determining overall habitat quality.

No evidence of western ringtail possums was observed during the day or nighttime surveys.

The WRP habitat assessment suggests that the survey area represents very poor-quality western ringtail possum habitat. As a consequence, they are very unlikely to utilise the area except possibly on rare occasions when moving between areas of more favourable habitat.

.

6. REFERENCES

Department of Primary Industries and Regional Development (DPIRD) Geographic Information Services (2025). Native Vegetation Extent (DPIRD-005) (Western Australia) Shapefile - https://catalogue.data.wa.gov.au/dataset/native-vegetation-extent.

Department of Water and Environmental Regulation (DWER) (2024). Clearing Permit Decision Report – CPS 10368/1 – 19 December 2024.

PGV Environmental (2022). Detailed Flora and Vegetation Survey. Report prepared for Lime Industries, April 2022.

Wayne, A.F., Cowling, A., Lindenmayer, D.B., Ward, C.G., Vellios, C.V., Donnelly, C.F. Calver, M.C. (2006). The abundance of a threatened arboreal marsupial in relation to anthropogenic disturbances at local landscape scales in Mediterranean-type forests in south-western Australia. Biological Conservation 463-476.

FIGURES



Legend

- Lot/Tenement Boundary
- Survey Area

0 50 100

Metres

Fauna Survey

Drawn: G Harewood

Date: Feb 2026

Scale: 1:2,750

Coordinate System: UTM Z50/GDA 2020

Lot 4543 - M 70/1302
Caves Road - Boranup

Survey Area Aerial Photograph

Figure 1

APPENDIX A

FAUNA OBSERVED WITHIN SURVEY AREA

Fauna Observed within Survey Area

M 70/1302 - Caves Road - Boranup

Approx. Centroid - 34.187835°S and 115.077490°E

Compiled by Greg Harewood - February 2026

Class **Family** *Species*	Common Name	Conservation Status
Amphibians		
Myobatrachidae Ground or Burrowing Frogs		
Heleioporus eyrei	Moaning Frog	LC
Birds		
Accipitridae Kites, Goshawks, Eagles, Harriers		
Aquila audax	Wedge-tailed Eagle	LC
Columbidae Pigeons, Doves		
Phaps chalcoptera	Common Bronzewing	LC
Psittacidae Parrots		
Platycercus zonarius	Australian Ringneck Parrot	LC
Cuculidae Parasitic Cuckoos		
Cacomantis flabelliformis	Fan-tailed Cuckoo	LC
Halcyonidae Tree Kingfishers		
Dacelo novaeguineae	Laughing Kookaburra	Introduced
Meliphagidae Honeyeaters, Chats		
Phylidonyris novaehollandiae	New Holland Honeyeater	LC
Dicruridae Monarchs, Magpie Lark, Flycatchers, Fantails, Drongo		
Rhipidura fuliginosa	Grey Fantail	LC
Passeridae Grass Finches, Mannikins, Sparrows		
Stagonopleura oculata	Red-eared Firetail	LC

BC Act Status - S1 to S7, EPBC Act Status - CR = Critically Endangered EN = Endangered, VU = Vulnerable, EX = Extinct, DBCA Priority Status - P1 to P4, Int. Agmts - CA = CAMBA, JA = JAMBA, RK = ROKAMBA, IUCN Red List Category Definitions LC = Least Concern - see Appendix A and https://www.iucnredlist.org/resources/categories-and-criteria for others.

Class **Family** *Species*	Common Name	Conservation Status
Zosteropidae White-eyes		
Zosterops lateralis	Silvereye	LC

Mammals

Macropodidae Kangaroos, Wallabies		
Macropus fuliginosus	Western Grey Kangaroo	LC

BC Act Status - S1 to S7, EPBC Act Status - CR = Critically Endangered EN = Endangered, VU = Vulnerable, EX = Extinct, DBCA Priority Status - P1 to P4, Int. Agmts - CA = CAMBA, JA = JAMBA, RK = ROKAMBA, IUCN Red List Category Definitions LC = Least Concern - see Appendix A and https://www.iucnredlist.org/resources/categories-and-criteria for others.

DISCLAIMER

This fauna assessment report ("the report") has been prepared in accordance with the scope of services set out in the contract, or as otherwise agreed, between the Client and Greg Harewood ("the Author"). In some circumstances the scope of services may have been limited by a range of factors such as time, budget, access and/or site disturbance constraints. In accordance with the scope of services, the Author has relied upon the data and has conducted environmental field monitoring and/or testing in the preparation of the report. The nature and extent of monitoring and/or testing conducted is described in the report.

The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also it should be recognised that site conditions, can change with time.

Within the limitations imposed by the scope of services, the field assessment and preparation of this report have been undertaken and performed in a professional manner, in accordance with generally accepted practices and using a degree of skill and care ordinarily exercised by reputable environmental consultants under similar circumstances. No other warranty, expressed or implied, is made.

In preparing the report, the Author has relied upon data, surveys, analyses, designs, plans and other information provided by the Client and other individuals and organisations, most of which are referred to in the report ("the data"). Except as otherwise stated in the report, the Author has not verified the accuracy of completeness of the data. To the extent that the statements, opinions, facts, information, conclusions and/or recommendations in the report ("conclusions") are based in whole or part on the data, those conclusions are contingent upon the accuracy and completeness of the data. The Author will not be liable in relation to incorrect conclusions should any data, information or condition be incorrect or have been concealed, withheld, misrepresented or otherwise not fully disclosed to the Author.

The report has been prepared for the benefit of the Client and no other party. The Author assumes no responsibility and will not be liable to any other person or organisation for or in relation to any matter dealt with or conclusions expressed in the report, or for any loss or damage suffered by any other person or organisation arising from matters dealt with or conclusions expressed in the report (including without limitation matters arising from any negligent act or omission of the Author or for any loss or damage suffered by any other party relying upon the matters dealt with or conclusions expressed in the report). Other parties should not rely upon the report or the accuracy or completeness of any conclusions and should make their own enquiries and obtain independent advice in relation to such matters.

The Author will not be liable to update or revise the report to take into account any events or emergent circumstances or facts occurring or becoming apparent after the date of the report.

BORANUP LIMESAND
SOUTH-WEST MINERAL FIELD

Extraction of Limesand for Lime

ENMIC PTY LTD

ATTACHMENT 3
AUDIT OF OPERATION AND CLOSURE OBJECTIVES

Enmic Pty Ltd

Boranup Limesand Pit – M 70/1302

Notes on Rehabilitation

27 June 2025

1.0 Background

The limesand resource is a very deep and overlies brown silica sand which has also been excavated as fill sad for urban and other developments in the Margaret River Augusta Region. The limesand is used for soil amendments to neutralise acidic soils in viticulture and agriculture.

The pit is deep at 50 plus metres located in a dune system. With the angle of repose of the sand at around 32 degrees and faces of 50 plus metres a large pit footprint has to be formed before any revegetation can be undertaken.

As the sand resource is cut deeper, the pit becomes deeper and the area to be revegetated. It is therefore not possible to revegetate the faces until excavation has been completed in a particular location and the final floor elevation has been reached.

The methods of revegetation were documented in the updated Mine Closure Plan of 6 December 2023 REG ID 118177 and approved 11 December 2023.

2.0 Revegetation Trials

The requirement and commitment is to close and rehabilitate the land relates to closing land as soon as possible after that part of the disturbance is completed.

In the Mine Closure Plan, revegetation completed by the Shire of Margeret River and in Figures 16 – 17 were provided to demonstrate that locally revegetation is able to be completed.

Figure 13 of the MCP shows revegetation completed by Lime Industries at Lancelin which has achieved good regeneration. See the Mine Closure Plan 5.2.1. That revegetation demonstrates the potential to close and re-establish vegetation on completion of each portion of the pit when the final surface has been reached.

The only portion of land available for revegetation currently, is a small patch of land in the north eastern corner of the pit. (Triangular piece in Figure 2 below.). The remainder of the northern face will still have further sand removed from it and is not available for revegetation. It is noted that if excavation commences on the adjoining land to the north as discussed below. mining will move through the face and the interim revegetation will have to be removed.

0.82 ha of revegetation is shown in the AER and includes portion of the northern face and the area cleared to the north of the northern face. Figure 2 on the Nearmap image of January 2025.

The roots and plant fragments can be seen in the north eastern section of the northern face is shown in Figure 3 below.

The remainder of the northern face continues to be excavated and is not at final position and cannot be closed at this stage without compromising excavation capability or safety.

The tenement boundary is shown in Figure 1.

Enmic Pty Ltd

Boranup Limesand Pit – M 70/1302

Notes on Rehabilitation

27 April 2026

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Figure 1 Sand resources and tenement boundary.



Figure 2 Triangular section of completed face (approx. 0.25 ha) and area north of the pit under rehabilitation.

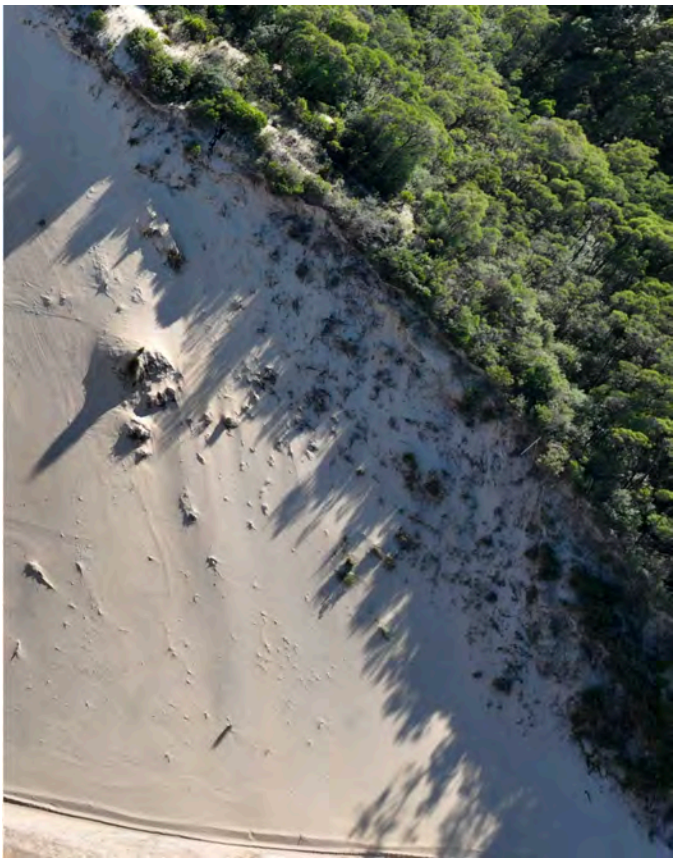


Figure 3. Area of completed face in the north east which can be revegetated. Note if excavation commences on the adjoining land to the north mining will move through the face.

3.0 Discussions with South West Boojarah Traditional Owners

The South West Boojarah Traditional Owners approached and liaised with Enmic Pty in 2024, with a request and expression of interest to extract sand from the land immediately adjoining the northern boundary. That liaison continues.

Documentation relating to that request is attached.

It is noted that DMPE suggested a 500 metre buffer from activities within the proposed Reserve 531434, however DMPE may not have realised that the proposal by the South West Boojarah Traditional Owners includes the extraction of limesand.

Discussions with the South West Boojarah Traditional Owners suggested that the limesand extraction would best be served by accessing the resource through the existing northern face of the pit as that would be the safest entrance and is established.

That Northern face of M 70/1302 is also the highest face and thickest resource.

However as access to the adjacent site to the north by the traditional owners remains unclear and further discussions will be required, revegetation to local native species will be undertaken in Autumn 2026 on the north eastern portion of the northern face.

If excavation were to occur in conjunction with the South West Boojarah Traditional Owners, it would go through the northern face which would be extracted and lowered to maximise the resource and provide a consistent landform. In doing so the interim revegetation proposed will have to be taken to achieve a wide safe entrance and a consistent final landform.

Also, an access road from the South West Boojarah Traditional Owner land is not as safe a location as that from M 70/1302 and coming through M 70/1302 would negate the need for an additional access point.

4.0 Clearing Permit CPS 10368/1

Clearing Permit CPS 10368/1 was issued on 19 December 2024 and covers the whole of the current pit including the area under interim revegetation.

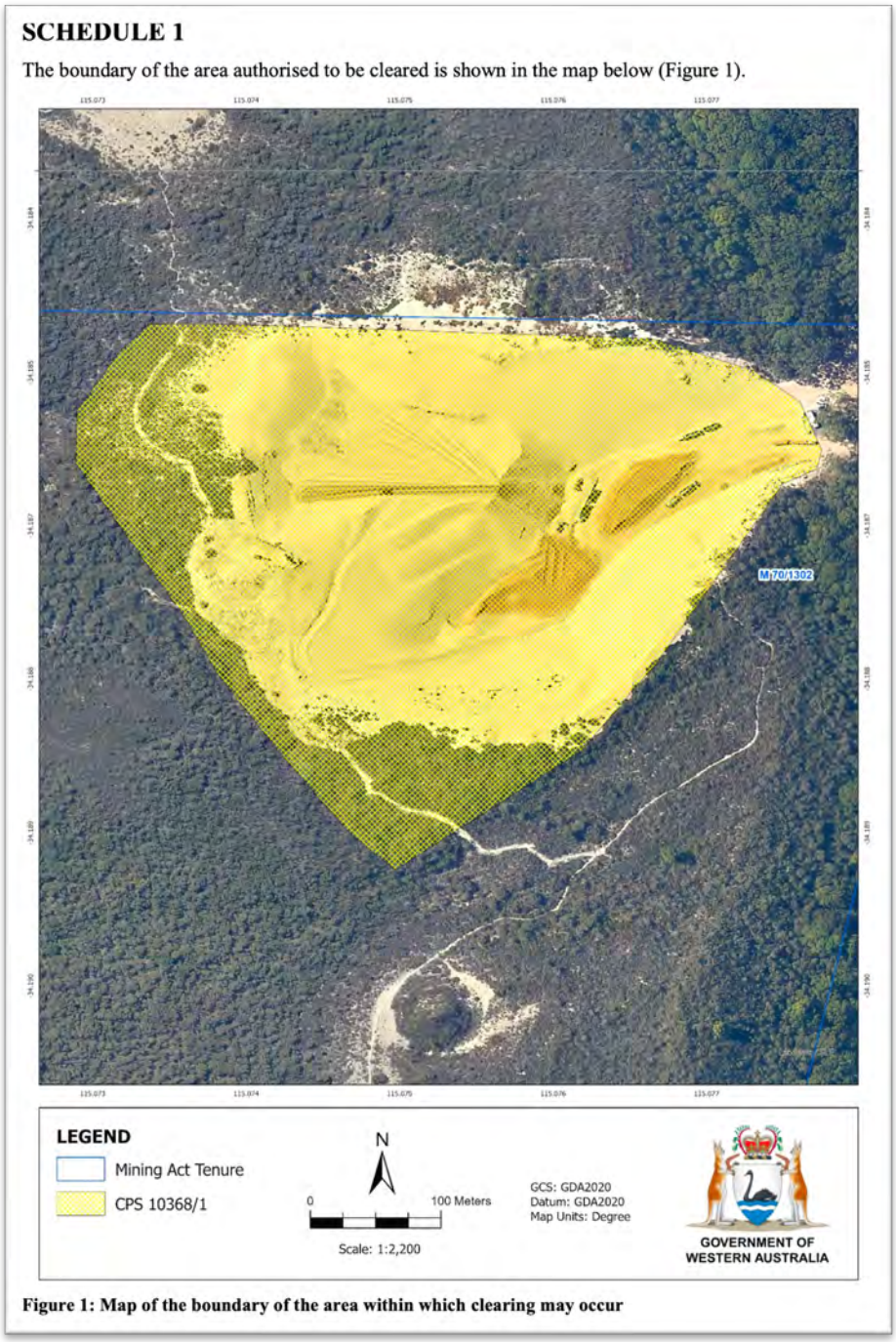


Figure 4. Approved clearing permit area.

5.0 Revegetation Comments

The small portion of the northern face in the north east is being revegetated; around 0.25 hectares.

When approached by the South West Boojarah Traditional Owners in 2024, no further revegetation was proceeded with because that area would end up being cleared and mined if the proposal went ahead. That liaison is continuing.

At this stage, it remains unclear whether revegetation will be interim or final because of;

- Clearing Permit CPS 10368/1 is in place, covering that location.

- The face may be excavated northwards taking the interim revegetation if the South West Boojarah are to excavate their resource.

1. Plant matter and initial revegetation has been left in place on the interim revegetation area.
2. No further replanting or seeding was completed in 2024 or 2025 as the area was still active
3. No other location is suitable for revegetation because the faces continue to be excavated with the resource having such high faces.
4. Tube plants are sourced from a local supplier. These must be ordered in September the preceding year, so an order in September 2025 will enable the plants to be ready for planting in June 2026.
5. Seeds can be provided at any time and spread at any time, but only germinate in Autumn and Spring. Seeds to be spread in Autumn 2026.
6. Only local provenance species will be used.
7. The existing vegetation fragments will form an ability to stabilise seed and retain it on site.
8. The use of topsoil and vegetation fragments removed during land clearing of vegetated areas, provides the best means of plant sources**. NOTE** however that the pre-mine landscape is bare limesand and so topsoil and vegetation fragments are not always available.
9. Normally it takes 6 – 12 months for revegetation from seed to be observable.

6.0 Proposed Revegetation

Until the discussions with the South West Boojarah Traditional Owners are resolved and decisions are made on the use of the land to the north, the proposed revegetation of the around 0.25 ha on the northern face will remain "interim revegetation".

The best method of revegetation is to use the local topsoil and vegetation fragments.

Proposed Rehabilitation Action	Completed by	Timing
Weed control will be undertaken generally and on the portion of face as required	Enmic through a contractor	Spring 2025 Inspected
Spread topsoil and vegetation fragments from an area being cleared, if available, July – August 2025.	Enmic	Autumn 2026
Spread vegetation fragments, logs etc to assist in seed retention if available.	Enmic	Autumn 2026 prior to seeding
Provide local native seed in Autumn 20265. (Not all species may be available because of the short time frames). See list of seed that was able to be obtained. Spread seed in Autumn 2026.	Enmic	Autumn 2026
Review the revegetation in November 2025	Enmic and Consultant	November 2025
Report to DMPE on the progress of the revegetation	Enmic	21 November 2025 and in AER April 2026.

Seeds purchased and to be used Autumn 2026

Acacia rosteliffera	ok 500g	&kilo rates	$950 per kilo
cyclops	ok 200g		$760 ditto
Acanthocarpus preissii	50g ok		1200 /kilo
Agonis flexuosa	100g ok		1100 kilo
Allocasuarina humilis	50g ok		2500 per kilo
Anthocercis littorea	50g ok		2950 kilo
Atriplex cinerea	100g ok		670 kilo
Clematis linearifolia	50g ok		1100 kilo
Ficinia nodosa	20g ok		2000 kilo
Hardenbergia comptoniana -	50g ok		1000 kilo
Lepidosperma (no stock) but can do L gladiatum ?			
Melaleuca systena	200g ok		950 kilo
huegelii	200g ok		650 kilo
lanceolata	100g ok		600 kilo
myoporum insulare	50g ok		600 kilo
Olearia axillaris	20 g ok		1000 kilo (= $20)
Scaevola crassifolia	50 g ok		1100 kilo
Scaevola anchusifolia	30 g ok		900 kilo (= $27)

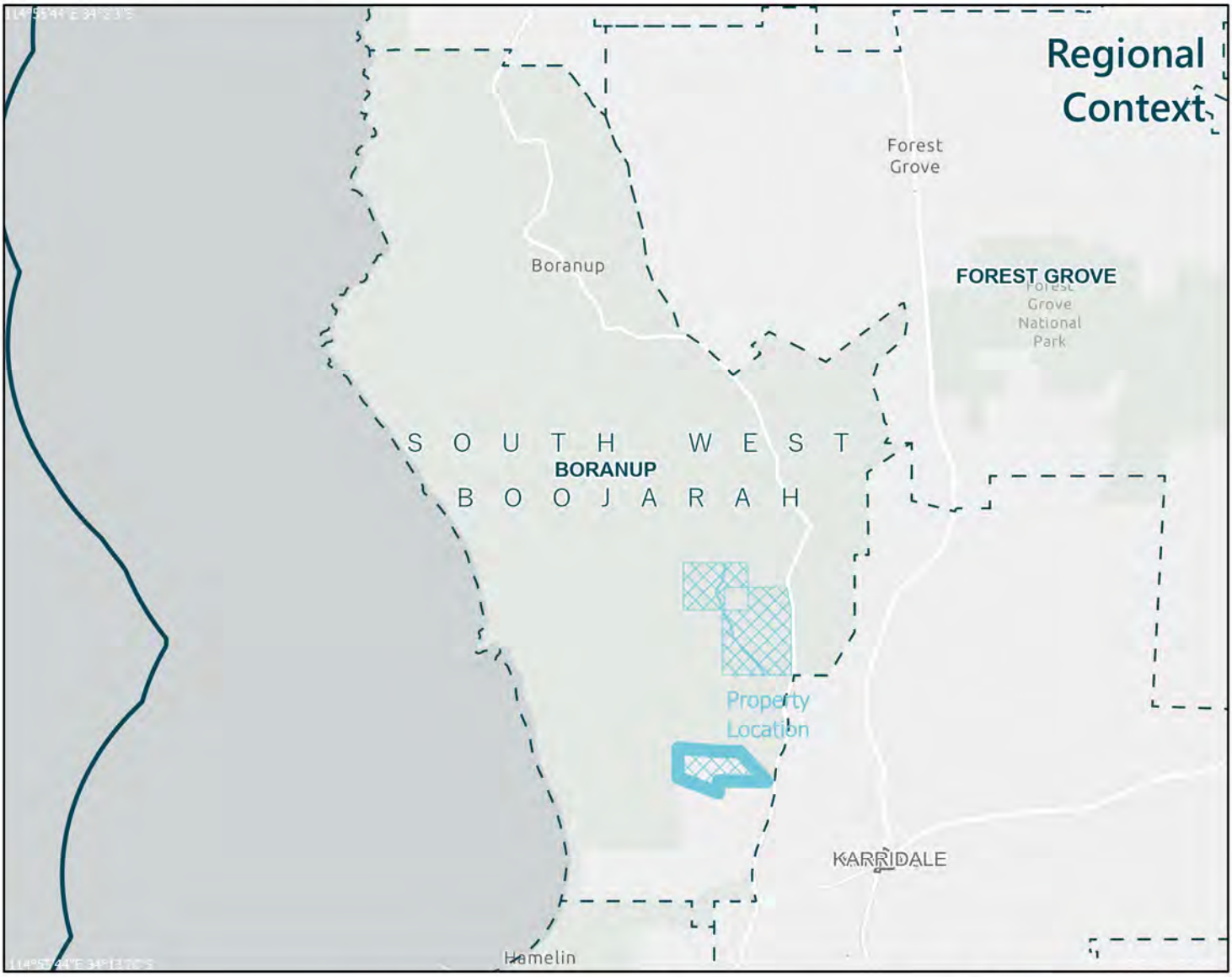
Lindsay Stephens
Landform Research on behalf of Enmic Pty Ltd.

Landform Research

Lindsay Stephens BSc (Geology), MSc (Plant Ecology)
Mem Aus Geomechanics Soc – MEIANZ – FIQA - MAIG No 7319

1/ 49 Birdwood Avenue, Como WA 6152
Tel 0417 931 638, landform@iinet.net.au

SWB Boranup 531434 - L4230 Boranup Dr

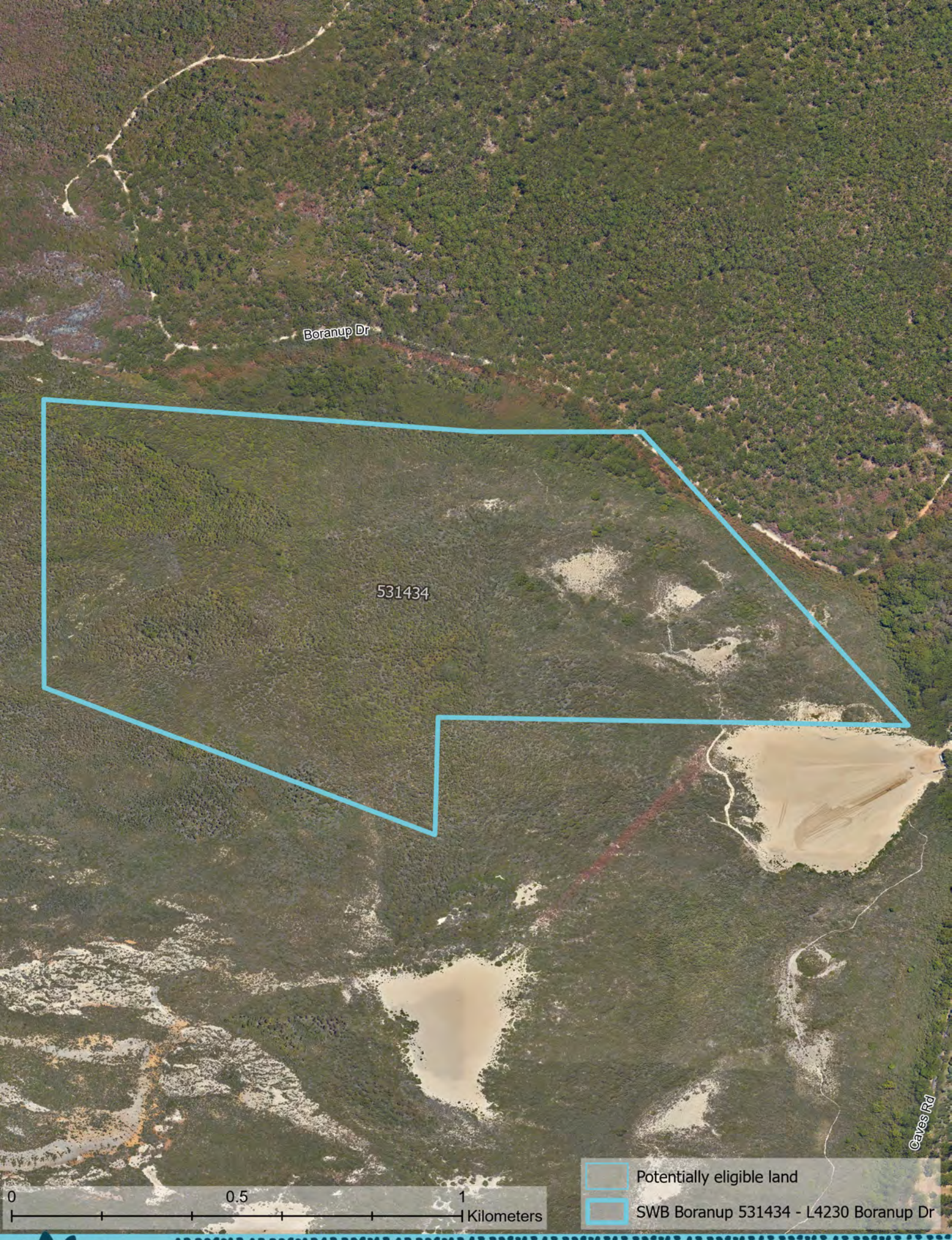




SWB Boranup 531434 - L4230 Boranup Dr
Locality / Suburb
Townsite
Potentially eligible land
ILUA

Perpetual

Esri, HERE, Garmin, Foursquare, METI/NASA, USGS, Esri, HERE, Garmin, FAO, NOAA, USGS



Map of land offer

Landgate / SLIP

Perpetual

Land offered for inclusion into the Noongar Land Estate

SWB Boranup 531434 - L4230 Boranup Dr

PROPERTY DETAILS

PIN	531434	**Region**	South West Boojarah
Ha Size	95.18	**Address**	L4230 Boranup Dr, Boranup WA
Lot on plan	Lot 4230 on DP208941	**Local Government**	Shire of Augusta-Margaret River

TERMS OF ALLOCATION

Proposed tenure	Reserve
Terms	Pre-Conditions: The parties acknowledge and agree that the Land will be set aside as a reserve for the purpose of "Noongar Social, Cultural and/or Economic Benefit", or such other purpose as agreed between the State and the Trustee, pursuant to section 41 of the LAA; and A memorial under section 17 of the LAA being registered against the Qualified Certificate of Crown Land Title that records that habitable and sensitive land uses may be restricted due to the Land's proximity to Road and Rail Noise. Special Conditions: The Management Body and Trustee acknowledge the Land is overlain by a threatened ecological community within the definition of the Biodiversity Conservation Act 2016 (WA) and subject to regulation under that Act; The Management Body and Trustee acknowledge that the Land is within a mining buffer and development restrictions may apply; and The Allocation of the Land is subject to: (i) the memorial under section 17 of the LAA recording that habitable and sensitive Land uses may be restricted due to the Land's proximity to Road and Rail Noise which will remain on the Qualified Certificate of Crown Land Title subsequent to registration of the Management Order; and (ii) the Management Body and Trustee acknowledging the potential restrictions on its use of the Land.

DUE DILIGENCE, CONSIDERATIONS & RECOMMENDATIONS

Aboriginal heritage	Registered Sites: ID 5765 (Arumvale). Perpetual has been advised that the site has additional unrecorded Noongar cultural and heritage values of significance.
Infrastructure	No
Planning	Zoned as 'National Parks and Nature Reserves' under the Local Planning Strategy and Scheme.
Potential use	Noongar Social, Cultural and/or Economic Benefit Conservation of natural values, caring for country, carbon farming, and customary activities.
Development potential	No development potential under current zoning.
Cultural potential	Likely to be cultural land.
Summary of recommendation	Accept as cultural after receipt of request from SWB Regional Corporation
Recommended fund	Cultural

DISCLAIMER: Perpetual has performed a desktop assessment based on information provided by the Department of Planning Land and Heritage, the South West Aboriginal Land and Sea Council and various Government Agencies. While all care has been taken to ensure the accuracy of the information provided at the time of preparing this document, we recommend that the Relevant Regional Corporation(s) perform their own due diligence to inform decision making. Perpetual does not make or give any representation or warranty as to the subject matter of this document.

Land offered for inclusion into the Noongar Land Estate

SWB Boranup 531434 - L4230 Boranup Dr

SOUTH WEST BOOJARAH REGIONAL CORPORATION DECISION

☐ The Regional Corporation, following consultation with the Cultural Advice Committee, requests that the Trustee accept this parcel of Boodja into the Noongar Boodja Trust and requests (in accordance with clause 10.3(b) of the NBT Deed) that this parcel of Boodja be allocated to the Cultural Land Fund to be managed by the Regional Corporation in accordance with the Noongar ILUA and Trust Deed.

OR

☐ The Regional Corporation, following consultation with the Cultural Advice Committee, requests that the Trustee accept this parcel of Boodja into the Noongar Boodja Trust, but does not request that the land be allocated to the Cultural Land Fund, and prefers that the land be allocated to:

☐ Development Land Fund ☐ Housing Land Fund ☐ no preference

OR

☐ The Regional Corporation, following consultation with the Cultural Advice Committee, requests that the Trustee not accept this parcel of Boodja into the Noongar Boodja Trust.

The Regional Corporation, following consultation with the Cultural Advice Committee, would like the Trustee to know the following matters of social, cultural, and/or economic significance of this parcel of Boodja to Noongar people:

Signed: _____ Date: _____

Chairperson

DISCLAIMER: Perpetual has performed a desktop assessment based on information provided by the Department of Planning Land and Heritage, the South West Aboriginal Land and Sea Council and various Government Agencies. While all care has been taken to ensure the accuracy of the information provided at the time of preparing this document, we recommend that the Relevant Regional Corporation(s) perform their own due diligence to inform decision making. Perpetual does not make or give any representation or warranty as to the subject matter of this document.

Terms of Allocation Summary Sheet

TERMS OF ALLOCATION					
LAND DETAILS					
LAND LIST NAME	20200106_SWALSC_SWB_AugustaMargaretRiver__Year0_OfferTargetLand			**ID**	1217
PIN/s	**531434**	**CURRENT TENURE**	Unallocated Crown Land	**TOWNSITE**	OUTSIDE OF KARRIDALE
ZONING	National Parks and Nature Reserves	**LAND AREA**	95.18 ha	**CLAIM AREA**	HARRIS FAMILY,SOUTH WEST BOOJARAH
LGA	Shire of Augusta-Margaret River				
TENURE SELECTED	Reserve with power to lease				
CONDITION OF LAND	The land parcel appears to be highly vegetated. There are some cleared sand areas in the western portion and some walking tracks are visible in these cleared areas.				

STAKEHOLDER CONSULTATIONS AND CONSIDERATIONS			
☒ LGA	☒ Contaminated Sites	☒ State Heritage	☒ Aboriginal Heritage
☒ Land Use Planning	☐ ALT	☒ DMIRS	☒ DBCA
☒ MRWA	☒ DWER	☐ Development WA	☐ JTSI
☒ Telstra	☒ Western Power	☒ Water Corporation	☒ Optus
☒ ATCO Gas	☒ NBN Co	☐ Other:	

CONSIDERATIONS	• The Department of Biodiversity, Conservation and Attractions (DBCA) have advised that the land parcel is subject to Threatened Ecological Communities. • Based on the high conservation values of the land parcel and the proximity to existing Class 'A' Leeuwin Naturaliste National Park, DBCA has suggested that this land parcel is also managed as a Class 'A' reserve. Classification as Class 'A' pursuant to Section 42 of the *Land Administration Act 1997* (LAA) may be pursued following Allocation if this approach is supported by the Trustee. • The land parcel is within a buffer area of existing mining activities, being within 500m of Reserve 30656, which has a purpose of 'Quarry limesand'. The Department of Mines, Industry Regulation and Safety (DMIRS) has requested acknowledgement of this buffer, which may result in development restrictions.

OFFER OF TERMS OF ALLOCATION		
TENURE	☒ **Reserve** **Purpose:** Noongar Social, Cultural and / or Economic Benefit	☒ **Power to lease**
	☐ **Freehold**	☐ **Leasehold**

In respect of

UCL Lot 4230 (PIN 531434) on Deposited Plan 208941, being the whole of the land described in Qualified Certificate of Crown Land Volume 3004 Folio 651,

the Land is offered to the Management Body and Trustee for Reserve Allocation subject to:



(a) the following Pre-Conditions to Allocation:

i. The parties acknowledge and agree that the Land will be set aside as a reserve for the purpose of "Noongar Social, Cultural and/or Economic Benefit", or such other purpose as agreed between the State and the Trustee, pursuant to section 41 of the LAA; and

ii. A memorial under section 17 of the LAA being registered against the Qualified Certificate of Crown Land Title that records that habitable and sensitive land uses may be restricted due to the Land's proximity to Road and Rail Noise.

(b) the following Special Conditions to Allocation:

i. The Management Body and Trustee acknowledge the Land is overlain by a threatened ecological community within the definition of the *Biodiversity Conservation Act 2016* (WA) and subject to regulation under that Act;

ii. The Management Body and Trustee acknowledge that the Land is within a mining buffer and development restrictions may apply; and

iii. The Allocation of the Land is subject to:

(i) the memorial under section 17 of the LAA recording that habitable and sensitive Land uses may be restricted due to the Land's proximity to Road and Rail Noise which will remain on the Qualified Certificate of Crown Land Title subsequent to registration of the Management Order; and

(ii) the Management Body and Trustee acknowledging the potential restrictions on its use of the Land.

TRUSTEE OR SWALSC DECISION

☐ Terms of Allocation Accepted

☐ Changes to Terms of Allocation Proposed

☐ Terms of Allocation Not Accepted

Amendments to terms proposed (where relevant):

Comments:

TERMS OF ALLOCATION SUPPORTING INFORMATION

DESKTOP ASSESSMENT (as at 04/03/2021)

1. Inside or outside town site: Outside of townsite.
2. Indicative encroachments: According to Landgate imagery, it appears that walking tracks are visible in the Western area of the PIN between the cleared sand areas. No other encroachments are visible.
3. Responsible Agency: Department of Planning, Lands and Heritage.
4. Mining and petroleum interests identified: Adjacent to Mining Lease - M 7001302, held by ENMIC PTY LTD.
5. File notation areas: The land parcels are affected by the following File Notation Areas: Nil.
6. Limitations, Interests, Encumbrances, and Notifications:
   - Title excludes the land shown on Deposited Plan 91182 and 175162.
7. Adjoining land parcels:



- R8428 (PIN 11850700) for the purpose of National Park Act 103-1978, to the East, North and West of the PIN;
- UCL (PIN 11876711) to the south of PIN (middle to eastern side of southern border) and
- R30656 (PIN 531438) for the purpose of Quarry Mine, also to the south of the PIN (middle to western side of southern border).

8. Registered Aboriginal heritage sites: ID 5765 (Arumvale).
9. State heritage: Nil.
10. Buildings and infrastructure or vacant: Vacant.
11. Indicative contamination: Nil.
12. Indicative environmental:
    - impacted by the RIWI Act (Cape to Cape South Surface Water Area) as indicated by the Department of Water and Environmental Regulation.
    - impacted by the RIWI Act, Groundwater Areas as indicated by the Department of Water and Environmental Regulation.
13. Services: It appears no services are available to the PIN
14. Planning considerations:
    - Zoning: National Parks and Nature Reserves.
    - Region Scheme / Other: Principal Ridge Protection Area (SPP 6.1 - Leeuwin-Naturaliste Ridge State Planning Policy).
    - Within a Bush Fire Prone Area, State Planning Policy 3.7 – Planning in Bush Fire Prone Areas applies.
15. Lost Lands Description: Nil.
16. Additional Information: Nil.

TENURE SELECTION			
Date	25/06/2019	**Tenure**	Reserve with power to lease
Comment (if applicable)	*No comment recorded in the Land Assessment Portal.*		

REFERRAL INFORMATION (as at 04/03/2021)	
Legal Access	Unconstructed, legal access is available via Boranup Drive, PIN 11605209 (DBCA/unconstructed).
LGA	1. Is the Shire of Augusta-Margaret River (Shire) supportive of the transfer of this land to the Noongar People under the Settlement? No comment provided. 2. Does the Shire have any interest in the land? No comment provided. 3. Does the Shire have existing or planned infrastructure within the land parcel that requires protection? No comment provided. 4. Is the land parcel subject to any mandatory connection to services? No comment provided. 5. Are any future proposals for the land identified? No comment provided. 6. Are there any future proposals for adjoining land that may affect the land identified in the spreadsheet? If so, in what timeframe? No comment provided. 7. Please advise of any proposed planning scheme amendments that may affect the zoning of this land at a State or Local government level. If a scheme amendment is to occur, what is the change proposed and when will it come into effect? No comment provided

	8. Please advise of any known land management issues such as site contamination, hazards, debris or rubbish dumping, unauthorised land use and environmental considerations (such as inundation or similar site constraints): This land parcel may be land locked as the boundary appears not to abut the Boranup Drive road reserve. 9. Please provide any additional comments on the proposed transfer of this land as part of the Settlement: Borannup Drive constructed section appears to encroach into PIN 531434. Previous discussions with DBCA identified the requirement of an agreement as the road is entirely within a National Park. The agreement would have formalised DBCA maintaining the road although gazetted. Currently DBCA is maintain the road without an agreement. As a result of this, Boranup Drive is considered a National Park road and it is also identified by Main Roads Western Australia as a road not eligible for local government road funding.
Land Use Planning	The Western Australian Planning Commission has no interest in this land. Not aware of any proposals on this land. On adjacent land, limesand extraction occurs on Lots 320 and 4543. Identified as within 'Principal Ridge Protection Area – State Planning Policy 6.1: Leeuwin-Naturaliste Ridge State Planning Policy. Zoned as 'National Parks and Nature Reserves' under the Local Planning Strategy and Scheme. No structure plan or subdivision proposal exists for this land. Any development should be discussed with the relevant Local Government. The southern portion of this land is within the State Planning Policy 2.5 – Rural Land Use Significant Geological Supplies buffer area (limesand extraction) and development restrictions may apply. The land is also within a Bush Fire Prone area under State Planning Policy 3.7 – Planning in Bush Fire Prone Areas. The land is within 300 metres of Caves Road which is designated 'Other Significant Freight/Traffic route' under State Planning Policy 5.4 - Transport Noise and Rail, wherein sensitive land uses will need to be protected from traffic noise. The land is remote from the power grid. The Department of Biodiversity, Conservation and Attraction's management plan report for the Leeuwin-Naturaliste National Park has recommended that Lots 4230 and adjoining Lots 4543 and 320 be added to the National Park.
Heritage Services (State Heritage)	Parcel Tenure Investigation undertaken by Heritage Assessment and Registration using the data provided by LUM shows no intersection with any place mapped as historic heritage in SLIP No GHPDP referral required.
Heritage Services (Aboriginal Heritage)	Registered Sites: ID 5765 (Arumvale) Other Places: None Identified
Department of Biodiversity, Conservation and Attractions	DBCA continues to note existing interest in this land for conservation purposes, as per recommendations contained in the Leeuwin Naturaliste Capes Area Parks and Reserves Management Plan 2015 and Forest Management Plan 2014. Upon further consideration, DBCA accepts that the conservation values of the land are likely to be sufficiently protected via the applicable development assessment process. As such, DBCA does not object to the transfer of these lands under the South West Native Title Settlement. However, DBCA does suggest the area should be managed as a Class A Reserve due to its connectivity to the existing Class A National Park, and continued inclusion in Departmental Management Plans. [*Classification pursuant to Section 42 of the LAA may be pursued following Allocation if this approach is supported by the Trustee*.]
Department of Water and	Has no interest in land.

Environmental Regulation			
Main Roads WA	Has no interest in land.		
Servicing Authorities	**Water Corporation:** No objection. **Western Power:** No objection. **Optus:** No objection. **Telstra:** No Telstra Assets located within the identified land parcel **Atco Gas:** No Interest. No ATCO Gas infrastructure. No objection nor conditions as gas is a non-mandatory service		
Additional Referrals	N/A		
Contaminated Sites Desktop Assessment	A search of the DWER & DPLH Contaminated sites databases confirms there are no known or suspected contamination risks on the site.		
DMIRS FINAL CLEARANCE			
Date	8/11/2020	**Tenure**	Reserve with power to lease
Comment **(if applicable)**	This proposal contains high grade limesand and adjoins active mining lease M70/1302 on its south eastern boundary with recent extraction of limesand taking place close to the proposal boundary. However, this Reserve Proposal raises no significant access concerns for mineral and petroleum resources, geothermal energy or basic raw materials, provided no sensitive land uses are introduced within 500 metres of Crown Reserve 30656 which has a purpose of 'Quarry limesand', in order to protect limesand extraction on current mining lease M70/1302 DMIRS requests the acknowledgement of this separation area for the limesand be included in the reserve management order		

Note: This document is intended as a summary of the information contained in the Land Assessment Portal for the purposes of negotiating the Terms of Allocation. No warranty is given as to the accuracy of this summary or the information contained in the Portal and your own due diligence should be undertaken for this purpose.



BORANUP LIMESAND
SOUTH-WEST MINERAL FIELD

Extraction of Limesand for Lime

ENMIC PTY LTD

ATTACHMENT 4
REVEIEW OF REHABILITATION

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
MINE CLOSURE PLAN OBJECTIVES							
LAND AND SOILS							
RISK L1 DISTURBANCE FOOTPRINT The excavations may extend outside the approved disturbance footprint or may not comply with the conditions of approval	CO – L1 Compliance with the requirements of the Mining Tenement, and other legally binding conditions and commitments.	All legally binding conditions and commitments are complied with. No clearing outside the approved boundaries.	Domain 1	• Annual site auditing by a review of all conditions. • Quarterly survey of the disturbance areas. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Site survey, aerial drone and ground inspections and photography.	• All legally binding conditions and commitments are complied with. • No clearing outside the approved boundaries. • All disturbed land outside the approved envelopes related to mining is closed and vegetation is re-established.	• Annual site auditing by a review of all conditions. • Quarterly survey of the disturbance areas. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. Remedial Action • Undertake any action that is necessary to bring the site into compliance.	• All conditions are complied with. • There are no disturbances outside the approved footprint. • A small area to the north that was cleared previously has been under revegetation for some years. ***See Notes on Rehabilitation 20 November 2025.*** • The 2023 updated Mining Proposal and Mine Closure Plan provided additional pit area. • A clearing permit (CPS 10368) was provided for a small enlargement of the current pit. ***See Notes on Rehabilitation 20 November 2025.***
L2A STAKEHOLDER CONSULTATION The interests of all relevant stakeholders may not be considered during operations, closure planning and closure.	CO - L2A Stakeholder requirements are incorporated into the operations and closure.	Minimum yearly liaison completed with the Shire of Augusta – Margaret River, Main Roads and relevant other stakeholders.	All Domains	• Annual review of stakeholder register. • Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Consultation is current in the stakeholder register. • Regular consultation is conducted with the stakeholders.	• Minimum yearly liaison completed with the Shire of Augusta – Margaret River, Main Roads and relevant other stakeholders. • Stakeholder requirements are incorporated into operational procedures and closure actions	• Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Update the stakeholder register to reflect consultation. Remedial Action • Contact stakeholder as soon as practicable and carry out any actions required.	• There has been extensive stakeholder consultation through the years and during the 20234 update of the Mining Proposal and Mine Closure Plan. **Site meetings were held on site on 1 April 2025 with DMPE and DWER.** • There has been extensive stakeholder consultation with DWER and DEMIRS in relation to the operations, dust management and approvals with both authorities inspecting the site In April 2025 and DEMIRS inspecting several times during 2024. The site was found

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
		Stakeholder requirements are incorporated into operational procedures and closure actions					to be compliant with some requirements for upgrades to the fixed sprinkler system and other dust management relating to potential road impacts. • The Main observations were noted by DMPE (A1-568-5542) as being application of dust issues, sprinklers along the access road, street sweeping, sealing the apron and water cart. These have been provided. ***See attached photos.*** • The other main observation raised related to revegetation and closure. • In response Enmic has addressed all dust management issues and installed the bitumen apron and seal along the access road during the first and second week of October 2025. • All other items have been completed, including repairs to the sprinkler systems, purchasing a small street sweeper and having a water cart located on site. This has been communicated to DMPE and DWER as actions have been completed. ***See attached photos***. **General Consultation** • There has been a sustained public campaign in relation to the site but as far as is known the overseeing Government authorities are satisfied with the management of the operations. • There has been ongoing liaison between Enmic Pty Ltd and the local walking group and a good working relationship established. • There has also been some liaison between representatives of the traditional owners in relation to the adjoining land to the north.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
							• The limesand is vital for reducing acidic soils in agriculture and viticulture and liaison is ongoing with the relevant parties with respect to maintenance of supply.
RISK L3 LANDFORM RESTORATION The land surface may not restore to be compatible to its pre mined condition.	CO – L1 - 1 The closed landform has a form that is similar to nearby undulating coastal dune landform. CO – L1 – 2 Creation of a safe and stable landform that minimises erosion and supports appropriate local native vegetation.	The restored dune land has the same function as adjoining natural dune system.	All domains	• Quarterly review of the disturbance areas using historic and ongoing aerial, drone and satellite photography to confirm the dune form. • Quarterly discussions with staff and operators to assess compliance. • Quarterly discussions with staff and operators to assess compliance. • Annual discussion with Shire of Augusta – Margaret River and DBCA as required for closed landform. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Assessment of any contaminated areas to accordance with the Contaminated Sites Act 2003 (WA). • Soil testing and remediation if contaminated soils or water are recorded.	• Final slopes do not exceed the angle of repose of limesand. • Final landform is variable in form, horizontally and vertically and compatible with the local natural landforms. • Assessment of any contaminated areas in accordance with the Contaminated Sites Act 2003 (WA). • Soil testing and remediation if contaminated soils or water are recorded. • No buildings, concrete, metal and other non natural materials will remain at closure, unless required by a stakeholder • All wastes and any contaminated limesand and soil have been removed to an approved disposal site.	• Quarterly review of the disturbance areas using historic and ongoing aerial, drone and satellite photography to confirm the dune form. • Quarterly discussions with staff and operators to assess compliance. • Annual discussion with Shire of Augusta – Margaret River and DBCA as required for closed landform. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Assessment of any contaminated areas to accordance with the Contaminated Sites Act 2003 (WA). • Soil testing and remediation if contaminated soils or water are recorded. Remedial Action	• The landform of completed faces is provided at the angle of repose which matches the natural sand movements. ***See Notes on Rehabilitation 20 November 2025 - Figure 3.*** • There are no adverse material on site. A regular collection and removal from site of old and service items is provided. • The site is clean and tidy with no adverse conditions. DMPE inspected the site in January 2023 **and April 2025** and found the operational aspects satisfactory with no observed contamination or rubbish. • As the pit has progressed westwards the face has became higher. Benches were not possible or safe because hard stand would have to be provided to enable access to the upper bench which would introduce materials such as limestone to the limesand which was not desirable from product quality and would have resulted in introducing foreign materials to site. ***See attached photos.*** • The safest and most efficient means of mining is to use a bulldozer to push down the limesand from the west. This however necessitated a much larger footprint to access the limesand and was the trigger that led to additional ground being opened. ***See attached photos.*** • The attached drone photos show that the whole pit is required to be used because the dune is so high and to safely excavate In such a small, approved footprint safely there is only a

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
					• No materials that will trigger the Contaminated Sites Act 2003 (WA) will remain. • Signs, fences and other aspects of mining removed unless required as part of a future landuse.	• Undertake additional or alternatives earthworks.	minor area of closure that could be undertaken prior to the summer campaign of 2025 – 2026. That is summarised in Notes on Rehabilitation which was provided to DMPE on 25 June 2025 and documents the closure and revegetation to be undertaken during the spring summer if 2025 2026 and beyond. See the attached document. • The northern face is the one to be commenced with revegetation and a small area allocated which will be enlarged in Summer 2025 – 2026. ***See Notes on Rehabilitation 20 November 2025 – Figure 6.*** • Topsoil and vegetation fragments collected from clearing in early summer 2025 – 2026 will be used, combined with seed already purchased. (See attached seed list and ***See Notes on Rehabilitation 20 November 2025 – Figure, 5 and attached seed lint to that report..*** • The excavation is completed in annual campaigns occupying, which will be reformed at the end of each campaign or prepared for the next yearly campaign. • The volumes required by the community have been increasing annually as other sources of limesand become exhausted. • Excavation is conducted on the floor of the pit well below the natural dune elevation. • There is no evidence of excessive or additional wind erosion and the existing pit slopes are stable. • Regular aerial, drone and satellite photography to inform the operations, disturbances and dune and forest form.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
RISK L5 Heritage Aboriginal heritage may be encountered during excavation.	CO - L5 Identified Aboriginal heritage is not impacted.	Identified Aboriginal heritage is assessed by the Wadandi traditional owners and actioned.	All domains	• Compliance with the Heritage Management Procedures developed jointly by between the Wadandi and Enmic Pty Ltd with input of Brad Good eand Associates (archaeology and ethnographics) as a result of the Heritage Survey • Wadandi Observers are in place during land clearing.	• No disturbance of identified aboriginal heritage material without approval of the Wadandi. • All heritage material is identified and investigated promptly. • Maintenance and compliance with the Heritage Agreement. • All heritage material is reported to Wadandi and DPLH is found.	• Provide Wadandi monitors during land clearing. • Comply with the Heritage Management Plan. • Wadandi to monitor clearing operations and to action treatment of any heritage material found. Remedial Action • Provide additional liaison and consultation with the Wadandi. • Provide additional archaeological survey support if heritage material is found.	• At Closure of each portion of the land and at final closure. There has been no additional land opening conducted in 2024 – 2025. Clearing for Clearing Permit CPS 10368/1 was conducted in August – September 2025.Some additional opening will be required in 2025 – 2026.
BIODOVERSITY							
B1 – WEEDS - DIEBACK Vehicles arriving on site may introduce weeds and/or dieback. Weeds or dieback may be present at levels that impact vegetation.	CO – B1 - 1 No additional weed load as a result of mining activities that will adversely impact on the environmental values of the local area. CO – B1 - 2	No greater weed load than is currently present No introduction of dieback disease.	All domains	• Spring and Autumn and or wet season audits of weeds. • Site audit of completed rehabilitation for species type, richness, diversity and if necessary using standard 100m2 plots of restored areas and adjoining natural analogue areas.	• No obvious sign of weed impacts on restored land that is impacting natural vegetation. • No significant weed impacts of adjoining natural vegetation. • No additional weed loads present. • Absence of Declared Weeds.	• Yearly assessment of all disturbed areas, access roads, the entrance and truck parking areas for weed and dieback impacts. • Annual visual auditing of habitat values on adjoining land.	• Twice yearly inspections are made. No additional or spread of weeds was noted. • The presence and potential impact of weeds is review regularly by site and Enmic staff. • Ground and drone photograph records are maintained. • There do not appear to be any significant weed incursions. • An updated vegetation study was completed by PGV Environmental on 1 October 2025 and will contain a review of the weed impact and condition of the vegetation. • Some weeds occur near the site office and are

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
	No introduction of dieback disease.			• Audit for weeds and disturbances. • Photographic records. • Annual reporting.	• Absence of known invasive weeds.	• Provide counts of species present and plant density for exotic species using 100 m2 or other sample plots or transects in revegetation as appropriate. Remedial Action • Provide additional weed and or dieback control and or inspections and treatments until weeds are compliant with the objectives.	recommended to be treated. ***See Notes on Rehabilitation 20 November 2025 – Figure 8 and Section 6.0.*** • It can be seen from the drone and site photography that there has been no observable impact on the adjoining vegetation. Further the coastal dune vegetation on calcareous limesand has a lower risk of dieback that other local vegetation communities. • There are some minor weeds along the entrance road which have bene treated. They will be inspected in November 2025 and retreated as necessary. • Further assessments of vegetation were completed in early November 2025 to review the presence of weeds and the preparation of the site for placement of vegetated material and the seeding which will be undertaken in summer 2025 – 2026. Seeding was not completed in spring 2025 to prevent germination and just prior to summer where the seedlings would not grow sufficiently before the hot summer conditions and would likely die. ***See Notes on Rehabilitation 20 November 2025.***
WATER RESOURCES							
W1 – GROUNDWATER CONTAMINATION	CO – W1 There will be no foreign materials or contamination that will impact water quality.	No untreated contaminated materials that could impact on groundwater quality present on site.	Domain 3	• No waste materials that are not part of routine management present on site.	• Weekly visual audit of completed ground, to verify no materials likely to contaminate the groundwater are unmanaged.	• Visual audit of completed ground, to verify compliance of absence of pollution. • Discussion with staff and operators.	• There are no adverse material on site. • Regular collection and removal from site of old and service items is provided. • The fuel storage is approved and has been inspected by DWER and DMPE on 1 April 2025.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
Groundwater may be contaminated by fuel spills or servicing.				• No untreated contaminated materials that could impact on groundwater quality present on site. • Compliance with the Contaminated Sites Act 2003 (WA). • Waste water system is performing and maintained correctly.	• Weekly discussion with staff and operators to verify management of water quality. • Soil testing and remediation as required. • High risk potential contaminated areas such as refueling zones assessed at least daily. •	• Structures and features not required by stakeholders will be removed. • Visual observation backed by soil sampling as necessary and through discussions with internal stakeholders. • If contaminated sites are identified, manage the remediation in accordance with the Contaminated Sites Act 2003 (WA). Remedial Action • Remove foreign material to an approved waste site or recycle. • Remove contaminated soils and other materials to an approved waste disposal site.	

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
						• Potential contaminated areas such as refueling zones will be assessed and sample tested as necessary. Any contaminated materials will be removed and the area remediated and retested as necessary. • The site will be cleaned and retested as necessary to ensure compliance. • Any wastes or non natural materials found will be removed to an approved facility and the site tidied.	
REHABILITATION AND MINE CLOSURE							
R1 – CLOSURE The operations may not be progressively closed.	CO – R1 The disturbed mining environment is safe to humans and animals.	The disturbed mining environment is safe to humans and animals.	All domains	• Annual inspections at the appropriate time of the year. • Annual visual auditing of habitat values on adjoining land. • Annual audit for weeds and disturbances. • Ongoing photographic records. • Annual reporting in AER and MRF.	• Rehabilitation is progressive during mining. • Compliance with rehabilitation commitments for completed land.	• Yearly ground inspections and audits. • Annual audit against the Completion Criteria and for compliance with the Mine Closure Plan.	• Only small areas are currently available for revegetation and they have had topsoil added. • Disturbed land to the north is revegetating well. • Aerial photography from 1971 and 2025 show the rapid and successful colonisation of bare dunes by the coastal vegetation. • Portion of the eastern end of the northern face will be able to be closed and revegetated in 2025 – 2026 and this is proposed. • ***See Notes on Rehabilitation 20 November 2025.***

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
					• Compliance with the Mine Closure Plan as assessed by audits of each stage and final audit of the Conditions of Approval and commitments made within the Mine Closure Plan • Compliance with Weed Risk B1 Management. • Area of active ground minimised. • All suitable and available ground under revegetation.	• Annually review closed land to ensure no non natural materials remain unless required by a stakeholder. Remedial Action • Repeat and undertake additional closure and rehabilitation actions as described in the Mine Closure Plan..	• The slope will remain at the angle of repose which applies to natural slopes on dune sands including those on site. • ***See Notes on Rehabilitation 20 November 2025.*** • An updated vegetation study was completed by PGV Environmental on 1 October 2025 and will contain a review of the weed impact and condition of the vegetation. • It can be seen from the drone and site photography that there has been no observable impact on the adjoining vegetation. Further the coastal dune vegetation on calcareous limesand has a lower risk of dieback that other local vegetation communities. • Further assessments of vegetation were completed in early November 2025 to review the presence of weeds and the preparation of the site for placement of vegetated material and the seeding which will be undertaken in summer 2025 – 2026. ***See Notes on Rehabilitation 20 November 2025.***
R2 - REVEGETATION The revegetation may not be representative of the local plant communities.	CO – R2 The excavated area and access road will have equivalent function and resilience as local ecosystems.	Disturbed land will be restored to match the adjoining ecosystems.	All domains	• Annual site inspection of restored areas. • Comparison of habitat values between restored areas and adjoining land. • Comparison of fauna usage between natural and restored areas.	• Similar habitat values between restored areas and adjoining analogue areas. • Similar fauna usage between natural and restored areas. • No new disturbances to the conservation areas.	• Annual audit against the Completion Criteria and for compliance with the Mine Closure Plan. • Counts of species present and plant density for exotic species using 100 m^2 or other sample plots or transects.	• Only small areas are currently available for revegetation and they have had topsoil added. • Seeds have been purchased in September 2025. See the attached list. • Seeding was not completed in spring 2025 to prevent germination and just prior to summer where the seedlings would not grow sufficiently before the hot summer conditions and would likely die. • ***See Notes on Rehabilitation 20 November 2025.***

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
		Plant density that is variable but with an average plant density of > 1000 plants per hectare. Species richness of 5 species per 500 m2.		• Annual visual auditing of habitat values on revegetated land and adjoining land. • Site audit of completed rehabilitation for species type, richness, diversity and if necessary using standard 100m2 plots of restored areas and adjoining natural analogue areas. • Photographic records. • Annual reporting.	• Disturbed areas comply with the completion criteria for local native vegetation. • Compliance of rehabilitation with type, richness, diversity and completion criteria and adjoining natural analogue areas • Compliance with species richness and plant density increasing over the three year monitoring period. •	**Remedial Action** • Repeat and undertake additional closure and rehabilitation actions as described in the Mine Closure Plan. • Where deficient, provide additional seed to increase the number and diversity of plants, spread vegetation fragments or harvested branches capable of providing seed sources from brushing. • Review future rehabilitation techniques and modify as necessary to improve compliance and restoration success.	• There is no ground in the mining tenement which has undergone revegetation because there is no ground available. The small area nominated in the Notes on Rehabilitation provided to DMPE in June 2025 was not able to be reviewed. That area and a larger area consisting of between 1.0 and 1.5 hectares will be revegetated in summer 2025 – 2026 as proposed in the Rehabilitation Notes of June 2025. (See attached). • The area outside the tenement north of M 70/1302 that was cleared some years ago is regrowing as shown in the drone photos. It was to be assessed in spring 2025 and will be reviewed in the second site review in November 2025. • ***See Notes on Rehabilitation 20 November 2025 – Figure 8 and Section 6.0.*** • The revegetation exceeds the completion criteria and is compatible with the surrounding local native vegetation.
MINING PROPOSAL ENVIRONMENTAL OBJECTIVES							
RISK L1 **DISTURBANCE FOOTPRINT**	Compliance with the requirements of the Mining Tenement, and other legally binding conditions and commitments.	• All legally binding conditions and commitments are complied with.	All domains	• Annual site auditing by a review of all conditions. • Quarterly survey of the disturbance areas. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River.	• All legally binding conditions and commitments are complied with. • No clearing outside the approved boundaries.	• Annual site auditing by a review of all conditions. • Quarterly survey of the disturbance areas. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River.	• All conditions are complied with. • There are no disturbances outside the approved footprint. • A small area to the north that was cleared previously has been under revegetation for some years. • The 2023 updated Mining Proposal and Mine Closure Plan provided additional pit area.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
The excavations may extend outside the approved disturbance footprint or may not comply with the conditions of approval. **L2A**		• No clearing outside the approved boundaries.		• Site survey, aerial drone and ground inspections and photography.		**Remedial Action** • *Undertake any action that is necessary to bring the site into compliance.*	• A clearing permit (CPS 10368/1) was provided for a small enlargement of the current pit. Clearing commenced in August - September 1015 • The current operations are compliant with the approved footprints.
STAKEHOLDER CONSULTATION The interests of all relevant stakeholders may not be considered during operations, closure planning and closure.	Stakeholder requirements are incorporated into the operations and closure.	• Minimum yearly liaison completed with the Shire of Augusta – Margaret River, Main Roads and relevant other stakeholders. • Stakeholder requirements are incorporated into operational procedures and closure actions.	All domains	• Annual review of stakeholder register. • Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Consultation is current in the stakeholder register. • Regular consultation is conducted with the stakeholders.	• Minimum yearly liaison completed with the Shire of Augusta – Margaret River, Main Roads and relevant other stakeholders. • Stakeholder requirements are incorporated into operational procedures and closure actions.	• Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Update the stakeholder register to reflect consultation. **Remedial Action** • *Contact stakeholder as soon as practicable and carry out any actions required.*	• There has been extensive stakeholder consultation through the years and during the 2024 update of the Mining Proposal and Mine Closure Plan. **Site meetings were held on site on 1 April 2025 with DMPE and DWER.** • There has been extensive stakeholder consultation with DWER and DEMIRS in relation to the operations, dust management and approvals with both authorities inspecting the site In April 2025 and DEMIRS inspecting several times during 2024. The site was found to be compliant with some requirements for upgrades to the fixed sprinkler system and other dust management relating to potential road impacts. • The Main observations were noted by DMPE (A1-568-5542) as being application of dust issues, sprinklers along the access road, street sweeping, sealing the apron and water cart.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
							• The other main observation raised related to revegetation and closure. • In response Enmic has addressed all dust management issues and installed the bitumen apron and seal along the access road during the first and second week of October 2025. • All other items have been completed, including repairs to the sprinkler systems, purchasing a small street sweeper and having a water cart located on site. This has been communicated to DMPE and DWER as actions have been completed. **General Consultation** • There has been ongoing liaison between Enmic Pty Ltd and the local walking group and a good working relationship established. • There has also been some liaison between representatives of the traditional owners in relation to the adjoining land to the north. • The limesand is vital for reducing acidic soils in agriculture and viticulture and liaison is ongoing with the relevant parties with respect to maintenance of supply.
L2B **COMMUNITY** There may be community complaints to operations or transport.	The community has a means of providing comment to inform the operations and closure.	• Complaints recording and action program is maintained.	All domains	• Annual review of stakeholder register. • Reporting to DMPE, DWER and Shire of Augusta – Margaret River. • Review of Complaints Register	• Complaints recording and action program is maintained. • All complaints are investigated within 48 hours of notification, actioned as soon as practicable and reported back to the complainant within 14 days.	• Review complaints diary monthly to verify complaints are investigated and actioned in accordance with the complaints procedure. • Review communications at least daily for complaints.	• There has been a sustained public campaign in relation to the site but as far as is known the overseeing Government authorities are satisfied with the management of the operations. • The site was reviewed by DMPE and DWER on 1 April 2025 as a result of the sustained campaign. No comments were made directly to the company and it is presumed that DMPE and DWER responded to the public.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
		All complaints are investigated within 48 hours of notification, actioned as soon as practicable and reported back to the complainant within 14 days.				**Remedial Action** • *Update the complaints procedure as necessary.* • *Update the action procedures to ensure the complaints procedures are complied with.*	• Enmic could not liaise direcdtly with the complainants as most complaints were made to Government rather than the company. The complainants did not provide their contact details to Enmic even though the contacts were requested to enable a response. • The finding of DMPE and DWER are contained in theory inspection report (A1-568-5542).
RISK L3 **LANDFORM RESTORATION** The land surface may not restore to be compatible to its pre mined condition.	The closed landform has a form that is similar to nearby undulating coastal dune landform. Creation of a safe and stable landform that minimises erosion and supports appropriate local native vegetation	The closed landform has a form that is similar to nearby undulating coastal dune landform. Creation of a safe and stable landform that minimises erosion and supports appropriate local native vegetation	All domains	• Quarterly review of the disturbance areas using historic and ongoing aerial, drone and satellite photography to confirm the dune form. • Quarterly discussions with staff and operators to assess compliance. • Quarterly discussions with staff and operators to assess compliance. • Annual discussion with Shire of Augusta – Margaret River and DBCA as required for closed landform. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River.	• Final slopes do not exceed the angle of repose of limesand. • Final landform is variable in form, horizontally and vertically and compatible with the local natural landforms. • Assessment of any contaminated areas to accordance with the *Contaminated Sites Act 2003 (WA).* • Soil testing and remediation if contaminated soils or water are recorded.	• Quarterly review of the disturbance areas using historic and ongoing aerial, drone and satellite photography to confirm the dune form. • Quarterly discussions with staff and operators to assess compliance. • Annual discussion with Shire of Augusta – Margaret River and DBCA as required for closed landform. • Annual Reporting to DMPE, DWER and Shire of Augusta – Margaret River.	• The landform of completed faces is provided at the angle of repose which matches the natural sand movements. • The site is clean and tidy with no adverse conditions. DMPE inspected the site in January 2023 and found the operational aspects satisfactory with no observed contamination or rubbish. See the include site photos. The sire was inspected by DMPE on 1 April 2025. • As the pit has progressed westwards the face has became higher. Benches were not possible or safe because hard stand would have to be provided to enable access to the upper bench which would introduce materials such as limestone to the limesand which was not desirable from product quality and would have resulted in introducing foreign materials to site. • The safest and most efficient means of mining is to use a bulldozer to push down the limesand from the west. This however necessitated a much larger footprint to access the limesand and was the trigger that led to additional ground being opened in spring summer if 2025 2026 and beyond. See the attached document. ***See attached photos***.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
				• Assessment of any contaminated areas to accordance with the Contaminated Sites Act 2003 (WA). • Soil testing and remediation if contaminated soils or water are recorded	• No buildings, concrete, metal and other non natural materials will remain at closure, unless required by a stakeholder • All wastes and any contaminated limesand and soil have been removed to an approved disposal site. • No materials that will trigger the *Contaminated Sites Act 2003 (WA)* will remain. • Signs, fences and other aspects of mining removed unless required as part of a future landuse. •	• Assessment of any contaminated areas to accordance with the *Contaminated Sites Act 2003 (WA).* • Soil testing and remediation if contaminated soils or water are recorded. **Remedial Action** • *Undertake additional or alternative earthworks.*	• The excavation is completed in annual campaigns occupying, which will be reformed at the end of each campaign or prepared for the next yearly campaign. • The volumes required by the community have been increasing annually as other sources of limesand become exhausted. • Excavation is conducted on the floor of the pit well below the natural dune elevation. • There is no evidence of excessive or additional wind erosion and the existing pit slopes are stable. • Regular aerial, drone and satellite photography to inform the operations, disturbances and dune and forest form • The attached drone photos show that the whole pit is required to be used because the dune is so high and to safely excavate In such a small approved footprint safely there is only a minor area of closure that could be undertaken prior to the summer campaign of 2025 – 2026. That is summarised in Notes on Rehabilitation which was provided to DMPE on 25 June 2025 and documents the closure and revegetation to be undertaken. • Updated notes are attached.
RISK L4A **DUST – TRANSPORT DUST**	Limesand on Caves Road does not impact the safety or amenity of the road.	Limesand on Caves Road does not impact the safety or amenity of the road.	All domains	• Signs of visible dust blowing. • Visible dust and limesand on Caves Road. • Absence of dust from vegetation. • Health of vegetation adjoining disturbance areas.	• Absence of limesand on Caves Road does not form a safety risk or environment nuisance.	• Visual monitoring of Caves Road at least twice per day during operations. • Review communications at least daily for complaints.	• On 1 April 2025 and DEMIRS and DWER inspected the site. • The Main observations were noted by DMPE (A1-568-5542) as being application of dust issues, sprinklers along the access road, street sweeping, sealing the apron and water cart. • The other main observation raised related to revegetation and closure.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
Excessive dust might be generated that would impact on the public areas or nearby vegetation or conservation sites.						**Remedial Action** • *Sweep or wash affected section of road.* • *Undertake additional management to reduce the incidence of limesand on Caves Road.* • *Switch on, update or modify dust management procedures.* • *Provide additional site induction and training of staff to better management dust risk.*	• In response Enmic has addressed all dust management issues and installed the bitumen apron and seal along the access road during the first and second week of October 2025. **See attached photos.** • All other items have been completed, including repairs to the sprinkler systems, purchasing a small street sweeper and having a water cart located on site. This has been communicated to DMPE and DWER as actions have been completed. See attached photos.
RISK L4B **DUST – VEGETATION IMPACT** Limesand may impact adjoining vegetation	Mobile Limesand does not impact adjoining vegetation	Mobile Limesand does not impact adjoining vegetation	All domains	• Absence of dust from vegetation. • Health of vegetation adjoining disturbance areas.	• Vegetation adjoining disturbance areas is not impacted by wind blown limesand.	• Quarterly review of the vegetation disturbance boundary for depositional impact. **Remedial Action** • *Undertake additional earthworks to reduce the potential for limesand erosion and movement.* • *Remove excess limesand.*	• There is no observable impact on vegetation adjoining the access road or the pit itself. The sand does not tend to blow as dust, nor settle on vegetation and with the frequent small rainfall events the vegetation is clean and unimpeded. **See attached photos.**

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
						• *Recontour the adjoining limesand so that it does not erode.* • *Provide brushing with recovered vegetation or temporary wind break fencing.* • *Increase the revegetation effort on adjoining disturbed areas.*	
RISK L5 **HERITAGE** Aboriginal heritage may be encountered during excavation.	Identified aboriginal heritage is not impacted.	No disturbance of identified aboriginal heritage material without approval of the Wadandi. All heritage material is identified and investigated promptly. Maintenance and compliance with the Heritage Agreement. All heritage material is reported to Wadandi and DPLH is found.	All domains	• Compliance with the Heritage Management Procedures developed jointly by between the Wadandi and Enmic Pty Ltd with input of Brad Good eand Associates (archaeology and ethnographics) as a result of the Heritage Survey	• No disturbance of identified aboriginal heritage material without approval of the Wadandi. • All heritage material is identified and investigated promptly. • Maintenance and compliance with the Heritage Agreement. • All heritage material is reported to Wadandi and DPLH is found.	• Provide Wadandi monitors during land clearing. • Comply with the Heritage Management Plan. • Wadandi to monitor clearing operations and to action treatment of any heritage material found. **Remedial Action** • *Provide additional liaison and consultation with the Wadandi.* • *Provide additional archaeological survey support if heritage material is found.*	• At Closure of each portion of the land and at final closure. • There has been no additional land opening conducted in 2024 – 2025. • Some additional opening will be required in 2025 – 2026 and the extend. CPS 10368/1was cleared in August to September 2025 • A Heritage Survey completed and no further sites identified.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
RISK B1 **WEEDS and DIEBACK** Vehicles arriving on site may introduce weeds and/or dieback. Weeds or dieback may be present at levels that impact vegetation.	No additional weed load as a result of mining activities that will adversely impact on the environmental values of the local area. No introduction of dieback disease.	No additional weed load as a result of mining activities that will adversely impact on the environmental values of the local area. No introduction of dieback disease.	All domains	• Spring and Autumn and or wet season audits of weeds. • Site audit of completed rehabilitation for species type, richness, diversity and if necessary using standard 100m2 plots of restored areas and adjoining natural analogue areas. • Audit for weeds and disturbances. • Photographic records. • Annual reporting.	• No obvious sign of weed impacts on restored land that is impacting natural vegetation. • No significant weed impacts of adjoining natural vegetation. • No additional weed loads present. • Absence of Declared Weeds. • Absence of known invasive weeds. •	• Yearly assessment of all disturbed areas, access roads, the entrance and truck parking areas for weed and dieback impacts. • Annual visual auditing of habitat values on adjoining land. • Provide counts of species present and plant density for exotic species using 100 m^2 or other sample plots or transects in revegetation as appropriate. **Remedial Action** • *Provide additional weed and or dieback control and or inspections and treatments until weeds are compliant with the objectives.*	• Twice yearly inspections are made. No additional or spread of weeds was noted. • The presence and potential impact of weeds is review regularly by site and Enmic staff. • Ground and drone photograph records are maintained. • There do not appear to be any significant weed incursions. • An updated vegetation study was completed by PGV Environmental on 1 October 2025 and will contain a review of the weed impact and condition of the vegetation. • It can be seen from the drone and site photography that there has been no observable impact on the adjoining vegetation. Further the coastal dune vegetation on calcareous limesand has a lower risk of dieback that other local vegetation communities. • Further assessments of vegetation were completed on 17 November 2025 to review the presence of weeds and the preparation of the site for placement of vegetated material and the seeding which will be undertaken in summer 2025 – 2026. Seeding was not completed in spring 2025 to prevent germination and just prior to summer where the seedlings would not grow sufficiently before the hot summer conditions and would likely die. • It can be seen from the drone and site photography that there has been no observable impact on the adjoining vegetation. Further the coastal dune vegetation on calcareous limesand has a lower risk of dieback that other local vegetation communities.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
							• There are some minor weeds along the entrance road which have bene treated. They will be inspected in November 2025 and retreated as necessary.
RISK B2 **FAUNA** Local fauna may be impacted by excavation activities.	No adverse impacts on the abundance and diversity of native fauna species as a result of mining.	No adverse impacts on the abundance and diversity of native fauna species as a result of mining.		• Ground observations • Aerial and drone photos. • Evidence of fauna activity; ant nests tracks and trails, evidence of feeding from vegetation.	• Clearing is undertaken at times when impacts on fauna are minimised. • Fauna species and distribution is not compromised by mining. • Similar habitat values between restored areas and adjoining analogue areas. • Similar fauna usage between natural and restored areas. • No new disturbances to the conservation areas. •	• Five yearly review of local fauna habitats to assess longer term impacts. • Annual visual auditing of habitat values on adjoining land. **Remedial Action** • *Improve management of clearing and revegetation to further reduce the risk of fauna impacts.*	• There is no impact on adjoining vegetation communities or habitats. The pit footprint was largely cleared prior to mining commencement by Enmic and so little fauna habitat has been impacted by mining to this time.
RISK W1 **GROUNDWATER CONTAMINATION** Groundwater may be contaminated by fuel spills or servicing.	No untreated contaminated materials that could impact on groundwater quality present on site.	No untreated contaminated materials that could impact on groundwater quality present on site.	All domains	• No waste materials that are not part of routine management present on site. • No untreated contaminated materials that could impact on groundwater quality present on site. • Compliance with the Contaminated Sites Act 2003 (WA).	• Weekly visual audit of completed ground, to verify no materials likely to contaminate the groundwater are unmanaged. • Weekly discussion with staff and operators to verify management of water quality.	• Weekly visual audit of completed ground, to verify no materials likely to contaminate the groundwater are unmanaged. • Weekly review of the waste water system for correct function.	• There are no adverse material on site. • Regular collection and removal from site of old and service items is provided. • The fuel storage is approved and has been inspected by DWER and DMPE on 1 April 2025.

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
				• Waste water system is performing and maintained correctly.	• Soil testing and remediation as required. • High risk potential contaminated areas such as refueling zones assessed at least daily.	• Weekly discussion with staff and operators to verify management of water quality. • Soil testing and remediation as required. • High risk potential contaminated areas such as refueling zones assessed at least daily. Remedial Action • Contaminated materials will be removed and the area remediated and retested. • *Ensure that contaminated sites are identified, and do impact on the Project area and post-mining land use in accordance with the Contaminated Sites Act 2003 (WA).* • *Remove any unmanaged wastes or non natural materials found to an approved facility and the site tidied.*	

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
RISK R1 CLOSURE The operations may not be progressively closed.	• The disturbed mining environment is safe to humans and animals.	• Compliance with the Mine Closure Plan. • All facilities and non-natural materials associated with mining are removed on closure of each completed area.	All domains	• Compliance with the Mine Closure Plan. • Annual inspections at the appropriate time of the year. • Annual visual auditing of habitat values on adjoining land. • Annual audit for weeds and disturbances. • Ongoing photographic records. • Annual reporting in AER and MRF.	• Rehabilitation is progressive during mining. • Compliance with rehabilitation commitments for completed land. • Compliance with the Mine Closure Plan as assessed by audits of each stage and final audit of the Conditions of Approval and commitments made within the Mine Closure Plan. • Area of active ground minimised.	• Yearly ground inspections and audits. • Annual audit against the Completion Criteria and for compliance with the Mine Closure Plan. • Annually review closed land to ensure no non natural materials remain unless required by a stakeholder. **Remedial Action** • *Repeat and undertake additional closure and rehabilitation actions as described in the Mine Closure Plan.*	• Only small areas are currently available for revegetation and they have had topsoil added. • .There is no ground in the mining tenement which has undergone revegetation because there is no ground available. The small area nominated in the Notes on Rehabilitation provided to DMPE in June 2025 was not able to be reviewed. That area and a larger area consisting of between 1.0 and 1.5 hectares will be revegetated in summer 2025 – 2026 as proposed in the Rehabilitation Notes of June 2025. (See attached).
RISK R2 – REHABILITATION The revegetation may not be representative of the local plant communities.	The rehabilitated landscapes has function and resilience similar to the local coastal dune shrubland vegetation.	• All rehabilitation commitments are complied with. • Compliance with the Mine Closure Plan for species richness, plant density and ecosystem.	All domains	• Compliance with Mine Closure Plan. • Annual site inspection of restored areas. • Comparison of habitat values between restored areas and adjoining land. • Comparison of fauna usage between natural and restored areas.	• Compliance with Mine Closure Plan. • Similar habitat values between restored areas and adjoining analogue areas. • Similar fauna usage between natural and restored areas. • No new disturbances to the conservation areas.	• Annual audit against the Completion Criteria and for compliance with the Mine Closure Plan. • Counts of species present and plant density for exotic species using 100 m^2 or other sample plots or transects	• Only small areas are currently available for revegetation and they have had topsoil added. • Disturbed land to the north is revegetating well. • Aerial photography from 1971 and 2025 show the rapid and successful colonisation of bare dunes by the coastal vegetation. • Portion of the eastern end of the northern face will be able to be closed and revegetated in 2025 – 2026 and this is proposed. ***See Notes on Rehabilitation 20 November 2025.***

Identified Risk	Closure Outcome	Completion Criteria	Domains	Measurement Tools	Performance Indicators to Meet Completion Criteria	Monitoring and Remediation	Audit
				• Annual visual auditing of habitat values on revegetated land and adjoining land. • Site audit of completed rehabilitation for species type, richness, diversity and if necessary using standard 100m2 plots of restored areas and adjoining natural analogue areas. • Photographic records. • Annual reporting.	• Disturbed areas comply with the completion criteria for local native vegetation. • Compliance of rehabilitation with type, richness, diversity and completion criteria and adjoining natural analogue areas • Compliance with species richness and plant density increasing over the three year monitoring period.	**Remedial Action** • *Repeat and undertake additional closure and rehabilitation actions as described in the Mine Closure Plan.* • *Where deficient, provide additional seed to increase the number and diversity of plants, spread vegetation fragments or harvested branches capable of providing seed sources from brushing.* • *Review future rehabilitation techniques and modify as necessary to improve compliance and restoration success.*	• The slope will remain at the angle of repose which applies to natural slopes on dune sands including those on site. • Seeds have been purchased in September 2025. **See the attached list.** • Seeding was not completed in spring 2025 to prevent germination and just prior to summer where the seedlings would not grow sufficiently before the hot summer conditions and would likely die. • An updated vegetation study was completed by PGV Environmental on 1 October 2025 and will contain a review of the weed impact and condition of the vegetation. • The revegetation to the north of the tenement complies with the completion criteria and is similar to the adjoining natural vegetation. ***See Notes on Rehabilitation 20 November 2025.***



Operations from the south



Overview from the south west



Overview of the operations from the entrance



Sealed exit road, site facilities and fixed sprinklers on the gravel inlet road



Static sprinklers for access road



Road sweeper retained on site



Bitumen seal to crossover to Caves Road and exit road



Bitumen seal to crossover to Caves Road and exit road

BORANUP LIMESAND
SOUTH-WEST MINERAL FIELD

Extraction of Limesand for Lime

ENMIC PTY LTD

ATTACHMENT 5
CLEARING PERMIT CPS 10368/1

GOVERNMENT OF
WESTERN AUSTRALIA

CLEARING PERMIT

Granted under section 51E of the Environmental Protection Act 1986

Purpose Permit number:	10368/1
Duration of Permit:	From 11 January 2025 to 10 January 2035
Permit Holder:	Enmic Pty Ltd

The Permit Holder is authorised to clear native vegetation subject to the following conditions of this Permit.

PART I - CLEARING AUTHORISED

1. Land on which clearing is to be done
Mining Lease 70/1302

2. Clearing authorised (purpose)
The Permit Holder is authorised to clear native vegetation for the purpose of sand mining.

3. Area of Clearing
The Permit Holder must not clear more than 3 hectares of native vegetation within the area cross-hatched yellow in Figure 1 of Schedule 1.

4. Type of Clearing Authorised
The Permit Holder shall not clear native vegetation unless the purpose for which the clearing is authorised is enacted within three months of the authorised clearing being undertaken.

5. Directional clearing
The Permit Holder shall must:
(a) conduct all clearing authorised under this permit in one direction towards adjacent vegetation; and
(b) allow a reasonable time for fauna present within the area being cleared to move into that adjacent native vegetation ahead of the clearing activity.

PART II - MANAGEMENT CONDITIONS

6. Avoid, minimise and reduce the impacts and extent of clearing

In determining the amount of native vegetation to be cleared under this Permit, the Permit Holder must apply the following principles, set out in descending order of preference:

(a) avoid the clearing of native vegetation;
(b) minimise the amount of native vegetation to be cleared; and
(c) reduce the impact of clearing on any environmental value.

7. Weed control

When undertaking any clearing or other activity authorised under this Permit, the Permit Holder must take the following steps to minimise the risk of the introduction and spread of *weeds*:

(a) clean earth-moving machinery of soil and vegetation prior to entering and leaving the area to be cleared;
(b) ensure that no known or *weed*-affected soil, *mulch*, *fill* or other material is brought into the area to be cleared; and
(c) restrict the movement of machines and other vehicles to the limits of the areas to be cleared.

PART III - RECORD KEEPING AND REPORTING

8. Records to be kept

The Permit Holder must maintain records relating to the listed relevant matters in accordance with the specifications detailed in Table 1.

Table 1: Records that must be kept

No.	Relevant matter	Specifications
1.	In relation to the authorised clearing activities generally	(a) the location where the clearing occurred, recorded using a Global Positioning System (GPS) unit set to Geocentric Datum Australia 2020 (GDA2020), expressing the geographical coordinates in Eastings and Northings; (b) the date that the area was cleared; (c) the size of the area cleared (in hectares); (d) actions taken in accordance with Condition 4; (e) actions taken in accordance with Condition 5; (f) actions taken to avoid, minimise, and reduce the impacts and extent of clearing in accordance with Condition 6; and (g) actions taken to minimise the risk of the introduction and spread of *weeds* in accordance with Condition 7.

9. Reporting

(a) The Permit Holder shall provide a report to the *CEO* by 31 July each year for the life of this Permit, demonstrating adherence to all conditions of this Permit, and setting out the records required under Condition 8 of this Permit in relation to clearing carried out between 1 July and 30 June of the previous financial year.

(b) If no clearing authorised under this Permit was undertaken between 1 July and 30 June of the previous financial year, a written report confirming that no clearing under this permit has been carried out, must be provided to the *CEO* by 31 July of each year.

(c) Prior to 10 January 2035, the Permit Holder must provide to the *CEO* a written report of records required under Condition 8 of this Permit where these records have not already been provided under Condition 9(a) or 9(b) of this Permit.

DEFINITIONS

In this Permit, the terms in Table 2 have the meanings defined.

Table 2: Definitions

Term	Definition
CEO	the Chief Executive Officer of the Department responsible for administering the clearing provisions contained within the *Environmental Protection Act 1986* or an Officer with delegated authority under Section 20 of the *Environmental Protection Act 1986*.
clearing	has the meaning given under section 3(1) of the EP Act.
condition/s	a condition to which this clearing permit is subject under section 51H of the EP Act.
department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
EP Act	*Environmental Protection Act 1986* (WA)
fill	means material used to increase the ground level, or to fill a depression.
mulch	means the use of organic matter, wood chips or rocks to slow the movement of water across the soil surface and to reduce evaporation.
native vegetation	has the meaning given under section 3(1) and section 51A of the EP Act.
weed/s	means any plant – (a) that is a declared pest under section 22 of the *Biosecurity and Agriculture Management Act 2007*; or (b) published in a Department of Biodiversity, Conservation and Attractions species-led ecological impact and invasiveness ranking summary, regardless of ranking; or (c) not indigenous to the area concerned.

END OF CONDITIONS

Danielle Risbey

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Danielle Risbey | Acting General Manager Mine Closure and Environmental Services
Resource and Environmental Compliance Division
19 December 2024

Officer with delegated authority under Section 20
of the *Environmental Protection Act 1986*

SCHEDULE 1

The boundary of the area authorised to be cleared is shown in the map below (Figure 1).



Figure 1: Map of the boundary of the area within which clearing may occur

Department of Energy, Mines, Industry Regulation and Safety

GOVERNMENT OF WESTERN AUSTRALIA

Clearing Permit Decision Report

1. Application details and outcomes

1.1. Permit application details

Permit number:	10368/1
Permit type:	Purpose Permit
Applicant name:	Enmic Pty Ltd
Application received:	5 October 2023
Application area:	3 hectares
Purpose of clearing:	Sand Mining
Method of clearing:	Mechanical Removal
Tenure:	Mining Lease 70/1302
Location (LGA area/s):	Shire of Augusta-Margaret River
Colloquial name:	Boranup Limesand Project

1.2. Description of clearing activities

Enmic Pty Ltd proposes to clear up to 3 hectares of native vegetation within a boundary of approximately 12.5 hectares, for the purpose of limesand mining. The project is located approximately 2.5 kilometres northwest of Karridale, within the Shire of Augusta-Margaret River.

The application is to allow for continued limesand mining at the quarry.

1.3. Decision on application and key considerations

Decision:	Grant
Decision date:	19 December 2024
Decision area:	3 hectares of native vegetation

1.4. Reasons for decision

This clearing permit application was made in accordance with section 51E and 51O of the *Environmental Protection Act 1986* (EP Act) and was received by the Department of Energy, Mines, Industry Regulation and Safety (DEMIRS) on 31 October 2023. DEMIRS advertised the application for a public comment for a period of 21 days, and one submission was received.

In making this decision, the Delegated Officer had regard for the site characteristics (Appendix B), relevant datasets (Appendix F), supporting information provided by the applicant including the results of a flora and vegetation survey (Appendix E), the clearing principles set out in Schedule 5 of the EP Act (Appendix D), proposed avoidance and minimisation measures (Section 3.1), relevant planning instruments and any other matters considered relevant to the assessment (Section 3.3).

The assessment identified that the proposed clearing may result in:

- the potential introduction and spread of weeds into adjacent vegetation, which could impact on the quality of the adjacent vegetation and its habitat values;
- the potential direct impacts to fauna of the local area;
- potential land degradation in the form of wind erosion.

After consideration of the available information, as well as the applicant's minimisation and mitigation measures (see Section 3.1), the Delegated Officer determined the proposed clearing can be minimised and managed to be unlikely to lead to an unacceptable risk to environmental values.

The Delegated Officer decided to grant a clearing permit subject to conditions to:

- avoid, minimise to reduce the impacts and extent of clearing;
- take hygiene steps to minimise the risk of the introduction and spread of weeds;
- undertake slow, progressive one-directional clearing to allow terrestrial fauna to move into adjacent habitat

ahead of the clearing activity; and
- commence sand mining no later than three months after undertaking clearing to reduce the risk of erosion.

1.5. Site map

A site map of proposed clearing is provided in Figure 1 below.



Figure 1. Map of the application area. The blue area indicates the initial footprint when the application was submitted in which the proposed clearing was of 25.62 hectares of native vegetation. The yellow area indicated the reduced footprint within which the proposed clearing of 3 hectares of native vegetation is approved.

2. Legislative context

The clearing of native vegetation in Western Australia is regulated under the EP Act and the Environmental Protection (Clearing of Native Vegetation) Regulations 2004 (Clearing Regulations).

In addition to the matters considered in accordance with section 51O of the EP Act (see Section 1.4), the Delegated Officer has also had regard to the objects and principles under section 4A of the EP Act, particularly:
- the precautionary principle
- the principle of intergenerational equity
- the principle of the conservation of biological diversity and ecological integrity.

Other legislation of relevance for this assessment include:
- *Biodiversity Conservation Act 2016* (WA) (BC Act)
- *Conservation and Land Management Act 1984* (WA) (CALM Act)
- *Environment Protection and Biodiversity Conservation Act 1999* (Cth) (EPBC Act)
- *Mining Act 1978* (WA)

The key guidance documents which inform this assessment are:
- *A guide to the assessment of applications to clear native vegetation* (DER, December 2014)
- *Procedure: Native vegetation clearing permits* (DWER, October 2021)
- Technical guidance – *Flora and Vegetation Surveys for Environmental Impact Assessment* (EPA, 2016)

3. Detailed assessment of application

3.1. Avoidance and mitigation measures

In order to avoid impacts to a local flora population of Priority 4 *Banksia sessilis* var. *cordata* the Permit Holder reduced the initial clearing permit application to clear 25.62 hectares of native vegetation within a clearing permit footprint of the same area to request the approval for clearing 3 hectares of native vegetation within a clearing permit footprint of 12.46 hectares.

The thickest limesand resource is chosen by the application as this provides a greater total of limesand per area cleared, rather than clearing larger areas where the limesand is shallower to achieve the same volume of resource. That minimizes the clearing footprint. The least significant and weakest areas of vegetation have been selected for mining and therefore clearing with only the apple anticipated to be required within 10 plus years applied for. The current application area incorporates the cleared area

of CPS 5804/1. Progressive closure and revegetation are to follow mining; as new land is opened, excavated land will be closed (Enmic, 2024).

The Delegated Officer was satisfied that the applicant has made a reasonable effort to avoid and minimise potential impacts of the proposed clearing on environmental values.

3.2. Assessment of impacts on environmental values

In assessing the application, the Delegated Officer has had regard for the site characteristics (see Appendix B) and the extent to which the impacts of the proposed clearing present a risk to biological, conservation, or land and water resource values.

It was determined that the application area is unlikely to represent significant habitat for fauna of the region. The application area is dominated by *Agonis flexuosa* which is one of the foraging resources for the Critically Endangered Western ringtail possum (DPaW, 2017). However, the canopy density in the application area is sparse (<20% cover) and is unlikely to represent critical habitat for the Western ringtail possum. Additionally, most of the vegetation in the application area is in Completely Degraded condition as it has been utilized as a limesand mine (see map in Appendix 1.5). Similarly, habitat suitability for all three species of black cockatoos was assessed and it was determined no nesting, roosting, or foraging vegetation is present in the application area. The application area forms part of a linkage between areas of the Naturaliste National Park however, the vegetation being cleared will not significantly impact on this linkage as the vegetation being cleared is sparse and more significant areas to the west are being retained.

Advice received from the Department of Primary Industries and Regional Development (2024) identified that soils in the area proposed for clearing are primarily deep calcareous sands with horizons of organic matter. There is a risk of wind erosion on site however careful management during the clearing period including staging the clearing process and areas no longer used are quickly rehabilitated with ground cover would reduce the likelihood of wind erosion (DPIRD, 2024). Activities undertaken during mining operations which are not related to clearing are managed under the *Mining Act 1978*. The tenement has a condition on them requiring the holder to take all reasonable and practicable measures to prevent or minimise the generation of dust from mining operations. There is also a condition on the tenement requiring that the development and operation of the project are carried out to create the minimum practicable disturbance to the existing vegetation and natural landforms. Provided steps are implemented to minimise the risk of erosion, the proposed clearing can be considered acceptable.

The assessment against the clearing principles (see Appendix C) identified the impacts of the proposed clearing are limited and able to be managed to be environmentally acceptable with standard avoid and minimize, hygiene and staged clearing conditions for erosion management, as well as a directional clearing condition to minimize potential direct impacts to local fauna.

3.3. Relevant planning instruments and other matters

The clearing permit application was advertised on 31 October 2023 by the Department of Energy, Mines, Industry Regulation and Safety inviting submissions from the public. One submission was received in relation to this application.

The permit area is within the South West Native Title Settlement area (DPLH, 2024). This settlement resolves Native Title rights and interests over an area of approximately 200,000 square kilometres within the south west of Western Australia. The mining tenure has been granted in accordance with the future act regime of the *Native Title Act 1993* and the nature of the act (i.e. the proposed clearing activity) has been provided for in that process, therefore the granting of a clearing permit is not a future act under the *Native Title Act 1993*.

There are no registered Aboriginal Sites of Significance within the application area (DPLH, 2024). It is the proponent's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.

Other relevant authorisations required for the proposed land use include:

- A Mining Proposal / Mine Closure Plan approved under the *Mining Act 1978*.

It is the proponent's responsibility to liaise with the Department of Water and Environmental Regulation and the Department of Biodiversity, Conservation and Attractions, to determine whether a Works Approval, Water Licence, Bed and Banks Permit, or any other licences or approvals are required for the proposed works.

End

Appendix A. Details of public submissions

Summary of comments	Consideration of comment
The Shire of Augusta-Margaret River objected to the proposed clearing based on a number of grounds. The Shire has an "environment first" approach. The proposal is to clear an additional 15 hectares over the next decade. This type of development is contrary to the objectives set out in key Shire planning documents, specifically the Local Planning Scheme No.2, Local Planning Strategy, Environmental Strategy and Overarching Sustainability Policy.	Compatibility with local planning schemes was considered during the grant of Mining Lease 70/1302.
The Shire is opposed to large-scale clearing of native vegetation. The Shire recently won a SAT case (DR 7/2023) opposing clearing of 97 peppermint trees. In making its decision, SAT highlighted the importance of peppermint trees and their habitat for the critically endangered Western Ringtail Possum.	The applicant reduced the proposed clearing to 3 hectares of native vegetation to minimise impacts to Western ringtail possum and its habitat. The least significant and weakest areas of vegetation have been selected for mining (Enmic, 2024).
The majority of the clearing footprint is identified as "peppermint woodland", likely to be habitat to Western Ringtail Possum (WRP). Internal environmental mapping identifies three (3) WRP directly north of the clearing footprint and one Chuditch. The Western Ringtail Possum is listed as 'critically endangered' under the *Environment Protection Biodiversity Conservation Act 1999* (Cth) (EPBC Act) and the *Biodiversity Conservation Act 2018* (WA). It is also listed as critically endangered on the International Union for Conservation's Red List of Threatened Species.	The applicant reduced the proposed clearing to 3 hectares of native vegetation to minimise impacts to Western ringtail possum and its habitat. The least significant and weakest areas of vegetation have been selected for mining (Enmic, 2024).
The site is zoned Principal Ridge Protection Area in *SPP6.1: Leeuwin-Naturaliste Ridge Policy.* Proposed clearing goes against the following policy statements of SPP6.1 for this zone as follows: 1. LUS 3.1 In Principal Ridge Protection Areas, protection of conservation and landscape values will be paramount. Only land uses compatible with these values will be permitted. 2. LUS 3.5 There is a general presumption against the clearing of remnant vegetation in the Principal Ridge Protection Area other than for approved building envelopes, access and services.	Compatibility with the Leeuwin-Naturaliste Ridge Policy was considered during the grant of Mining Lease 70/1302.
It also goes against the 'Statement of Intent' set out in SPP6.1 as follows: The nature conservation values will be conserved through: 1. reinforcing the functions of the Leeuwin-Naturaliste National Park; 2. fostering strategic environmental corridors and preserving biological diversity; 3. protecting and maintaining remnant vegetation; 4. protecting water quality and quantities required to maintain ecosystem functions; 5. supporting the establishment of a marine reserve; and 6. establishing land use controls to conserve land and marine environments.	The application area has been reduced to exclude areas of greater environmental value. The proposed clearing is not likely to impact on the functions of Leewin-Natuaraliste National Park and will not severe any environmental corridors in the local area.
Potential impacts on karst systems: Has a detailed and recent geotechnical investigation been undertaken of karst systems in the area proposed for clearing?	The proposed clearing is not likely to impact on any karst systems.
The Flora Survey provided with the Clearing Permit documents outlines a section on fauna, however, it is limited	The application area has been reduced to remove the area of *Banksia sessilis* var *cordata* which is suitable foraging habitat

Summary of comments	Consideration of comment
to a desktop overview. It is strongly recommended that a detailed fauna survey be prepared prior to issue of a clearing permit. There is likely to be fauna within the subject area that requires federal referral- such as State and Commonwealth conservation three listed Black Cockatoo species. The flora assessment recorded plant species such including *Banksia* sessilis var *cordata* and *Hakea oleifolia* that would provide foraging habitat for Black Cockatoos. The loss of equal to or greater than 1 hectare of high-quality foraging habitat is likely to require a referral (as determined using the foraging quality scoring tool) (Commonwealth of Australia, 2022). There is potentially other conservation listed fauna within the site including Chudich, Westen Ringtail Possum as well as impacts and loss of habitat including ecological linkages to all fauna including Quenda.	for black cockatoos. Areas of significant western ringtail possum habitat have also been removed from the application area.
The detailed survey for the Flora and Vegetation Assessment did not include covering the majority of the native vegetation area on foot and no tracking of the consultants' traversing footprint has been included in the report. There are potentially Priority listed flora species, such as *Caladenia abbreviata, Stylidium lowrieanum, Eucalyptus marginata* x *megacarpa* not found during the survey. A Priority 4 species- *Banksia sessilis* var. *cordata* was recorded on the site. The extent of the *Banksia sessilis* var *cordata/Agonis flexuosa* Low Woodland vegetation type may be of a greater extent than the mapping indicates due to the limitation of the survey access to the site.	The vegetation containing *Banksia sessilis* var *cordata* has been removed from the application area which now only includes vegetation adjacent to the existing quarry face.
Aboriginal Heritage Sites are located directly north and west (directly adjacent) of the subject area. Has an archaeological aboriginal survey been undertaken of the subject area, and approvals in place?	There are no registered sites within the application area. It is the applicant's responsibility to comply with the *Aboriginal Heritage Act 1972* and ensure that no Aboriginal Sites of Significance are damaged through the clearing process.
The subject area is predominantly identified as "Excellent" condition native vegetation. EPA Guidance Statement No.33 "Section B2.3 Considering Native Vegetation and Flora During Planning" and checklist is a relevant consideration that aims to retain natural areas which regionally and locally support a high diversity of native flora, fauna and/or range of ecological communities. It is recommended that EPA No.33 and its key objectives are fully considered.	The application area has been reduced to remove areas of vegetation which have the potential to support higher diversity of flora and fauna.
Surrounding National Park land is identified as Environmentally Sensitive Areas (ESA). It is highly likely that R30656 is also an ESA but is not listed. It is recommended that the ESA listing over R30656 is further investigated.	The areas surrounding Mining Lease 70/1302 are an Environmentally Sensitive Area due to them being within the Leeuwin - Naturaliste Ridge Area which is listed on the Register of National Estate. The Register of National Estate has been frozen since 2007 meaning that no places can be added or removed.
Visual impacts – The current clearing footprint is approximately 9 hectares. Proposed clearing of an additional 15 hectares will further exacerbate adverse visual impacts from large sections of Bussell and Caves Road and surrounding roads and settlements	The application area has been reduced to 3 hectares of clearing surrounding the existing quarry face which will limit the amount of visual impacts.
The proposed clearing footprint is located on a steep hillside. Due to the steep gradient across the site, and the sandy soil type, there is potential for "blow-outs and further erosion outside of the proposed clearing footprint. This should be factored into any decision making. It is recommended that a geotechnical report is prepared.	There is potential for wind erosion following clearing activities. Conditions have been placed on the clearing permit and mining lease in order to minimise the risk of erosion during clearing and operation of the mine.
If the clearing permit is supported, it is recommended that the proponent enter an off-setting arrangement for revegetation of an area equivalent to the area that has been cleared. Details of this arrangement are to be agreed upon to the satisfaction of the local government, DWER and DBCA.	Following the reduction in the application area, the assessment of clearing did not consider that the clearing would result in significant residual impacts which require an offset.

Appendix B. Site characteristics

B.1. Site characteristics

Characteristic	Details
Local context	The area proposed to be cleared is part of an expansive tract of native vegetation in the intensive land use zone of Western Australia. It is adjacent to Leeuwin-Naturaliste National Park and Caves Road runs along the eastern border of the application area. There are also extensive areas of agricultural land to the east of the application area. Spatial data indicates the local area (10 kilometre radius from the centre of the area proposed to be cleared) retains approximately 52 per cent of the original native vegetation cover.
Ecological linkage	The application area is within a patch of vegetation that is intersected by an ecological linkage as mapped in the South West Regional Ecological Linkages technical report (Molloy et al., 2009).
Conservation areas	The application area is not located within any conservation areas (GIS Database). The Leeuwin-Naturaliste National Park is located approximately 20 metres north of the application area at its closest point. The National Park also envelopes the application area to the west and south but at a greater distance (1-1.5 kilometres) (GIS Database).
Vegetation description	The vegetation of the application area is broadly mapped as the following Beard vegetation associations (GIS Database): 1: Tall forest; karri (*Eucalyptus diversicolor*); 129: Bare areas; dune sands; 1108: Medium open woodland; marri; and 1109: Medium open woodland; marri & river gum. A flora and vegetation survey was conducted over the application area by PGV Environmental during October 2021. The following vegetation associations were recorded within the application area (PGV Environmental, 2022): AfSg1: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata* Open Low Heath AfSg2: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath
Vegetation condition	The vegetation survey (PGV Environmental, 2022) indicated the vegetation within the proposed clearing area is in Excellent (Keighery, 1994) condition, with very few weeds species present. The full Keighery (1994) condition rating scale is provided in Appendix D.
Climate and landform	The application area is mapped within elevations of 65-170 metres AHD (GIS Database). The average annual rainfall (Cape Leeuwin) is 952.1 millimetres (BoM, 2023).
Soil description	The soil is mapped as the following soil landscape units (DPIRD, 2024): 216GrKPf: Steep dunes, (gradients usually in excess of 20%) not exposed to prevailing winds. Deep pale calcareous sands with brown topsoil; and 216GrKPm: Steep bare dunes of mobile pale calcareous sand, not exposed to prevailing winds.
Land degradation risk	The application area has been mapped as being in an area with a high potential for wind and water erosion (DPIRD, 2024). The application area does not have a high risk of flooding or waterlogging (DPIRD, 2024).
Waterbodies	The desktop assessment and aerial imagery indicated that there are no watercourses within the application area (GIS Database).
Hydrogeography	The application area is not located within any Public Drinking Water Source Areas (PDWSA) (GIS Database). The mapped groundwater salinity is 1,000-3,000 milligrams per litre total dissolved solids which is described as brackish (GIS Database).
Flora	There are records of the priority flora species *Banksia sessilis* less than one kilometre away but not within the application area. Other conservation significant flora species have been recorded within 10 kilometres of the application area (see Appendix B.3).
Ecological communities	There are no Threatened or Priority Ecological Communities recorded within the local area (GIS Database).
Fauna	There are records of the Critically Endangered Western ringtail possum less than one kilometre away but not within the application area. Other conservation significant fauna species have been recorded within 10 kilometres of the application area (see Appendix B.4).

B.2. Vegetation extent

	Pre-European area (ha)	Current extent (ha)	Extent Remaining %	Current extent in all DBCA managed land (ha)	Current proportion (%) of pre-European extent in all DBCA Managed Lands

IBRA Bioregion - Warren	833,986	659,432	79	588.485	67
IBRA Subregion - Warren	833,986	659,432	79	588.485	67
Local Government – Shire of Augusta-Margaret River	211,681	131,715	62	99,070	47
Beard vegetation associations - State					
1	72,410	56,328	78	47,060	65
129	95,286	82,850	87	42,870	45
1108	4,592	1,138	25	0	0
1109	18,226	3,004	16	107	1
Beard vegetation associations - Bioregion					
1	69,118	53,852	78	45,958	65
129	12,605	12,063	96	10,719	85
1108	8,769	8,024	92	5,750	66
1109	33,365	32,174	96	26,094	78
Beard vegetation associations - subregion					
1	69,118	53,852	78	45,958	65
129	12,605	12,063	96	10,719	85
1108	8,769	8,024	92	5,750	66
1109	33,365	32,174	96	26,094	78

Government of Western Australia (2019)

B.3. Flora analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1), and biological survey information, impacts to the following conservation significant flora required further consideration.

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (WA Herbarium)	Are surveys adequate to identify? [Y, N, N/A]
Acacia inops	Priority 3	N	N	N	<7	16	Y
Actinotus repens	Priority 3	N	N	N	<7	36	Y
Aotus carinata	Priority 4	N	N	N	<8	23	Y
Austrostipa mundula	Priority 3	N	N	N	<7	16	Y
Banksia sessilis var. *cordata*	Priority 4	Y	Y	Y	<1	58	Y
Caladenia abbreviata	Priority 3	Y	Y	Y	<6	12	Y
Caladenia ambusta	Priority 2	Y	Y	N	<5	2	Y
Dampiera heteroptera	Priority 3	N	Y	Y	<2	18	Y
Drakaea micrantha	Threatened	N	N	N	<9	50	Y
Eucalyptus calcicola subsp. *calcicola*	Priority 4	Y	Y	N	<4	24	Y
Lambertia orbifolia subsp. *vespera*	Threatened	N	N	N	<5	24	Y

Species name	Conservation status	Suitable habitat features? [Y/N]	Suitable vegetation type? [Y/N]	Suitable soil type? [Y/N]	Distance of closest record to application area (km)	Number of known records (WA Herbarium)	Are surveys adequate to identify? [Y, N, N/A]
Lepyrodia extensa	Priority 2	N	N	N	<2	12	Y
Machaerina ascendens	Priority 2	N	N	N	<5	17	Y
Pultenaea pinifolia	Priority 3	N	N	N	<7	44	Y
Reedia spathacea	Threatened	N	N	N	<7	26	Y
Stylidium gloeophyllum	Priority 4	N	N	N	<4	23	Y
Stylidium lowrieanum	Priority 3	Y	Y	Y	<2	24	Y

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

B.4. Fauna analysis table

With consideration for the site characteristics set out above, relevant datasets (see Appendix F.1), and biological survey information, impacts to the following conservation significant fauna required further consideration. Marine species and migratory birds were not included in the table below are there is no suitable habitat for those species in the application area.

Species name	Conservation status	Suitable habitat features ? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Atrichornis clamosus (Noisy Scrub-bird)	Endangered	Y	Y	<5	1,112	N/A
Bettongia penicillata ogilbyi (Woylie)	Critically Endangered and Endangered	Y	Y	<3	16,540	N/A
Calyptorhynchus banksii naso (Forest Red-tailed Black Cockatoo)	Vulnerable	N	N	<2	3,287	N/A
Calyptorhynchus baudinii (Baudin's Cockatoo)	Endangered	N	N	<2	3,918	N/A
Calyptorhynchus latirostris (Carnaby's Cockatoo)	Endangered	N	N	<1	20,601	N/A
Dasyurus geoffroii (Chuditch)	Vulnerable	Y	Y	<1	5,274	N/A
Elapognathus minor (Short-nosed Snake)	Priority 2	N	N	<7	27	N/A
Falco peregrinus (Peregrine Falcon)	Other Specially Protected	Y	Y	<7	1,756	N/A
Falsistrellus mackenziei (Western False Pipistrelle)	Priority 4	N	N	<4	468	N/A
Isoodon fusciventer (Quenda)	Priority 4	N	N	<3	9,126	N/A
Leipoa ocellata (Malleefowl)	Vulnerable	N	N	<10	29,461	N/A
Macroderma gigas (Ghost bat)	Vulnerable	N	N	<4	823	N/A
Notamarcropus eugenii derbianus (Tammar Wallaby)	Priority 4	Y	Y	<3	2,408	N/A
Notamacropus irma (Western Brush Wallaby)	Priority 4	Y	Y	<3	5,244	N/A
Perameles bougainville (Shark Bay Bandicoot)	Vulnerable and Endangered	Y	Y	<6	247	N/A
Petrogale lateralis lateralis (Black-footed Rock-wallaby)	Endangered	Y	N	<3	2,000	N/A
Pezoporus flaviventris (Western ground parrot)	Critically Endangered	N	N	<5	331	N/A
Phascogale tapoatafa wambenger (Brush-tailed Phascogale)	Conservation Dependent	Y	Y	<3	1,448	N/A
Potorous gilbertii (Gilbert's Potoroo)	Critically Endangered	N	N	<3	571	N/A
Pseudocheirus occidentalis (Western Ringtail Possum)	Critically Endangered	N	Y	<1	14,669	N/A

Species name	Conservation status	Suitable habitat features ? [Y/N]	Suitable vegetation type? [Y/N]	Distance of closest record to application area (km)	Number of known records (total)	Are surveys adequate to identify? [Y, N, N/A]
Pseudomys fieldi (Shark Bay Mouse)	Vulnerable	N	N	<4	171	N/A
Pseudomys shortridgei (Heath Mouse)	Vulnerable and Endangered	N	N	<4	474	N/A
Setonix brachyurus (Quokka)	Vulnerable	Y	Y	<3	6,122	N/A
Tyto novaehollandiae novaehollandiae (Masked Owl)	Priority 3	Y	Y	<6	66	N/A

T: threatened, CR: critically endangered, EN: endangered, VU: vulnerable, P: priority

B.5. Land degradation risk table

Risk categories	*Land Unit 1*
Wind erosion	H2: >70% of the map unit has a high to extreme wind erosion risk
Water erosion	M1: 10-30% of the map unit has a high to extreme water erosion risk
Salinity	L1: <3% of the map unit has a moderate or high salinity risk or is presently saline
Subsurface Acidification	L1: <3% of the map unit has a high subsurface acidification risk or is presently acid
Flood risk	L1: <3% of the map unit has a moderate to very high risk
Water logging	L1: <3% of the map unit has a moderate to very high to risk
Phosphorus export risk	M2: 30-50% of the map unit has a high to extreme phosphorus export risk

(DPIRD, 2024)

Appendix C. Assessment against the clearing principles

Assessment against the clearing principles	Variance level	Is further consideration required?
Environmental value: biological values		
Principle (a): *"Native vegetation should not be cleared if it comprises a high level of biodiversity."* Assessment: The were no conservation significant flora species recorded within the application area (PGV Environmental, 2022; GIS Database). A population of over 50 *Banksia sessilis* var. *cordata* individuals was recorded by the detailed flora and vegetation survey conducted by PGV Environmental (2022). This population was initially located inside the application area; however, the Permit Holder has reduced the clearing permit footprint to avoid impacts to this Priority species. Other Priority flora species were recorded within 10 kilometres from the application area (see Appendix B.3). It is unlikely that the proposed clearing of 3 hectares will significantly impact Priority flora of the region.	Not likely to be at variance	No
Principle (b): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna."* Assessment: The area proposed to be cleared is dominated by Peppermint trees (*Agonis flexuosa*) low open woodland (PGV Environmental, 2022). Given the low height and sparseness of the vegetation it is unlikely the application area contains significant habitat for conservation significant fauna. Various fauna species of conservation significance have been recorded within 10 kilometres of the application area. Impacts to fauna moving through the area can be mitigated by placing a directional clearing condition on the permit.	May be at variance	No
Principle (c): *"Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora."* Assessment: There are no records of any Threatened flora species within the application area (PGV Environmental, 2022: GIS Database). The area proposed to be cleared is unlikely to contain habitat for flora species listed under the BC Act.	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
Principle (d): *"Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a threatened ecological community."* Assessment: There are no records of any Threatened Ecological Communities (TECs) within the application area (GIS Database). The flora survey over the application area did not identify any vegetation communities which area which are considered to be a TEC (PGV Environmental, 2022).	Not likely to be at variance	No
Environmental value: significant remnant vegetation and conservation areas		
Principle (e): *"Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared."* Assessment: The extent of native vegetation in the Warren bioregion and subregion, local government area, and state is presented in Appendix B.2. The vegetation extent for vegetation association 1108 and 1109 at state level is inconsistent with the national objectives and targets for biodiversity conservation in Australia (Commonwealth of Australia, 2001). Although the vegetation proposed to be cleared is considered to be part of a formal ecological linkage in the local area, the application area is adjacent to the existing Boranup Limesand Project and the proposed clearing is unlikely to significantly impact any known or mapped ecological linkages.	Not likely to be at variance	No
Principle (h): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area."* Assessment: Given the distance to the nearest conservation area (20 metres), the proposed clearing may have an impact on the environmental values of nearby conservation areas. Impacts can be minimised by placing a staged clearing condition on the clearing permit to prevent erosion in conservation areas adjacent to the application area.	May be at variance	No
Environmental value: land and water resources		
Principle (f): *"Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland."* Assessment: There are no watercourses or wetlands within the application area and none of the vegetation has been identified as being riparian vegetation (PGV Environmental, 2022; GIS Database).	Not likely to be at variance	No
Principle (g): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation."* Assessment: The mapped soils are highly susceptible to wind erosion. Noting the location of the application area, the proposed clearing is likely to cause appreciable land degradation.	May be at variance	No
Principle (i): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water."* Assessment: There are no permanent watercourses or wetlands within the application areas (GIS Database). The proposed clearing is unlikely to result in significant changes to surface water flows. The area of the proposed additional clearing is unlikely to cause deterioration in the quality of underground water.	Not likely to be at variance	No
Principle (j): *"Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding."* Assessment:	Not likely to be at variance	No

Assessment against the clearing principles	Variance level	Is further consideration required?
There are no water courses or waterbodies within or in close proximity to the application area (GIS Database). The application area is on sandy soils and water from rain events is likely to quickly infiltrate or runoff, with flooding considered unlikely.		

Appendix D. Vegetation condition rating scale

Vegetation condition is a rating given to a defined area of vegetation to categorise and rank disturbance related to human activities. The rating refers to the degree of change in the vegetation structure, density and species present in relation to undisturbed vegetation of the same type. The degree of disturbance impacts upon the vegetation's ability to regenerate. Disturbance at a site can be a cumulative effect from a number of interacting disturbance types.

Considering its location, the scale below was used to measure the condition of the vegetation proposed to be cleared. This scale has been extracted from Keighery, B.J. (1994) *Bushland Plant Survey: A Guide to Plant Community Survey for the Community*. Wildflower Society of WA (Inc). Nedlands, Western Australia.

Measuring vegetation condition for the South West and Interzone Botanical Province (Keighery, 1994)

Condition	Description
Pristine	Pristine or nearly so, no obvious signs of disturbance.
Excellent	Vegetation structure intact, with disturbance affecting individual species; weeds are non-aggressive species.
Very good	Vegetation structure altered, with obvious signs of disturbance. For example, disturbance to vegetation structure caused by repeated fires, the presence of some more aggressive weeds, dieback, logging and/or grazing.
Good	Vegetation structure significantly altered by very obvious signs of multiple disturbances. Retains basic vegetation structure or ability to regenerate it. For example, disturbance to vegetation structure caused by very frequent fires, the presence of some very aggressive weeds at high density, partial clearing, dieback and/or grazing.
Degraded	Basic vegetation structure severely impacted by disturbance. Scope for regeneration but not to a state approaching good condition without intensive management. For example, disturbance to vegetation structure caused by very frequent fires, the presence of very aggressive weeds, partial clearing, dieback and/or 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 or shrubs.

Appendix E. Photographs of the vegetation



AfSg1: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata* Open Low Heath (PGV Environmental, 2022).



AfSg2: *Agonis flexuosa* Low Open Woodland over *Spyridium globulosum* Shrubland over *Acrotriche cordata/Leucopogon parviflorus* Open Low Heath (PGV Environmental, 2022).

Appendix F. Sources of information

F.1. GIS databases

Publicly available GIS Databases used (sourced from www.data.wa.gov.au):

- Aboriginal Heritage Places (DPLH-001)
- Clearing Regulations – Schedule One Areas (DWER-057)
- DBCA – Lands of Interest (DBCA-012)
- DBCA Legislated Lands and Waters (DBCA-011)
- Environmentally Sensitive Areas (DWER-046)
- Groundwater Salinity Statewide (DWER-026)
- Hydrographic Catchments – Catchments (DWER-028)
- Hydrography – Inland Waters – Waterlines
- Hydrography, Linear (DWER-031)
- IBRA Vegetation Statistics
- Native Title (ILUA) (LGATE-067)
- Pre-European Vegetation Statistics
- Remnant Vegetation, All Areas
- RIWI Act, Groundwater Areas (DWER-034)
- RIWI Act, Surface Water Areas and Irrigation Districts (DWER-037)
- Soil Landscape Land Quality – Flood Risk (DPIRD-007)
- Soil Landscape Land Quality – Phosphorus Export Risk (DPIRD-010)
- Soil Landscape Land Quality – Subsurface Acidification Risk (DPIRD-011)
- Soil Landscape Land Quality – Water Erosion Risk (DPIRD-013)
- Soil Landscape Land Quality – Waterlogging Risk (DPIRD-015)
- Soil Landscape Land Quality – Wind Erosion Risk (DPIRD-016)
- Soil Landscape Mapping – Best Available (DPIRD-027)
- Soil Landscape Mapping – Rangelands (DPIRD-064)
- WA Now Aerial Imagery

Restricted GIS Databases used:

- Black Cockatoo WTBC Breeding
- Black Cockatoo FRTBC Breeding
- Black Cockatoo BC Roosts
- Black Cockatoo BC Feeding SCP
- Black Cockatoo Feeding JF
- Black Cockatoo Feeding Areas Buffered
- Black Cockatoo Baudins Distribution
- Black Cockatoo Forest Red Tail Distribution
- Black Cockatoo Carnabys Distribution
- Threatened Flora (TPFL)
- Threatened Flora (WAHerb)
- Threatened Fauna
- Threatened Ecological Communities and Priority Ecological Communities
- Threatened Ecological Communities and Priority Ecological Communities (Buffers)
- Western Ringtail Possum Habitat Suitability (DBCA-049)

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4. Glossary

Acronyms:

BC Act	*Biodiversity Conservation Act 2016,* Western Australia
BoM	Bureau of Meteorology, Australian Government
DAA	Department of Aboriginal Affairs, Western Australia (now DPLH)
DAFWA	Department of Agriculture and Food, Western Australia (now DPIRD)
DCCEEW	Department of Climate Change, Energy, the Environment and Water, Australian Government
DBCA	Department of Biodiversity, Conservation and Attractions, Western Australia
DER	Department of Environment Regulation, Western Australia (now DWER)
DMIRS	Department of Mines, Industry Regulation and Safety, Western Australia
DMP	Department of Mines and Petroleum, Western Australia (now DMIRS)
DoEE	Department of the Environment and Energy (now DCCEEW)
DoW	Department of Water, Western Australia (now DWER)
DPaW	Department of Parks and Wildlife, Western Australia (now DBCA)
DPIRD	Department of Primary Industries and Regional Development, Western Australia
DPLH	Department of Planning, Lands and Heritage, Western Australia
DRF	Declared Rare Flora (now known as Threatened Flora)
DWER	Department of Water and Environmental Regulation, Western Australia
EP Act	*Environmental Protection Act 1986*, Western Australia
EPA	Environmental Protection Authority, Western Australia
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999* (Federal Act)
GIS	Geographical Information System
ha	Hectare (10,000 square metres)
IBRA	Interim Biogeographic Regionalisation for Australia
IUCN	International Union for the Conservation of Nature and Natural Resources – commonly known as the World Conservation Union
PEC	Priority Ecological Community, Western Australia
RIWI Act	*Rights in Water and Irrigation Act 1914*, Western Australia
TEC	Threatened Ecological Community

Definitions:

{DBCA (2019) Conservation Codes for Western Australian Flora and Fauna. Department of Biodiversity, Conservation and Attractions, Western Australia}:-

T **Threatened species:**

Listed by order of the Minister as Threatened in the category of critically endangered, endangered or vulnerable under section 19(1), or is a rediscovered species to be regarded as threatened species under section 26(2) of the *Biodiversity Conservation Act 2016* (BC Act).

Threatened fauna is that subset of 'Specially Protected Fauna' listed under schedules 1 to 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for Threatened Fauna.

Threatened flora is that subset of 'Rare Flora' listed under schedules 1 to 3 of the *Wildlife Conservation (Rare Flora) Notice 2018* for Threatened Flora.

The assessment of the conservation status of these species is based on their national extent and ranked according to their level of threat using IUCN Red List categories and criteria as detailed below.

CR **Critically endangered species**
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*".

Listed as critically endangered under section 19(1)(a) of the BC Act in accordance with the criteria set out in section 20 and the ministerial guidelines. Published under schedule 1 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for critically endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for critically endangered flora.

EN **Endangered species**
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*".

Listed as endangered under section 19(1)(b) of the BC Act in accordance with the criteria set out in section 21 and the ministerial guidelines. Published under schedule 2 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for endangered fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for endangered flora.

VU **Vulnerable species**
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*".

Listed as vulnerable under section 19(1)(c) of the BC Act in accordance with the criteria set out in section 22 and the ministerial guidelines. Published under schedule 3 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for vulnerable fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for vulnerable flora.

Extinct Species:

EX **Extinct species**
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 (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW **Extinct in the wild species**
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 fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species:

Listed by order of the Minister as specially protected under section 13(1) of the BC Act. Meeting one or more of the following categories: species of special conservation interest; migratory species; cetaceans; species subject to international agreement; or species otherwise in need of special protection.

Species that are listed as threatened species (critically endangered, endangered or vulnerable) or extinct species under the BC Act cannot also be listed as Specially Protected species.

MI **Migratory species**
Fauna that periodically or occasionally visit Australia or an external Territory or the exclusive economic zone; or the species is subject of an international agreement that relates to the protection of migratory species and that binds the Commonwealth; and listing is otherwise in accordance with the ministerial guidelines (section 15 of the BC Act).

Includes birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA), China (CAMBA) and The Republic of Korea (ROKAMBA), and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention), an environmental treaty under the United Nations Environment Program. Migratory species listed under the BC Act are a subset of the migratory animals, that are known to visit Western Australia, protected under the international agreements or treaties, excluding species that are listed as Threatened species.

Published as migratory birds protected under an international agreement under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

CD **Species of special conservation interest (conservation dependent fauna)**
Fauna of special conservation need being species dependent on ongoing conservation intervention to prevent it becoming eligible for listing as threatened, and listing is otherwise in accordance with the ministerial guidelines (section 14 of the BC Act).

Published as conservation dependent fauna under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

OS **Other specially protected species**
Fauna otherwise in need of special protection to ensure their conservation, and listing is otherwise in accordance with the ministerial guidelines (section 18 of the BC Act).

Published as other specially protected fauna under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*.

P **Priority species:**

Possibly threatened species that do not meet survey criteria, or are otherwise data deficient, are added to the Priority Fauna or Priority Flora Lists under Priorities 1, 2 or 3. These three categories are ranked in order of priority for survey and evaluation of conservation status so that consideration can be given to their declaration as threatened fauna or flora.

Species that are adequately known, are rare but not threatened, or meet criteria for near threatened, or that have been recently removed from the threatened species or other specially protected fauna lists for other than taxonomic reasons, are placed in Priority 4. These species require regular monitoring.

Assessment of Priority codes is based on the Western Australian distribution of the species, unless the distribution in WA is part of a contiguous population extending into adjacent States, as defined by the known spread of locations.

P1 **Priority One - 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.

P2 **Priority Two - 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.

P3 **Priority Three - 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.

P4 **Priority Four - 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.

Principles for clearing native vegetation:

(a) Native vegetation should not be cleared if it comprises a high level of biological diversity.

(b) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of, a significant habitat for fauna.

(c) Native vegetation should not be cleared if it includes, or is necessary for the continued existence of, threatened flora.

(d) Native vegetation should not be cleared if it comprises the whole or a part of, or is necessary for the maintenance of a threatened ecological community.

(e) Native vegetation should not be cleared if it is significant as a remnant of native vegetation in an area that has been extensively cleared.

(f) Native vegetation should not be cleared if it is growing in, or in association with, an environment associated with a watercourse or wetland.

(g) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause appreciable land degradation.

(h) Native vegetation should not be cleared if the clearing of the vegetation is likely to have an impact on the environmental values of any adjacent or nearby conservation area.

(i) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause deterioration in the quality of surface or underground water.

(j) Native vegetation should not be cleared if the clearing of the vegetation is likely to cause, or exacerbate, the incidence or intensity of flooding.