



CHAPMAN VALLEY QUARRY

FLORA SURVEY REPORT



Report prepared in conjunction with Williams & Son Pty Ltd August 2025

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1.0 INTRODUCTION

1.1 BACKGROUND

Kimberley Quarry Pty Ltd (KQ) has been operating the Chapman Valley Quarry, a hard rock quarry, since 2000. The Project supplies products and services to the mining and construction industry. Prior to KQ's ownership, the site was formerly operated from 1960 to 2000.

The property on which the Quarry is located was historically part of the Newmarrcara Station which was first grazed around 1900. It was later split off from the station and sold and has continued to have been subject to grazing since this time. In the early 1900's the area was also subject to wood cutting for Sandalwood (*Santalum spicatum*) for incense and Jam (*Acacia acuminatum*) for fence posts.

A new Development Application for the Project has recently been lodged with the City of Greater Geraldton to expand the operational boundary to encompass both current and proposed operational areas, including stockpile zones, the extraction pit, and supporting infrastructure. The underlying land use remains unchanged as Extractive Industry (Hard Rock), previously approved under Development Approval TP16/187 issued on January 5, 2017.

1.2 OBJECTIVES

The objective of this document is to:

- Supplement the flora report completed by Williams and Son (2025) to fulfil the requirements of 'Technical Guidance - Flora and Vegetation Surveys for Environmental Impact Assessment (EPA, 2016)'.
- Support the clearing permit application for the Quarry.

1.3 LOCATION AND TENURE

The Project is located on Lot 20 Plan 6975 within the City of Greater Geraldton, approximately 15km north-east of the Geraldton town centre off the Chapman Road East Road Figure 1).

The site is zoned as rural within the Shire of Greater Geraldton Planning Scheme No. 1. Developmental approval and is approved for Extractive Industry (Hard Rock) by the City of Greater Geraldton.

1.4 LEGISLATIVE CONTEXT

Flora and fauna in Western Australia is protected formally and informally by various legislative and non-legislative measures, which include the:

- Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act) Australian Government
- Biodiversity Conservation Act 2016 (BC Act) WA State Government.
- WA Department of Biodiversity, Conservation and Attractions (DBCA) Priority lists for flora, ecological communities and fauna (non-legislative)
- Recognition of locally significant populations by DBCA (non-legislative).

An outline of the conservation rating categories is provided in Appendix 1.

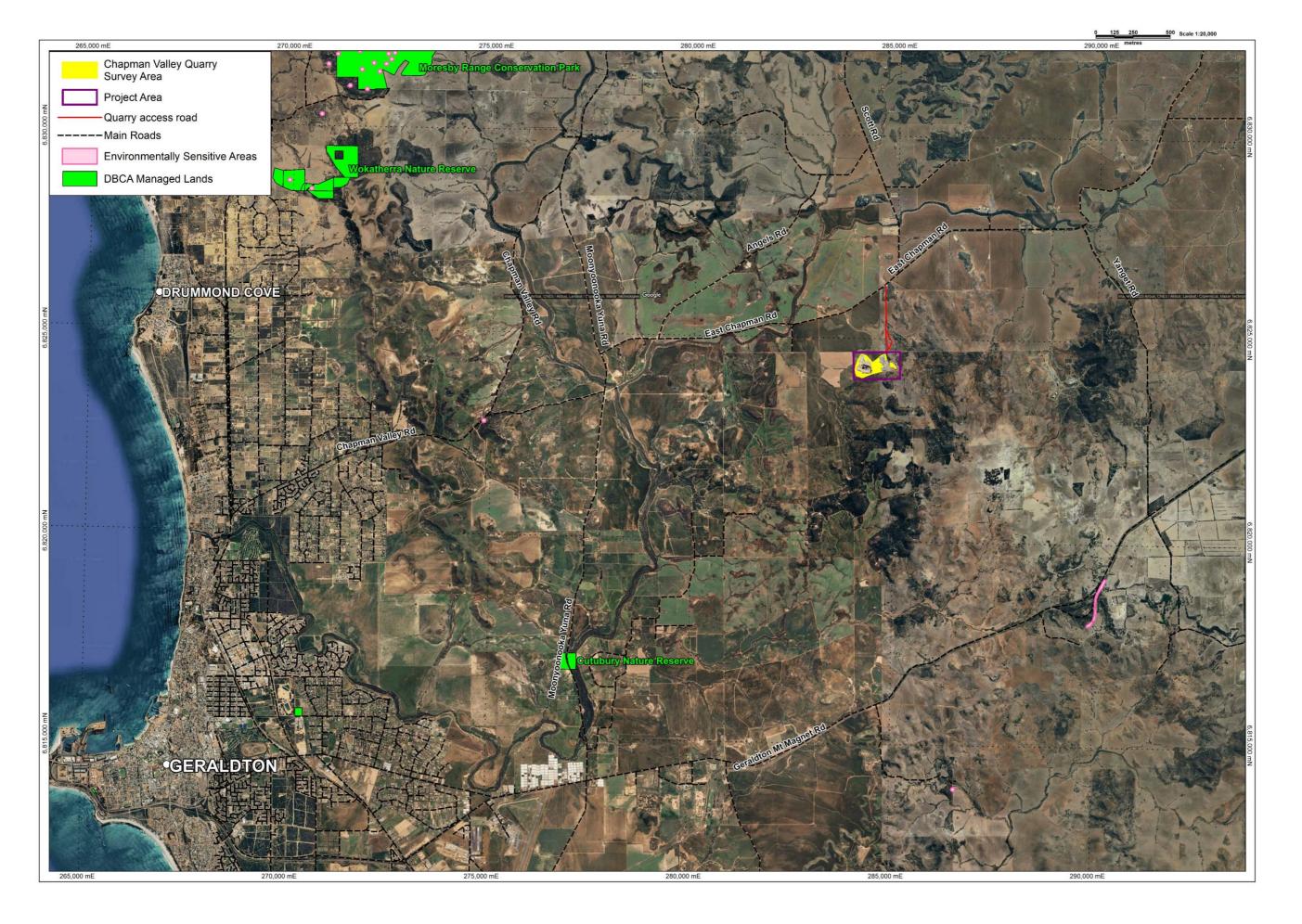


Figure 1: Location of the Project

2 EXISTING ENVIRONMENT

2.1 CLIMATE

The climate of the region has a Mediterranean-type climate characterised by seasonal patterns of hot, dry summers and mild, wet winters. The area is subject to high wind speeds, dust storms, lightning storms, high summer temperatures and low winter night temperatures.

The closest meteorological stations are Geraldton and Geraldton airport, located approximately 8 km west and 4.5 km west of the Project respectively. The average annual rainfall is 437.2 mm with the average monthly rainfall ranging from 3.6 mm in December to 110 mm in June.

The rainfall is irregular and unpredictable, with heavy rainfalls occurring in winter due to the passage of cold fronts from the west. Long dry periods occur from October to March.

The mean maximum temperature ranges from $32.6\,^{\circ}\text{C}$ in February to $19.6\,^{\circ}\text{C}$ in July and mean minimum temperature is highest in February ($19.2\,^{\circ}\text{C}$) and lowest at $8.9\,^{\circ}\text{C}$ in August. The winds are predominantly easterly/northeasterly at 9 am changing to southwesterly/southerly by 3 pm (BOM 2025).

Relative humidity varies from 78% at 9 am to 58% at 3 pm in June to 49% at 9 am to 47% at 3 pm in December. Mean annual relative humidity is 61% at 9 am and 50% at 3 pm.

2.2 LANDFORM

2.2.1 IBRA Region

The Interim Biogeographic Regionalisation for Australia (IBRA) is a landscape based approach for classifying the land surface of Australia. The Project area is located within the Geraldton Hills (GS2) IBRA sub-region within the Geraldton Sandplain.

The Geraldton Sandplains (GS2 – Geraldton Hills subregion) bioregion comprises mainly proteaceous scrub-heaths, rich in endemics, on the sandy earths of an extensive, undulating, and lateritic sandplain mantling Permian to Cretaceous strata. Extensive York Gum and Jam wood lands occur on out wash plains associated drainage. The Geraldton Hills subregion (GS2) incorporates the southern end of the Carnarvon Basin and northern end of the Perth Basin, with exposed areas of Permian / Silurian siltstone and Jurassic sandstones, mostly overlain by sandplains, alluvial plains, and coastal limestones. Sand heaths with emergent *Banksia* and *Actinostrobus*, York Gum wood lands on alluvial plains, proteaceous heath and *Acacia* scrubs on limestones depending on depth of coastal-sand mantle, low closed forest of *Acacia rostellifera* (now cleared) on alluvial plains of Greenough and the Irwin River (behind beach dune system south of Geraldton) (Desmond & Chant 2001).

2.2.2 Land System

The Project area is mapped within one land system as described in Table 1 (Schoknecht 2006).

Table 1: Land systems in the Project area

Land System	Description
Sugarloaf 1 Subsystem	Rolling rises and low hills with granite outcrop common. Reddish brown sandy loam duplex soils moderately well drained. Subsoils neutral to alkaline.

2.3 SOILS

The survey area is located in two soil mapping groups as defined by (Northcote *et al.*, (1960 – 1968) (Figure 2):

- Pb29: Generally rolling but sometimes undulating or hilly terrain on granulite; some rock outcrops; some mesas and buttes of unit Uc2: chief soils are hard acidic red soils and neutral red soils (Dr2.21, Dr2.22, and Dr2.62).
- Ub100: Broken hilly terrain on sandstones and claystones with mesas and buttes of unit Uc2; some saline flats- some rock outcrops: chief soils seem to be hard neutral yellow mottled soils.

2.4 SURFACE WATER HYDROLOGY

There are no water bodies or major drainage lines (rivers or creeks) in the Project area (Figure 2).

The Chapman River East is northwest of the survey area and there are minor non-perennial watercourses (tributaries of the Chapman River East) that occur towards the survey area.

The Project is not located within a Proclaimed Surface Water area under the Right in Water and Irrigation Act 1914.

2.5 GROUNDWATER

The Project area is located within the Northampton/Galena subarea of the Gascoyne groundwater management area within the Carnarvon – Tumblagooda aquifer.

Groundwater in the area occurs at approximately ~50m AHD.

The Project area does not fall within a Public Drinking Water Source Area (PDWSA) or PDWSA Protection Zone.

There are no known groundwater dependent ecosystems (GDE) in the Project area or surrounds (BOM 2025b).

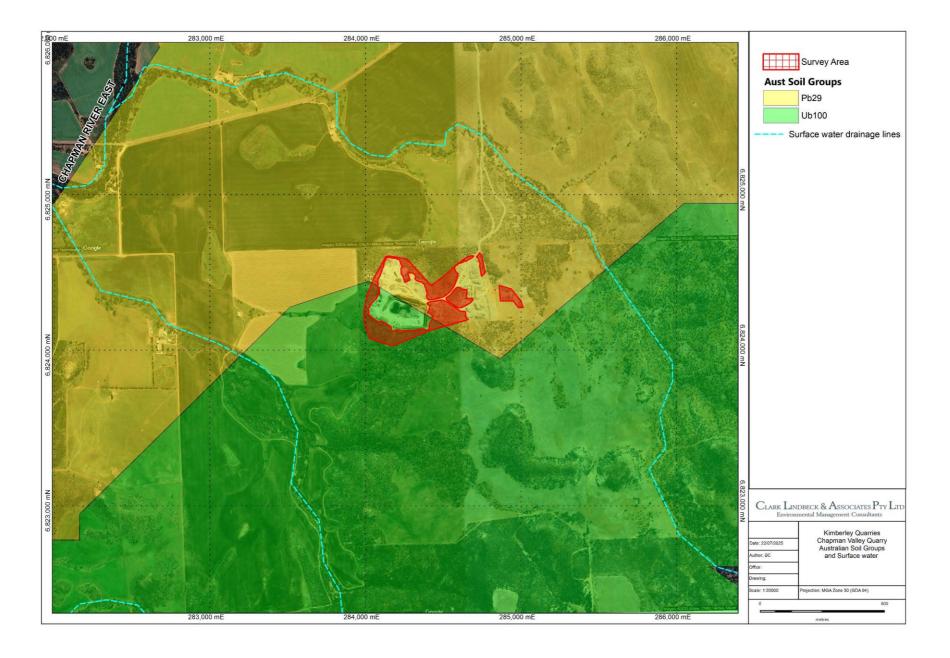


Figure 2: Surface water catchments in the Project area

3 METHODOLOGY

3.1 DESKTOP ASSESSMENT

3.1.1 Environmental Protection and Biodiversity Conservation Act Protected Matters

The EPBC Act Protected Matters Search tool (PMST) was utilised to provide results for matters of National Environmental Significance (NMES) within the proposed clearing area with a 10 km buffer (DCCEEW, 2025). The results are attached as Appendix 2.

3.1.2 Flora

A search of the DBCA Threatened/ Priority flora spatial database (DBCA, 2025) was undertaken to assist in determining potentially occurring conservation significant flora at the Project.

3.1.3 Communities

The presence of Threatened and Priority Ecological Communities (TEC's and PEC's) was determined with the use of DWER's Environment Online Interactive map (DWER 2025a).

3.1.4 Environmentally Sensitive Areas (ESA's) and Conservation Reserves

The Department of Water and Environmental Regulation (DWER) Clearing Permit System Map Viewer was used to determine the location of any ESA's (DWER, 2025b). In addition, the 'DBCA Legislated Lands and Water' was used to determine the occurrence of DBCA reserves in proximity to the Project (Government of Western Australia 2025).

3.1.5 Vegetation Type and Extent

Vegetation extent and status data was sourced from the Department of Agriculture and Food (DAFWA) report and its associated GIS file (Shepherd *et al*, 2002). This data comprises Beard's Pre-European vegetation groups.

3.1.6 Dieback

Given the nature of native vegetation occurrence in the survey area as isolated trees/shrubs areas with no understorey, these were considered 'Not Interpretable' and assessment by a DBCA Registered Interpreter was not considered appropriate or useful.

Mr Williams has a Greencard issued by the Dieback Working Group and is experienced in dieback identification.

3.2 SITE INVESTIGATIONS

3.2.1 Site Surveys

Williams & Son (2025) completed a site visit on 26 June 2025 to assess all native vegetation occurring in the survey area (Figure 3).

The survey was undertaken in accordance with methods outlined in "Technical Guidance – Flora and vegetation surveys for environmental impact assessment (EPA 2016b)".

High resolution aerial photography of the Project was made available prior to the survey to identify areas of native vegetation occurrence. The proposed Quarry expansion area was provided by GIS by KQ, and was used to determine detailed assessment areas by Mr Williams to complete a systematic survey that would be encompass all native vegetation occurring at the Project.

Given the nature of the vegetation in the survey area, all species encountered were recorded to provide a representative species list of native species occurring on the Project site. This was undertaken by vehicle and foot traverse.

The following parameters were recorded by Williams & Son (2025) for the survey area:

- Systematic recording of all flora species (native and non-native)
- Comment on habit of isolated native vegetation encountered.
- Vegetation condition in accordance with Keighery (1994)
- Evidence of dieback i.e. degraded plant health.

3.2.2 Survey Timing

EPA (2016b) Technical guidance identifies the primary survey timing for the Geraldton Sandplain Botanical Province is Spring (September- November).

The site survey was conducted in June 2025. Prior to the site visit, provision for a second survey was made, however, based on the nature of the vegetation occurring at site (i.e. completely degraded) it was deemed this was not necessary.

Rainfall in the three months preceding the surveys was below average - average (Table 2). There was 168.4mm of rainfall in the month preceding the survey and the survey was timed to be completed after significant rainfall.

Table 2: Monthly rainfall (Jurien BOM site)

Month	2025 Monthly Rainfall (mm)	Mean Monthly Rainfall (mm)
Jan	1.0	5.6
Feb	3.0	11.1
Mar	3.6	15.9
Apr	1.6	23.8
May	38.6	69.5
Jun	135	97.2

3.2.3 Survey Limitations and Constraints

An assessment of the potential limitations and constraints of the survey was undertaken to identify potential limitations and constraints that may impact the assessment (Table 3).

Table 3: Assessment of limitations and constraints of survey work

Potential Limitation/Constraint	Constraint (Y/N/NA)	Comment
Availability of contextual information at a regional and local scale	N	Reference resources such as Beard's mapping, together with online flora and vegetation information, have provided an appropriate level of information for the current survey. The vegetation of the this area has previously been mapped by Beard (1976).
Resources (i.e. were there adequate resources to complete the survey to the required standard).	N	Adequate resources were made available by KQ to complete the surveys.
Competency/experience of team carrying out survey; experience in the bioregion surveyed	N	Mr Williams has had extensive experience working in this botanical district and is used by DBCA for flora survey work, and has worked in this area in addition to areas in the field from North Eneabba to South Badgingarra and the Coast to East of Moora and Carnamah for > 30 years. Mr Williams is highly experienced in identification of Threatened and Priority flora in this bioregion.
Proportion of flora collected and identification issues	N	The areas surveyed in detail were considered representative of the areas to be disturbed and to encompass species of native vegetation to be disturbed. Mr Williams is highly experienced in identification of Threatened and Priority flora in this bioregion. Species which could not be identified to species levels, are not potential Threatened or Priority flora species. While not all annuals may have been picked up this is not expected to have a significant effect on mapping reliability, nor on the identification of threatened and priority species in the area as the majority were perennial species.
Effort and extent of survey	N	Survey intensity was appropriate for the size/significance of the area.
Mapping reliability	N	Handheld GPS unit was used for the survey, which for a majority of field conditions have an accuracy level of \pm 5 m.
Access restrictions with survey area	N	Vehicle access and foot traverses were readily available across the whole survey area.
Survey timing, rainfall, season of survey	N	The EPA (2016a) recommends that flora and vegetation surveys in the South — West Botanical Province be conducted in Spring (September-November). The survey was conducted after rainfall and to encompass the optimum flowering time for potentially occurring flora species of conservation significance as identified by Mr Williams. Rainfall in the three months preceding the assessment was below average-average. There was 168.4mm of rainfall in the month preceding the survey. Mr Williams is highly experienced in this botanic region. Given the nature of the vegetation (i.e. completely degraded – grazed), this is not considered a limitation.
Disturbances (fire/flood/clearing)	N	The survey area surrounds the existing Quarry. The area has been subject to grazing for >100 years.
Data and statistical analysis	N/A	Given the occurrence of the native vegetation surveyed (i.e. isolated trees/patches in completely degraded condition), no statistical analysis was warranted to differentiate vegetation groups.



Figure 3: Chapman Valley Survey Area

4 RESULTS

4.1 DESKTOP ASSESSMENT

4.1.1 EPBC Protected Matters Search Tool

The results of the EPBC PMST are presented in Appendix 2 and Threatened flora/flora habitat potentially occurring summarised in Table 4.

Table 4: EPBC PMST Threatened flora/flora habitat identified as potentially occurring in the Project area (DCCEW 2025)

Scientific Name	Common Name	Threatened Category	Presence Text
Leucopogon marginatus	Thick-margined Leucopogon	Endangered	Species or species habitat may occur within area
Drummondita ericoides	Morseby Range Drummondita	Endangered	Species or species habitat likely to occur within area
Caladenia elegans	Elegant Spider-orchid	Endangered	Species or species habitat may occur within area
Conostylis micrantha	Small-flowered Conostylis	Endangered	Species or species habitat may occur within area
Conostylis dielsii subsp. teres	Irwin's Conostylis	Endangered	Species or species habitat may occur within area
Caladenia hoffmanii	Hoffman's Spider-orchid	Endangered	Species or species habitat likely to occur within area
Chorizema humile	Prostrate Flame Pea	Endangered	Species or species habitat may occur within area
Eucalyptus cuprea	Mallee Box	Endangered	Species or species habitat may occur within area
Caleana dixonii	Sandplain Duck Orchid	Endangered (listed as	Species or species habitat may occur within area

4.1.2 Flora Database Results

A search of the DBCA Threatened flora database (20 km buffer) revealed 70 flora species of conservation significance known to occur. The results are attached as Appendix 3 and presented in Figure 4.

4.1.3 Threatened Communities

No TEC's or PEC's pursuant to Commonwealth or State legislation are located at the Project (Figure 5).

4.1.4 Environmentally Sensitive Areas and Conservation Reserves

The survey area does not lie within or contain any ESA's or Conservation Reserves (DWER, 2025b) (Figure 1).

4.1.5 Vegetation Type and Extent

Based on Beard (Shepherd *et al.* 2002), one Pre-European vegetation association has been mapped in the Project area:

• 35: Shrublands; jam scrub with scattered York gum.

This association has been extensively cleared for agriculture in this region and has 16.3% of its original extent remaining (Table 5). This figure takes into account the total extent of this vegetation association in WA.

In the City of Greater Geraldton, there is 20.14% of this vegetation association, Northampton 35, remaining (i.e. 10,948.94 ha remaining of original extent of 54,090 ha Pre-European).

Table 5: Current extent of regional vegetation associations

Beard Vegetation Association	Pre-European Extent (Ha)	Current Extent (Ha)	Pre-European extent remaining (%)
35	184.501.78	30,087.81	16.31

4.1.6 Dieback

Given the nature of occurrence of native vegetation at the Project, the area is largely 'Not Interpretable'.

No evidence of dieback was recorded by Williams & Son (2025).

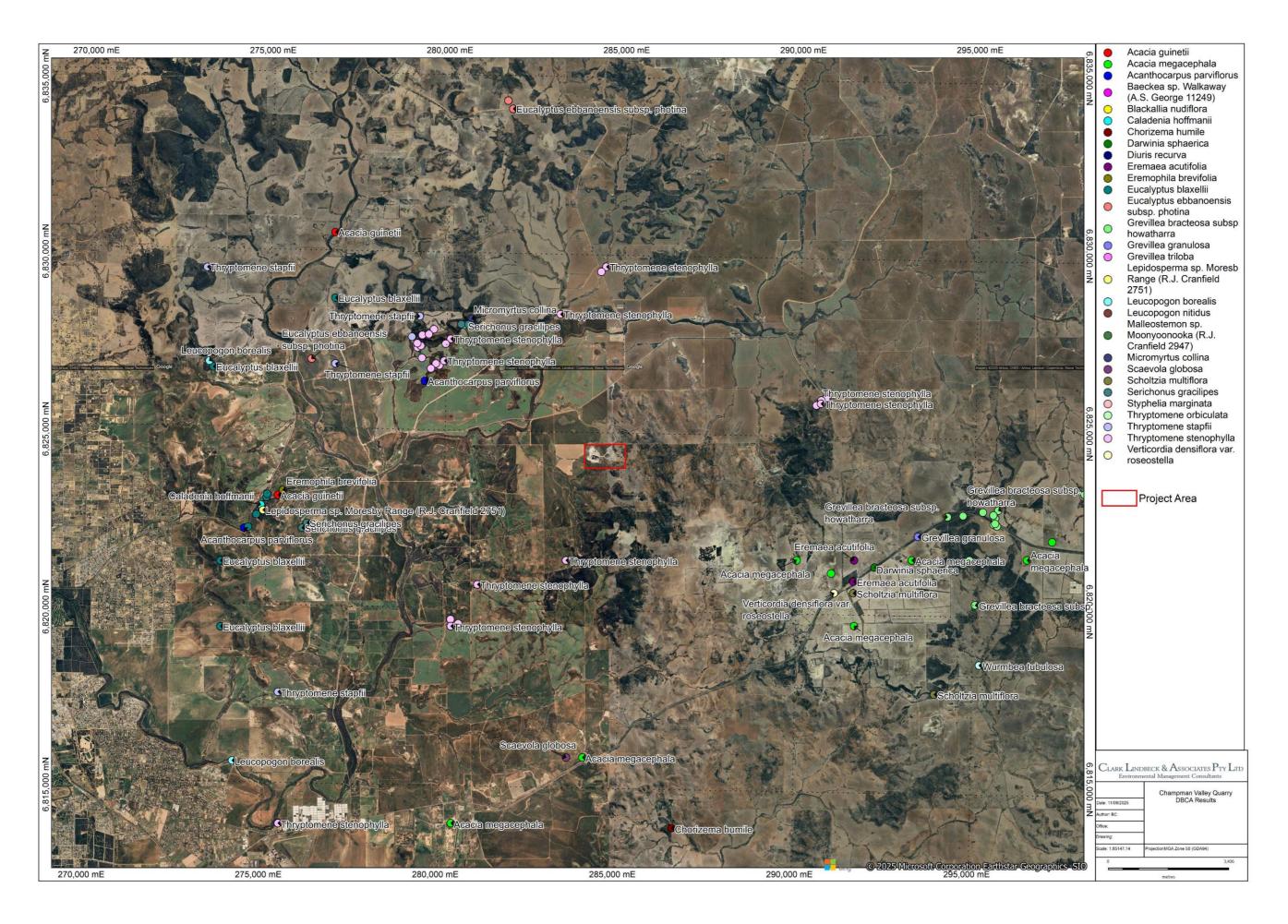


Figure 4: DBCA Threatened/Priority flora search results in proximity to the Project

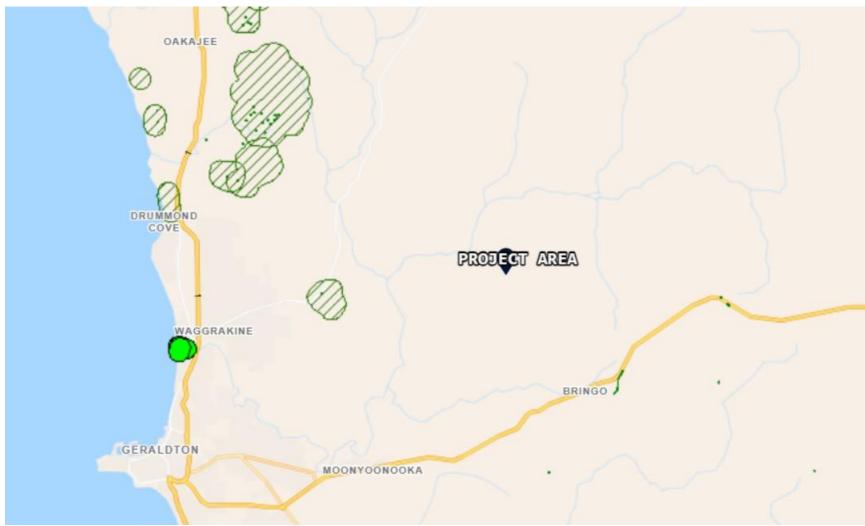


Figure 5: TEC/PEC occurrence in Region (from Environment online) – PEC hashed line; TEC light green

4.2 SITE INVESTIGATIONS

4.2.1 Threatened and Priority Flora

No Threatened or Priority flora were recorded in the survey area.

It appears the long history of grazing and density of introduced species have outcompeted any of the potentially occurring species of conservation significance (and other understorey species).

Table 6 presents an assessment of the potentially occurring conservation significant flora, based on Mr Williams experience (and review of EPBC/DBCA results).

As Williams and Son (2025) notes: "The smaller less robust Genus such as Caladenia, Pterostylis, Drakaea and Leschenaultia would have been out competed by the dense vigorous nature of the introduced species. The livestock grazing regime of the last 80+ years has reduced the native population to a remnant of very robust long-lived Genera".

Table 6: Potentially occurring Threatened and Priority species based on Williams & Son (2025) assessment

Species Name and rating	Approx. flowering	Williams & Son (2025) Assessment
Androcalva microphylla P.2	August on	Not observed, has distinctive
		foliage
Beyeria gardneri P. 3	July onwards	Not observed does not appear to
		have been recorded within 10 Km.
Caladenia bryceana T	July onwards	Not observed occurs further north.
Caladenia hoffmanii T	July onwards	Not observed has potential to
		occur in general area
Caladenia longicauda 2	Spring	Not observed does not appear to
		have been recorded within 15 Km.
Caladenia pluvialis 2	Spring	Not observed does not appear to
		have been recorded within 20 Km
Caladenia wanosa T	Aug on	Not observed does not appear to
		have been recorded within 15 Km
Drummondita ericoides T	Sept oct	Not observed.
Eucalyptus cuprea T	Aug Nov	No rough bark mallee species
		observed. Does occur in granite.
Eucalyptus blaxellii 4	Aug Nov	No smooth bark mallee species
		observed. Does occur nearby.
Eucalyptus ebbanoensis 4	Sept to Mar	No smooth bark glossy leaved
		mallee species observed. Does
		occur nearby.
Grevillea bracteosa subsp.	Aug Nov	Not observed occurs to North and
howatharra T		East.
Grevillea candicans 3	Aug Oct	Not observed occurs on deep sand
Grevillea granulosa 3	July Oct	Not observed mainly further East.
Grevillea leptopoda 3	Aug Sept	Not observed occurs well North
		and South
Grevillea triloba 3	Jun Oct	Not observed common in area has
		distinctive leaf form.
Leucopogon borealis 2	Unknown	No Leucopogon spp observed most
		population to North
Leucopogon psammophilus 1	Unknown	No <i>Leucopogon</i> spp observed
		greatest population to South
Leucopogon Sp. Moresby Ranges 3	Jun Jul	Not observed occurs to North

4.2.2 Vegetation and Flora

While the survey area is expected to have once comprised Jam shrubland (*Acacia acuminata* or *Hakea recurva*) with scattered York gums (*Eucalyptus loxophleba*), consistent with the broad pre-European vegetation mapping, the long history of grazing and subsequent introduction of weeds has removed the original structure and diversity of the native vegetation (Plates 1-4).

Williams and Sons (2025) recorded a total of 9 species of native flora in the survey area surround the Quarry (Appendix 4) which occurs in isolated patches and/or individuals. *Acacia ramulosa* and *Hakea recurva* were the most dominant species on site and this was attributed to the very pungent nature of the foliage. The mature *A.acuminata* and *A.ramulosa* were all mature and approaching senescence (no regeneration). As such, it is expected the native vegetation cover will further reduce with time as these species die out.

There is a large dense well established introduced annual weed species population and a smaller range and population of perianal introduced weed species which have prevented any natural regeneration of species (Section 4.2.3) (Plates 1-4).

Vegetation condition according to Keighery (1994) within the survey area is 'Completely Degraded' (Williams & Son 2025).

Based on the results of the June 2026 survey, Mr Williams considered an additional survey was not required.

4.2.3 Non-native species

The survey recorded 12 non-native (weed) species which a dense coverage across the survey area (Williams and Son 2025) (Appendix 4) (Plates 1-4).

None of these species are 'Declared Pests' under the *Biosecurity and Agriculture Management Act* 2007 (BAM Act).



Plate 1: Vegetation occurring in the northern part of survey area (north of the Quarry) – shows typical occurrence of patches of native vegetation

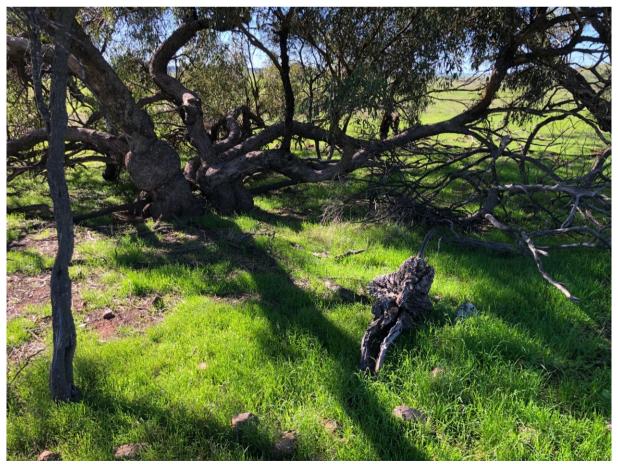


Plate 2: *E.loxophleba* occurring in eastern extent of survey area – occurs in patch surrounded by non-native cover



Plate 3: Vegetation in the western part of the survey area (looking south) - showing dominance of weed cover



Plate 4: Dense weed population with degraded native population behind (from Williams & Son)

5 CLEARING PERMIT PRINCIPLES

These Principles are listed in Schedule 5 attached to the Environmental Protection Act 1986.

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

The Project lies within the central area of the Geraldton Hills (GS2) Interim Biogeographic Regionalisation for Australia (IBRA) Sub Region of the Geraldton Sandplains Biogeographic Region (Desmond & Chant 2003).

The survey has areas has been subject to grazing for over 100 years, is completely degraded and comprises a total of 9 native species. Historically the area may have comprised a high level of biological diversity, but this is no longer the case. Weeds are a significant component of ground cover.

Therefore, the proposed clearing is not at variance to this Principle.

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

N/A - Please refer to fauna assessment report.

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

No plant taxa located in the survey area are gazetted as Threatened under the EPBC Act or BC Act .

No Priority flora were recorded in the survey area. Based on the vegetation condition, resulting from a long history of grazing and introduction of weeds to this area, no flora of conservation significance would be expected to occur.

Given the above, the proposed clearing will not be at variance to this Principle.

(d) Native vegetation should not be cleared if it comprises the whole or part of, or is necessary for the maintenance of a Threatened Ecological Community (TEC).

No TEC's are listed under the Commonwealth *Environmental Protection and Biodiversity Conservation Act 1999* or endorsed by the Western Australian Minister for the Environment are present in the survey area.

Therefore, the proposed clearing is not at variance to this 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.

The proposed clearing comprises one Beard Vegetation Associations which have approximately 16.3% of its Pre-European extent remaining.

Therefore, the proposed clearing will be at variance to this Principle. However, given the 'completely degraded' vegetation condition which is dominated by weeds and has lost its original structure, this is not expected to have a significant impact on the remaining extent of this vegetation groups.

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

There are no watercourse or wetlands in the survey area, and thus no riparian vegetation identified during the survey.

The proposed clearing is not at variance to this Principle.

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

The native vegetation to be cleared comprises 'completely degraded' native vegetation which has been subject to grazing for 100 years and surrounds the existing Quarry.

The proposed clearing of this vegetation is not likely to lead to further land degradation and therefore is not considered to be at variance to this 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.

There are no conservation or nature reserves within the survey area (closest is >10km away).

The proposed clearing, therefore, is not at variance to this 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.

There is no surface water of significance, large drainage lines, lakes or swamps within, or in close proximity to the survey area.

The survey area proposed to be cleared does not fall within a Public Drinking Water Source Area (PDWSA) or PDWSA Protection Zone.

The clearing is unlikely to cause deterioration in the quality of surface or groundwater and, therefore, the proposed clearing is not at variance to this Principle.

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

The survey area surrounds the existing Quarry and comprises 'completely degraded' native vegetation which is dominated by weed species.

The Chapman Valley East River, and tributaries flow to the north and west of the Project area. As there is little surface flow during normal rains, the proposed clearing is not likely to cause or exacerbate the incidence or intensity of flooding.

Therefore, the proposed clearing is not at variance to this Principle.

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6 BIBLIOGRAPHY

Australian Soil Resource Information System (2022). asris.csiro.au accessed 16 September 2022.

Department of Biodiversity, Conservation and Attractions (2025a). *Threatened and Priority Flora Database Search in the Greater Geraldton vicinity*. Prepared by the Species and Communities, DBCA ref 52-0725FL.

Desmond, A., Cowan, M. & A. Chant (2003). IN: A Biodiversity Audit of Western Australia's 53 Biogeographical Subregions in 2002, (edited by J.E. May & N.L. McKenzie). Department of Conservation and Land Management, 2003.

Department of Water and Environmental Regulation (2025). *Environment Online interactive map*. Government of Western Australia. Available at: https://environmentonline.dwer.wa.gov.au (Accessed: 1 June 2025).

Government of Western Australia. (2019). 2018 Statewide Vegetation Statistics incorporating the CAR Reserve Analysis (Full Report). Current as of March 2019. WA Department of Biodiversity, Conservation and Attractions, Perth. https://catalogue.data.wa.gov.au/dataset/dbca-statewide-vegetation-statistics

Government of Western Australia (2025). *DBCA – Legislated Lands and Waters. Current at 11 June 2025*. WA Department of Biodiversity, Conservation and Attractions, Perth https://catalogue.data.wa.gov.au/dataset/dbca-legislated-lands-and-waters (accessed June 2025).

Keighery, G.J. (1994).

Northcote, K. H. with Beckmann, G. G., Bettenay, E., Churchward, H. M., Van Dijk, D. C., Dimmock, G. M., Hubble, G. D., Isbell, R. F., McArthur, W. M., Murtha, G. G., Nicolls, K. D., Paton, T. R., Thompson, C. H., Webb, A. A. and Wright, M. J. (1960-1968). *Atlas of Australian Soils, Sheets 1 to 10*. With explanatory data (CSIRO Aust. and Melbourne University Press: Melbourne).

Schoknecht, N. (2006). North Coastal Plain land resources survey. Department of Agriculture and Food, 2006.

Shepherd, D.P., Beeston, G.R., and Hopkins A.J.M. (2002). *Native Vegetation in Western Australia – Extent, Type and Status.* Resource Management Technical Report 249. Department of Agriculture, Western Australia, South Perth.

Williams & Son (2025). Survey of Native Flora Species Lot 20 Plan 6975, East Chapman CPS 10758/1. *Report for Kimberley Quarry Pty Ltd.* July 2025

APPENDICES

Chapman Valley Quarry Flora Report	Chanman	Valley	Quarry	Flora	Report
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Appendix 1: Conservation Rating Definitions





CONSERVATION CATEGORY DEFINITIONS

For Western Australian Fauna and Flora

Threatened, Extinct and Specially Protected fauna or flora¹ are species² 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.

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 Criteria³, 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.

Examples of use:

- The western ringtail possum (*Pseudocheirus occidentalis*) is listed as a critically endangered threatened species under the *Biodiversity Conservation Act 2016*.
- Western ringtail possum is listed as critically endangered under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: CR.

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.

- Caladenia hopperiana is listed as an endangered threatened species under the Biodiversity Conservation Act 2016.
- Caladenia hopperiana is listed as endangered under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: EN.

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.

Examples of use:

- The forest red-tailed black cockatoo (*Calyptorhynchus banksii naso*) is listed as a vulnerable threatened species under the *Biodiversity Conservation Act 2016*.
- Forest red-tailed black cockatoo is listed as vulnerable under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: VU.

Extinct species

Listed by order of the Minister as extinct under section 23(1) of the BC Act as extinct or extinct in the wild.

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).

Examples of use:

- Acacia kingiana is listed as an extinct species under the Biodiversity Conservation Act 2016.
- Acacia kingiana is listed as extinct under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: EX.

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 fauna or flora species listed as extinct in the wild.

SP 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).

Migratory species include birds that are subject to an agreement between the government of Australia and the governments of Japan (JAMBA)⁴, China (CAMBA)⁵ or The Republic of Korea (ROKAMBA)⁶, and fauna subject to the *Convention on the Conservation of Migratory Species of Wild Animals* (Bonn Convention)⁷, 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.

- The wedge-tailed shearwater (*Ardenna pacifica*) is listed as a specially protected migratory species under the *Biodiversity Conservation Act 2016*.
- Wedge-tailed shearwater is listed as migratory under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: MI.

CD Species of special conservation interest (conservation dependent)

Species of special conservation need that are 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.

Examples of use:

- The wambenger, south-western brush-tailed phascogale (*Phascogale tapoatafa wambenger*) is listed as a specially protected species of special conservation interest under the *Biodiversity Conservation Act 2016*.
- Wambenger, south-western brush-tailed phascogale, is listed as conservation dependent under the *Biodiversity Conservation Act 2016.*
- Listing reference in a table: column heading: BC Act, row text: CD.

OS Species otherwise in need of special protection (other specially protected)

Species 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.

Examples of use:

- The dugong (*Dugong dugon*) is listed as a specially protected species otherwise in need of special protection under the *Biodiversity Conservation Act 2016*.
- Dugon is listed as other specially protected fauna under the Biodiversity Conservation Act 2016.
- Listing reference in a table: column heading: BC Act, row text: OS.

Priority species

Priority is not a listing category under the BC Act. The Priority Flora and Fauna lists are maintained by the department and are published on the department's website.

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.

1 Priority 1: Poorly-known species - known from few locations, none on conservation lands

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.

- Borya stenophylla is listed as a Priority 1 species by the Department of Biodiversity, Conservation and Attractions.
- Borya stenophylla is listed as Priority 1 on the DBCA Priority Flora List.
- Listing reference in a table: column heading: DBCA, row text: P1.

2 Priority 2: Poorly-known species - known from few locations, some on conservation lands

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.

Examples of use:

- Caladenia nivalis is listed as a Priority 2 species by the Department of Biodiversity, Conservation and Attractions.
- Caladenia nivalis is listed as Priority 2 on the DBCA Priority Flora List.
- Listing reference in a table: column heading: DBCA, row text: P2.

3 Priority 3: Poorly-known species - known from several locations

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.

Examples of use:

- Acacia nitidula is listed as a Priority 3 species by the Department of Biodiversity, Conservation and Attractions.
- Acacia nitidula is listed as Priority 3 on the DBCA Priority Flora List.
- Listing reference in a table: column heading: DBCA, row text: P3.

4 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.

- Banksia aculeata is listed as a Priority 4 species by the Department of Biodiversity, Conservation and Attractions.
- Banksia aculeata is listed as Priority 4 on the DBCA Priority Flora List.
- Listing reference in a table: column heading: DBCA, row text: P4.

¹ The definition of flora includes algae, fungi, and lichens.

² 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).

³ Western Australia has assigned species to threat categories using the *IUCN Red List of Threatened Species Categories and Criteria* since 1996 (referencing all criteria).

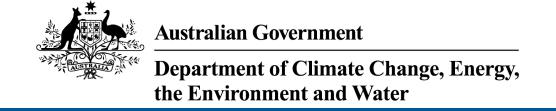
⁴ JAMBA - first included in the WA migratory species list in 1980.

⁵ CAMBA - first included in the WA migratory species list in 2010.

⁶ ROKAMBA - first included in the WA migratory species list in 2010.

⁷Bonn Convention (Birds) - first included in the WA migratory species list in 2015.

Appendix 2: EPBC PMST Results



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: 6-June-2025

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 <u>Administrative Guidelines on Significance</u>.

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:	None
Listed Threatened Species:	22
Listed Migratory Species:	9

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 <u>permit</u> 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:	14
Whales and Other Cetaceans:	None
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:	None
Regional Forest Agreements:	None
Nationally Important Wetlands:	None
EPBC Act Referrals:	1
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Listed Threatened Species

Matters of National Environmental Significance

Scientific Name	Threatened Category	Presence Text
BIRD	<u> </u>	
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area
Leipoa ocellata Malleefowl [934]	Vulnerable	Species or species habitat likely to occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area
Tringa nebularia Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area

[Resource Information]

Scientific Name	Threatened Category	Presence Text
Zanda latirostris listed as Calyptorhynchu Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	us latirostris Endangered	Species or species habitat likely to occur within area
MAMMAL		
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat may occur within area
Macroderma gigas Ghost Bat [174]	Vulnerable	Species or species habitat may occur within area
PLANT		
Caladenia elegans Elegant Spider-orchid [56775]	Endangered	Species or species habitat may occur within area
Caladenia hoffmanii		
Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat likely to occur within area
Caleana dixonii listed as Paracaleana dix	<u>xonii</u>	
Sandplain Duck Orchid [87944]	Endangered	Species or species habitat may occur within area
Chorizema humile		
Prostrate Flame Pea [32573]	Endangered	Species or species habitat may occur within area
Conostylis dielsii subsp. teres Irwin's Conostylis [3614]	Endangered	Species or species habitat may occur within area
Conostylis micrantha Small-flowered Conostylis [17635]	Endangered	Species or species habitat may occur within area
<u>Drummondita ericoides</u> Morseby Range Drummondita [9193]	Endangered	Species or species habitat likely to occur within area
Eucalyptus cuprea Mallee Box [56773]	Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Leucopogon marginatus Thick-margined Leucopogon [12527]	Endangered	Species or species habitat may occur within area
REPTILE		
Egernia stokesii badia Western Spiny-tailed Skink, Baudin Island Spiny-tailed Skink [64483]	Endangered	Species or species habitat may occur within area
SPIDER		
Idiosoma nigrum Shield-backed Trapdoor Spider, Black Rugose Trapdoor Spider [66798]	Vulnerable	Species or species habitat may occur within area
Listed Migratory Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Migratory Marine Birds		
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
Motacilla cinerea Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Numenius madagascariensis Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area

Scientific Name	Threatened Category	Presence Text
Pandion haliaetus		
Osprey [952]		Species or species habitat may occur within area
Tringa nebularia		
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Listed Marine Species		[Resource Information]
Scientific Name	Threatened Category	Presence Text
Bird		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area
Apus pacificus		
Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area
Calidria aguminata		
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area

Scientific Name	Threatened Category	Presence Text
Chalcites osculans as Chrysococcyx osc	<u>culans</u>	
Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area
Haliaeetus leucogaster		
White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area
Merops ornatus		
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area
Motacilla cinerea		
Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area
Numenius madagascariensis		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
Pandion haliaetus		
Osprey [952]		Species or species habitat may occur within area
Rostratula australis as Rostratula bengh	alensis (sensu lato)	
Australian Painted Snipe [77037]	Endangered	Species or species habitat may occur within area overfly marine area
Tringa nebularia		
Common Greenshank, Greenshank [832]	Endangered	Species or species habitat likely to occur within area overfly marine area

Extra Information

EPBC Act Referrals			[Resource Information]
Title of referral	Reference	Referral Outcome	Assessment Status
Not controlled action			
Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed

Title of referral Reference Referral Outcome Assessment Status

Not controlled action

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 3: DBCA flora search results

Sheet	NameID	Taxon	ns_Code Locality	Latitude	Longitude	Geo_Method	Precision	Date
		Acacia guinetii	Adjacent Quadrat 1 Bushland Plant Survey of remnant vegetation on Keith and Maureen Jon					
			property Bullswamp in the Shire of Chapman Valley c. 24 km N and 35 km NE of the Geraldi	on				
6445047			4 Townsite. (c. 450 km N of Perth). The bush block is in the Chapman River	-28.536			1	28/08/1999
196452		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.643			2	2/09/1983
755729 196940	•	Acacia guinetii Acacia guinetii	4 Moresby Range 4 Wokatharra Hill, 20 km NE [of] Geraldton	-28.702 -28.650			 	19/07/1984 28/08/1981
196444		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650			2	2/09/1983
196428		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650	+		2	2/09/1982
195987	1	Acacia guinetii	4 10 miles NE of Geraldton	-28.650	+		3	8/09/1962
197378	3358	Acacia guinetii	4 8 km W [of] Nanson towards Howatharra	-28.550	114.6916667	MAN	3	22/08/1973
196924		Acacia guinetii	4 Ca 3 miles (4.8 km) W of Nanson, (ca 22 miles (35.4 km) NNE of Geraldton by road)	-28.550				27/08/1970
196908		Acacia guinetii	4 Howatharra Range, 4.7 miles (7.5 km) N of Nanson	-28.517				22/08/1973
197416		Acacia guinetii	4 Howatharra Range, 4.7 miles (7.5 km) N of Nanson	-28.517			3	22/08/1973
196932 196916		Acacia guinetii Acacia guinetii	4 Howatharra-Nanson Road in Moresby Ranges, on saddle over Moresby Ranges 4 Ca 5 miles (8.1 km) W of Nanson, (ca 24 miles (38.6 km) NNE of Geraldton by road)	-28.702 -28.550			3 /	// 27/08/1970
5825784	•	Acacia guinetii	4 Small area of uncleared land on private land - Moresby Range,	-28.595				29/06/2000
5808251		Acacia guinetii	4 The Brothers, Moresby Ranges,	-28.708	+		3	8/07/2000
6600050	1	Acacia guinetii	4 Moresby Conservation Park, quadrat 6	-28.607			1	6/08/2002
6420486	3358	Acacia guinetii	4 Moresby Conservation Park, Site 2	-28.619	114.6819889	GPS	1	31/07/2002
919640	3358	Acacia guinetii	4 Nanson-Howatharra road ca 7 km W of Nanson	-28.550	114.7	MAN	3	12/03/1986
197408		Acacia guinetii	4 Moresby Range	-28.702			3	//
196479		Acacia guinetii	4 Howatharra Range	-28.600			4	12/11/1981
196363		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650			3	2/09/1983
9580662	1	Acacia guinetii	4 Nanson to Howatharra Road	-28.548				26/07/1969
197335		Acacia guinetii	4 Moresby Range	-28.702			3	30/08/1972
1778439		Acacia guinetii	4 7.5 km from Nanson on the road to Howatharra	-28.558			3	4/12/1991
196460 196851	+	Acacia guinetii Acacia guinetii	4 8 km W of Nanson 4 White Peak Station, ca 18 km NE [of] Geraldton	-28.550 -28.633			3	8/10/1972 29/08/1980
196398		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650			3	2/09/1983
196398		Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650			3	2/09/1983
	2333	Acacia guinetii	Wells Park, 27.6 km S of Horrick Beach turnoff, 4 km E of North West Coastal Highway [Ca 5		117.00	-	 	
197327	3358		4 due N of Wokatherra Hill].	-28.600	114.65	MAN	3	26/08/1983
197394	.	Acacia guinetii	4 Moresby Range	-28.702				19/09/1966
196401	1	Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650	114.65	MAN	2	2/09/1983
]	Acacia guinetii	4.4 km NE of Moonyoonooka turnoff on Nanson to Geraldton Road, Mr. Heinricks farm [Ca 7	I				_
196959	3358		4 ESE of Wokatherra Hill].	-28.667			3	25/08/1983
195995		Acacia guinetii	4 10 miles NE of Geraldton	-28.650			3	8/09/1962
196436	•	Acacia guinetii	4 Wokatherra Hill, ca 15 km N of Geraldton	-28.650			2	2/09/1982
8988382		Acacia guinetii	4 Morseby Conservation Park, along N-S track on western side of reserve	-28.609				23/11/2017
759449 759430		Acacia guinetii	4 Moresby Range 4 Moresby Range	-28.702 -28.702				30/08/1972 30/08/1972
5889510		Acacia guinetii Acacia guinetii	4 The Brothers, Moresby Range, access via Chapman Valley Road and Mills Lookout,	-28.702			3	5/08/2000
173401		Acacia megacephala	3 10 miles E of Geraldton	-28.617			3	3/12/1961
637254	1	Acacia megacephala	3 19 miles E of Geraldton on the road to Mullewa (at Kojarena siding)	-28.733			3	8/08/1970
173851	+	Acacia megacephala	3 Northern Gully	-28.717			3	14/06/1971
173827		Acacia megacephala	3 Ca 50.5 miles W of Mullewa on the road to Geraldton	-28.783	114.75	TOPO	3	30/03/1970
173800	3437	Acacia megacephala	3 10 miles E of Geraldton towards Mullewa	-28.617	114.6333333	TOPO	3	23/04/1970
173347	3437	Acacia megacephala	3 19 miles E of Geraldton	-28.717	114.8833333	TOPO	3	17/10/1967
173843		Acacia megacephala	3 3.2 km E of Northern Gully (34 km E of Geraldton) towards Mullewa	-28.717			3	5/10/1972
173835		Acacia megacephala	3 19 miles E Geraldton	-28.717			3	8/08/1970
637238		Acacia megacephala	3 19 miles E Geraldton, towards Mullewa	-28.717			3	8/08/1970
896942		Acacia megacephala	3 22 miles E of Geraldton	-28.717				28/08/1964
173428	1	Acacia megacephala	3 Kojarena, 18 miles (29 km) ENE of Geraldton, 0.5 miles (0.8 km) S of the Geraldton - Mulley				3	25/08/1970
764787 764795		Acacia megacephala Acacia megacephala	3 19 miles E of Geraldton towards Mullewa (opposite Kojarena Siding) 3 19 miles E of Geraldton towards Mullewa (at Kojarena Siding)	-28.733 -28.733			3	8/08/1970 8/08/1970
764809		Acacia megacephala	3 19 miles E of Geraldton towards Mullewa (at Kojarena Siding)	-28.733			3	8/08/1970
765236		Acacia megacephala	3 19 miles E of Geraldton towards Mullewa (at Kojarena Siding)	-28.733			3	8/08/1970
173436		Acacia megacephala	3 17 miles E of Geraldton	-28.767			3	12/08/1956
888354	1	Acacia megacephala	3 17 miles E of Geraldton	-28.767				12/08/1956
173398	3437	Acacia megacephala	3 Northern Gully (E of Geraldton)	-28.717	114.9166667	TOPO	3	2/12/1971
8416575		Acacia megacephala	3 Geraldton to Mullewa Rail Corridor, 300 m NE of Kojarena	-28.722				18/09/2010
8416664		Acacia megacephala	3 Geraldton to Mullewa Rail Corridor, 8.5 km E of Kojarena	-28.717			1	18/09/2010
4400585		Acacia megacephala	3 Kojarena South Road on S side of railway line S of the Mullewa-Geraldton road (Kojarena Sid					6/07/1995
173363		Acacia megacephala	3 23 miles E of Geraldton on road to Mullewa	-28.712				//1967
637246	3437	Acacia megacephala	3 10 miles E of Geraldton Mullewa - Geraldton Road, 6.5 km E of Kojarena Siding just E of Northern Gully, rail and road	-28.767	114.7880556	IUPU	2	23/09/1932
4400577	3437	Acacia megacephala	Mullewa - Geraldton Road, 6.5 km E of Kojarena Siding just E of Northern Gully, rail and road reserve on S side	-28.717	/ 114.85	MAN	ا	6/07/1995
- 1-1 000//	040/	Acacia megacephala	Geraldton - Mullewa Road, behind parking bay - old rail reserve at 34.8 km E of Geraldton	-20./1/	114.00	4		3,3711333
5947634	3437		3 (measured from ring road), ca 3.5 km E of Northern gully	-28.712	114.9493509	GPS	1	25/10/2001
98555	+	Acacia megacephala	3 N side of Geraldton-Mt Magnet Rd, on E side of junction with Kojarena North Rd.	-28.720				6/07/1995
98556		Acacia megacephala	3 Kojarena South Rd, on S side of railway line, S of the Geraldton-Mt Magnet Rd (Kojarena sidi		-			6/07/1995
98558	1	Acacia megacephala	3 Geraldton-Mt Magnet Rd, 6.5 km E of Kojarena Siding just E of Northern Gully. S side.	-28.712	114.9239343			6/07/1995
98559		Acacia megacephala	3 Geraldton-Mt Magnet Rd, 6.5 km E of Kojarena Siding just E of Northern Gully. S side.	-28.712				6/07/1995
98564		Acacia megacephala	3 Geraldton-Mt Magnet Rd, ca. 3.5 km E of Northern Gully. Behind parking bay - old rail reserv					25/10/2001
98565		Acacia megacephala	3 Geraldton-Mt Magnet Rd, ca. 3.5 km E of Northern Gully. Behind parking bay - old rail reserv			ODC		25/10/2001
8959692		Acanthocarpus parviflorus	3 Near North West Coastal Highway, N of Geraldton	-28.671			1	23/10/2009
5808162 6420702		Acanthocarpus parviflorus Androcalva microphylla	The Brothers, Moresby Ranges, Morseby Conservation , not in quadrat ?	-28.708 -28.617			3	8/07/2000 25/09/2002
6841325	•	Anthocercis intricata	3 Brand Highway E side of road, Tarcoola, Geraldton	-28.617			3	1/06/2004
5041020	0340	Baeckea sp. Walkaway (A.S. George	2.5 km ESE Mumbemarra Hill,	-20.707	117.01000/	. 5. 5	3	
5226228	14476	11249)	3	-28.665	114.741649	MAN		29/11/1997
	1	Baeckea sp. Walkaway (A.S. George	7.4 km N of North Gully farm house on Valentine Road, 10.4 km SW of Station Valentine Roa		1_0.0			
5226201	14476	11249)	3	-28.644	114.9947415	MAN	<u></u>	28/11/1997
1093916		Banksia scabrella	4 ?Geraldton district	-28.767	114.6166667	MAN	4	19/09/1962
1093878		Banksia scabrella	4 Geraldton district.	-28.767			4	12/09/1964
8588171	34236	Beyeria cinerea subsp. cinerea	3 Lot 800 Old Acres Estate, to the east of Geraldton townsite	-28.797	114.6499132	GPS	1	3/10/2012
		Beyeria cinerea subsp. cinerea	Remnant vegetaion on farm, located c. 2 km NW of Rudds Gully Road, adjacent to railway li	l l				1
8767831		Disabelli ""	3 Narngulu, c. 10 km SW of Geraldton	-28.801			1	21/10/2009
6321445	31606	Blackallia nudiflora	3 N bank of Chapman River opposite Polo Road Gauging Station	-28.783	114.7	MAN	3	5/08/2002
	Ī	Blackallia nudiflora	0.84 km E from Crown Reserve and North West Coastal Highway, 5.42 km E from the mouth	I			1	İ
		l	ICIAKAIPE RIVEL 2 P. K.W. Z. ILUM HUMAINELLA 3/3/2 F.W. Z. ILUM INIVIEWILIVE VI. V.	Road I			•	•
8959773	31606		Oakajee River, 5.6 km S from Howatherra, 4.43 km S from intersection of Coronation Beach and 20.97 km NNE from Geraldton town centre	Road -28.585	114.6384668	GPS	1	20/08/2009

2985772	48443	Brachyloma pirara	2 Wicherina turnoff, Geraldton - Mullewa Road	-28.717	115	MAN	3 17/07/1966
91200	13618	Caladenia elegans	`Wicherina` Water Reserve 17711 (Loc 9726). Ca. 20m S of main access road, past dam, ca. T 2.5km S of Geraldton-Mt Magnet Road.	-28.735	114.9940278		22/08/2008
31200	10010	Caladenia hoffmanii	Quadrat 16 Bushland Plant Survey of remnant vegetation on Greg and Tanya Burrows property	20.700	114.5540276		22/00/2000
0445554	40057		Hawkrise in the Shire of Chapman Valley c. 24 km N and 35 km NE of the Geraldton Townsite. (c.	00.500	44.4.050000	0.00	4 00/00/4000
6445551	13857	Caladenia hoffmanii	T 450 km N of Perth). The bush block straddles the Oakajee and Buller N Quadrat 13 Bushland Plant Survey of remnant vegetation on Greg and Tanya Burrows property	-28.589	114.652266	GPS	1 29/08/1999
			Hawkrise in the Shire of Chapman Valley c. 24 km N and 35 km NE of the Geraldton Townsite. (c.				
6445543	13857		T 450 km N of Perth). The bush block straddles the Oakajee and Buller N	-28.767	114.6867134		1 29/08/1999
330841	13857	Caladenia hoffmanii Caladenia hoffmanii	T Howatharra Hills, ca 21 km NE of Geraldton 4.89 km E from bridge crossing of the Chapman Valley Road over the Chapman River. 18.97 km N	-28.600	114.7166667	MAN	4 27/08/1980
9255656	13857	outdoma normanii	T from Geraldton town centre	-28.657	114.753809	GPS	1 19/08/2009
		Caladenia hoffmanii	Road reserve of Nanson Howatharra Rd, ~3.6km E of NW Coastal Hwy. Base of Howatharra				
102149	13857	Caladenia hoffmanii	T Hill.[Previously 2A; now includes all plants located in road reserve in this area.] Howatharra NR No.40587, ca.3.6km E of NW Coastal Hwy on Nanson Howatharra Rd, S of road,	-28.546	114.6625556		3/09/2008
102150	13857	outducting normalin	T base of Howatharra hill.	-28.548	114.6616667		12/09/2007
		Caladenia hoffmanii	Howatharra NR No.40587. W side of track running N-S along eastern edge of reserve. ~470m S or				
102152	13857	Caladenia hoffmanii	T road. Bella Vista Road, western verge. Adjacent to Howatharra Nature Reserve. [Ca. 20m and 60m nor	-28.549 h	114.6675		10/09/2010
106065	13857	outdoma normanii	T along road from the intersection with Nanson Howatharra Rd].	-28.545	114.6660794		27/09/2011
		Caladenia hoffmanii	Howatharra Nature Reserve (40587), Lot 11764. Adjacent to the intersection of Nanson				
106066 102160	13857 13857	Caladenia hoffmanii	T Howatharra Rd and Bella Vista Rd [on the east and west side of the intersection in the nature T Oakajee NR No.331, ca.1.8 km E of NW Coastal Hwy on Olsen Rd, 40m S of rd, within creek.	-28.545 -28.570	114.665996 114.6441667		27/09/2011 19/09/2006
102100	10007	Caladenia hoffmanii	Along that section of Olsen Road which bisects Oakajee Nature Reserve No.331 & track running	20.070	111101111007		10/00/2000
102161	13857		T north of Olsen Road(WANOSG advised APB in September 2005)	-28.570	114.6555		23/08/2009
102162	13857	Caladenia hoffmanii	Oakajee Nature Reserve, both side of the track at the NE corner of the reserve. Also along T fenceline/track heading S from Olsen Rd along edge of reserve, up to 160m S from rd.	-28.571	114.6574444		12/09/2007
102102	10007	Caladenia hoffmanii	Private Property at 342 Olsen Rd Howatharra (Lot 3 on Diagram 39476), immediately east of	20.071	114.0074444		12/00/2007
102163	13857		T Oakajee Nature Reserve. 50-60m S of Olsen Road.	-28.571	114.6575556		12/09/2007
91460	13857	Caladenia hoffmanii	Private Property Location No 100 [prev. 924] south of the Oakajee Nature Reserve No.331, in T drainage line.	-28.580	114.6541667		28/08/2002
J140U	1000/	Caladenia hoffmanii	Oakajee Nature Reserve No.331. E edge of nature reserve near SE corner. Along drainage line that	_	114.004100/		20/00/2002
102165	13857		T runs E-W. ~540m S of Olsen Rd.	-28.576	114.6555278		2/09/2004
102166	13857	Caladenia hoffmanii	Oakajee Nature Reserve No.331, southern boundary adjacent to Location No 3441 and where	-28.579	114.6566389		2/09/2004
102100	13037	Caladenia hoffmanii	T drainage line crosses boundary. Creek running E-W through the reserve. Private Property Lot 3441 on Plan 128378.Adjoining Oakajee Nature Reserve. Occurs throughout	-20.579	114.0000009		2/09/2004
102167	13857		T drainage line that extends from NW-SE from the SE corner of the reserve into Lot 3441.	-28.579	114.6580833		14/09/2000
100160	12057	Caladenia hoffmanii	Proposed 'Moresby Range Conservation Park' north of Wokatherra, plants occur along a creek in	20 625	114 6606044		2/00/2008
102169	13857	Caladenia hoffmanii	T the southern area of this reserve. Proposed 'Moresby Range Conservation Park', Lot 31, north of Wokatherra, plants occur along a	-28.625	114.6686944		3/09/2008
102170	13857		T creek in the western area of reserve. Also more plants ~100m N along creek from this coord.	-28.623	114.667206		27/09/2011
100171	12057	Caladenia hoffmanii	Proposed 'Moresby Range Conservation Park' north of Wokatherra. More plants found ~100m N o	1 1	114 070000		2/00/2000
102171	13857	Caladenia hoffmanii	T this location. Proposed 'Moresby Range Conservation Park' north of Wokatherra. Multiple plants spread aroun	-28.621	114.6708889		3/09/2008
102172	13857		T this area (this coordinate centre of 200m line NW to SE).	-28.624	114.6642222		12/09/2009
100170	12057	Caladenia hoffmanii	Proposed 'Moresby Range Conservation Park' north of Wokatherra. Multiple plants spread aroun	-28.629	114 6655		12/00/2000
102173 102174	13857 13857	Caladenia hoffmanii	T this area T Proposed 'Moresby Range Conservation Park' north of Wokatherra.	-28.628	114.6655 114.6611667		12/09/2009 12/09/2009
102175		Caladenia hoffmanii	T Proposed 'Moresby Range Conservation Park' north of Wokatherra. Several plants in this area	-28.621	114.6581389		12/09/2009
106067	13857	Caladenia hoffmanii Caladenia hoffmanii	T Proposed White Peak Nature Reserve [Proposed Moresby Conservation Park], Lot 31.	-28.623	114.6703609		27/09/2011
106068	13857	Catauema normanii	Proposed White Peak Nature Reserve [proposed Moresby Conservation Park]. Lot 14 (144) Carey T Rd, White Peak.	-28.623	114.65578		27/09/2011
91455	13857	Caladenia hoffmanii	T Private Property Lot 9 on Plan 13548, White Peak Rd, White Peak.2.4km E of North West Coastal	-28.634	114.6540556		21/09/2009
91457 5958911		Caladenia hoffmanii Calectasia browneana	T Mills Lookout, Chapman Valley Rd. Lot 100 and 101. South of Chapman Valley Road. 2 45 km E of Geraldton on the Geraldton - Mount Magnet road, Irwin District	-28.702 -28.716	114.6950278 115.0003231	CDS	4/09/2008 1 9/09/1997
9111123		Chamaescilla maculata	1 Howatharra Nature Reserve	-28.545	114.6670833		2 30/08/2018
1227653		Chamelaucium sp. Yuna (A.C. Burns	2 Geraldton	-28.770	114.6163889		3 10/09/1968
3414116		Chorizema humile	T Kojareena	-28.725	114.8663889 114.813833		3 /08/1967
9698892	13115	Chorizema humile Chorizema humile	T Private property, ca. 100 m S of Ivan Goulds Road, where road meets farm gate Kojarena, on private property, in remnant vegetation on S edge of Ivan Gould's Road, where road	-28.785	114.813833	GPS	1 17/08/2021
			terminates at farm gate, on E boundary of vegetation near fenceline track, near NE corner of				
8772487	13115		T vegetation	-28.785	114.813833	GPS	1 11/08/2009
		Chorizema humile	Private property (Kojarena) Lot 3 Moonyoonooka Station in remnant veg on S edge of Ivan Goulds rd where road terminates at farm gate. On E boundary of veg near fenceline track, NE corner of				
90796	13115		T veg. Shire of Geraldton-Greenough.	-28.785	114.8138333		11/03/2010
05015		Darwinia sphaerica	1 km from Kojarena, 20 m E of Geraldton-Mt Magnet road, City of Geraldton-Greenough [The true		444.5===	TOD2	2
8591318	50127	Desmocladus glomeratus	2 locality is probably near Canna. B.L. Rye 03/11/2020] Geraldton Area - Chapman Valley, Howatharra Road (W of Nanson) opposite Junction Road to No	-28.718	114.872539	1040	2 4/10/2011
2139545	17624	I - I	2 14 Hill	-28.558	114.7563889	AUTO	3 22/09/1976
8054940		Desmocladus glomeratus	2 6.5 km E of North West Coastal Highway on Nanson - Howathara Road	-28.543	114.6961111		3 25/08/2006
8054827 8054894		Desmocladus glomeratus Desmocladus glomeratus	2 6.5 km E of North West Coastal Highway on Nanson - Howathara Road 2 6.5 km E of North West Coastal Highway on Nanson - Howathara Road	-28.543 -28.543	114.6961111 114.6961111		3 25/08/2006 3 25/08/2006
8270120		Diuris recurva	4 Site No. GRV0810, W of Carey Road, 1 km N of White Peak Road, N of Geraldton	-28.615	114.6472222		1 12/08/2008
7519273	12936	Diuris recurva	4 Howatharra Hill Nature Reserve	-28.546	114.6652778		2 7/08/1994
8313288		Diuris recurva	4 1.2 km Oakajee Nature Reserve	-28.569	114.65057		2 7/08/1994
8959757 9014187		Diuris recurva Diuris recurva	4 E of the Moresby Ranges 4 4.4 km NE of Moonyoonooka turnoff on Nanson-Geraldton Road, Heinrich's Farm	-28.628 -28.667	114.6618113 114.7166667		1 20/08/2009 3 25/08/1983
	12930	2.0	4 Oakajee Nature Reserve, (R 331) 2.6km east of North West Coastal Highway		114.6519444		7/08/1994
126791		Diuris recurva	4 Oukajee Nature neserve, (Noo1) 2.0km east of North West Oodstat Fighway	-28.569	114.0319444		
	12936	Diuris recurva Diuris recurva	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m				
126791 126806	12936	Diuris recurva	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area]	-28.571	114.65505		17/08/2019
	12936		Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m	-28.571			17/08/2019
126806 126792 126799	12936 12936 12936 12936	Diuris recurva Diuris recurva Diuris recurva	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee	-28.571 n -28.546 -28.615	114.65505 114.6652167 114.6472222		17/08/2019 17/08/2019 12/08/2008
126806 126792 126799 126800	12936 12936 12936 12936 12936	Diuris recurva Diuris recurva Diuris recurva Diuris recurva	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton	-28.571 n -28.546 -28.615 -28.628	114.65505 114.6652167 114.6472222 114.6618056	MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009
126806 126792 126799	12936 12936 12936 12936 12936 4458	Diuris recurva Diuris recurva Diuris recurva	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee	-28.571 n -28.546 -28.615	114.65505 114.6652167 114.6472222		17/08/2019 17/08/2019 12/08/2008
126806 126792 126799 126800 957607 957569 957550	12936 12936 12936 12936 12936 4458 4458	Diuris recurva Diuris recurva Diuris recurva Diuris recurva Diuris recurva Drummondita ericoides Drummondita ericoides Drummondita ericoides	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton T White Peak, Geraldton T White Peak just N of Geraldton. T White Peak just N of Geraldton.	-28.571 n -28.546 -28.615 -28.628 -28.633 -28.633 -28.633	114.65505 114.6652167 114.6472222 114.6618056 114.6333333 114.6333333 114.6333333	MAN MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009 3 //1901 3 /10/1926 3 /09/1926
126806 126792 126799 126800 957607 957569 957550 957577	12936 12936 12936 12936 12936 4458 4458 4458	Diuris recurva Diuris recurva Diuris recurva Diuris recurva Diuris recurva Drummondita ericoides Drummondita ericoides Drummondita ericoides Drummondita ericoides	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton T White Peak, Geraldton T White Peak just N of Geraldton. T White Peak just N of Geraldton. T Rocky eastern side of White Peak, 12 miles N of Geraldton.	-28.571 n -28.546 -28.615 -28.628 -28.633 -28.633 -28.633	114.65505 114.6652167 114.6472222 114.6618056 114.6333333 114.6333333 114.6333333	MAN MAN MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009 3 //1901 3 /10/1926 3 /09/1926 3 /10/1926
126806 126792 126799 126800 957607 957569 957550	12936 12936 12936 12936 12936 4458 4458 4458 4458	Diuris recurva Diuris recurva Diuris recurva Diuris recurva Diuris recurva Drummondita ericoides Drummondita ericoides Drummondita ericoides	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton T White Peak, Geraldton T White Peak just N of Geraldton. T White Peak just N of Geraldton.	-28.571 n -28.546 -28.615 -28.628 -28.633 -28.633 -28.633	114.65505 114.6652167 114.6472222 114.6618056 114.6333333 114.6333333 114.6333333	MAN MAN MAN MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009 3 //1901 3 /10/1926 3 /09/1926 3 /10/1926 3 1/10/1926
126806 126792 126799 126800 957607 957569 957550 957577 957593 957542 957585	12936 12936 12936 12936 12936 4458 4458 4458 4458 4458 4458	Diuris recurva Diuris recurva Diuris recurva Diuris recurva Diuris recurva Drummondita ericoides Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton T White Peak, Geraldton T White Peak just N of Geraldton. T White Peak just N of Geraldton. T Rocky eastern side of White Peak, 12 miles N of Geraldton. T Summit of White Peak near Geraldton T Near summit of White Peak. T White Peak prope [near] Champion Bay.	-28.571 n -28.546 -28.615 -28.633 -28.633 -28.633 -28.633 -28.633 -28.633 -28.633	114.65505 114.6652167 114.6472222 114.6618056 114.6333333 114.6333333 114.6333333 114.6333333 114.6333333 114.6333333	MAN MAN MAN MAN MAN MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009 3 //1901 3 /10/1926 3 /09/1926 3 /10/1926 3 1/10/1926 3 1/10/1926 3 1/10/1926	
126806 126792 126799 126800 957607 957569 957550 957577 957593 957542	12936 12936 12936 12936 4458 4458 4458 4458 4458 4458	Diuris recurva Diuris recurva Diuris recurva Diuris recurva Diuris recurva Drummondita ericoides	Oakajee Nature Reserve, (R 331) 3.2km east of North West Coastal Highway. [Plants ca 120m 4 south of road past open area] Road Reserve Nanson Howatharra Road ca 4.1 km east of North West Coastal Hgihway. [Plants of west side of track to picnic table] 4 PP Lot 2729 (pln 114658) Carey Road ca 1.9km north of White Peak Road Oakajee 4 PP Lot 12 (Plan 013548) White Peak Road Wokatherra, north of Geraldton T White Peak, Geraldton T White Peak just N of Geraldton. T Rocky eastern side of White Peak, 12 miles N of Geraldton. T Summit of White Peak near Geraldton T Near summit of White Peak.	-28.571 n -28.546 -28.615 -28.628 -28.633 -28.633 -28.633 -28.633 -28.633 -28.633	114.65505 114.6652167 114.6472222 114.6618056 114.6333333 114.6333333 114.6333333 114.6333333 114.6333333 114.6333333	MAN MAN MAN MAN MAN MAN MAN MAN	17/08/2019 17/08/2019 12/08/2008 20/08/2009 3 //1901 3 /10/1926 3 /09/1926

6137962	4458	Drummondita ericoides	T Moresby Conservation Reserve	-28.617	114.6333333	MAN	3 11/08/200
5689015		Drummondita ericoides	T Murphy Farm, newly acquired CALM estate, W facing slope,	-28.622	114.6717112		1 5/10/200
7438788	4458	Drummondita ericoides	T ESE White Peak	-28.617	114.6333333	TOPO	4 16/06/198
		Drummondita ericoides	Moresby Conservation Park, ca. 250 m E of central cleared area of park on steep N-facing slope				
8997667	4458		T below breakaway	-28.622	114.6716944		1 23/11/201
6113508		Drummondita ericoides	T Murphyl Farm, Chapman Valley	-28.621	114.6727778		1 30/11/200
5689007 957526		Drummondita ericoides Drummondita ericoides	T Murphy Farm, newly acquired CALM estate, T Summit of White Peak.	-28.622 -28.633	114.6710833 114.6333333		5/10/200 3 1/10/192
99138		Drummondita ericoides	T Wokatherra NR No.39276, White Peak, W slopes ca.60m down from white scree.	-28.649	114.6353333	MAIN	14/07/200
00100	4400	Drummondita ericoides	Wokatherra NR No.39276, E of White Peak, along top of ridges incl. saddles, floor & slopes of gully	20.040	114.040000		1-17077230
99139	4458		T to S.	-28.651	114.6514167		14/07/200
		Drummondita ericoides	Location No 3565, (Murphyl Farm) proposed `Moresby Range Conservation Park`, west facing				
99141	4458		T slope above gully ca. 70m east of cleared patch, at white exposed rock; off White Peak Road,	-28.622	114.6716944		8/07/200
		Drummondita ericoides	Location No 3565, (Murphyl Farm) proposed `Moresby Range Conservation Park`, east of cleared				
99142	4458		T area, side of peak, east of gully; off White Peak Road, Oakajee.	-28.621	114.6725278		8/07/200
		Drummondita ericoides	Location No. 3721, `Murphyl Farm` soon to be acquired by CALM, west facing slope adjacent to				
99143	4458		T Location No 2598, off Careys Road, Oakajee.	-28.620	114.6599444		22/02/200
		Drummondita ericoides	Western slope of Moresby Reserve. Population in 2 clusters seperated by a thicket of Melaleuca				
87099	4458		T and Hakea.	-28.617	114.65925		18/07/200
5829933		Enekbatus bounites	2 Howatharra Hill Reserve (N. Macfarland),	-28.550	114.6666667		3 13/09/197
1030930		Eremaea acutifolia	3 Near Geraldton	-28.767	114.6166667		4 /09/1901
1030884 1030892		Eremaea acutifolia	3 Kojerina [Kojarena], East of Geraldton	-28.717 -28.767	114.8666667 114.6166667	-	3 30/09/196 4 /09/1901
4106911		Eremaea acutifolia Eremaea acutifolia	3 Near [Geraldton]	-28.767	114.81664345		1 5/10/199
5502845		Eremophila brevifolia	3 S side of railway, E of Kojarena South Road at Kojarena, N of Telecom Tower 2 Chapman River Regional Park,	-28.733	114.65	-	20/08/199
1069438		Eremophila brevifolia	2 Chapman River 2 Chapman River	-28.733	114.63		4 /09/1959
4506901		Eremophila brevifolia	2 Chapman River, Geraldton	-28.770	114.6163889		4 2/09/193
1069462		Eremophila brevifolia	2 Chapman River, Geraldton	-28.770	114.6163669		4 2/09/193
4506898		Eremophila brevifolia	2 Spalding Park, 3 miles N of Geraldton	-28.730	114.6419444		2 17/08/196
.555500	, 100	Eremophila brevifolia	Chapman River Regional Park, growing along the steep riverbank along walktrail to the W of Fairfax	_5.750			2 17700/130
8691630	7185	·	2 Road, Geraldton	-28.734	114.6447222	GPS	1 22/10/201
1069446		Eremophila brevifolia	2 Mills Lookout, Nanson-Geraldton Road, South Moresby Range	-28.703	114.6952778		2 24/08/198
		Eremophila brevifolia	Chapman River Regional Park (Spalding Park), City of Geraldton. Near Spalding Park Golf Course				
100238	7185	·	2 and Fairfax Road. North bank of River.	-28.730	114.6422222		3/08/200
		Eremophila brevifolia	Chapman River Regional Park (Spalding Park.) South bank of river, both sides of walking trail which				
100239	7185	·	2 follows the river, ca. 200 m South West of Golf Course.	-28.730	114.6422222	<u> </u>	2/11/200
		Eremophila brevifolia	Mills Lookout (The Brothers?), South Moresby Range, on the Chapman Valley road, just before				
88967	7185		2 Chapman East Road.	-28.699	114.7014344		24/08/198
8839298	13039	Eucalyptus blaxellii	4 Moresby Range	-28.623	114.6711944	GPS	1 16/08/201
9509003	13039	Eucalyptus blaxellii	4 Ca 30 km S of Northampton, and 3.1 km E along Olsen Road, next to Oakajee Nature Reserve	-28.571	114.6583333	GPS	1 19/09/201
1050435	13039	Eucalyptus blaxellii	4 7 km ENE of Geraldton on Yuna Road	-28.733	114.6833333	TOPO	3 25/01/198
1048937	13039	Eucalyptus blaxellii	4 1.5 miles N of 332 Mile Peg on the North West Coastal Highway. [ca 112 km N of Geraldton].	-28.700	114.6166667	TOPO	3 20/08/197
1049984	13039	Eucalyptus blaxellii	4 9 miles NE of Geraldton on Yuna Road.	-28.650	114.7166667	TOPO	3 16/03/196
		Eucalyptus blaxellii	1.5 km N along Buller River road on Buller River Farm, West Moresby Range [Ca 17 km NNE of				
1048902	13039		4 Geraldton].	-28.617	114.65		3 22/08/198
1048945		Eucalyptus blaxellii	4 13 km E of Geraldton, 100 metres NE of Narra Tarra Road junction with Geraldton-Yuna Road	-28.717	114.6833333		3 28/05/198
1048953		Eucalyptus blaxellii	4 Nanson road [ca 4 km NW of Nanson]	-28.550	114.7166667		3 12/03/198
1048910		Eucalyptus blaxellii	4 Not given.	-28.733	114.6833333		3 27/05/198
1050508		Eucalyptus blaxellii	4 Moresby [Flat Topped] Range.	-28.700	114.675		3 19/09/196
3660567		Eucalyptus blaxellii	4 7 km ENE of Geraldton on Yuna road	-28.733	114.6833333		25/01/198
5167868		Eucalyptus blaxellii	4 0.6 km NE of Wynarling Station entrance	-28.701 -28.667	114.6966667 114.7166667		2 25/08/198
1413368	13039	Eucalyptus blaxellii	4 4.4 km NE of Moonyoonooka turnoff Nanson-Geraldton Road, Heinricks Farm E Moresby Range	-28.007	114./10000/	MAIN	2 25/08/198
4646827	13039	Eucalyptus blaxellii	S of Nanson Howatharra Road, 1.1 km W of junction with Murphy Yetna Road, 1.2 km down fence 4 line on E side of uncleared block	-28.547	114.6991667	MANI	17/02/199
4040027	13039	Eucalyptus blaxellii	Oakajee (or Oakabella) c. 2 km E along Unnamed road into private property on the E side of the	-20.047	114.0991007	MAIN	17/02/198
4098730	13039		4 North West Coastal Highway, c. 34 km N of Geraldton, Irwin Botanical District	-28.567	114.6666667	ΜΔΝ	10/09/199
5761719		Eucalyptus blaxellii	4 Shed block, property on Howatharra Road,	-28.547	114.726	-	29/11/200
6297161		Eucalyptus blaxellii	4 7.7 km from Geraldton on the Geraldton to Yuna Road. S side of road	-28.717	114.6833333		3 //
6297145		Eucalyptus blaxellii	4 7.7 km from Geraldton on the Geraldton to Yuna Road, N side of road	-28.717	114.6833333		3 //
6238130		Eucalyptus blaxellii	4 Olsen Road from E side of Oakajee Reserve	-28.567	114.65		3 22/01/200
5758386		Eucalyptus blaxellii	4 Murphy/Farm, newly acquired CALM estate,	-28.622	114.6717112	GPS	1 5/10/200
5758408		Eucalyptus blaxellii	4 Wokatherra Nature Reserve, ridges to the E of White Peak,	-28.652	114.6517672		1 4/10/200
5758432		Eucalyptus blaxellii	4 Wokatherra Nature Reserve, SW slope of White Peak, ca 20 m below exposed rock,	-28.648	114.6453227	GPS	1 4/10/200
6113427		Eucalyptus blaxellii	4 Murphyl Farm population 12a, E boundary of estate, Chapman Valley	-28.619	114.6830556		1 30/11/200
		Eucalyptus blaxellii	Shire Recreation Reserve adjoining private property, 66 Arnold Road Wagrakine, S of Moresbey				
6095860	13039		4 Ranges	-28.697	114.6316012	GPS	1 16/01/200
		Eucalyptus blaxellii	Shire Recreation Reserve adjoining private property, 66 Arnold Road Wagrakine, S of Moresbey				
6095879	13039		4 Ranges	-28.697	114.6316012		1 16/01/200
6095828		Eucalyptus blaxellii	4 Landcorp property, Moresby	-28.619	114.6586		1 22/02/200
7413548	13039	Eucalyptus blaxellii	4 UCL, W of White Peak Hill	-28.642	114.6356389	GPS	1 17/10/200
7750475	40000	Eucalyptus blaxellii	Chapman Valley Road, N side take track at top of Cutting in Moresby Range. Continue past masts	00.00=	444.004.005	CDC	4 05 (00 (00)
7752148	13039		4 then down slope to east	-28.667	114.6813333	GPS	1 25/08/200
7070045	10000	Eucalyptus blaxellii	SW from house, Cribb's Property, Lot 3 Olsen Road (number 342), Howatharra, which is 3.4 km E	20 570	1110577770	CDS	1 10/00/000
7970315	13039		4 along Olsen Road from North West Coastal Highway, Chapman Valley	-28.573	114.6577778	649 	1 13/03/200
7969961	13039	Eucalyptus blaxellii	Bella Vista Nature Reserve, Howatharra, E side of reserve. Nature reserve is E of Bella Vista Road 4 which runs off Howatharra-Nanson Road c. 4.1 km E of North West Coastal Highway, Chapman	-28.537	114.6784444	GPS	1 24/04/200
7969961		Eucalyptus blaxellii	4 Moresby Conservation Park - access from White Peak Road, Chapman Valley	-28.537 -28.613	114.6784444		1 12/03/200
7970036	13039	Eucalyptus blaxellii	NW end on W facing slope, Moresby Conservation Park - access is from White Peak Road,	-20.013	114.0000278	J J J	1 12/03/200
7970072	13039		4 Chapman Valley	-28.600	114.6581667	GPS	1 12/03/200
7970072		Eucalyptus blaxellii	4 Moresby Conservation Park (access from White Peak Road), Chapman Valley	-28.600 -28.618	114.6581667		1 12/03/200
. 5, 5110	10009	Eucalyptus blaxellii	Private Property (Yerani Pty Ltd) Loc 2578. 6.9 km E of North West Coastal Highway along	20.010	11-1.00/0011		1 12/03/200
7970145	13039	1	4 Howatharra-Nanson Road, Chapman Valley	-28.547	114.6996111	GPS	1 11/03/200
7970153		Eucalyptus blaxellii	4 Olsen Road, Howatharra, 3.2 km E from North West Coastal Highway, Shire of Chapman Valley	-28.571	114.6578611	-	1 4/03/200
J. J 100	10000	Eucalyptus blaxellii	Yerani Pty Ltd Loc 2578, Lot 405 Murphy-Yetna Road. 6.9 km E of North West Coastal Highway	_5.571	, 0011		
			along Howatharra-Nanson Road to western edge of bushland block (and old gravel pit) and 0.7 km				
			4 from E boundary to Murray-Yetna Road on S side of road, Chapman Vall	-28.546	114.6991944	GPS	1 4/03/200
7970234	13039	Eucalyptus blaxellii	4 Moresby Conservation Park (access from White Peak Road), Chapman Valley	-28.615	114.6654167		1 12/03/200
7970234 7970129		Trucatypius biakettii					
		Eucalyptus blaxellii	Chibb 5 Property, Lot 3 Otsen Road (humber 342) Howathana, which is 3.4 km e along Otsen Road	•		Ī	
		Eucalyptus blaxellii	Cribb's Property, Lot 3 Olsen Road (number 342) Howatharra, which is 3.4 km E along Olsen Road from North West Coastal Highway	-28.573	114.6595833	GPS	1 13/03/200
7970129	13039	Eucalyptus blaxellii		-28.573	114.6595833	GPS	1 13/03/200
7970129	13039	Eucalyptus blaxellii Eucalyptus blaxellii	4 from North West Coastal Highway	-28.573 -28.548	114.6595833 114.698		1 13/03/200
7970129 7970102	13039 13039 13039	Eucalyptus blaxellii Eucalyptus blaxellii	4 from North West Coastal Highway Private Property (Yerani Pty Ltd), location 2578. W boundary of bushland 6.9 km E of North West			GPS	
7970129 7970102 7970161	13039 13039 13039	Eucalyptus blaxellii Eucalyptus blaxellii	4 from North West Coastal Highway Private Property (Yerani Pty Ltd), location 2578. W boundary of bushland 6.9 km E of North West 4 Coastal Highway along Howatharra-Nanson Road. SW end of block. Chapman Valley	-28.548	114.698	GPS	1 11/03/200

		Eucalyptus blaxellii	Private property (Brett Gannon) - end of Wells Road, Moresby Range. Boundary of cleared land,				
7970242	13039		4 inside fenceline, E of hut on hill. Location/Lot 3441. Chapman Valley	-28.587	114.6566944	GPS	1 13/03/2008
7970099	13039	Eucalyptus blaxellii	Cribb's Property, Lot 3 Olsen Road (number 342) Howatharra, which is 3.4 km E along Olsen Road from North West Coastal Highway	-28.573	114.6596111	GPS	1 13/03/2008
7970439	13039	Eucalyptus blaxellii	4 Howatharra Nature Reserve - southern block, W of gravel pit access track, Chapman Valley	-28.549	114.6665556	GPS	1 22/04/2008
7970455	13039	Eucalyptus blaxellii	Wokatharra Nature Reserve, slope below White Peak summit c. 50 m below white sandstone slope 4 washout, Chapman Valley	-28.649	114.6465278	GPS	1 7/04/2008
7970226	13039	Eucalyptus blaxellii	Lot 924 Wells Road (Greg Burrows) property - end of road, c. 100 m to NE and c. 30 m below hut; 4 2.5 km E of North West Coastal Highway, Chapman Valley	-28.589	114.6553611	GPS	1 30/04/2008
		Eucalyptus blaxellii	NW end on W facing slope, Moresby Conservation Park - access is from White Peak Road,				
7970080 7970021	13039	Eucalyptus blaxellii	4 Chapman Valley 4 Wokatherra Nature Reserve - along ridgeline extending E of White Peak, S side, below ridge	-28.601 -28.651	114.658 114.6560556		1 12/03/2008 1 7/04/2008
8699089		Eucalyptus blaxellii	4 Moresby Conservation Reserve East	-28.606	114.6905556		1 9/01/2007
8699143		Eucalyptus blaxellii	4 Moresby Conservation Reserve East	-28.617	114.6952778		1 9/01/2007
4257405		Eucalyptus blaxellii	4 Nabawa Road 7.1 km E of North West Coastal Highway, 50 m S of road and 50 m upslope, near	-28.708	114.6913889		3/07/1995
		Eucalyptus blaxellii	7.7 km E of North West Coastal Highway on the Nabawa Road 100 km E of Narra Tarra Road, N				
4257480	13039		4 road verge with adjoining private property	-28.708	114.6913889		3/07/1995
6113451		Eucalyptus blaxellii	4 Murphyl Farm population 12b, E of central gully, Chapman Valley	-28.622	114.6697222		1 30/11/2001
5758416 6130704		Eucalyptus blaxellii Eucalyptus blaxellii	4 Murphy/Farm, newly acquired CALM estate, E boundary, 4 Murphy Farm, edge of cleared area in remnant vegetation	-28.616 -28.614	114.6824333 114.6670444		1 5/10/2000 1 8/03/2001
6130682		Eucalyptus blaxellii	4 Murphy Farm, edge of cleared area in SW of remnant vegetation	-28.614	114.6670444		1 8/03/2001
6130666		Eucalyptus blaxellii	4 Western most ridge of Murphy Farm, W facing slopes, N of population 5	-28.624	114.6666279		1 13/03/2001
6130674		Eucalyptus blaxellii	4 Western most ridge of Murphy Farm, W facing slopes, N of population 5	-28.624	114.6666279		1 13/03/2001
5758424		Eucalyptus blaxellii	4 Murphy/Farm, newly acquired CALM estate, E boundary,	-28.622	114.6695723	GPS	1 5/10/2000
6708692	13039	Eucalyptus blaxellii	4 Murphy/Farm, newly acquired CALM estate, E boundary,	-28.622	114.6695723	GPS	1 5/10/2000
		Eucalyptus blaxellii	Private Property, Loc. 19.23, Nabawa Road (also known as Chapman Valley Road). 7.1km E of the				
90653	13039		4 North West Coastal Hwy, on side road to Brothers Lookout, just SE of road ca. 50m.	-28.705	114.69375		9/01/2007
101520	13039	Eucalyptus blaxellii	Private property Loc. 17, N side of Nabawa Road. 7.7km E of the North West Coastal Hwy, 100m E of Narra Tarra Road. Chapman Valley.	-28.700	114.6968889		9/01/2007
101501	10000	Eucalyptus blaxellii	Nabawa Road, N verge, adjoining PP Loc 17. 7.7km E of the North West Coastal Hwy, 100m E of	00.700	11/ 000000		0/04/0007
101521	13039	Eucalyptus blaxellii	4 Narra Tarra Road. Chapman Valley. Private Property, Loc 3063, Lot14. 2.2km E of NW Coastal Hwy along White Peak Rd & then	-28.700	114.6968889		9/01/2007
90654	13039	Eucalyptus blaxellii	4 <1.5km N along Buller River(Careys) Rd and then E <500m to hills on Buller River Farm. Chapman Private Property, Loc 2578, S side of Nanson-Howatharra Rd (1.1km W of Murphy-Yetna Rd). In NW	-28.621	114.6556001		22/02/2001
90656	13039	Eucatyptus blaxettii	4 portion of property, recorded @ 11 specific spots. Up to ca. 600m S from road. Chapman Valley.	-28.547	114.6992222		11/03/2008
101485	13039	Eucalyptus blaxellii	Wokatherra NR (R 39276), Loc 11557. S side of ridge which runs W-E between White Peak and Wokatherra. Extending for ca. 150m.Chapman Valley.	-28.652	114.6517778		7/04/2008
		Eucalyptus blaxellii	Wokatherra NR (R 39276), Loc 11215. SW slope of White Peak, ca. 100m below white clear-fell.				
101486	13039	Eucalyptus blaxellii	4 Extending for 200m. Chapman Valley. Wokatherra NR (R 39276), Loc 11532. Along ridgeline extending E of White Peak. S side, below	-28.649	114.6453611		7/04/2008
101487	13039		4 ridge. Extending for ca. 80m. Chapman Valley.	-28.651	114.6560556		7/04/2008
101489	13039	Eucalyptus blaxellii	4 Loc. 31 (Murphyl Farm), proposed Moresby NR new CALM estate. E boundary. Chapman Valley.	-28.617	114.681		30/11/2001
101400	12020	Eucalyptus blaxellii	Loc. 31 (Murphyl Farm), proposed Moresby NR, new CALM estate. Near cleared area E of central	20,022	114.07		24/01/2006
101490	13039	Eucalyptus blaxellii	4 gully. Chapman Valley. Loc. 31 (Murphyl Farm), proposed Moresby NR, new CALM estate. Near E boundary, ca.400m N of	-28.622	114.67		24/01/2006
101491	13039	Eucalyptus blaxellii	4 SE cnr of Loc.2598, side of ridge upslope of sandstone area. Chapman Valley. Loc. 31 (Murphyl Farm), proposed Moresby NR, new CALM estate. NW end of property, W facing	-28.622	114.6719444		24/01/2006
101492	13039		4 slope. Chapman Valley.	-28.600	114.6581667		12/03/2008
101493	13039	Eucalyptus blaxellii	Loc. 31 (Murphyl Farm), proposed Moresby NR, new CALM estate. Central to S portion of property. 4 Plants within 500m radius of this point. N of pop 12B +C. Chapman Valley.	-28.616	114.6679167		12/03/2008
101494	13039	Eucalyptus blaxellii	Loc. 31 (Murphyl Farm), proposed Moresby NR, new CALM estate. W boundary, adjacent to Loc. 4 2598. Chapman Valley.	-28.617	114.6597778		15/01/2007
90643		Eucalyptus blaxellii	4 Private Property, Loc 2502. Howatharra Road. Shed block remnant vegetation. Chapman Valley.	-28.547	114.7260556		15/02/2007
90645		Eucalyptus blaxellii	4 UCL. E of NW Coastal Hwy, S of White Peak Rd and N of Eliza Shaw Dve. Chapman Valley.	-28.642	114.6356389		17/10/2005
		Eucalyptus blaxellii	Lot 34, Proposed Moresby NR. Upper W boundary; referred to as population site 'A' on map.				
101499	13039		4 Chapman Valley.	-28.606	114.6905556		9/01/2007
101500	13039	Eucalyptus blaxellii	Lot 34, Proposed Moresby NR. Upper W boundary; referred to as population site 'B' (ca. 200m 4 south from 'A') on map. Chapman Valley.	-28.608	114.6895833		9/01/2007
101000	10000	Eucalyptus blaxellii	Lot 34, Proposed Moresby NR. Middle W boundary; referred to as population site 'C' (ca. 700m	20.000	114.0000000		3/01/2007
101501	13039	Eucalyptus blaxellii	4 southeast from site 'B') on map. Chapman Valley. Lot 34, Proposed Moresby NR. SW boundary; referred to as population site 'D' (ca. 460m south	-28.614	114.69425		9/01/2007
101502	13039		4 from site 'C') on map. Chapman Valley.	-28.618	114.6929444		17/11/2004
101503	13039	Eucalyptus blaxellii	Lot 34, Proposed Moresby NR. S boundary; referred to as population site 'E' (ca. 240m east from 4 site 'D') on map. Chapman Valley.	-28.617	114.6952778		9/01/2007
101504	13039	Eucalyptus blaxellii	Loc. 2548, Proposed Moresby NR. S central boundary; referred to as population site 'F' (ca. 820m 4 east from site 'E') on map. Chapman Valley.	-28.613	114.7016667		9/01/2007
		Eucalyptus blaxellii	Loc. 2548, Proposed Moresby NR. SE boundary adjacent to road; referred to as population site 'G'				
101505	13039	Eucalyptus blaxellii	4 (ca. 680m southeast from site 'F') on map. Chapman Valley. Howatharra NR (R 40587 -E half of NR, Loc 11764). Ca. 340m S of Nanson-Howatharra Rd, central	-28.617	114.7074167		9/01/2007
			section, W of gravel pit access track. Ca. 4km along Nanson-Howatharra Rd from North West				
101509	13039	Eucalyptus blaxellii	4 Coastal Hwy. Chapman Valley. Private Property, Loc 100 (261 Wells Road). N off Wells Road. Plants are ca. 800m to 1km N of	-28.549	114.6665556		22/04/2008
90649	13039	I	4 Wells Rd along track (N portion of property). Chapman Valley.	-28.582	114.6527222		13/03/2008
		Eucalyptus blaxellii	Private Property, Loc 3441. N off Wells Road. Plants are ca. 500m following track from SW corner of property (near house/shed at border with Lot 100). At boundary of cleared land, inside fence				
101511	13039		4 line, E of hut on hill. Chapman Valley.	-28.587	114.6566944		13/03/2008
101512	13039	Eucalyptus blaxellii	Private Property, Loc 100 (261 Wells Rd). N off Wells Road. Plants are ca. 150m from SE corner of 4 property, 100m from house/shed at border with Lot 3441. 30m below hut on hill. Chapman Valley.	-28.589	114.6553611		30/04/2008
101312	10000	Eucalyptus blaxellii	Private Property, Lot 3 (342 Olsen Road). S off Olsen Road. Ca. 150m from Olsen Rd. Plants from E	20.505	114.0000011		30/04/2000
101514	13039		of house & sheds in cleared paddock, and W towards boundary with Oakajee NR (R 331). 4 Chapman Valley.	-28.573	114.6593333		13/03/2008
101314	13039	Eucalyptus blaxellii	Olsen Road. Adjacent to Lot 2 (#321) to the N & Lot 3 (#342) to the S. Just E of Oakajee NR (R 331).	-20.573	114.0595555		13/03/2008
101515	13039	Eucalyptus blaxellii	4 Chapman Valley. Bella Vista NR (R 40001). Near E boundary of reserve, extending from 360-550m N from the S	-28.571	114.6578611		4/03/2008
101517	13039		4 boundary (central E portion). Chapman Valley.	-28.539	114.6785278		11/04/2008
101518	13039	Eucalyptus blaxellii	Private Property, Lot 3 (143 Ridley Road). E of Bella Vista NR (R 40001). Extending from E boundary of reserve. Chapman Valley.	-28.538	114.6798056		11/04/2008
1022776		Eucalyptus cuprea	T Nanson road, E side of hill.	-28.550	114.7		3 11/06/1985
1022814		Eucalyptus cuprea	T Moresby [Flat Topped] Range.	-28.700	114.6666667	MAN	3 4/11/1985
7970498	13510	Eucalyptus cuprea	Bella Vista Reserve - c. 200 m E from road and 0.8 km along Bella Vista Road, N from Howatharra T Road, Chapman Valley	-28.540	114.6751667	GPS	1 4/04/2008
		Eucalyptus cuprea	Bella Vista Reserve - c. 200 m E from road and 0.8 km along Bella Vista Road, N from Howatharra				
7970420 8908915	13510 13510	Eucalyptus cuprea	T Road, Chapman Valley T Bella Vista Nature Reserve	-28.540 -28.540	114.6751667 114.6749444		1 4/04/2008 1 13/10/2015

						ı	
1 04044	10510	Eucalyptus cuprea	Private Property Lot 50. On N side of Nanson Howatharra Rd, 4.2km E of NW Coastal Hwy,	00.540	444.0700700		10/04/004
91014	13510	Fuedbatus cupres	T Northampton. [Southern edge of property near road reserve.]	-28.546	114.6709722		19/04/2011
91018	13510	Eucalyptus cuprea	Bella Vista NR (R 40001). 0.8km along Bella Vista Road, N from Howatharra Road. Ca. 200m E T from road.	-28.540	114.675		19/04/2011
1370960		Eucalyptus ebbanoensis subsp.	4 4.4 km NE of Moonyoonooka turnoff Geraldton-Nanson Road, Heinricks Farm E Moresby Range	-28.667	114.7166667	ΜΔΝ	3 25/08/1983
1370979		Eucalyptus ebbanoensis subsp.	4 4.5 km S of Nanson on Murphy-Norris Road	-28.600	114.7666667		3 18/07/1989
1380362		Eucalyptus ebbanoensis subsp.	4 Nanson road	-28.567	114.7166667		3 12/03/1986
91140		Eucalyptus ebbanoensis subsp.	4 Murphy-Norris Rd, at 3.8 km E of Chapman Valley Rd. 200 m from the road, on private property.	-28.602	114.7680996		18/07/1989
		Eucalyptus ebbanoensis subsp.	`Heinricks Farm`, E Moresby Range. 4.4 km NE of Moonyoonooka turnoff, Geraldton-Nanson Rd.				
91144	13550	photina	4 [W side of Morrell Rd, ca 1.75 km S of Chapman Valley Rd]	-28.665	114.7097673		25/08/1983
1096907	3917	Gastrolobium propinquum	3 Geraldton district	-28.767	114.6166667	MAN	4 27/08/1974
1051717	3917	Gastrolobium propinquum	3 Geraldton	-28.770	114.6163889	AUTO	3 /01/1962
1096915	3917	Gastrolobium propinquum	3 White Peak	-28.633	114.6333333	MAN	3 2/09/1947
		Geleznowia eximia	100 m N of Well Road on Brand Highway (NW Coastal Hwy) Plants located in bush surrounding old				
8298858	51941		1 sandpit on the W side of highway	-28.589	114.6318333		1 10/09/2008
6947956	51941	Geleznowia eximia	1 Crown Reserve 16200. North West Coastal Highway ca 20 km N of Geraldton, W side of highway	-28.587	114.6330996	GPS	1 21/07/2004
		Geleznowia eximia	100 m N of Well Road on Brand Highway. Plants located in bush surrounding old sandpit on the				
7118252	51941		1 West side of the Highway	-28.589	114.6306111	GPS	2 3/10/2004
0507040	54044	Geleznowia eximia	400 m W on the opposite side of the intersection of Wells Road and the North West Coastal	00.500	444,000400	0.00	4 04 (00 (0004
9507949	51941	Coloraccia ocircia	1 Highway, N of Geraldton	-28.588	114.629139	GPS	1 31/08/2021
9507930	51941	Geleznowia eximia	400 m W on the opposite side of the intersection of Wells Road and the North West Coastal Highway, N of Geraldton	-28.588	114.629139	CDS	1 31/08/2021
9508724		Geleznowia eximia	1 c. 21 km N of Geraldton CBD on the North West Coastal Highway, 100 m W of road	-28.588	114.629639		1 28/08/2020
967017		Geleznowia narcissoides	3 Spalding Park, 3 miles N of Geraldton.	-28.726	114.6166667		3 30/08/1965
6947999		Geleznowia narcissoides	3 Moresby Nature Reserve (proposed). Top of W facing Hill, NW corner of Reserve, near track	-28.596	114.6687941		1 23/07/2004
6947980		Geleznowia narcissoides	3 Moresby Nature Reserve (proposed), top of W facing ridge, NW part of reserve	-28.603	114.6631276		1 23/07/2004
6315976		Geleznowia narcissoides	3 Farifax Road car park, Chapman Regional Park	-28.733	114.65		3 11/09/2002
970182		Geleznowia narcissoides	3 27.6 km S of Northampton, 4 km E of NW Coastal Highway, Wells Park, West Moresby Range.	-28.600	114.65		3 26/08/1983
9236880		Geleznowia narcissoides	3 Moresby Conservation Park	-28.621	114.663444		1 16/08/2016
5641357	51942	Geleznowia narcissoides	3 Marie Hart's block, corner David and Cooper Roads, Waggrakine,	-28.700	114.6166667	MAN	13/06/1999
6396712	33579	Grevillea bracteosa subsp. howatharra	T 30 km E of Geraldton, near Northern Gully Road. Between road and rail line. Irwin District	-28.717	114.9	MAN	3 28/09/1992
7275897	33579	Grevillea bracteosa subsp. howatharra	T Moresby Conservation Park	-28.619	114.6651556	GPS	1 24/01/2006
		Grevillea bracteosa subsp. howatharra	Rail reserve on Geraldton-Mullewa Road off Northern Gully South Road, Population along rail				
6118860	33579		T reserve, N and S of the rail line	-28.705	114.9069444		1 27/11/2001
5510147	33579	Grevillea bracteosa subsp. howatharra	T Road verge on dirt road heading NE off Nanson-Howatharra Road,	-28.542	114.6711545	GPS	1 23/09/1999
	<u> </u>	Grevillea bracteosa subsp. howatharra	Rail reserve on Geraldton-Mullewa Road off Northern Gully South Road, population along rail		 - ·	0.5.5	
5534461	33579		T reserve, N and S of rail line,	-28.704	114.9083786		1 2/02/2000
2357682		Grevillea bracteosa subsp. howatharra	T 21 miles Geraldton - Mullewa Road	-28.654	114.9586111		3 /10/1961
2357690		Grevillea bracteosa subsp. howatharra	T Northern Gully, Geraldton	-28.728	114.9016667		3 30/09/1962
2357747 5426391		Grevillea bracteosa subsp. howatharra	T Northern Gully	-28.728 -28.705	114.9016667 114.9069444		3 15/08/1965 16/03/1999
5189977		Grevillea bracteosa subsp. howatharra Grevillea bracteosa subsp. howatharra	T Northern Gully Siding, S side of railwayline, W side of Sandsprings road junction T Northern Gully Siding, western side of crossing	-28.703	114.9069444		1 4/09/1996
1645978		Grevillea bracteosa subsp. howatharra	T Geraldton-Mullewa Road, 12.8 km W of Greenough River	-28.700	114.9009090		3 22/08/1985
8699151		Grevillea bracteosa subsp. howatharra	T Moresby Conservation Reserve East	-28.599	114.6848889		1 9/01/2007
0000101	00070	Grevillea bracteosa subsp. howatharra	Geraldton to Mullewa Rail Corridor, 0.5 km W of Geraldton - Mount Magnet Road and Northern	20.000	114.0040000	010	1 0/01/2007
8416672	33579	orovikou bruotoosu subop. novutnariu	T Gully Road intersection	-28.706	114.9074722	GPS	1 18/09/2010
2357720		Grevillea bracteosa subsp. howatharra	T Northern Gully	-28.728	114.9016667		3 17/09/1971
7934386		Grevillea bracteosa subsp. howatharra	T Rail reserve on Geraldton - Mullewa Road, off Northern Gully South Road	-28.705	114.9069444	GPS	1 10/11/2007
8076146		Grevillea bracteosa subsp. howatharra	T 0.25 km N of the Nanson - Howathara Road on Bella Vista Road. Pop. 3, N of Geraldton	-28.543	114.6685556	GPS	1 11/11/2007
1646028	33579	Grevillea bracteosa subsp. howatharra	T McFarlands Howatharra Hill Reserve	-28.550	114.6666667	MAN	13/09/1977
1646001	33579	Grevillea bracteosa subsp. howatharra	T McFarlands Howatharra Hill Reserve	-28.550	114.6666667	MAN	13/09/1977
		Grevillea bracteosa subsp. howatharra	Road Verge, Northen Gully siding, W side of railway crossing, plants occur along both sides of dirt				
			track running along S side of railway line. Between track & railway line & railway line & Geraldton-				
105150	33579		T Mt Magnet Rd.	-28.708	114.9079928		25/08/2011
		Grevillea bracteosa subsp. howatharra	Rail Reserve, Northern Gully siding, S side of railway line, W side of Sandsprings Rd junction.Pop				
			extends from 100m to ca. 300m west of the intersection of Northern Gully South road and				
105151	33579		T Geraldton Mt Magnet Road.	-28.707	114.9074444		23/02/2011
		Grevillea bracteosa subsp. howatharra	Gravel Reserve (28881) and Crown Lease RL I-821086. Geraldton-Mount Magnet Rd, 30 km E from				
105152	33579		Mullewa turnoff at Geraldton. Land off N side of road, in a healthy patch of veg ca. 100 m inside T farm boundary.	-28.705	114.9039167		6/01/2010
103132	33379	Gravillas hractages suben howstharra	Rail Reserve, Northern Gully siding, S side of railway line, W side of Sandsprings Rd junction.Pop	-20.703	114.9039107		0/01/2010
		Grevillea bracteosa subsp. howatharra	extends from 1km to ca. 1.1km west of the intersection of Northern Gully South road and				
107602	33579		T Geraldton Mt Magnet Road within the railway reserve	-28.705	114.8981944		20/08/2012
	22.0	Grevillea bracteosa subsp. howatharra	Private property lot 2860 Geraldton-Mt Magnet Rd. About 340m west of boundary with lot 2243 and				25.05,2012
107622	33579	_[T ca. 1.7km west from intersection between Geraldton-Mt Magnet and Northern Gully Rds.	-28.706	114.8936944		13/10/2009
		Grevillea bracteosa subsp. howatharra	Road verge on Bella Vista Rd heading NE off Nanson-Howatharra Rd. Both sides of the Rd from ca.				
105154	33579		T 100m N of Cattle grid at crest of hill, to about halfway down to gully.	-28.543	114.6694722		12/09/2011
		Grevillea bracteosa subsp. howatharra	Private property, Lot 506 (previously lot 50), on Bella Vista Rd heading NE off Nanson-Howatharra				
105155	33579		T Rd. Both sides of the Rd from ca. 100m N of Cattle grid at crest of hill, to about halfway down to	-28.543	114.669459		10/10/2011
		Grevillea bracteosa subsp. howatharra	Howatharra Nature Reserve (40587). From the gravel road south of the intersection of Howatharra				
			and Bella Vista Roads, travel south ca. 600m and stop at SE corner of two fences. Plants are ca.				
105157	33579		T 110m E along fence upslope. Shire of Chapman Valley.	-28.551	114.6661111		7/01/2010
		Grevillea bracteosa subsp. howatharra	Private Property, Lot 550. From the gravel road south of the intersection of Howatharra and Bella				
405450	20575		Vista Roads, travel south ca. 600m and stop at SE corner of two fences. Plants are ca. 110m E	00.55	444.0001111		7/04/00:5
105158	33579	Gravillas brastasas subas becordes	T along fence upslope. Shire of Chapman Valley. Proposed Morosby Conservation Park, Let 31 Joseph of White Book Book, within the Shire of	-28.551	114.6661111		7/01/2010
96532	33579	Grevillea bracteosa subsp. howatharra	Proposed Moresby Conservation Park. Lot 31 located off White Peak Road, within the Shire of T Chapman Valley. Approximately 2km north of Wokatherra Nature Reserve.	-28.620	114.6636111		5/01/2010
105160		Grevillea bracteosa subsp. howatharra	T PP Lot 6751 adjacent to Moresby Conservation Park. Proposed Nature Reserve.	-28.520 -28.599	114.6636111		5/01/2010
2216884		Grevillea erinacea	3 Walkaway road, S of Geraldton	-28.770	114.6163889	ALITO	4 17/12/1968
8416605		Grevillea granulosa	3 Geraldton to Mullewa Rail Corridor, 2.5 km NE of Kojarena	-28.770	114.8851111	-	1 18/09/2010
0 0 0 0 1		Grevillea gianutosa	4 6 km NNE of Geraldton	-28.711	114.6334692		1 25/09/2012
8451028			Wicherina gravel reserve on the N side of the Geraldton - Mullewa Road, ca 2.1 km W of the	'			
		Grevillea phanerophlebia		00.745		GPS	1 28/11/2007
	2063	Готемиеа рианегорицеріа Потемие в рианегорицеріа	T Wicherina South Road, E of Geraldton	-28.715	114.9992222		
8451028		Grevillea phanerophlebia	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina	-28./15	114.9992222	J. J	
8451028				-28.715 -28.715	114.9992222	0.0	25/08/2011
8451028 8076294	2063 2063		Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina				
8451028 8076294 85711	2063 2063 2113	Grevillea phanerophlebia	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711.	-28.715	114.9991667	AUTO	25/08/2011 3 11/08/1956
8451028 8076294 85711 1648608	2063 2063 2113 2113	Grevillea phanerophlebia Grevillea triloba	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton	-28.715 -28.625	114.9991667 114.6163889	AUTO MAN	25/08/2011 3 11/08/1956
8451028 8076294 85711 1648608 5825806	2063 2063 2113 2113 2113	Grevillea phanerophlebia Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton 3 Road reserve of North West Coastal Highway near Oakajee Industrial Estate, 3 M. Harts property, David-Coopers Roads, Waggrakine, 3 Moresby Conservation Park upper slopes on Western ridges	-28.715 -28.625 -28.594	114.9991667 114.6163889 114.6322222	AUTO MAN MAN	25/08/2011 3 11/08/1956 2 29/06/2000
8451028 8076294 85711 1648608 5825806 5498228 6370799	2063 2063 2113 2113 2113 2113	Grevillea phanerophlebia Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton 3 Road reserve of North West Coastal Highway near Oakajee Industrial Estate, 3 M. Harts property, David-Coopers Roads, Waggrakine, 3 Moresby Conservation Park upper slopes on Western ridges On S side of Olsen Road, 1.7 km E of NW Coastal Highway, Oakajee Nature Reserve, c. 26 km S of	-28.715 -28.625 -28.594 -28.683 -28.625	114.9991667 114.6163889 114.6322222 114.65 114.666625	AUTO MAN MAN MAN	25/08/2011 3 11/08/1956 2 29/06/2000 17/07/1999 2 5/01/2003
8451028 8076294 85711 1648608 5825806 5498228 6370799 6686117	2063 2063 2113 2113 2113 2113 2113	Grevillea phanerophlebia Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton 3 Road reserve of North West Coastal Highway near Oakajee Industrial Estate, 3 M. Harts property, David-Coopers Roads, Waggrakine, 3 Moresby Conservation Park upper slopes on Western ridges On S side of Olsen Road, 1.7 km E of NW Coastal Highway, Oakajee Nature Reserve, c. 26 km S of Northampton. [Plot - NO01]	-28.715 -28.625 -28.594 -28.683 -28.625	114.9991667 114.6163889 114.6322222 114.65 114.666625	AUTO MAN MAN MAN GPS	25/08/2011 3 11/08/1956 2 29/06/2000 17/07/1999 2 5/01/2003 1 15/08/1999
8451028 8076294 85711 1648608 5825806 5498228 6370799 6686117 6600131	2063 2063 2113 2113 2113 2113 2113	Grevillea phanerophlebia Grevillea triloba Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton 3 Road reserve of North West Coastal Highway near Oakajee Industrial Estate, 3 M. Harts property, David-Coopers Roads, Waggrakine, 3 Moresby Conservation Park upper slopes on Western ridges On S side of Olsen Road, 1.7 km E of NW Coastal Highway, Oakajee Nature Reserve, c. 26 km S of Northampton. [Plot - NO01] 3 Moresby Conservation Park	-28.715 -28.625 -28.594 -28.683 -28.625 -28.568 -28.610	114.9991667 114.6163889 114.6322222 114.65 114.666625 114.6431827 114.6611832	AUTO MAN MAN MAN GPS GPS	25/08/2011 3 11/08/1956 2 29/06/2000 17/07/1999 2 5/01/2003 1 15/08/1999 1 6/08/2002	
8451028 8076294 85711 1648608 5825806 5498228 6370799 6686117	2063 2063 2113 2113 2113 2113 2113 2113 2113	Grevillea phanerophlebia Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba Grevillea triloba	Shire Gravel Reserve No 43236, west of Eradu and adjacent to the northern boundary of 'Wicherina T Water Reserve' No 17711. 3 10 miles N of Geraldton 3 Road reserve of North West Coastal Highway near Oakajee Industrial Estate, 3 M. Harts property, David-Coopers Roads, Waggrakine, 3 Moresby Conservation Park upper slopes on Western ridges On S side of Olsen Road, 1.7 km E of NW Coastal Highway, Oakajee Nature Reserve, c. 26 km S of Northampton. [Plot - NO01]	-28.715 -28.625 -28.594 -28.683 -28.625	114.9991667 114.6163889 114.6322222 114.65 114.666625	AUTO MAN MAN MAN GPS GPS GPS	25/08/2011 3 11/08/1956 2 29/06/2000 17/07/1999 2 5/01/2003 1 15/08/1999

4159918	2113	Grevillea triloba	3 E road verge, North West Coastal Highway 1.9 km N of Drummonds Cove turnoff, N of Geraldton	-28.650	114.6211111	MAN		7/08/1994
		Grevillea triloba	Water Reserve 16200 S of Oakajee & 8.7 km N of Drummonds Cove turnoff on NW Coastal					
4106822	2113		3 Highway, N of Geraldton	-28.587	114.6317107			6/08/1994
4257413 4159861		Grevillea triloba Grevillea triloba	3 At 500-800 m S of junction with Hooper St, on rail line reserve N of Spalding Park, Geraldton	-28.667 -28.569	114.6166667 114.6519444			3/07/1995 6/08/1994
5395909		Grevillea triloba	3 Oakajee Nature Reserve, NW boundary & along track on NE side of reserve 3 M. Hart, David Road/Cooper Road, Waggrakine,	-28.683	114.6519444		_	2/05/1999
1648152		Grevillea triloba	3 North of Geraldton	-28.770	114.6163889		_	24/09/1953
5396344	2113	Grevillea triloba	3 Waggrakine,	-28.717	114.6166667	MAN	2	7/10/1998
1648160		Grevillea triloba	3 16 km N of Geraldton	-28.626	114.6163889			1/06/1980
1648659		Grevillea triloba	3 Drummonds Cove turnoff	-28.668	114.6166667			28/10/1978
1648632		Grevillea triloba Grevillea triloba	3 10 miles N of Geraldton	-28.625 -28.633	114.6163889 114.6333333			.1/08/1956 7/07/1959
1648055 1647636		Grevillea triloba	3 White Peaks 3 Spalding Park Reserve - Chapman River, Geraldton	-28.770	114.6333333			26/06/1981
1648594		Grevillea triloba	3 Utakarra, 3 miles (4.8 km) E of Geraldton, on the Geraldton-Mullewa road	-28.783	114.6333333			26/08/1970
1900439	2113	Grevillea triloba	3 C. 6 km N of the Buller River on North West Coast Highway	-28.583	114.6333333	MAN	1	2/06/1976
1900498		Grevillea triloba	3 C. 6 km N of the Buller River on North West Coastal Highway	-28.583	114.6333333			.2/06/1976
1648144		Grevillea triloba	3 On the North West Coastal Highway, 32 km S of Northampton	-28.600	114.6333333			8/09/1984
8208727 8289727		Grevillea triloba Grevillea triloba	3 N of Reserve 893 which is W of the Narratarra - Moonyoonooka Road, 3.2 km N of the Magnet Road	-28.750 -28.587	114.7 114.6311389			.4/08/2008
8500274		Grevillea triloba	3 Site GRV 0825. North West Coastal Highway, ca 2 km S of Oakagee Road, N of Geraldton 3 North - West Coastal Highway, 1.5 km N of Chapman River, Geraldton	-28.714	114.6311369			4/09/2004
8171505		Grevillea triloba	3 North West Coastal Highway, 15.2 km N of Chapman River, Geraldton	-28.598	114.6336111			4/09/2004
8088519	2113	Grevillea triloba	3 Slte 46, near Oakajee Port	-28.587	114.6292241	GPS	1 1	.3/09/2007
8088632		Grevillea triloba	3 Near Oakajee Port, Site DA 33	-28.589	114.6289603			23/01/2008
8088624	2113	Grevillea triloba	3 Site 47, near Oakajee Port	-28.587	114.6294415	GPS	1 1	.3/09/2007
0007750	0110	Grevillea triloba	Moresby Conservation Park, growning along N-S track along top of breakaway on western side of	20,000	114 0010070	CDC		00/11/0017
8997756 1179233	2113	Hemigenia saligna	3 reserve 3 Near Champion Bay.	-28.609 -28.766	114.6610278 114.5997222			27/06/1902
1179233	0003	Lepidosperma sp. Moresby Range (R.J.	150 m E of parking/pull-off bay on E side of North West Coastal Highway, near Oakajee, 4.41 km	-20.700	114.5557222	A010	3 2	.7700/1902
9255842	29147	Cranfield 2751)	1 from White Peak Road. 19.86 km NNE from Geraldton town centre	-28.595	114.63556	GPS	1 2	0/08/2009
		Lepidosperma sp. Moresby Range (R.J.	The Brothers, Moresby Ranges					-
5815398	29147	Cranfield 2751)	1	-28.704	114.6956645	GPS	1	8/07/2000
		Lepidosperma sp. Moresby Range (R.J.	0.28 km ESE of parking pull-off bay on North West Coastal Highway. 19.7 km NNE of Geraldton					
9255680	29147	Cranfield 2751)	1 town	-28.597	114.636475	GPS	1 1	1/12/2009
		Lepidosperma sp. Moresby Range (R.J.	0.84 km E from Crown Reserve and North West Coastal Highway. 5.42 km E from the mouth of					
9255672	291/17	Cranfield 2751)	Oakajee River. 5.6 km S from Howatharra. 4.43 km S from intersection of Coronation Beach Road, 1 20.97 km NNE from Geraldton town centre	-28.585	114.638467	GPS	1 1 2	20/08/2009
3233072	23147	Lepidosperma sp. Moresby Range (R.J.	0.18 km E of parking/pull-off bay on eastern side of North West Coastal Highway, near Oakajee,	-20.303	114.000407	013	1 2	.0/00/2003
9255818	29147	Cranfield 2751)	1 4.41 km N from White Peak Road. 19.86 km NNE from Geraldton town centre	-28.596	114.635483	GPS	1 2	0/08/2009
		Lepidosperma sp. Moresby Range (R.J.	1.55 km ESE from parking/pull-off bay on E side of North West Coastal Highway, 4.25 km NNE of					
			intersection of North West Coastal Highway and White Peak Road, 19.63 km NNE from Geraldton					
9255699	29147	Cranfield 2751)	1 town centre	-28.600	114.648886	GPS	1 2	2/10/2009
8961182	201.47	Lepidosperma sp. Moresby Range (R.J. Cranfield 2751)	0.28 km N of White Peak Road, on N side of Wokatherra Gap, 3.76 km ENE of intersection of North 1 West Coastal Highway and White Peak Road, 16.73 km NNE of Geraldton town centre	-28.628	114 6660006	CDC		23/10/2009
0901102	29147	Lepidosperma sp. Moresby Range (R.J.	Moresby Range Conservation Park, 0.24 km N of White Peak Road, N side of Wokatherra Gap	-20.020	114.6660926	GFS	1 2	3/10/2009
8961174	29147	Cranfield 2751)	1	-28.629	114.6633934	GPS	1 2	2/10/2009
		Lepidosperma sp. Moresby Range (R.J.	0.92 km ESE from parking/pull-off bay on E side of North West Coastal Highway, 4.25 km NNE of					
			intersection of North West Coastal Highway and White Peak Road, 19.63 km NNE from Geraldton					
8961158	29147	Cranfield 2751)	1 town centre	-28.598	114.6429553	GPS	1 2	23/10/2009
		Lepidosperma sp. Moresby Range (R.J.	Edge of paddock, 1.32 km SE from parking/pull-off bay on E side of North West Coastal Highway,					
8961131	291/17	Cranfield 2751)	3.87 km NNE from intersection of North West Coastal Highway and White Peak Road, 19.06 km 1 NNE from Geraldton town centre	-28.603	114.6447507	GPS	1 1 2	23/10/2009
0901131	23147	Lepidosperma sp. Moresby Range (R.J.	0.26 km W from Carey Road; 1.8 km N from intersection with White Peak Road. 1.58 km E from	-20.003	114.0447307	013	1 2	.3/10/2009
9255826	29147	Cranfield 2751)	1 North West Coastal Highway. 17.7 km NNE from Geraldton town centre	-28.616	114.647932	GPS	1 2	20/08/2009
		Lepidosperma sp. Moresby Range (R.J.	Wokatharra Hill, Moresby Range West					
2252554	29147	Cranfield 2751)	1	-28.650	114.65	MAN	2	2/08/1983
		Lepidosperma sp. Moresby Range (R.J.	Wokatherra Nature Reserve (No. 39276), at Wokatherra Hill in the Moresby Flat Topped Range, [ca					
95625	29147	Cranfield 2751)	1 11 km NNE of Geraldton].	-28.643	114.6585556			22/08/1983
95626	201/17	Lepidosperma sp. Moresby Range (R.J. Cranfield 2751)	`Narra Tarra Estate`, 22 Narra Tarra-Moonyoonooka Road, Narra Tarra. At The Brothers in the 1 Moresby Flat Topped Range, [ca 200 m SE of Chapman Valley Road, ca 8 km NE of Geraldton].	-28.704	114.6956667			8/07/2000
6130534		Leucopogon borealis	2 Moresby Conservation Reserve, White Peaks Road E from North West Coastal Highway	-28.617	114.6333333	MAN	-	.1/08/2001
6420303		Leucopogon borealis	2 Moresby C.P. Site 3, Whitepeak Road	-28.619	114.6816667			31/07/2002
2955601		Leucopogon borealis	2 4.4 km NE of Moonyoonooka turnoff Nanson-Geraldton Road, Heinricks Farm, East Moresby Range	-28.667	114.7166667			25/08/1983
4506170	31794	Leucopogon borealis	2 N of White Peak Road, Heinrich's property	-28.583	114.6666667	MAN	1	5/08/1996
		Leucopogon borealis	Spillman site 3, N off Chapman Valley Road in Waggrakine Cutting, through paddock past masts					
7750668	31794		2 down steep slope 20 m N of White Peak Poad, 0.4 km from E and of this road and 3.97 km NNE from the intersection	-28.666	114.6801667	GPS	1 2	25/08/2007
9255761	31794	Leucopogon borealis	20 m N of White Peak Road, 0.4 km from E end of this road and 3.97 km NNE from the intersection with North West Coastal Highway. 16.8 km NNE of Geraldton town centre	-28.629	114.66416	GPS	1 1 2	2/10/2009
2_00,01	J±/ J4	Leucopogon borealis	Quadrat 13 Bushland Plant Survey of remnant vegetation on Greg and Tanya Burrows property	_5.525	±±-7.00 → 10	J. J		
			Hawkrise in the Shire of Chapman Valley c. 24 km N and 35 km NE of the Geraldton Townsite. (c.					
6482074	31794		2 450 km N of Perth). The bush block straddles the Oakajee and Buller N	-28.767	114.6867134			9/08/1999
4616073		Leucopogon borealis	2 E end of White Peak Road, N of Geraldton	-28.633	114.6666667			.0/08/1993
6138209		Leucopogon nitidus	T Sewell, Sand Springs, Sand Springs Road, Mount Julie, Kojarena	-28.800	114.9666667			.1/07/2001
7908032	40802	Leucopogon nitidus	T Sewell Property, fenced breakaway, Sand Springs Road, Kojarena Mount Julia, covenanted fenced remnant of property 'Sand Springs' N side of Sand Springs Road	-28.784	114.9536111	GPS	1 1 1	.9/07/2008
7908024	40802	Leucopogon nitidus	Mount Julia, covenanted fenced remnant of property 'Sand Springs' N side of Sand Springs Road, T Kojarena	-28.783	114.9555463	GPS	1 1	.9/07/2008
. 555524	+0002	Leucopogon nitidus	Private Property, Lot 2250 (2250) Sandsprings Road, City of Greater Geraldton. Mt Julia remanant			3. 3	+ + + +	
109298	40802		T vegetation on `Sandsprings` property, fenced breakaway.	-28.784	114.9536111		2	2/07/2013
8239533	6437	Leucopogon psammophilus	1 27.6 km S of Northampton, 4 km E of North West Coastal Highway, Wells Park, West Moresby	-28.600	114.65			26/08/1983
8239541		Leucopogon psammophilus	1 27.6 km S of Northampton, 4 km E of North West Coastal Highway, Wells Park, West Moresby	-28.600	114.65			26/08/1983
7813686			1 Moresby Conservation Park. Access through Murphyl Farm.	-28.600	114.6878333	UNK	1 2	28/10/2006
		Leucopogon psammophilus	of 45 Vetna [Near proposed] Morashy Consequation Dark 12 0 km wast of North West Coastal				ı I	1
88727	6437	Leucopogon psammophilus Leucopogon psammophilus	Lot 45, Yetna. [Near proposed] Moresby Conservation Park, [3.9 km west of North West Coastal 1 Highway].	-28.600	114.6878333		2	8/08/2006
88727			Lot 45, Yetna. [Near proposed] Moresby Conservation Park, [3.9 km west of North West Coastal Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges	-28.600	114.6878333		2	8/08/2006
88727 6165672	6437 6437	Leucopogon psammophilus	1 Highway].	-28.600 -28.574	114.6878333 114.6628216	GPS		9/06/2002
6165672	6437 6437 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S.	1 Highway].	-28.574	114.6628216		1	9/06/2002
	6437 6437 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614)	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges 3 Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton				1	
6165672 8289751	6437 6437 20360 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614)	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill	-28.574 -28.628	114.6628216 114.6695556	GPS	1	9/06/2002
6165672	6437 6437 20360 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614)	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill	-28.574	114.6628216	GPS	1	9/06/2002
6165672 8289751	6437 6437 20360 20360 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614) Malleostemon sp. Moonyoonooka (R.J.	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill 4.4 km NE of Moonyoonooka turnoff Nanson - Geraldton road, Heinricks Farm, East Moresby	-28.574 -28.628	114.6628216 114.6695556	GPS GPS	1 1	9/06/2002
6165672 8289751 7516010	6437 6437 20360 20360 20360	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614)	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill	-28.574 -28.628 -28.650 -28.667	114.6628216 114.6695556 114.6475449	GPS GPS	1 1	9/06/2002 1/10/2008 4/06/2006
6165672 8289751 7516010	6437 6437 20360 20360 20360 14469	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Malleostemon sp. Moonyoonooka (R.J. Cranfield 2947)	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill 4.4 km NE of Moonyoonooka turnoff Nanson - Geraldton road, Heinricks Farm, East Moresby Range	-28.574 -28.628 -28.650 -28.667	114.6628216 114.6695556 114.6475449	GPS GPS MAN	1 1 1	9/06/2002 1/10/2008 4/06/2006
6165672 8289751 7516010 3328481	6437 6437 20360 20360 20360 14469 14469 19451	Leucopogon psammophilus Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614) Leucopogon sp. Moresby Range (S. Patrick 2614) Malleostemon sp. Moonyoonooka (R.J. Cranfield 2947) Malleostemon sp. Moonyoonooka (R.J. Malleostemon sp. Moonyoo	1 Highway]. Olson Road, 3.8 km E of North West Coastal Highway, Moresby Ranges Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, N of Geraldton Wokatherra Nature Reserve, close to western end at base of conical hill 4.4 km NE of Moonyoonooka turnoff Nanson - Geraldton road, Heinricks Farm, East Moresby Range	-28.574 -28.628 -28.650 -28.667	114.6628216 114.6695556 114.6475449 114.7166667	GPS GPS MAN MAN MAN	1 1 2 2	9/06/2002 1/10/2008 4/06/2006 25/08/1983

7301049	10454	Melaleuca huttensis	3 Corner of Cooper and David Roads, Geraldton	-28.675	114.6445556	CDC		5/08/2003
7301049	19451	Melaleuca huttensis Melaleuca huttensis	114 Cooper Street, Waggrakine (property of M. Hart). On corner of David Road, [1.7 km NW of	-28.075	114.0445550	GPS		3/08/2003
104147	19451		3 North West Coastal Highway, ca 1.1 km north of Tramway Road].	-28.675	114.6443889		4	4/11/2008
		Melaleuca huttensis	Road reserve at corner of Cooper Street and David Road, Waggrakine. [1.7 km NW of North West					
104148	19451		3 Coastal Highway, ca 1.1 km north of Tramway Road].	-28.677	114.6444722 114.65	MANI		4/11/2008
2502801 6420338		Micromyrtus collina Micromyrtus collina	Wokatharra Hill, West Moresby Range Moresby C.P. Site 3 off Whitepeak Road	-28.650 -28.619	114.65			2/08/1983 1/07/2002
2422670		Micromyrtus collina	1 White Peaks Station, 18 km NE of Geraldton	-28.655	114.7561111			9/08/1980
8982376	37680	Micromyrtus collina	1 Moresby Range Conservation Park, steep E-facing slope W of creekline at White Peak Road	-28.618	114.6626944	GPS	1 22	2/01/2017
2502690		Micromyrtus collina	1 4.4 km NE of Moonyoonooka turnoff Nanson - Geraldton Road, Heinricks Farm, East Moresby	-28.667	114.7166667			5/08/1983
7750595 2423200		Micromyrtus collina	1 Site Spillman 1, Moresby Range, N of Chapman Valley Road past masts down steep track	-28.666 -28.550	114.6791667 114.6666667	-		5/08/2007 3/09/1977
2423200	19600	Micromyrtus rubricalyx Mirbelia sp. Ternata (M.D. Crisp & L.G.	2 SE corner of property of C.H. Royce, Howatharra 0.18 km E of parking/pull-off bay on eastern side of North West Coastal Highway, near Oakajee,	-28.330	114.0000007	MAIN	13	3/09/19//
9255796	41989	Cook MDC 9267)	1 4.41 km N from White Peak Road. 19.86 km NNE from Geraldton town centre	-28.595	114.635546	GPS	1 20	0/08/2009
912646	18505	Philotheca wonganensis	4 28.6 km S of Northampton along NW Coastal Highway	-28.588	114.632426	TOPO	2 1	1/09/1983
		Philotheca wonganensis	Road Reserve R 16200, Lot no. 7240 [ca. 1.47km SE of Oakajee Well, 5.88km S of Howatharra					
94483	18505		4 township, ca. 2.3km SW of Oakajee Nature Reserve].	-28.589	114.6328889			4/09/2008
		Rhodanthe sp. Yuna (G.J. Keighery, B.J.	Moresby Range					
448311		Keighery & B. Moyle 2820)	3	-28.700	114.6666667			9/09/1965
1043463	13068	Scaevola globosa	3 46 m.p. Mullewa - Geraldton. [Ca 46 miles from Mullewa to Geraldton]	-28.767	114.7833333	MAN	3 12	2/12/1973
5982197	7627	Scaevola oldfieldii	Private property, hill 100 m N of house 1.2 km along Carey Road off White Peak Road, c. 18 km N of 3 Geraldton,	-28.583	114.65	ман	3 25	5/08/1997
7813767		Scaevola oldfieldii	3 Moresby Conservation Park. Access through Murphyl Farm.	-28.600	114.6878333			7/10/2006
		Scaevola sp. Golden hairs (D. & B.	Oakajee (or Oakabella), ca 2 km E along unnamed road into private property on the E side of the					
4138120	20449	Bellairs 1450 A)	1 North West Coastal Highway, ca 34 km N of Geraldton, Irwin Botanical District	-28.567	114.6666667		10	0/09/1990
1064193		Schoenia filifolia subsp. subulifolia	T Champion Bay	-28.766	114.5997222		3 //	0/40/0000
8728402	17571	Schoenus badius Scholtzia inaequalis	2 Bella Vista Nature Reserve, NW corner of Nanson - Howatharra Road and Bunter Road, W of Wicherina Reserve, N of Geraldton-Mount Magnet Road, into bush from pull-off 29.9 km from	-28.545	114.665222	GPS	1 19	9/10/2008
8748810	49120	ουποιτεία πιασγματίο	2 Moonyoonooka Road	-28.714	114.9995833	GPS	1 28	8/08/2008
8748853		Scholtzia multiflora	1 Private property, Kojarena Range on Kojarena South Road, W of Sandsprings Road	-28.751	114.88975			5/08/2008
3629198	49122	Scholtzia multiflora	1 Near Kojarena (Kojarena is c. 30 km E of Geraldton), South West Division	-28.725	114.8663889	AUTO	3 14	4/08/1966
5808243	31575	Serichonus gracilipes	3 The Brothers, Moresby Ranges,	-28.708	114.7069444	MAN	3 8	8/07/2000
5982200	31575	Serichonus gracilipes	Private property, halfway up driveway hill to house 1.2 km along Carey Road off White Peak Road, 3 c. 18 km N of Geraldton	-28.583	114.65	MAN	2 25	5/08/1997
6744141		Serichonus gracilipes	3 On the Morrell farm property, on the summit of Mount Rennie	-28.659	114.7439171			0/08/2003
6744133		Serichonus gracilipes	3 On the Morrell farm property, on the summit of Mount Rennie	-28.659	114.7439171			0/08/2003
1017640	31575	Serichonus gracilipes	3 7.1 km W along mud road from [North West Coastal] Highway of erupting mud	-28.550	114.7833333	MAN	29	9/08/1983
		Serichonus gracilipes	4.85 km E of the Chapman Valley Road bridge crossing of the Chapman River, 18.9 km NE from					
8959781	31575	Cariahanya zaailinaa	3 Geraldton town centre	-28.657	114.7530654	GPS	1 19	9/08/2009
9136770	31575	Serichonus gracilipes	5.02 km E from Chapman Valley Road bridge crossing of the Chapman River, 19.5 km NE from 3 Geraldton town centre	-28.657	114.755152	GPS	1 21	1/10/2009
1008188		Serichonus gracilipes	3 Wokatharra Hills	-28.643	114.6516667			9/09/1901
95864		Serichonus gracilipes	3 Wokatharra Hills, Moresby Flat Topped Range, NE of Geraldton. Herbarium Record Only.	-28.641	114.6608781			9/09/1901
		Serichonus gracilipes	7.1 km W of Erupting Mud towards the NW Hwy along the Howatharra-Nanson Rd. Herbarium					
95866	31575		3 Record Only.	-28.549	114.7847655			9/08/1983
95867	315/5	Serichonus gracilipes Serichonus gracilipes	3 The Brothers, Moresby Flat Topped Range. NE of Geraldton. Private property, half way up driveway hill to house, 1.2 km along Carey Road off White Peak Road.	-28.707	114.708379		*	8/07/2000
95868	31575	Senemonus graenipes	3 ca 18 km N of Geraldton. Herbarium Record Only.	-28.619	114.6567111		25	5/08/1997
8287376	52087	Styphelia howatharra	2 Site GRV 0864. N of White Peak Road, ca 2 km E of Carey Road, Geraldton	-28.628	114.6695556	GPS	1 1	1/10/2008
7516002	52087	Styphelia howatharra	2 Moresby Conservation Park, White Wells Road, 4.4 km E of North West Coastal Highway	-28.630	114.6700446	GPS	1 4	4/06/2006
8982317		Styphelia howatharra	2 Moresby Range Conservation Park. W-facing slope of lower creek [off] White Peak Road	-28.623	114.6717222	-		3/07/2016
8366292		Styphelia howatharra	2 Howatharra Nature Reserve, corner Nanson - Howatharra Road and Bella Vista Road	-28.544	114.6677778			2/06/2011
7919174 7919166		Styphelia marginata Styphelia marginata	T Sewell Property, fenced breakaway, Sand Springs Road, Kojarena T Sewell Property, fenced breakaway, Sand Springs Road, Kojarena	-28.784 -28.784	114.9541111 114.9530833			9/07/2008 9/07/2008
8982260		Styphelia marginata	T Moresby Range Conservation Park near lookout track, S of flat top hill, N of White Peak Road	-28.609	114.6611389			1/09/2017
		Styphelia marginata	Private Property Lot 2250, N off Sandsprings Road, Kojarena. In remnant veg near W boundary of					
88661	49811		T property. W of R48173. Geraldton-Greenough.	-28.784	114.9537222		22	2/07/2013
107342	49811	Styphelia marginata	Private property Lot 800, 'Old Acres Estate' approximately 900m south west of the Moloney and T Hardey Road intersection	-28.795	114.6493889		25	7/06/2013
6841341		Thryptomene orbiculata	3 Sand Springs, Kojarena, 50 km E of Geraldton	-28.683	114.9666667	UNK		5/09/2002
		Thryptomene stapfii	4.2 km E of North West Coastal Highway on Howatharra Road (Nanson) at E end of Howatharra					
4400429	44704		3 Nature Reserve	-28.545	114.6708333			8/06/1996
1189174		Thryptomene stapfii Thryptomene stapfii	3 SE corner of property of C.H. Royce, Howatharra	-28.550	114.6666667			3/09/1977 4/07/1071
2191431 5313341		Thryptomene stapfii Thryptomene stapfii	3 Chapman Valley, ca 1.5 km W of Bridge over Chapman River, on Nanson Road 3 N of Wokatherra, Heinrich's property E end of White Peak Road	-28.558 -28.617	114.7563889 114.6666667			4/07/1971 5/08/1996
5372577		Thryptomene stapfii	3 Oakajee to Tallering Peak railway line, Site 5C, 2.5 km ESE of Mumbemarra Hill	-28.660	114.7387728			9/10/1998
2191385		Thryptomene stapfii	3 Wokatharra Hill, West Moresby Range	-28.650	114.65			2/08/1983
2191377	44704	Thryptomene stapfii	3 4.4 km NE of Moonyoonooka turnoff Nanson-Geraldton Road, Heinricks Farm, East Moresby Range	-28.667	114.7166667	MAN	25	5/08/1983
004075	4.470	Thryptomene stapfii	ca 15 km N of Geraldton on North West Coastal Highway then 4.2 km E on White Peak Road and	00.000	444.007777	MANI		E/40/4000
6218725 6420710	44704 44704	Thryptomene stapfii	3 200-300 m N of the road 3 Moresby Conservation Park	-28.629 -28.622	114.6677793 114.6714334			5/12/1993 1/07/2002
0 4 ∠0/10		Thryptomene stapfii	Moresby Conservation Park Moresby Conservation Reserve, White Peaks Road E from North West Coastal Highway, to N at end		114.0/14334	01 0	1 31	., 0/1/2002
6130356	44704	- T	3 of road	-28.617	114.6333333	MAN	3 11	1/08/2001
		Thryptomene stapfii	On W side of Bella - Vista Road, 200 m N of Nanson - Howatharra Road, Howatharra Nature					
6691323	44704	The material state of the Co	3 Reserve, c. 23 km S of Northampton. [Plot - NO03]	-28.545	114.6670712			5/08/1999
7028024 6744125		Thryptomene stapfii Thryptomene stapfii	3 Moresby Range, CALM reserve from White Peak Road 3 On the Morrell farm property, on lower hill slopes and gully W of Mount Rennie	-28.613 -28.655	114.6954332 114.7410504	-		7/11/2004 0/08/2003
0/44120	+4/04	Thryptomene stapfii	N of Reserve 893 which is W of the Narratarra - Moonyoonooka Road, 3.2 km N of the Mount	20.000	114./410004	01 0	1 20	,, 0012003
5942535	44704		3 Magnet Road	-28.750	114.7	MAN	4 26	6/08/1997
8959803		Thryptomene stapfii	3 Moresby Range	-28.630	114.6611394			0/08/2009
8959749	44704	Thryptomene stapfii	3 Moresby Range Conservation Park, E side of mesa	-28.642	114.6796059	GPS	1 19	9/08/2009
9136886	44704	Thryptomene stapfii	20 m N of White Peak Road, 0.4 km from E end of this road and 3.97 km NNE from the intersection	-20 620	114.667822	CDC	1 1 2	A/10/2000
6420346		Thryptomene stapfii	3 with North West Coastal Highway, 16.8 km NNE of Geraldton town centre 3 Moresby Conservation Park, Site 3 off Whitepeak Road	-28.630 -28.619	114.667822	-		4/10/2009 1/07/2002
1025996		Thryptomene stenophylla	2 Geraldton, Victoria District	-28.770	114.6166667			9/1901
5502756		Thryptomene stenophylla	2 N side, Chapman River Regional Park,	-28.733	114.65			5/08/1999
5963001	6066	Thryptomene stenophylla	2 Site 5c, 2.5 km ESE of Mumbemarra Hill,	-28.665	114.741649			7/06/1998
5962994		Thryptomene stenophylla	2 Site 5b, 3 km ESE of Mumbemarra Hill,	-28.667	114.7467235			6/06/1998
6138098	6066	Thryptomene stenophylla Thryptomene stenophylla	2 SE access Fairfax Drive, Chapman River Regional Park Opposite Polo Road Gauging Station on Chapman River N bank. Access across private property	-28.733	114.65	MAN	3 13	3/07/2001
6321364	6066	Thryptomene stenophylla	Opposite Polo Road Gauging Station on Chapman River N bank. Access across private property 2 Harwood, Deepdale	-28.783	114.7	MAN	3 5	5/08/2002
1021004	5000			_3.700	117./	ı .		

	1	Thrystomono stononhylla	W of Vanget Poad Inroviously known a Kojarina North Poad 1.2.25 km S of East Chanman Poad and	<u> </u>		I	
6744311	6066	Thryptomene stenophylla	W of Yanget Road [previously known a Kojarina North Road], 2.25 km S of East Chapman Road and 2 ca 5.5 km N of Geraldton - Mount Magnet Road	-28.676	114.8572172	GPS	1 20/08/2003
6744303		Thryptomene stenophylla	2 8.4 km along Giles Road from Moonyoonooka Road	-28.723	114.757668		1 20/08/2003
6744281	†	Thryptomene stenophylla	2 At a bend in the road, 7.5 km along Giles Road from Moonyoonooka Road	-28.732	114.7499181	GPS	1 20/08/2003
6744273	6066	Thryptomene stenophylla	2 At a bend in the road, 7.5 km along Giles Road from Moonyoonooka Road	-28.732	114.7499181	GPS	1 20/08/2003
		Thryptomene stenophylla	Chapman River Regional Park, accessed from Green Street on a track along SW side of Chapman				
6744257	6066		2 River, on E side of Spalding Park Golf Club	-28.729	114.6428849	GPS	1 20/08/2003
6744249	6066	Thryptomene stenophylla	Chapman River Regional Park, accessed from Green Street on a track along SW side of Chapman 2 River, on E side of Spalding Park Golf Club	-28.729	114.6428849	GPS	1 20/08/2003
6744184		Thryptomene stenophylla	2 On the Morrell farm property, on S slope of Mount Rennie	-28.660	114.7499838		1 20/08/2003
6744265		Thryptomene stenophylla	2 At a bend in the road, 7.5 km along Giles Road from Moonyoonooka Road	-28.732	114.7499181		1 20/08/2003
		Thryptomene stenophylla	W of Yanget Road [previously known a Kojarina North Road], 2.25 km S of East Chapman Road and				
6744346	6066		2 ca 5.5 km N of Geraldton - Mount Magnet Road	-28.676	114.8585338	GPS	1 20/08/2003
07.44000	0000	Thryptomene stenophylla	W of Yanget Road [previously known a Kojarina North Road], 2.25 km S of East Chapman Road and	00.070	444.0570470	0.00	4 00/00/0000
6744338 6744362			2 ca 5.5 km N of Geraldton - Mount Magnet Road	-28.676 -28.642	114.8572172 114.7950168		1 20/08/2003 1 20/08/2003
6744354		Thryptomene stenophylla Thryptomene stenophylla	2 At creek crossing on Scott Road, 3.15 km N of Chapman East Road 2 At creek crossing on Scott Road, 3.15 km N of Chapman East Road	-28.642	114.7950168		1 20/08/2003
6744192		Thryptomene stenophylla	2 On the Morrell farm property, in a creek gully S of Mount Rennie	-28.663	114.7404172		1 20/08/2003
		Thryptomene stenophylla	6.7 km along Giles Road from Moonyoonooka Road. Located downhill from a bend in the road to				
7290772	6066	1	2 the north	-28.733	114.7521389	GPS	1 21/10/2004
		Thryptomene stenophylla	6.7 km along Giles Road from Moonyoonooka Road. Located downhill from a bend in the road to				
7291094	ł		2 the north	-28.733	114.7521389		1 4/10/2004
6364756		Thryptomene stenophylla	2 Site 5B. 3 km ESE of Mumbemarra Hill. Oakajee to Tallering Peak railway line	-28.666	114.7481006		1 9/10/1998
6364748	ł	Thryptomene stenophylla	2 Site 5C. 2.5 km ESE Mumbemarra Hill. Oakajee to Tallering Peak railway line	-28.662	114.7413731		1 9/10/1998
6364721 1026429		Thryptomene stenophylla Thryptomene stenophylla	2 Site 5 c. 2.5 km ESE of Mumbemarra Hill. Oakajee to Tallering Peak railway line 2 Spalding Park, 3 miles N of Geraldton	-28.662 -28.750	114.7403227 114.6333333		1 9/10/1998 3 30/08/1965
6744206		Thryptomene stenophylla	2 On the Morrell farm property, on SW slope of Mount Rennie	-28.659	114.7417838		1 20/08/2003
6744176	†	Thryptomene stenophylla	2 On the Morrell farm property, or Sw stope or Mount Rennie	-28.667	114.7417030		1 20/08/2003
6744168	ł	Thryptomene stenophylla	2 On the Morrell farm property, on E slope of Mount Rennie	-28.658	114.7451504		1 20/08/2003
1026445		Thryptomene stenophylla	2 Spalding Park Reserve, Geraldton	-28.750	114.6333333		3 26/06/1981
4084365		Thryptomene stenophylla	2 Spalding Park, Geraldton	-28.770	114.6163889		3 3/06/1973
1025988	 	Thryptomene stenophylla	2 Banks of Chapman River	-28.733	114.6166667		4 2/09/1947
1026437	1	Thryptomene stenophylla	2 Spalding Park, Geraldton	-28.750	114.6333333		3 /06/1965
5392195	ł	Thryptomene stenophylla	2 Chapman River Regional Park, Geraldton,	-28.717	114.65		2/06/1999
1026453 5395917		Thryptomene stenophylla Thryptomene stenophylla	2 Spalding Park, Geraldton 2 W of Yanget Road, Moonyoonooka,	-28.750 -28.717	114.6333333 114.7833333		3 3/06/1973 7/06/1999
8213488		Thryptomene stenophylla	2 7.8 km along Giles Road from Moonyoonooka Road	-28.733	114.7655555		3 20/08/2003
0210400	0000	Thryptomene stenophylla	W of Yanget Road (previously known as Kojarina North Road), 2.25 km S of East Chapman Road	20.700	114.70	OTTIC	0 20/00/2000
8213496	6066	1	2 and ca 5.5 km N of Geraldton - Mount Magnet Road	-28.677	114.8557833	GPS	1 20/08/2003
		Thryptomene stenophylla	W of Yanget Road (previously known as Kojarina North Road), 2.25 km S of East Chapman Road				
8213518	6066		2 and ca 5.5 km N of Geraldton - Mount Magnet Road	-28.677	114.8571	GPS	1 20/08/2003
8213526	ł	Thryptomene stenophylla	2 At creek crossing on Scott Road, 3.15 km N of Chapman East Road	-28.643	114.7935833		1 20/08/2003
8213550		Thryptomene stenophylla	2 On the Morrell farm property, on S slope of Mt Rennie	-28.662	114.74855		1 20/08/2003
8270201		Thryptomene stenophylla	2 Site No. GRV0872. Chapman River near Eucalyptus road, Geraldton	-28.753	114.6594444		1 2/10/2008
8451044 8213534		Thryptomene stenophylla Thryptomene stenophylla	Chapman River Regional Park, 5.6 km NE of Geraldton On the Morrell farm property, on E slope of Mount Rennie	-28.735 -28.659	114.6457069 114.7437167		1 25/09/2012 1 20/08/2003
8213542		Thryptomene stenophylla	2 On the Morrell farm property, on E stope of Hount Rennie	-28.668	114.7437107		1 20/08/2003
1096435		Thryptomene stenophylla	2 Chapman [River], N of Geraldton	-28.733	114.6166667		4 27/06/1901
1096842		Thryptomene stenophylla	2 Prope [Near] Chapman River	-28.733	114.6166667	MAN	4 27/06/1901
5225337	6066	Thryptomene stenophylla	2 2.8 km due N of Woodbine,	-28.654	114.7817786	MAN	27/06/1998
2028638	ł	Verticordia capillaris	4 NE of Geraldton	-28.744	114.6411111		4 1/11/1979
1406736		Verticordia chrysostachys var. pallida	3 Wicherina	-28.716		AUTO	3 19/10/1980
1406701		Verticordia chrysostachys var. pallida	3 E of Wicherina Reserve	-28.716		AUTO	3 21/11/1987
1406728 2029197		Verticordia chrysostachys var. pallida Verticordia chrysostachys var. pallida	3 E of Wicherina Reserve 3 Wicherina	-28.716 -28.716		AUTO AUTO	3 21/11/1987 3 19/10/1980
2029197		Verticordia chrysostachys var. pallida	3 E of Geraldton	-28.783	114.6430556		3 8/12/1979
2685914	1	Verticordia densiflora var. roseostella	3 Between Dongara and Northampton	-28.798	114.7808333		5 19/09/1932
2062879		Verticordia densiflora var. roseostella	3 Between Dongara and Northampton	-28.798	114.7808333		5 19/09/1932
		Verticordia densiflora var. roseostella	Ca 15 km N of Geraldton then 4.2 km E of North West Coastal Highway on White Peak Road and				
3379299	ł		3 200-300 m N of the road. AMG: 2 72 000 E 68 30 950 N (off map)	-28.628	114.6677778		5/12/1993
5287170	ł	Verticordia densiflora var. roseostella	3 Kojarena Reserve, on rail reserve near Telstra Tower	-28.725	114.8608333		18/10/1998
1404539 5916194		Verticordia densiflora var. roseostella Verticordia densiflora var. roseostella	3 Moresby Range 3 Chapman River Regional Wlidlife corridor, Geraldton,	-28.700 -28.729	114.6666667 114.6455556		4 16/09/1979 1 12/11/2001
6420699		Verticordia densifiora var. roseostetta Verticordia densifiora var. roseostetla	3 Moresby Conservation Park, Site 2	-28.729	114.6455556		2 25/09/2002
1404555		Verticordia densiflora var. roseostella	3 Wicherina	-28.716		AUTO	3 19/10/1980
2029480		Verticordia densiflora var. roseostella	3 E of Geraldton	-28.770	114.6163889		3 6/10/1979
6138233		Verticordia densiflora var. roseostella	3 E boundary of firebreak, access from E side of Fairfax Drive, Chapman Park	-28.733	114.6333333	MAN	3 7/10/2001
8416621		Verticordia muelleriana subsp. minor	2 Geraldton to Mullewa Rail Corridor, 10 km SW of Tenindewa	-28.722	115.0022222		1 18/09/2010
1401416		Verticordia muelleriana subsp. minor	2 Wicherina	-28.716		AUTO	3 16/09/1979
1401459		Verticordia muelleriana subsp. minor	2 Near Wicherina	-28.716		AUTO	3 20/11/1987
1401440	†	Verticordia muelleriana subsp. minor	2 Near Wicherina	-28.716		AUTO	3 20/11/1987
1401432 1401424	ł	Verticordia muelleriana subsp. minor Verticordia muelleriana subsp. minor	2 E of Wicherina Reserve 2 E of Wicherina Reserve	-28.716 -28.716		AUTO AUTO	3 21/11/1987 3 21/11/1987
2034336	1	Verticordia muelleriana subsp. minor	2 Wicherina 2 Wicherina	-28.716		AUTO	3 19/10/1980
1887912		Verticordia muelleriana subsp. minor	2 Wicherina South Road, 2 - 3 km S of Geraldton - Mullewa Road	-28.792	114.6166667		3 10/12/1988
1401408	ł	Verticordia muelleriana subsp. minor	2 Wicherina South Road	-28.716		AUTO	3 10/12/1988
		Verticordia penicillaris	Private property, top of breakaway 150 m SE of house 1.2 km (by road) along Carey Road off White				
5982219	6106		4 Peak Road, c. 18 km N of Geraldton,	-28.583	114.65		3 25/08/1997
1183567		Verticordia penicillaris	4 14 km N of Geraldton	-28.633	114.6333333		11/10/1981
	.		www.co.trom.co.grangton.to.words.Northometon.(20E miles from Dorth)	-28.583	114.6333333	MAN	3 21/09/1968
1135201	6106	Verticordia penicillaris	4 12.9 miles from Geraldton towards Northampton (325 miles from Perth).		11/ 600000	МЛИ	2 10/00/4005
1135201 1134655	6106 6106	Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton.	-28.583	114.6333333 114.675		3 20/09/1985 3 5/10/1974
1135201	6106 6106 6106	Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550).		114.6333333 114.675 114.6666667	MAN	
1135201 1134655 1135155	6106 6106 6106	Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton.	-28.583 -28.702	114.675	MAN	3 5/10/1974
1135201 1134655 1135155	6106 6106 6106	Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range	-28.583 -28.702	114.675	MAN AUTO	3 5/10/1974
1135201 1134655 1135155 2032279	6106 6106 6106 6106	Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range E of North West Coastal Highway, N of Geraldton, W of the Moresby Ranges, between Oakajee	-28.583 -28.702 -28.700	114.675 114.6666667	MAN AUTO	3 5/10/1974 4 16/09/1979
1135201 1134655 1135155 2032279 8959714 8959722	6106 6106 6106 6106 6106	Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range E of North West Coastal Highway, N of Geraldton, W of the Moresby Ranges, between Oakajee 4 River and Buller River Crown Reserve, 130 m E of North West Coastal Highway, 4.75 km E of Oakajee River mouth, 20.7 4 km N of Geraldton town centre	-28.583 -28.702 -28.700 -28.587	114.675 114.6666667 114.6319656 114.6316082	MAN AUTO GPS GPS	3 5/10/1974 4 16/09/1979 1 21/10/2009 1 24/10/2009
1135201 1134655 1135155 2032279 8959714	6106 6106 6106 6106 6106	Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range E of North West Coastal Highway, N of Geraldton, W of the Moresby Ranges, between Oakajee 4 River and Buller River Crown Reserve, 130 m E of North West Coastal Highway, 4.75 km E of Oakajee River mouth, 20.7 4 km N of Geraldton town centre 4 Moresby Conservation Park, growing along rocky creekline E of central cleared area	-28.583 -28.702 -28.700 -28.587	114.675 114.6666667 114.6319656	MAN AUTO GPS GPS	3 5/10/1974 4 16/09/1979 1 21/10/2009
1135201 1134655 1135155 2032279 8959714 8959722 8997640	6106 6106 6106 6106 6106 6106	Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range E of North West Coastal Highway, N of Geraldton, W of the Moresby Ranges, between Oakajee 4 River and Buller River Crown Reserve, 130 m E of North West Coastal Highway, 4.75 km E of Oakajee River mouth, 20.7 4 km N of Geraldton town centre 4 Moresby Conservation Park, growing along rocky creekline E of central cleared area Moresby Range, 33.9 km (21 road miles) N of Geraldton, Howatharra Hill Reserve. Lot 1, Victoria	-28.583 -28.702 -28.700 -28.587 -28.587 -28.623	114.675 114.6666667 114.6319656 114.6316082 114.67	MAN AUTO GPS GPS	3 5/10/1974 4 16/09/1979 1 21/10/2009 1 24/10/2009 1 23/11/2017
1135201 1134655 1135155 2032279 8959714 8959722 8997640 88240	6106 6106 6106 6106 6106 6106	Verticordia penicillaris	4 21 km N of Geraldton. 4 Moresby Range, 21 road miles N of Geraldton, Howatharra Hill Reserve. (Lot 1, Loc. 10550). 4 Moresby Range E of North West Coastal Highway, N of Geraldton, W of the Moresby Ranges, between Oakajee 4 River and Buller River Crown Reserve, 130 m E of North West Coastal Highway, 4.75 km E of Oakajee River mouth, 20.7 4 km N of Geraldton town centre 4 Moresby Conservation Park, growing along rocky creekline E of central cleared area Moresby Range, 33.9 km (21 road miles) N of Geraldton, Howatharra Hill Reserve. Lot 1, Victoria 4 Location 10550.	-28.583 -28.702 -28.700 -28.587 -28.587 -28.623 -28.699	114.675 114.6666667 114.6319656 114.6316082 114.67 114.6681011	MAN AUTO GPS GPS	3 5/10/1974 4 16/09/1979 1 21/10/2009 1 24/10/2009 1 23/11/2017 5/10/1974
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522325	11278 Vittadinia cervicularis var. occidenta	1 Champion Bay (Champion Bay = Geraldton approx. 500 km N of Perth)	-28.767	114.6	TOPO	3 /09/1899
522473	11278 Vittadinia cervicularis var. occidenta	1 Howatharra Hill Reserve 21 road mi. N of Geraldton Moresby Range	-28.700	114.6666667	AUTO	3 12/04/1975
8584958	11278 Vittadinia cervicularis var. occidenta	1 Ca 0.2 km W of Geraldton Walkaway Road, 2.1 km SE of Geraldton	-28.794	114.6283564 (GPS	1 26/09/2007
	Wurmbea tubulosa	Private Property - Location No. 541 off Kojarena South Road.4.5km south along Northern Gully				
		South Road from Geraldton-Mullewa Road, then 800m southeast from the Kojarena South Road				
84816	1404	T junction along Sandplains Road, then east of road to the site.	-28.743	114.9027778		14/07/2009
7515820	29964 Xanthoparmelia sargentii	1 Opposite Howatharra Nature Reserve NNE of Northampton on Moresby Range	-28.548	114.6661111	GPS	1 5/01/2004

	Chapman	Valley Ouar	ry Flora Repor
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Appendix 4: William & Son Flora Report

Kimberley Quarry Pty Ltd Survey of native flora species lot 20 Plan 6975

East Chapman CPS 10758/1

Site visit 26-06-2025.

The farm was first grazed around 1900 when it was part of Newmarrcarra Station. It was then split off the station and sold and has been grazed ever since. There was a lot of wood cutting in the early 1900s for Sandalwood (*Santalum spicatum*) for incense and Jam (Acacia acuminatum) for fence post. There was a lot of land clearing around 50 years ago around the quarry area to establish more improved pasture.

The quarry was started by Australian Blue Metal in the 1950s.

This information supplied by David Young Operations Manager Kimberly Quarries Geraldton.



Showing mature Jam tree (Acacia acuminatum) multi stemmed form has most likely been caused by stock grazing. Acacias are palatable to Sheep Cattle and Goats.

Kimberley Quarry Pty Ltd Survey of native flora species lot 20 Plan 6975

East Chapman CPS 10758/1

Site Visit 26-06-2025.

Native species located on site	Comments in relation to remnant vegetation.
Acacia acuminata	All mature approaching Senescans no
	regeneration not common on site
Acacia ramulosa	All mature approaching Senescans no
	regeneration nearly as common as Hakea
	recurva
Amyema preissii	Small amount on acacia acuminatum
Eucalyptus camaldulensis	Small number mature trees on moisture gaining
	sites. May have colonised.
Eucalyptus loxophleba	Small number mature trees in pasture
Gnephosis tenuissima	Very small number of small species difficult to
	locate.
Hakea recurva	Most common native species on site. Has
	fruited well in past years. See notes.
Polianthion wichurea	Shrub not flowering very small number
Quoya verbascina	Shrub not flowering very small number

Notes to above flora list.

The area surveyed is extremely Degraded. On the Keighery scale 1994 the area is classified **Completely degraded (6).** It is noted that the species *Acacia ramulosa* and *Hakea recurva* are the most numerous species on site. This is most likely because of the very pungent nature of the foliage. There is a large dense well established introduced annual weed species population. There is also a smaller range and population of perianal introduced weed species.

Kimberley Quarry Pty Ltd Survey of native Flora species lot 20 Plan 6975

East Chapman

Site Visit 26-06-2025.

Doubtful area

UTM and Site No	Material on site
0284927	15 mature Hakea recurva
6824369 site 1	
O284927	Euc. Loxophleba very few Hakea
6824369 site 2	
0284990	2 large old Euc Cameldulensis
6824298 site 3	

Kimberley Quarry Pty Ltd Survey of introduced or non-native species lot 20 Plan 6975

East Chapman CPS 10758/1 Site Visit 26-06-2025.

Potential Threatened and Priority species.

Species Name and rating	Approx. flowering	Comments
Acanthocarpus parviflorus P 3.	May Jun	Not observed does not occur in
		granitic areas.
Androcalva microphylla P.2	August on	Not observed, has distinctive
		foliage
Beyeria gardneri P. 3	July on	Not observed does not appear to
		have been recorded within 10 Km.
Caladenia bryceana T	July on	Not observed occurs further north.
Caladenia hoffmanii T	July on	Not observed has potential to
		occur in general area
Caladenia longicauda P 2	Spring	Not observed does not appear to
-		have been recorded within 15 Km.
Caladenia pluvialis P 2	Spring	Not observed does not appear to
·		have been recorded within 20 Km
Caladenia wanosa T	Aug on	Not observed does not appear to
		have been recorded within 15 Km
Drummondita ericoides T	Sept oct	Not observed.
Eucalyptus cuprea T	Aug Nov	No rough bark mallee species
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Except E. loxophleba observed.
		Does occur in granite.
Eucalyptus blaxellii P 4	Aug Nov	No smooth bark mallee species
,,		observed. Does occur nearby.
Eucalyptus ebbanoensis 4	Sept to Mar	No smooth bark glossy leaved
• •	·	mallee species observed. Does
		occur nearby.
Grevillea bracteosa subsp.	Aug Nov	Not observed occurs to North and
howatharra T		East.
Grevillea candicans P 3	Aug Oct	Not observed occurs deep sand
Grevillea granulosa P 3	July Oct	Not observed mainly further East.
Grevillea leptopoda P 3	Aug Sept	Not observed occurs well North
, ,		and South
Grevillea triloba P 3	Jun Oct	Not observed common in area has
		distinctive leaf form.
Leucopogon borealis P 2	Unknown	No Leucopogon observed most
. 5		population to North
Leucopogon psammophilus P 1	Unknown	No Leucopogon observed greatest
, 3 ,		population to South
Leucopogon Sp. Moresby Ranges P 3	Jun Jul	Not observed occurs to North
Thryptomene stenophylla P 2	Jun Aug	Not observed does not occur in
,,		granitic areas.

Note 1 The smaller less robust Genus such as *Caladenia, Pterostylis, Drakaea and Leschenaultia* would have been out competed by the dense vigorous nature of the introduced species. The livestock grazing regime of the last 80 plus years has reduced the native population to a remnant of very robust long-lived Genera.

Kimberley Quarry Pty Ltd Survey of introduced or non-native species lot 20 Plan 6975 East Chapman CPS 10758/1

Site Visit 26-06-2025.

Common name Perennial	Scientific name	Percentages of cover of individual species
Mulla mulla	Ptilotus polystachyus	Very small amount, insignificant
Bamboo	Arundo Sp.	Small amount most likely clumping species as appears to be confined.
Dongarra daisy	Reichardia tingatana	Small number possibly an annual.
Pussy tails	Pentaschistis thunbergia	Small Number.
Common name Annual	Scientific name	
Brome grass	Bromus alopecuros	Very small number.
Barley grass	Hordeum leporinum	Most dominant introduced species
Blue lupin	Lupinus cosentinii	Medium density
Cape weed	Arctotheca calendula	Medium density
Erodium	Erodium botrys	Medium density
Mallow	Malva parviflorum	Small number
Wild Turnip	Brassica tournefortii	Very small numbers
Wild Melon	Citrullus lanatus	Scattered areas of summer growing annuals

Notes to above. There do not appear to be any declared weeds. The dense weed cover appears to have prevented any natural regeneration of native species.

Kimberley Quarry Pty Ltd Survey of native flora species lot 20 Plan 6975

East Chapman CPS 10758/1

Site Visit 26-06-2025.

Conclusions after site visit.

The site is extremely degraded from the native plant diversity and structure point. Most material is very aged and reduced in diversity. There does not appear to be any threatened or priority species on site. The very great and diverse range of introduced species (weeds) population has outcompeted the complete range of native species. This process was most probably commenced 100 years previous. There does not appear to be evidence of Jarrah Dieback (*Phytophthora*). There would be a very small amount of Carnaby Cockatoo grazing on the small number of *Hakea recurva*. It is interesting to note that this avian species has adapted to grazing canola. There appears to be considerable areas within close proximity. There did not appear to be any nesting holes / sites. *Eucalyptus salmonophloia* is a suitable species for Carnaby Cockatoo nest sites. This species does not occur in granitic areas. Dust, water erosion and fire all seem to be well managed.



Showing healthy vigorous weed population in foreground with very degraded native population behind.

References

Western Weeds, a guide to the weeds of Western Australia.

B.M.J Hussey G.J. Keighery R.D. Cousins J. Dodd S.G. Lloyd.

Field Guide to Eucalypts Volume 2 Brooker and Kleinig.

Hakeas of Western Australia A field and Identification Guide J A Young

How to know Western Australian Wildflowers. W.E. Blackall and B.J. Grieve

Guide to Wildflowers of Western Australia. Simon Nevill & Nathan McQuoid.

Field Guide to Hi-Vallee Farm Jolanda Keebles, Don and Joy Williams and Mike Hislop.

Florabase - the Western Australian Flora.