

M70/138 WESCO ROAD, NOWERGUP

FLORA AND VEGETATION SURVEY AND BLACK COCKATOO HABITAT ASSESSMENT

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The logo for PGV Environmental is located at the bottom of the page. It features the letters 'PGV' in a large, bold, white sans-serif font. Below 'PGV', the word 'ENVIRONMENTAL' is written in a smaller, all-caps, white sans-serif font. The background of the logo area is a vibrant orange with a subtle pattern of fine, white, curved lines that create a sense of movement and depth.

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1 INTRODUCTION

1.1 Background

Mining Tenement M70/138 is located south of Wesco Road Nowergup, in the City of Wanneroo, approximately 35km north-north-west of the Perth Central Business District (Figure 1).

Limestone mining commenced in the tenement just prior to 2000. Currently approximately 54ha of the 99ha tenement has been quarried. The owners of the tenement, Cockburn Cement, plan to expand the existing quarry further south into the tenement.

The proposed expansion area contains native vegetation. Two flora and vegetation surveys have previously been undertaken parts of the proposed expansion area by Coffey Environments (2010) and GHD (2013). However, a large portion of the proposed expansion area has not yet been surveyed. PGV Environmental was commissioned by Cockburn Cement to undertake a flora and vegetation survey and Black Cockatoo habitat assessment of the unsurveyed portion of the tenement. The results of the three surveys have been consolidated into one report to assess the conservation significance of flora and vegetation communities with respect to any proposal to clear for future quarry operations.

The consolidated survey area is shown in Figure 2. The total area is around 45.0ha, of which about 39.7ha is native vegetation.

1.2 Scope of Works

1.2.1 Flora and Vegetation Survey

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

- Desktop search and review of the Department of Biodiversity, Conservation and Attractions (DBCA) Threatened and Priority flora and ecological community Databases;
- A search of the Naturemap website (DBCA, 2020);
- A search of the Commonwealth Government's Protected Matters Search Tool (DAWE, 2020) to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999*;
- Examination of historic and recent aerial photography and contour and soil maps to provisionally identify vegetation types and condition;
- Field survey using quadrats to record native and introduced species as well as a thorough site walkover of any areas of native vegetation;
- Recording of any significant plant species using a hand-held GPS;
- Description and mapping of vegetation types and vegetation condition; and
- Compilation of a flora list.

1.2.2 Black Cockatoo Habitat Assessment

The Black Cockatoo Habitat Assessment has been prepared by PGV Environmental to:

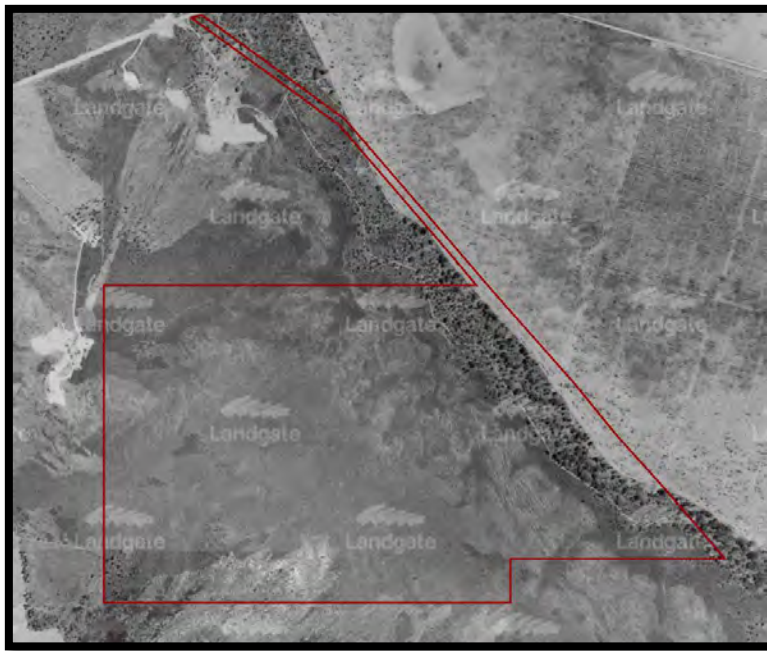
- Describe the Black Cockatoo habitat on the site; and
- Accurately map foraging habitat, potential breeding and potential roosting habitat.

2 EXISTING ENVIRONMENT

2.1 Land Use

The earliest available historic aerial photograph on-line from 1965 (Landgate, 2020) shows that the site contains native vegetation (Plate 2).

Plate 1: Aerial Photograph 1965 (Landgate, 2020)



The photograph from 1974 shows some disturbance to the site for mining exploration activities (Plate 2).

Plate 2: Aerial Photograph 1974 (Landgate, 2020)



Mining in the northern part of the site commenced between 1995 and 2000 (Plate 3).

Plate 3: Aerial Photograph 2000 (Landgate, 2020)



Mining has progressed to the current footprint (Figure 2). The balance of the site remains vegetated (Figure 2).

The site is currently zoned 'Rural' under the Metropolitan Region Scheme (National Map, 2020) and 'Rural Resource' under the City of Wanneroo Local Planning Scheme No. 2 (WAPC, 2001).

2.2 Topography

The site is gently undulating and slopes very gradually up from the western boundary at around 81m AHD to near the eastern boundary at 98m AHD (Figure 2).

2.3 Geology and Soils

2.3.1 Geology

The site is mapped as part of the Spearwood System which has the highest relief of the dune systems on the Swan Coastal Plain (Bolland, 1998). The Spearwood system consists of slightly calcareous Aeolian sand remnant from leaching of the underlying Pleistocene Tamala limestone (Davidson, 1995).

2.3.2 Soils

Two Spearwood soil units are mapped on the site and are described as follows:

- Karrakatta shallow soils Phase (211Sp__Kls) which are on low hills and ridges with bare limestone or shallow siliceous or calcareous sand over limestone. Typically, these soils have dense low shrub dominated by *Banksia sessilis*, *Melaleuca huegelii* and species of *Grevillea* (DPIRD, 2020). This soil is mapped over the majority of the site; and
- Karrakatta Sand Yellow Phase (211Sp__Ky) which re on low hilly to gently undulating terrain and consist of yellow sand over limestone at 1-2 m with *Banksia* spp. woodland with scattered

emergent *E. gomphocephala* and *E. marginata* and a dense shrub layer (DPRID, 2020). The soils are mapped on the northern part and the western and eastern boundaries of the site.

2.4 Hydrology

Groundwater is at approximately 22 to 28m AHD, which is 50m to 70m below the surface level, and generally flows to the west (DWER, 2020). There are no wetlands mapped on the site (National Map, 2020).

3 METHODOLOGY

3.1 Database Searches

Searches of the following databases were undertaken for a 10km radius around the central point of the site prior to the site survey:

- Department of Biodiversity, Conservation and Attractions (DBCA) Declared Rare and Priority Flora database and Threatened Ecological Communities database (Appendix 1);
- DBCA Naturemap Database (DBCA, 2020) (Appendix 2); and
- The Commonwealth Government's Protected Matters Search Tool to identify species potentially occurring within the area that are protected under the *Environment Protection and Biodiversity Conservation (EPBC) Act 1999* (DAWE, 2020). A radius of 5km was used for this database (Appendix 3).

3.2 Site Survey

A flora and vegetation survey of the unsurveyed portion of the site was conducted by Dr Paul van der Moezel of PGV Environmental on 12 October 2020.

The site was thoroughly walked to record all species in the survey area. Information on flora composition and vegetation structure was recorded in four 10m x 10m non-permanent quadrats in representative vegetation types.

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

3.3 Survey Conditions

The conditions that the survey was undertaken in are presented in Table 1 in order to assess the adequacy of the survey. In summary, there were no constraints to the survey.

Table 1: Statement of Botanical Survey Conditions

Issue	Constraints (Y/N)*	Comment
Competency/experience of the consultant conducting the survey	No	Dr Paul van der Moezel has extensive botanical survey experience in the Perth Metropolitan Region.
Proportion of the flora identified^	No	The timing of the survey in mid-September was optimal to identify most flora species on the site including all potential Threatened and Priority Flora. No follow-up survey required.
Sources of information (historic/recent or new data)	No	The flora in the Perth Metropolitan Region is well documented.
Proportion of the task achieved and further work that may need to be undertaken	No	No follow-up survey required as no Threatened Flora expected to occur in other seasons.

Issue	Constraints (Y/N)*	Comment
Timing/weather/season/cycle	No	The spring survey was optimal for most flora species. 2020 was a good year for ephemeral species, including orchids.
Disturbances (Fire)	No	The fire age of the vegetation was mostly greater than 5 years.
Intensity of survey (e.g. In retrospect was the intensity adequate)	No	The time spent on the small site and ease of access made for a full coverage.
Completeness (e.g. was relevant area fully surveyed)	No	
Resources (e.g. degree of expertise available for plant identification)	No	Experienced botanist undertook most plant identifications on site.
Remoteness and/or access problems	No	Easily accessible site in the Perth Metropolitan Region.
Availability of contextual (e.g. bioregional) information for the study area.	No	Bush Forever

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

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

4 RESULTS

4.1 Previous Surveys

Two previous surveys of the site have been undertaken by Coffey Environments (2010) and GHD (2013). The location of the surveys in relation to the current survey area is shown in Figure 3.

The Coffey Environments (2010) survey was mostly undertaken on a part of the M70/138 tenement between the eastern ridge and Hopkins Road. Only a small portion of the Coffey survey includes the current survey, and no quadrats were sampled within that small area. As such, the usefulness of the results of the Coffey survey is limited to the vegetation map prepared for the report.

The GHD (2013) survey was undertaken on the western portion of the survey area. GHD sampled four quadrats in the survey area and undertook data analysis to determine Floristic Community Types. GHD also prepared a species list for the area which has been used in this report to supplement the species recorded by PGV Environmental. The northwestern part of the GHD survey area has since been cleared for mining. The area cleared included one of the vegetation sample quadrats (Q1).

4.2 Flora Database Searches

A search of the DBCA Threatened Flora Databases: the WA Herbarium database (WAHerb), the Threatened (Declared Rare) and Priority Flora Species List (TFPL) (Appendix 1) and Naturemap Database (Appendix 2) indicates that a number of species that are listed as Endangered, Threatened or Priority have been located within a 10km radius of the site. The and the EPBC Act Protected Matters Search Tool (Appendix 3) indicates species that may have habitat within 5km radius of the site. The results from these database searches are shown in Table 2.

Table 3 lists the likelihood that any of these species could occur on the site based on the soil types and vegetation condition.

Table 2: Conservation Significant Flora Identified in Database Searches

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
<i>Caladenia huegelii</i>	King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid	Schedule 1	Endangered
<i>Calectasia cyanea</i>	Blue Tinsel Lily	Schedule 1	Critically Endangered
<i>Drakaea elastica</i>	Glossy-leafed Hammer Orchid	Schedule 1	Endangered
<i>Darwinia foetida</i>	Muchea Bell	Schedule 2	Critically Endangered
<i>Diuris purdiei</i>	Purdie's Donkey-orchid	Schedule 2	Endangered
<i>Drakaea micrantha</i>	Dwarf Hammer-orchid	Schedule 2	Vulnerable
<i>Marianthus paralius</i>		Schedule 2	Endangered
<i>Melaleuca</i> sp. Wanneroo (G.J. Keighery 16705)		Schedule 2	Endangered
<i>Andersonia gracilis</i>	Slender Andersonia	Schedule 3	Endangered

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
<i>Anigozanthos viridis</i> subsp. <i>terraspectans</i>	Dwarf Green Kangaroo Paw	Schedule 3	Vulnerable
<i>Diuris micrantha</i>	Dwarf Bee-orchid	Schedule 3	Vulnerable
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Schedule 3	Vulnerable
<i>Eucalyptus argutifolia</i>	Yanchep Mallee, Wabbling Hill Mallee	Schedule 3	Vulnerable
<i>Baeckea</i> sp. Limestone (N. Gibson & M.N. Lyons 1425)		Priority 1	
<i>Drosera patens</i>		Priority 1	
<i>Drosera x sidjamesii</i>		Priority 1	
<i>Grevillea</i> sp. Ocean Reef (D. Pike Joon 4)		Priority 1	
<i>Hydrocotyle striata</i>		Priority 1	
<i>Leucopogon maritimus</i>		Priority 1	
<i>Acacia benthamii</i>		Priority 2	
<i>Amanita wadulawitu</i>	Long-spored Lepidella	Priority 2	
<i>Calectasia elegans</i>	Elegant Tinsel Lily	Priority 2	
<i>Fabronia hampeana</i>		Priority 2	
<i>Lecania sylvestris</i>		Priority 2	
<i>Lecania turicensis</i> var. <i>turicensis</i>		Priority 2	
<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i>		Priority 2	
<i>Poranthera moorokatta</i>		Priority 2	
<i>Rinodina bischoffii</i>		Priority 2	
<i>Stenanthemum sublineare</i>		Priority 2	
<i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)		Priority 2	
<i>Thelymitra variegata</i>	Queen of Sheba	Priority 2	
<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		Priority 3	
<i>Amanita carneiphylla</i>	Miller's Pink-Gilled Lepidella	Priority 3	
<i>Austrostipa mundula</i>		Priority 3	
<i>Beyeria cinerea</i> subsp. <i>cinerea</i>		Priority 3	
<i>Conostylis bracteata</i>		Priority 3	
<i>Cyathochaeta teretifolia</i>		Priority 3	
<i>Dampiera triloba</i>		Priority 3	
<i>Hibbertia leptotheca</i>		Priority 3	
<i>Jacksonia gracillima</i>		Priority 3	
<i>Lasiopetalum membranaceum</i>		Priority 3	

Scientific Name	Common Name	Conservation Status (WA)	Status under EPBC Act
<i>Leucopogon</i> sp. Yanchep (M. Hislop 1986)		Priority 3	
<i>Pimelea calcicola</i>		Priority 3	
<i>Pithocarpa corymbulosa</i>	Corymbose Pithocarpa	Priority 3	
<i>Placynthium nigrum</i>	Blackthread Lichen	Priority 3	
<i>Platysace ramosissima</i>		Priority 3	
<i>Sarcozona bicarinata</i>	Ridged Noon-flower	Priority 3	
<i>Sphaerolobium calcicola</i>		Priority 3	
<i>Stylidium maritimum</i>		Priority 3	
<i>Stylidium paludicola</i>		Priority 3	
<i>Styphelia filifolia</i>		Priority 3	
<i>Anigozanthos humilis</i> subsp. <i>chrysanthus</i>	Golden Cats Paw	Priority 4	
<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>		Priority 4	
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>		Priority 4	
<i>Hibbertia helianthemoides</i>		Priority 4	
<i>Jacksonia sericea</i>	Waldjumi	Priority 4	
<i>Lepidium pseudotasmanicum</i>		Priority 4	
<i>Schoenus griffinianus</i>		Priority 4	
<i>Stylidium longitubum</i>	Jumping Jacks	Priority 4	
<i>Tripterococcus</i> sp. <i>Brachylobus</i> (A.S. George 14234)		Priority 4	

Conservation Codes are shown in Appendix 4

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

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Caladenia huegelii</i>	King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid	The Grand Spider-orchid prefers sand or clay loam. This species generally does not survive in disturbed areas.	Unlikely – not usually associated with shallow sand over limestone
<i>Calectasia cyanea</i>	Blue Tinsel Lily	The Blue Tinsel Lily prefers white, grey or yellow sand or gravel.	No – this species is endemic to the Albany region
<i>Drakaea elastica</i>	Glossy-leafed Hammer Orchid	The Glossy-leafed Hammer Orchid prefers low-lying situations adjoining winter-wet swamps. This species does not survive in disturbed areas.	High Unlikely – no winter wet areas

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Darwinia foetida</i>	Muchea Bell	The Muchea Bell is found in grey-white sand on swampy, seasonally wet sites.	High Unlikely – no winter wet areas
<i>Diuris purdiei</i>	Purdie's Donkey-orchid	Purdie's Donkey Orchid occurs in grey-black sand in moist winter-wet swamps.	High Unlikely – no winter wet areas
<i>Drakaea micrantha</i>	Dwarf Hammer-orchid	Dwarf Hammer-orchid occurs in grey sands over dark, grey to blackish, sandy clay-loam substrates in winter wet depressions or swamps.	High Unlikely – no winter wet areas
<i>Marianthus paralius</i>		<i>Marianthus paralius</i> occurs in white sand and brown loam amongst heath on coastal limestone cliffs (DEC, 2009).	High Unlikely – not coastal cliffs
<i>Melaleuca</i> sp. Wanneroo (G.J. Keighery 16705)		<i>Melaleuca</i> sp. Wanneroo occurs in very shallow soils over limestone 'caprock' on ridges.	Previously recorded on the site
<i>Andersonia gracilis</i>	Slender Andersonia	Slender Andersonia occurs in white/grey sand, sandy clay, gravelly loam in winter-wet areas, near swamps.	High Unlikely – no winter wet areas
<i>Anigozanthos viridis</i> subsp. <i>terraspectans</i>	Dwarf Green Kangaroo Paw	The Dwarf Green Kangaroo Paw occurs on grey sand, clay loam in winter-wet depressions.	High Unlikely – no winter wet areas
<i>Diuris micrantha</i>	Dwarf Bee-orchid	The Dwarf Bee-orchid is usually found on cleared firebreaks or open sandy patches that have been disturbed with in Jarrah Banksia woodland or thickets of Spearwood (<i>Kunzea ericifolia/ glabrescens</i>) (Williams <i>et al.</i> , 2001).	Unlikely – not habitat typical to this species
<i>Eleocharis keigheryi</i>	Keighery's Eleocharis	Keighery's Eleocharis occurs in clay, sandy loam and is emergent in freshwater: creeks, claypans.	High Unlikely – no winter wet areas
<i>Eucalyptus argutifolia</i>	Yanchep Mallee, Wabbling Hill Mallee	The Yanchep Mallee occurs in shallow soils over limestone on slopes or gullies of limestone ridges, outcrops.	Possible
<i>Baeckea</i> sp. Limestone (N. Gibson & M.N. Lyons 1425)		<i>Baeckea</i> sp. Limestone is recorded from limestone outcrop/ridge in yellow sand derived from Tamala Limestone - Spearwood Dune System in bushland burnt 5+ years (Western Australian Herbarium, 2012).	Possible
<i>Drosera patens</i>		<i>Drosera patens</i> occurs in sandy soils on the margins of winter-wet depressions, swamps and lakes.	High Unlikely – no winter wet areas

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Drosera x sidjamesii</i>		<i>Drosera x sidjamesii</i> grows in peaty sand along lake margins, close to winter high-water line.	High Unlikely – no lake areas
<i>Grevillea</i> sp. Ocean Reef (D. Pike Joon 4)		<i>Grevillea</i> sp. Ocean Reef (D. Pike Joon 4) occurs in dry brown/grey sand, yellow brown sand on sandy dune, gully in coastal scrub.	High Unlikely – no dune habitat
<i>Hydrocotyle striata</i>		<i>Hydrocotyle striata</i> occurs in clay near springs.	High Unlikely – no spring habitat
<i>Leucopogon maritimus</i>		<i>Leucopogon maritimus</i> occurs in Quindalup deep, calcareous sands, on the mid to upper slopes of dunes or in shallow sand over limestone, but avoiding the thicker vegetation of the swale (Hislop, 2011).	Possible
<i>Acacia benthamii</i>		<i>Acacia benthamii</i> grows on sand, typically on limestone breakaways	Possible
<i>Amanita wadulawitu</i>	Long-spored Lepidella	Long-spored Lepidella occurs in sandy soil with <i>Corymbia calophylla</i> , <i>Eucalyptus marginata</i> , <i>E. todtiana</i> , <i>E. camaldulensis</i> , <i>Jacksonia furcellata</i> , <i>Banksia attenuata</i> and <i>B. menziesii</i> . (McGurk et al., 2016).	High Unlikely – Not suitable habitat
<i>Calectasia elegans</i>	Elegant Tinsel Lily	Elegant Tinsel Lily occurs in deep grey quartz soils on gentle slopes, above damplands.	High Unlikely – Not suitable habitat
<i>Fabronia hampeana</i>		<i>Fabronia hampeana</i> occurs on sheltered wet trunk of <i>Macrozamia</i> in shrub layer (Western Australian Herbarium, 2005).	No – <i>Macrozamia</i> not recorded on the site
<i>Lecania sylvestris</i>		<i>Lecania sylvestris</i> typically occurs on limestone (Cranfield et al., 2020).	Possible
<i>Lecania turicensis</i> var. <i>turicensis</i>		<i>Lecania turicensis</i> var. <i>turicensis</i> occurs on coastal rocks, limestone (Western Australian Herbarium, 1988).	Unlikely – not coastal habitat
<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i>		<i>Leucopogon squarrosus</i> subsp. <i>trigynus</i> occurs in Bassendean sands (Hislop, 2011).	High Unlikely – Not Bassendean sand habitat
<i>Poranthera moorokatta</i>		<i>Poranthera moorokatta</i> grows in white silica sand and has been recorded in Banksia woodland and in a shallow dampland (Barrett, 2012).	High Unlikely – Not suitable habitat
<i>Rinodina bischoffii</i>		<i>Rinodina bischoffii</i> occurs on limestone (Cranfield et al., 2020).	Possible

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Stenanthemum sublineare</i>		<i>Stenanthemum sublineare</i> grows in littered white sand on coastal plain (Rye, 2001).	High Unlikely – Not suitable habitat
<i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)		<i>Tetraria</i> sp. Chandala is recorded from a mound spring in peaty sand (Western Australian Herbarium, 2005).	High Unlikely – No mound spring habitat
<i>Thelymitra variegata</i>	Queen of Sheba	The Queen of Sheba orchid grows on sandy clay, sand and laterite.	High Unlikely – Not suitable habitat
<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		<i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i> occurs in grey sand, lateritic gravel.	High Unlikely – Not lateritic habitat
<i>Amanita carneiphylla</i>	Miller's Pink-Gilled Lepidella	Miller's Pink-Gilled Lepidella is a deeply rooting species and grows in sandy soil.	High Unlikely – No deep sand habitat
<i>Austrostipa mundula</i>		<i>Austrostipa mundula</i> occurs on plains in grey sand (Western Australian Herbarium, 2001).	High Unlikely – No sandplain habitat
<i>Beyeria cinerea</i> subsp. <i>cinerea</i>		<i>Beyeria cinerea</i> subsp. <i>cinerea</i> grows in sand over limestone on road verges, gullies	Possible
<i>Conostylis bracteata</i>		<i>Conostylis bracteata</i> occurs in sand, limestone on consolidated sand dunes.	Possible
<i>Cyathochaeta teretifolia</i>		<i>Cyathochaeta teretifolia</i> occurs in grey sand, sandy clay on swamps, creek edges.	High Unlikely – No wetland habitat
<i>Dampiera triloba</i>		<i>Dampiera triloba</i> grows in loamy sand (Australian National Herbarium, 2009) in lower lying areas.	High Unlikely – No low-lying habitat
<i>Hibbertia leptotheca</i>		<i>Hibbertia leptotheca</i> grows near-coastal limestone ridges, outcrops and cliffs in coastal heaths and thickets usually dominated by species of <i>Melaleuca</i> and <i>Acacia</i> (Thiele, 2019).	Possible
<i>Jacksonia gracillima</i>		<i>Jacksonia gracillima</i> occurs in grey and brown well-drained sand.	Unlikely – not sandy habitat
<i>Lasiopetalum membranaceum</i>		<i>Lasiopetalum membranaceum</i> grows in sand over limestone.	Possible
<i>Leucopogon</i> sp. Yanchep (M. Hislop 1986)		<i>Leucopogon</i> sp. Yanchep occurs in light grey-yellow sand, brown loam, limestone, laterite, granite on coastal plain, breakaways, valley slopes, low hills.	Previously recorded on the site
<i>Pimelea calcicola</i>		<i>Pimelea calcicola</i> occurs in sand on coastal limestone ridges.	Possible
<i>Pithocarpa corymbulosa</i>	Corymbose Pithocarpa	Corymbose Pithocarpa occurs in gravelly or sandy loam amongst granite outcrops.	High Unlikely – Not suitable habitat

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Placynthium nigrum</i>	Blackthread Lichen	Blackthread Lichen is recorded from karst limestone on lagoon shore among salt marsh (Allan Herbarium, 1997).	High Unlikely – Not typical habitat
<i>Platysace ramosissima</i>		<i>Platysace ramosissima</i> prefers sandy soils.	High Unlikely – No deep sand habitat
<i>Sarcozona bicarinata</i>	Ridged Noon-flower	Ridged Noon-flower is found in white sand.	Previously recorded on the site but identification questionable
<i>Sphaerolobium calcicola</i>		<i>Sphaerolobium calcicola</i> grows in white-grey-brown sand, sandy clay over limestone, black peaty sandy clay on tall dunes, winter-wet flats, interdunal swamps, low-lying areas.	High Unlikely – No wetland habitat
<i>Stylidium maritimum</i>		<i>Stylidium maritimum</i> occurs in sand over limestone on dune slopes and flats in coastal heath and shrubland, open Banksia woodland.	Possible
<i>Stylidium paludicola</i>		<i>Stylidium paludicola</i> prefers peaty sand over clay in winter wet habitats in Marri and Melaleuca woodland, Melaleuca shrubland.	High Unlikely – No winter wet habitat
<i>Styphelia filifolia</i>		<i>Styphelia filifolia</i> occurs in sandy soils of the coastal plain (with one known occurrence from the northern Darling Scarp), usually in Banksia or Jarrah woodland and in low-lying situations (Hislop and Lelièvre, 2017).	High Unlikely – No low-lying habitat
<i>Anigozanthos humilis</i> subsp. <i>chrysanthus</i>	Golden Cats Paw	Golden Cats Paw grows in grey or yellow sand.	High Unlikely – No deep sand habitat
<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>		<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i> occurs in white, grey or yellow sand on consolidated dunes in coastal areas.	High Unlikely – No deep sand habitat
<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>		<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i> occurs in grey sand, limestone on hillslopes, consolidated dunes in coastal areas.	High Unlikely – No deep sand habitat
<i>Hibbertia helianthemoides</i>		<i>Hibbertia helianthemoides</i> grows in clayey sand over sandstone or loam over quartzite on hills and scree slopes.	High Unlikely – Not clay habitat
<i>Jacksonia sericea</i>	Waldjumi	Waldjumi grows in calcareous and sandy soils.	Possible

Scientific Name	Common Name	Habitat*	Likelihood to occur on the site
<i>Lepidium pseudotasmanicum</i>		<i>Lepidium pseudotasmanicum</i> occurs in loam, sand associated with granite.	High Unlikely – Not suitable habitat
<i>Schoenus griffinianus</i>		<i>Schoenus griffinianus</i> grows in white sand in low heath (Wilson, 1997).	High Unlikely – No deep sand habitat
<i>Stylidium longitubum</i>	Jumping Jacks	Jumping Jacks prefer sandy clay, clay in seasonal wetlands.	High Unlikely – No wetland habitat
<i>Tripterococcus</i> sp. <i>Brachylobus</i> (A.S. George 14234)		<i>Tripterococcus</i> sp. <i>Brachylobus</i> occurs in grey, black or peaty sand winter-wet flats	High Unlikely – No wetland habitat

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

4.3 TEC and PEC Desktop Search

A search of DBCA's Threatened (TEC) and Priority Ecological Communities (PEC) database was conducted within a radius of 5km around the site (21-1020EC) (Appendix 5). Four TECs and nine Priority 3 PECs at State level were identified in the database search. Three of the State TECs are also listed as TECs under the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act). Six of the State listed PECs are listed under the EPBC Act as TECs. The communities identified in the database searches are outlined in Table 4.

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

Ecological Community	Description	Conservation Status WA	Status under the EPBC Act
CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered
SCP19b	Woodlands over sedgelands in Holocene dune swales of the southern Swan Coastal Plain (original description; Gibson <i>et al.</i> (1994).	Critically Endangered	Endangered (Listed as FCT19)
SCP20a	<i>Banksia attenuata</i> woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson <i>et al.</i> (1994))	Endangered	Endangered
SCP26a	<i>Melaleuca huegelii</i> - <i>Melaleuca systema</i> shrublands on limestone ridges (floristic community type 26a as originally described in Gibson <i>et al.</i> (1994))	Endangered	
SCP21c	Low lying <i>Banksia attenuata</i> woodlands or shrublands	Priority 3	Endangered as part of Banksia WL SCP
SCP22	<i>Banksia ilicifolia</i> woodlands	Priority 3	Endangered as part of Banksia WL SCP
SCP23b	Swan Coastal Plain <i>Banksia attenuata</i> - <i>Banksia menziesii</i> woodlands	Priority 3	Endangered as part of Banksia WL SCP

Ecological Community	Description	Conservation Status WA	Status under the EPBC Act
SCP24	Northern Spearwood shrublands and woodlands	Priority 3	
SCP25	Southern <i>Eucalyptus gomphocephala</i> - <i>Agonis flexuosa</i> woodlands	Priority 3	Critically Endangered as part of Tuart Woodland TEC
SCP29a	Coastal shrublands on shallow sands	Priority 3	
SCP29b	Acacia shrublands on taller dunes	Priority 3	
Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered
Tuart woodlands	Tuart (<i>Eucalyptus gomphocephala</i>) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered

4.4 Flora

A combined total of 119 plant species have been recorded during the PGV Environmental and GHD surveys (Appendix 6). PGV Environmental recorded 97 species in their survey area. GHD recorded an additional 22 species. The GHD survey also included another mining lease in their report and the report did not separate the species list according to the two different survey areas. Therefore, the additional species recorded by GHD have been taken from the quadrat data that are located in the uncleared part of their survey on M70/138.

The combined species list consists of 87 native and 32 introduced species. The percentage of introduced species (27%) is higher than expected considering the site does not appear to have been cleared in the past. The number of native species is low for a survey area of 39.7ha mostly in Excellent condition but is to be expected given the low diversity of vegetation types.

The plant Families with the highest representation of species are the Fabaceae (Pea and Wattle family – 13 species, including 12 native and 1 introduced), Poaceae (Grass family – 12 species, including 1 native and 11 introduced), Asteraceae (Daisy family – 10 species, including 5 native and 5 introduced), Proteaceae (Banksia family - 9 species, all native) and Haemodoraceae (Kangaroo Paw family – 8 species, all native).

GHD (2010) recorded one plant of *Melaleuca* sp. Wanneroo in the northern end of their survey area. At the time of the survey *Melaleuca* sp. Wanneroo was a Priority 1 species. The species has since been changed to a Threatened species under the State *Wildlife Conservation Act 1950* in January 2018 and under the Commonwealth EPBC Act in July 2019. However, the plant appears to have been cleared as part of mining operations in 2015. No additional plants of *Melaleuca* sp. Wanneroo were recorded in the PGV Environmental survey.

Three Priority species have been recorded on the site as follows and shown on Figure 3:

- *Leucopogon* sp. Yanchep **P3** - four individual plants recorded near the mid-southern boundary (Plate 4)
- *Stylidium maritimum* **P3** – 9 plants recorded in two populations in the north-east corner (Plate 5)
- *Pimelea calcicola* **P3** – one plant recorded near the north-east corner (Plate 6)

Plate 4: *Leucopogon* sp. Yanchep P3 on the site (photo GHD 2013)



Plate 5: *Stylidium maritimum* P3 on the site



Plate 6: *Pimelea calcicola* P3 on the site



GHD (2010) provisionally recorded the Priority 3 plant *Sarcozona bicarinata* on the site. The identification of the species was not able to be verified by GHD due to the absence of flowering material. A photograph of the specimen, a young seedling, was included in the GHD report. By the sharp edges to the leaves PGV Environmental considers the plant is highly likely to be the non-native *Carpobrotus edulis* rather than the native *Sarcozona bicarinata* as *S. bicarinata* has rounded leaves compared to the sharp edges of *C. edulis*.

One Declared Pest weed, Bridal Creeper (*Asparagus asparagoides*), was recorded by GHD (2010) in the northern section of their survey area. The area in which the Bridal Creeper was recorded has since been cleared and quarried. No Bridal Creeper was recorded on the balance of the site in the PGV Environmental survey.

Quadrat Data from PGV Environmental are provided in Appendix 7.

Species richness in the four PGV Environmental quadrats ranged from 28-39 species (average 34.0). The percentage of introduced species in all quadrats was moderate to low with 4-11 species being 14-28% of species in each quadrat. GHD (2010) recorded a lower number of species in their four quadrats (average 22.8) which is highly likely due to the late spring (25 November) survey period when many spring ephemeral species would have finished flowering and not been able to be identified. The late survey period of GHD is not considered by PGV Environmental to have affected the results for identifying conservation

4.5 Vegetation

4.5.1 Vegetation Complex

Vegetation Complexes are a broad level of vegetation description which is based on the underlying geomorphology and rainfall (Hedde *et al.*, 1980). The areas of remnant native vegetation on the site is part of the Cottesloe Complex– Central and South vegetation complex which is described as:

Mosaic of woodland of *Eucalyptus gomphocephala* (Tuart) and open forest of *E. gomphocephala* – *E. marginata* (Jarrah) – *Corymbia calophylla* (Marri), closed heath on the limestone outcrops' (Hedde *et al.*, 1980).

The general description of the vegetation complex matches the vegetation types recorded on the site.

4.5.2 Vegetation Type

For small scale sites, such as the survey area, vegetation mapping can be further refined by using vegetation types which are described by the composition and structure of the dominant species rather than based on geomorphology.



GHD (2013) mapped one vegetation type over the whole of their survey area – *Melaleuca systena* Open Heath. PGV Environmental has examined the quadrat information and aerial photographs and considers that the area surveyed by GHD contains three distinct, but similar vegetation types. The consolidated vegetation type map shown in Figure 3 includes the revised mapping for the GHD survey area.



Coffey Environments (2010) mapped the small part of their survey area that overlaps the current survey area as a Tall Open Shrubland of *Xanthorrhoea preissii* and *Melaleuca huegelii* over *Banksia*

sessilis/Hakea trifurcata and *Melaleuca systema*. This description is similar to the description of the vegetation type determined by PGV Environmental for the area. The PGV Environmental terminology for vegetation types has been used in this report for consistency of mapping.

The consolidated vegetation map includes four native vegetation types as shown in Figure 3 and described in Table 5.

Table 5: Vegetation Types on the Site

Vegetation Type	Description	Photograph
<p>BsHt <i>Banksia sessilis/Hakea trifurcata/Xanthorrhoea preissii</i> Tall Open Scrub over <i>Hibbertia hypericoides/ Calothamnus quadrifidus/ Acacia pulchella</i> Open Low Heath</p>	<p>This is the main vegetation type occurring on the site, apart from the western, lower end. <i>Banksia sessilis</i> (Parrot Bush) is variable in density (2-70%) and up to 1.9m high. Other common taller shrubs over 1m include <i>Hakea trifurcata</i> and <i>Xanthorrhoea preissii</i>. The Low Heath vegetation contains common species <i>Hibbertia hypericoides</i>, <i>Calothamnus quadrifidus</i>, <i>Acacia pulchella</i>, <i>Melaleuca systema</i>, <i>Xanthorrhoea brunonis</i>, <i>Jacksonia calcicola</i>, <i>Austrostipa flavescens</i>, <i>Tricoryne elatior</i>, <i>Hemiandra pungens</i> and <i>Conostylis aculeata</i>.</p> <p>The soils were orange-brown sands with some surface limestone.</p> <p>PGV Environmental quadrats Q1, 2 and 3 are representative of this vegetation type.</p>	
<p>MsMh <i>Melaleuca systema/ Melaleuca huegelii</i> Open Heath</p>	<p>One small area of this vegetation type occurred in the north-east corner of the site at the top of a small limestone breakaway. <i>Melaleuca systema</i> was the main tall shrub to 1.5m with <i>M. huegelii</i> also fairly common. Other common species in this unit were many that reflect the massive limestone outcropping soil type and included <i>Scaevola thesioides</i>, <i>Trymalium ledifolium</i>, <i>Acacia pulchella</i>, <i>Opercularia vaginata</i>, <i>Grevillea preissii</i>, <i>Daucus glochidiatus</i> and <i>Desmocladius flexuosus</i>.</p> <p>The soils were orange-brown sand with abundant surface limestone.</p> <p>PGV Environmental quadrat Q4 is representative of this vegetation type.</p>	

Vegetation Type	Description	Photograph
<p>Ms <i>Melaleuca systema</i> Open Heath</p>	<p>This vegetation type commonly occurred on the western part of the site where the depth of sand over limestone was slightly greater than in the central and eastern parts. <i>Melaleuca systema</i>, <i>Calothamnus quadrifidus</i>, <i>Hibbertia hypericoides</i> were the most common shrubs to 1m with <i>Xanthorrhoea preissii</i>, <i>Mesomelaena pseudostygia</i>, <i>Daucus glochidiatus</i>, <i>Banksia dallanneyi</i> and <i>Lomandra hermaphrodita</i> also common.</p> <p>The soils were light brown sand over shallow limestone.</p> <p>GHD quadrats Q2 and 3 are representative of this vegetation type.</p>	
<p>MhCq <i>Melaleuca huegelii</i>/ <i>Calothamnus quadrifidus</i> Tall Open Scrub</p>	<p>This vegetation type occurred on a small limestone rise in the western part of the site. <i>Melaleuca huegelii</i> was dense 30-70% and up to 2.1m high. Other common shrubs included <i>Calothamnus quadrifidus</i>, <i>Banksia sessilis</i>, <i>Hibbertia hypericoides</i>, <i>Xanthorrhoea preissii</i>, <i>Grevillea preissii</i>, <i>Lomandra hermaphrodita</i>, <i>Conostylis aculeata</i>, <i>Hardenbergia comptoniana</i> and <i>Desmocladius flexuosus</i>.</p> <p>The soils were light brown sand with abundant surface limestone.</p> <p>GHD quadrat Q4 is representative of this vegetation type.</p>	

4.5.3 Floristic Community Types

Floristic Community Types (FCT) are based on the whole floristic composition of the vegetation rather than being determined by soil type and geomorphology (Vegetation Complex) or the nature of the dominant species (Vegetation Types).

GHD (2013) undertook computer analysis of their quadrats to assess likely FCTs on the site. The analysis found only a weak association of their quadrats with FCT 24 and 26a. PGV Environmental considers the weak association is highly likely due to the timing of the GHD survey in late November. The number of species recorded in the GHD quadrats was very low compared to the quadrats originally assessed for FCTs by Gibson *et al.* (1994).

PGV Environmental assessed the potential FCTs of the four quadrats using the spreadsheet method which compares the species in the quadrats to the species found in each FCT (Table 12 in Gibson *et al.* 1994).

Using the method above, the BsHt vegetation type was found to be most similar to FCT24 'Northern Spearwood Shrublands and Woodlands'.

The MsMh vegetation type also had a high similarity with both FCT 24 and FCT 26a '*Melaleuca huegelii* – *M. systena* shrublands of limestone ridges'. Given the location of the MsMh vegetation type at the top of a small limestone ridges the FCT26a result is considered more likely than FCT24.

PGV Environmental considers the GHD vegetation types are highly likely to be representative of FCT 24.

4.5.4 Vegetation Condition

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

Table 6: Vegetation Condition Rating Scale

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

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

The condition of the vegetation is shown in Figure 4. Most of the native vegetation on the site was assessed by PGV Environmental and GHD as being in Excellent condition. The western end of the site was rated as Good due to the higher abundance of weeds and some small, cleared areas and tracks.

4.6 Conservation Significance of Flora and Vegetation

4.6.1 Flora

Three Priority plant species recorded on the site being:

- *Leucopogon* sp. Yanchep **P3**
- *Stylidium maritimum* **P3**; and
- *Pimelea calcicola* **P3**.

Priority 3 species are those that are known from several localities that are not under imminent threat or from few but widespread localities with either large population size or significant remaining areas of apparently suitable habitat, much of which is not under imminent threat (Appendix 7).

Leucopogon sp. Yanchep is an erect shrub 0.15-1m high that occurs on a variety of soil types on the Swan Coastal Plain north of Perth from Wanneroo to the Shire of Dandaragan. The DBCA database records include 15 locations of *Leucopogon* sp. Yanchep within 10km of the site including in Neerabup and Yanchep National Parks.

Stylidium maritimum is a perennial herb up to 0.7m high in the Trigger Plant family that occurs from south of Mandurah to Jurien Bay on a variety of soil types, typically coastal heath and shrublands. Eleven locations of *Stylidium maritimum* have been recorded within 10km of the site (DBCA database search results, Appendix 5).

Pimelea calcicola is a 0.2-1m high that occurs on sand and coastal limestone ridges on the Swan Coastal Plain Yalgorup National Park to the Shire of Gingin. The DBCA database records include 8 locations of *Pimelea calcicola* within 10km of the site including in Yanchep National Park.

4.6.2 Vegetation

4.6.2.1 Vegetation Complex

The vegetation on the site is part of the Cottesloe Complex - Central and South (Hedde *et al.*, 1980). Approximately 32% of the pre-European vegetation extent of this complex remains, of which 14% is currently managed by DBCA (DBCA, 2018).

The percentage retention is above EPA's target for minimum 30% retention of vegetation complexes State-wide and above the 10% minimum criteria for vegetation complexes in the Perth and Peel Region Constrained Areas.

4.6.2.2 Threatened and Priority Ecological Communities

The main vegetation types on the site, BsHt *Banksia sessilis/Hakea trifurcata/Xanthorrhoea preissii* Tall Open Scrub, was found to be most similar to FCT24 'Northern Spearwood Shrublands and Woodlands'. FCT24 is a Priority 3 Ecological Community at State level but not listed under the EPBC Act. FCT 24 extends from Woodman Point in the south to the Shire of Gingin in the north.

The MsMh vegetation type occurring on a small area of outcropping limestone ridge in the north-east corner of the survey area was considered most likely to be FCT 26a '*Melaleuca huegelii* – *M. systema* shrublands of limestone ridges'. FCT26a is a listed Threatened Ecological Community at State level but not listed under the EPBC Act.

The location of the PEC and TEC are shown in Figure 5.

5 BLACK COCKATOO HABITAT ASSESSMENT

5.1 General

The site is within the mapped distribution of Carnaby's Black Cockatoo but north of the mapped distribution of both Baudin's Black Cockatoo and Forest Red-tailed Black Cockatoo. Therefore, the Black Cockatoo assessment focusses on Carnaby's Black Cockatoo habitat only.

5.2 Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*)

Carnaby's Black Cockatoo is found in the south-west of Australia from Kalbarri through to Ravensthorpe. It has a preference for feeding on the seeds of *Banksia*, *Hakea*, *Eucalyptus*, *Grevillea*, *Pinus* and *Allocasuarina* spp. It is nomadic, often moving toward the coast after breeding. It breeds in tree hollows that are 2.5 – 12m above the ground and have an entrance of 23-30cm with a depth of 1-2.5m. Nesting mostly occurs in smooth-barked trees (e.g. Salmon Gum, Wandoo, Red Morrell). Eggs are laid from July to October, with incubation lasting 29 days (DoeE, 2016).

5.3 Assessment

PGV Environmental undertook the Black Cockatoo habitat assessment on 12 October 2020 during the flora and vegetation survey. The Black Cockatoo Habitat Assessment was undertaken in accordance with the *EPBC Act referral guidelines for three threatened Black Cockatoo species: Carnaby's cockatoo (endangered) Calyptorhynchus latirostris Baudin's cockatoo (vulnerable) Calyptorhynchus baudinii Forest red-tailed Black Cockatoo (vulnerable) Calyptorhynchus banksii naso* (SEWPaC, 2012) (Black Cockatoo Referral Guidelines).

A previous assessment of the western part of the site was undertaken by GHD (2013) using the same EPBC Act Referral Guidelines.

5.4 Habitat

The survey area does not contain any tall Eucalypts such as Tuart, Jarrah or Marri that could be used by Carnaby's Black Cockatoo for roosting or breeding.

A known roost site for Carnaby's Black Cockatoo is mapped approximately 2km south-east of the site near Barbagallo Raceway (National Map, 2020).

The site contains six species that are known foraging resource for Carnaby's Black Cockatoo including *Banksia sessilis*, *Hakea prostrata* and *Hakea trifurcata* (High value), *Xanthorrhoea preissii* (Medium value) and *Banksia dallanneyi* (Low value) (Valentine and Stock, 2008; Groom, 2011). All vegetation types contain at least one of these species with *Banksia sessilis* (Parrot Bush) and *Xanthorrhoea preissii* the most abundant.

PGV Environmental recorded a small amount of foraging evidence on *Banksia sessilis* (Plate 7).

GHD (2013) did not record any evidence of foraging from their survey area but identified the vegetation as all providing potential foraging habitat.

Plate 7: Foraging on *Banksia sessilis*



6 SUMMARY AND CONCLUSIONS

6.1 Summary

The Flora and Vegetation survey of a 39.7ha portion of M70/138 resulted in the following findings:

- A combined total of 119 plant species have been recorded in the survey area. This total consists of 87 native species and 32 (27%) introduced species;
- Three Priority flora species were recorded on the site:
 - *Leucopogon* sp. Yanchep **P3** - four individual plants near the mid-southern boundary
 - *Stylidium maritimum* **P3** – 9 plants in two populations in the north-east corner
 - *Pimelea calcicola* **P3** – one plant in the north-east corner
- Four vegetation types were described and mapped on the site with over 90% of the vegetation comprising either *Banksia sessilis*/*Hakea trifurcata*/*Xanthorrhoea preissii* Tall Open Scrub or *Melaleuca systema* Open Heath vegetation. Two small areas of outcropping limestone contained vegetation with *Melaleuca huegelii* and *M. systema* as dominant tall shrubs;
- Most of the vegetation was rated in Excellent condition. The vegetation at the western end of the site was in Good condition due to the higher density of weed species;
- The vegetation is part of the Cottesloe – Central and South Vegetation complex which is well retained in the Perth Metropolitan Region;
- The dominant vegetation types (BsHt and Ms) on the site occurring on shallow sand soils with some outcropping limestone and the small area of MhCq vegetation were assessed as being FCT24 ‘Northern Spearwood Shrublands and Woodlands’ which is a Priority 3 ecological community at State level;
- The vegetation on the low ridge with abundant outcropping limestone in the north-east corner of the site was assessed as most likely being FCT 26a ‘*Melaleuca huegelii* – *M. systema* shrublands of limestone ridges’ which is a Threatened Ecological Community at State level;
- None of the vegetation types is a listed TEC under the Commonwealth EPBC Act; and
- The site does not contain any trees suitable for roosting or breeding by Black Cockatoos. All of the vegetation has foraging value for Carnaby’s Black Cockatoo with the eastern area of BsHt vegetation type having higher value due to the higher density of *Banksia sessilis* and other Proteaceous shrubs.

6.2 Conclusions

The vegetation on M70/138 south of the existing quarry all has some conservation status either as a Priority Ecological Community or a small area of Threatened Ecological. The site also contains some Priority 3 flora species and provides foraging habitat for Carnaby’s Black Cockatoos. This situation is not unusual for limestone tenements in the City of Wanneroo area where the vegetation types on the best limestone resources are either a Priority or Threatened Ecological Community, and where the presence of Threatened and Priority flora species is not uncommon.

PGV Environmental considers the vegetation in the northeastern part of the survey area has the highest environmental value as it contains FCT 26a which is a TEC at State level, contains two Priority

3 plant species and is part of a limestone ridge with similar environmental characteristics that extends in a south-east direction just outside the survey area.

The remaining vegetation in the survey area is typical of vegetation occurring on shallow sand over limestone soils that are well reserved in the City of Wanneroo including Neerabup and Yanchep National Parks and several Bush Forever sites. Clearing vegetation in the areas mapped as BsHt and Ms should not adversely impact on the conservation status of any ecological community or plant species.

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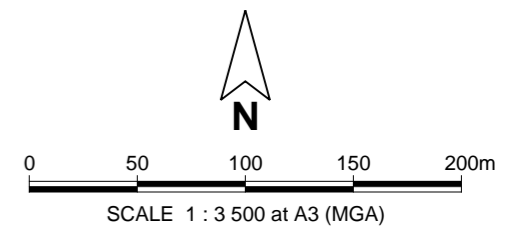
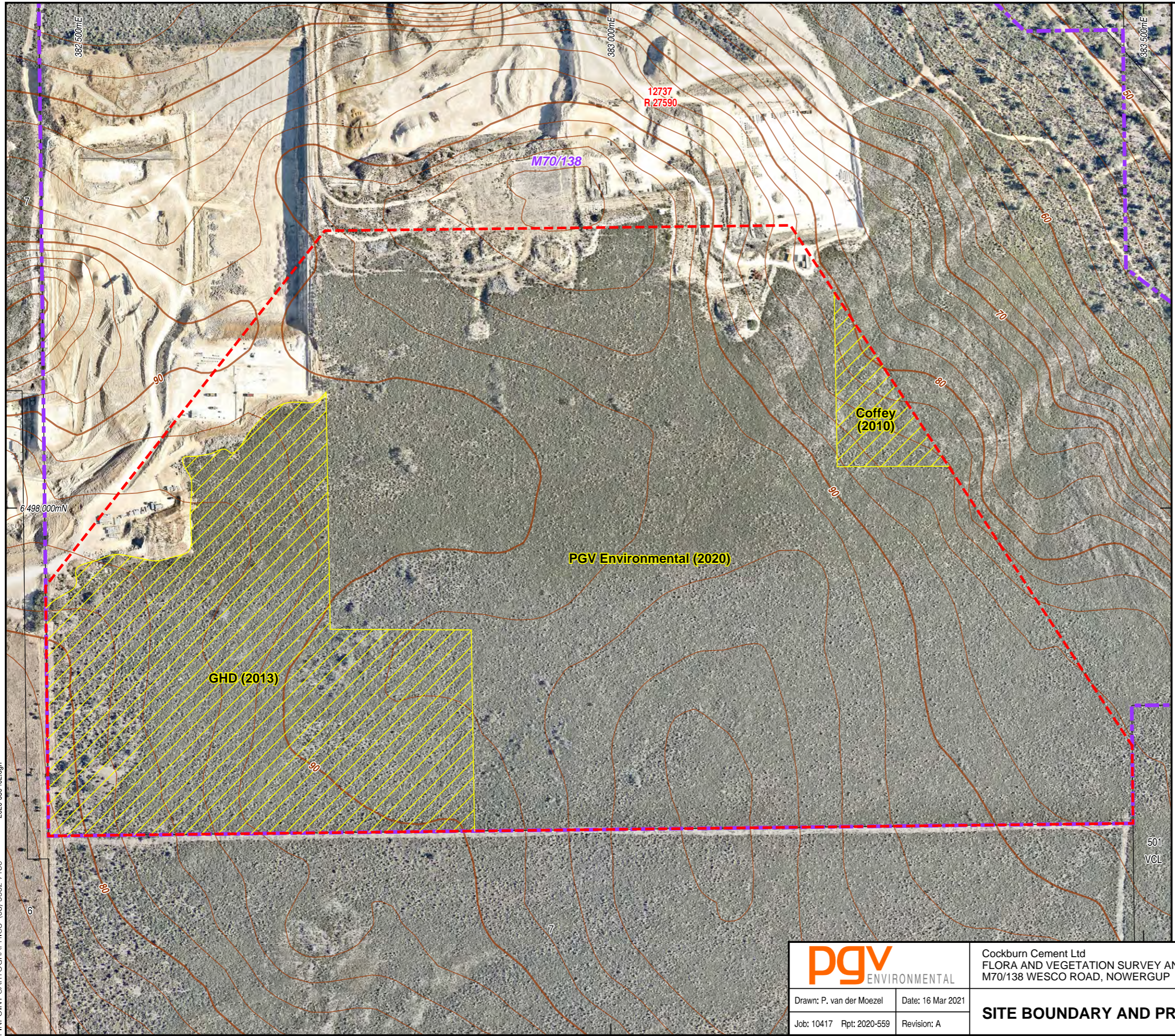
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FIGURES



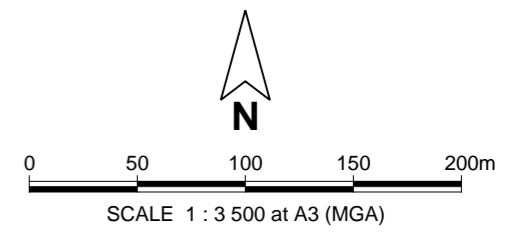
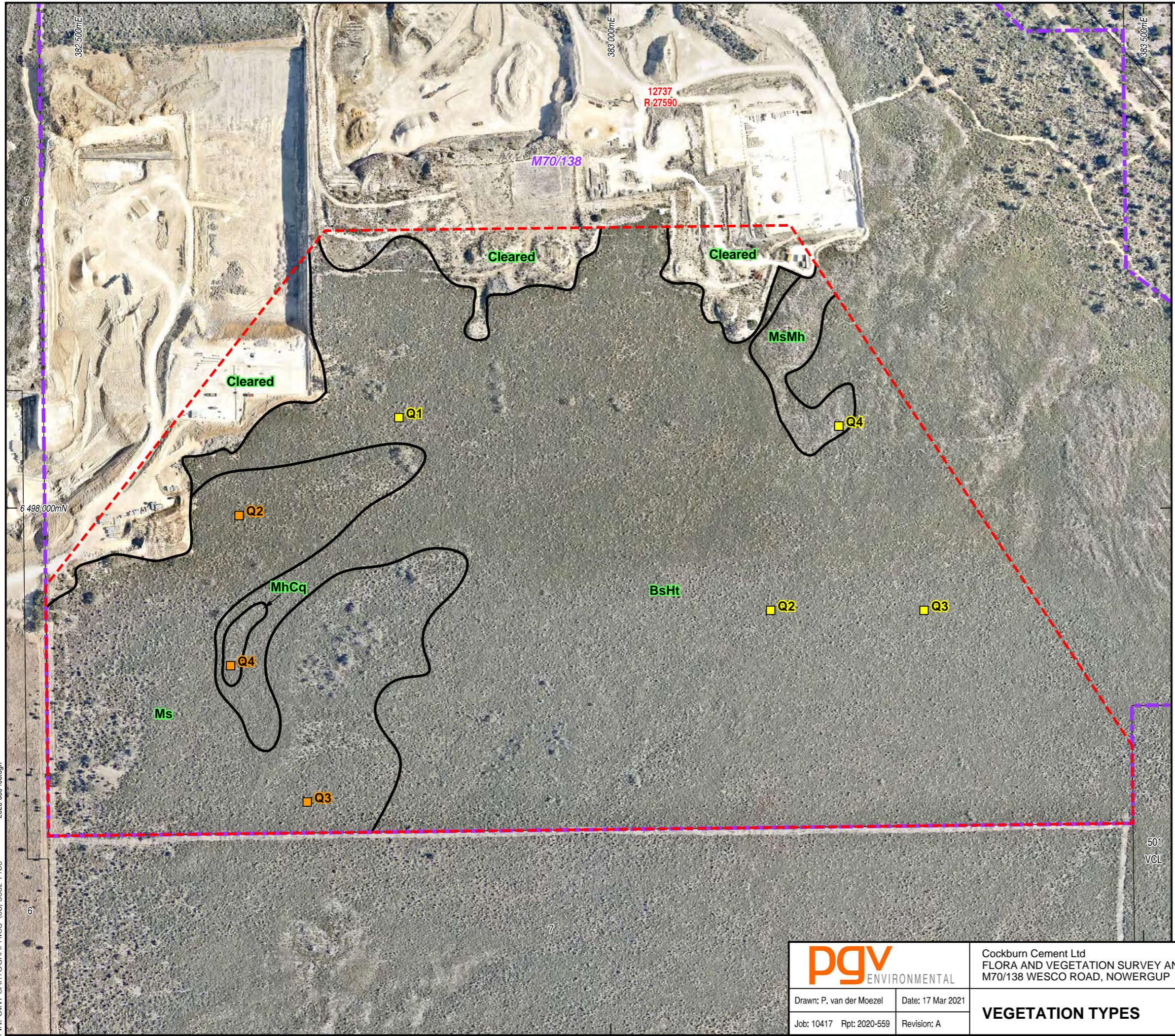
- Legend**
- - - Tenement Boundary
 - - - Site Boundary
 - Previous Survey Areas
 - Cadastral Boundary
 - Topographic Contour

CADASTRAL SOURCE: Landgate, March 2021.
 TOPOGRAPHIC CONTOURS SOURCE: Dept. of Agriculture, 2000.
 AERIAL PHOTOGRAPHY SOURCE: NearMap, flown January 2021.

		Cockburn Cement Ltd FLORA AND VEGETATION SURVEY AND BLACK COCKATOO HABITAT ASSESSMENT M70/138 WESCO ROAD, NOWERGUP	
		SITE BOUNDARY AND PREVIOUS SURVEY AREAS	
Drawn: P. van der Moezel Job: 10417 Rpt: 2020-559	Date: 16 Mar 2021 Revision: A		

Figure 2

PINPOINT CARTOGRAPHICS (08) 9562 7136 2020-559-102.dgn



- Legend**
- - - Tenement Boundary
 - - - Site Boundary
 - Cadastral Boundary
 - Quadrat Location - PGV Environmental (2020)
 - Quadrat Location - GHD (2013)
 - Vegetation Type Boundary
 - Ms Vegetation Type

- Vegetation Types**
- BsHt**
Banksia sessilis/Hakea trifurcata/Xanthorrhoea preissii Tall Open Scrub over *Hibbertia hypericoides/Calothamnus quadrifidus/Acacia pulchella* Open Low Heath
- MsMh**
Melaleuca systema/Melaleuca huegelii Open Heath
- Ms**
Melaleuca systema Open Heath
- MhCq**
Melaleuca huegelii/Calothamnus quadrifidus Tall Open Scrub

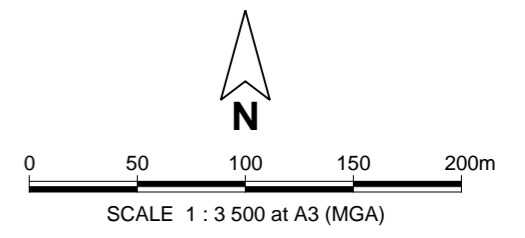
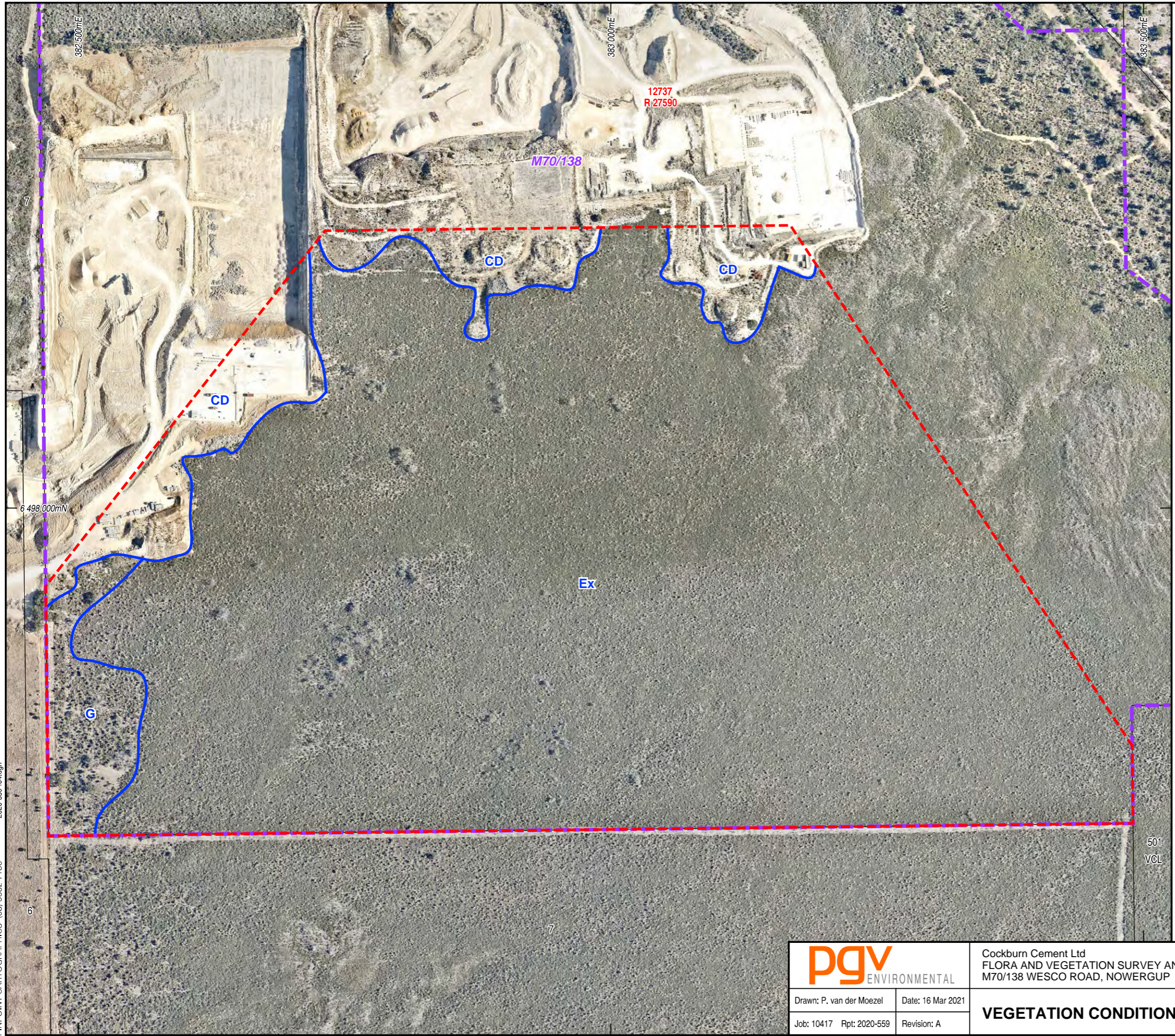
CADASTRAL SOURCE: Landgate, March 2021.
 AERIAL PHOTOGRAPHY SOURCE: NearMap, flown January 2021.

		Cockburn Cement Ltd FLORA AND VEGETATION SURVEY AND BLACK COCKATOO HABITAT ASSESSMENT M70/138 WESCO ROAD, NOWERGUP	
Drawn: P. van der Moezel	Date: 17 Mar 2021	VEGETATION TYPES	
Job: 10417 Rpt: 2020-559	Revision: A		

Figure 3

PINPOINT CARTOGRAPHICS (08) 9562 7136

2020-559-103.dgn



- Legend**
- - - Tenement Boundary
 - - - Site Boundary
 - Cadastral Boundary
 - Vegetation Condition Boundary
 - VG** Vegetation Condition

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

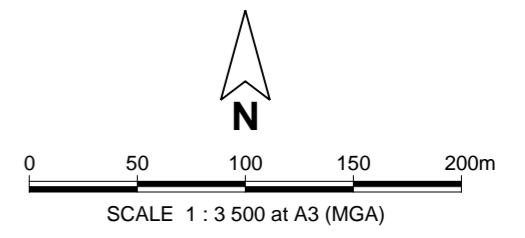
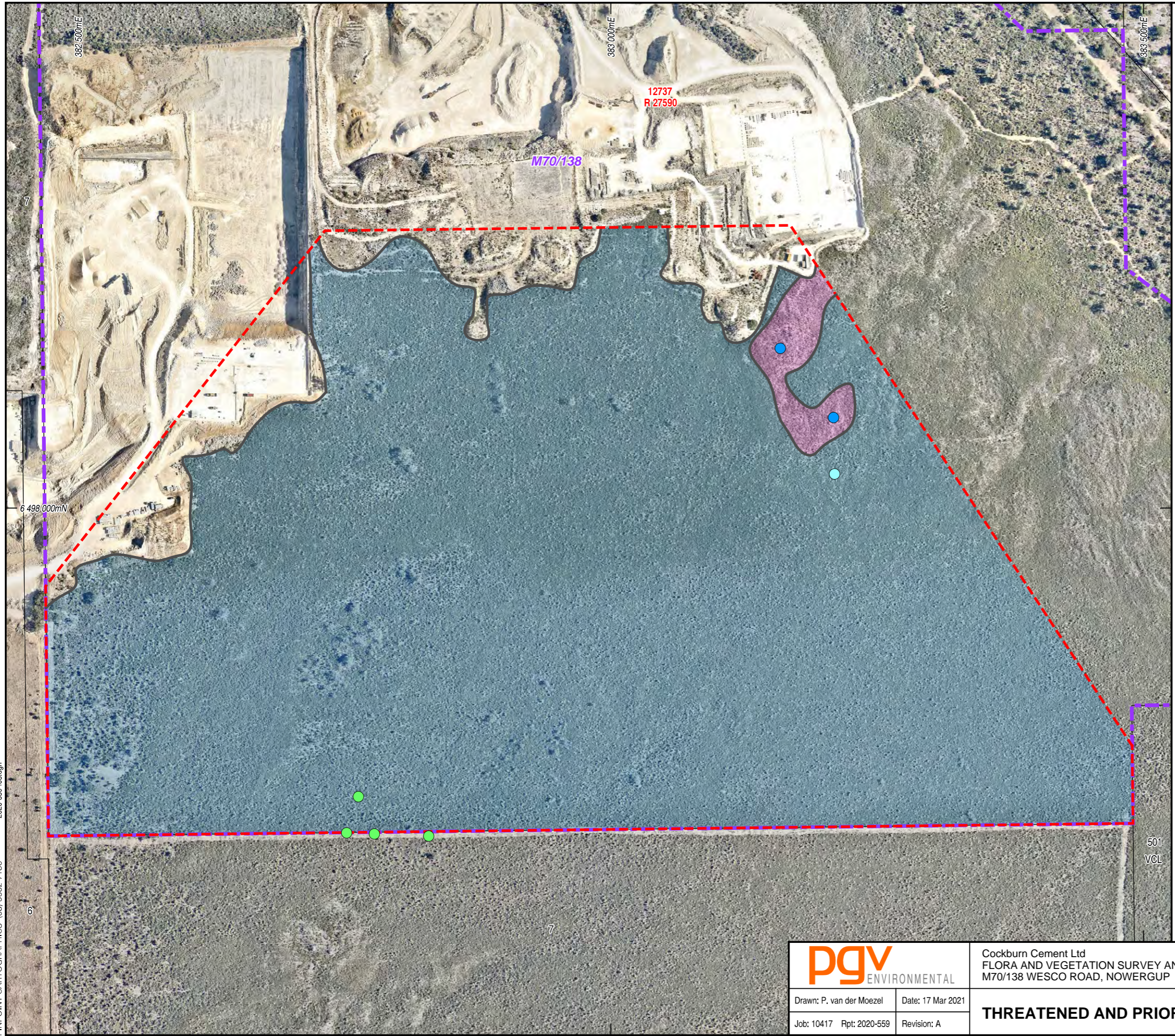
- P - Pristine**
Pristine or nearly so, no obvious signs of disturbance.
- Ex - Excellent**
Vegetation structure intact, disturbance affecting individual species and weeds are non aggressive species.
- VG - Very Good**
Vegetation structure altered, obvious signs of disturbance. For example, disturbance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

CADASTRAL SOURCE: Landgate, March 2021.
AERIAL PHOTOGRAPHY SOURCE: NearMap, flown January 2021.

	Cockburn Cement Ltd FLORA AND VEGETATION SURVEY AND BLACK COCKATOO HABITAT ASSESSMENT M70/138 WESCO ROAD, NOWERGUP		Figure 4
	Drawn: P. van der Moezel Date: 16 Mar 2021	VEGETATION CONDITION	
Job: 10417 Rpt: 2020-559	Revision: A		

PINPOINT CARTOGRAPHICS (08) 9562 7136

2020-559-104.dgn



- Legend**
- - - Tenement Boundary
 - - - Site Boundary
 - Cadastral Boundary
- Threatened Ecological Communities**
- FCT26a
- Priority Ecological Communities**
- FCT24 (P3)
 - *Leucopogon* sp. Yanchep (P3)
 - *Stylidium maritimum* (P3)
 - *Pimelea calcicola* (P3)

CADASTRAL SOURCE: Landgate, March 2021.
 AERIAL PHOTOGRAPHY SOURCE: NearMap, flown January 2021.

		Cockburn Cement Ltd FLORA AND VEGETATION SURVEY AND BLACK COCKATOO HABITAT ASSESSMENT M70/138 WESCO ROAD, NOWERGUP	
		THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES	
Drawn: P. van der Moezel Job: 10417 Rpt: 2020-559	Date: 17 Mar 2021 Revision: A		

Figure 5

PINPOINT CARTOGRAPHICS (08) 9562 7136 2020-559-105.dgn

APPENDIX 1
DBCA Flora Database Searches

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumb	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	MatC	JuvCo	Seedl	LiveT	Coun	Area	InFlo	PopC	HabC	HabNotes	SoilCo	Landfo	RockT	Gravel	SoilTy	SoilCol	Draina	Aspect	AssSpecies	
6307	93194	16245	Cyathochaeta teretifolia	3		10			SWAN COASTAL	LGA	VER		13/11/2007 0:00	ACT_I	1		1				N			Open forest over tall open scrub over sedge land. Meeboldina sp. Ground wet all year. 90% litter coverage.		FLAT			LOAM	BROW	PERMI		Melaleuca preissiana, Astartea scoparia, Lepidosperma effusum	
6321	93209	16245	Cyathochaeta teretifolia	3		24			SWAN COASTAL	CC	FOR		2/12/2002 0:00		0		0				N												Melaleuca preissiana, Astartea fascicularis, Hypocalymma angustifolium, Banksia littoralis	
6511	96623	34773	Darwinia foetida	T	EN	4			SWAN COASTAL	PRI			9/03/2007 0:00	ESTM	25		25				N		Palus plain multiple use wetland.					SAND	GRY_B	LCK			Corymbia calophylla, Melaleuca rhapsiophylla, Hypocalymma angustifolium	
8202	90764	13091	Eucalyptus argutifolia	T	VU	2			SWAN COASTAL	CC	FOR		13/12/2013 0:00	ACT_I	29	1	0	0	PLAN	471	N	HEAL	EXCE			DRY	OU_SL	LIMES	GRVL_	SAND	BROW	WLL_	SE	Occasional Xanthorrhoea preissii, Acacia pulchella, Conostylis sp., Leucopogon parviflorus, Grevillea preissii, Gompholobium tomentosum, Thomasia triphylla, Opercularia vaginata, Desmocladus sp., Leucopogon sp., Kennedia prostrata, Cassytha sp., Styl
8204	90767	13091	Eucalyptus argutifolia	T	VU	5			SWAN COASTAL	CC	FOR		5/04/2012 0:00	ACT_I	47		0		CLU	132	N	HEAL	EXCE	Habitat intact; no obvious disturbance.	DRY	FLAT	LIMES		SAND	BROW	WLL_	DRND	Xanthorrhoea preissii, Dryandra sessilis, Nuytsia floribunda, Melaleuca systema, H. lissocarpa, Diplolaena angustifolia, Acacia lasiocarpa, Grevillea preissii subsp. preissii, Hibbertia hypericoides, Bossiaea eriocarpa, Conostylis candicans, Hakea trifurca	
8206	101587	13091	Eucalyptus argutifolia	T	VU	7	A		SWAN COASTAL	CC	FOR		6/12/2013 0:00	ACT_	2	0	0	0	CLU	11	Y	HEAL	EXCE	QUARRY Despite being surrounded by a limestone mine this elevated and isolated remnant of vegetation on the top of the ridge is in very good to excellent condition.	DRY	OUTC	LIMES	GRVL_	SAND	BROW			Occasional E. argutifolia over closed heath of Melaleuca huegelii, Melaleuca systema, Banksia sessilis var. cygnorum, Acacia lasiocarpa, Hemiantra pungens, Acacia alata var. tetrantha with Lomandra maritima and Cassytha sp.	

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumb	SubPopCo	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	MatC	JuvCo	Seed	LiveT	Coun	Area	InFlo	PopC	HabC	HabNotes	SoilCo	Landfo	RockT	Gravel	SoilTy	SoilCol	Draina	Aspect	AssSpecies	
8207	101588	13091	Eucalyptus argutifolia	T	VU	7	B		SWAN COASTAL	CC	FOR	MIN	6/12/2013 0:00	ACT_CLMP	41	3	0	0	CLU MPS	446	Y	HEALTHY		Heath of Banksia sessilis var. cygnorum, Acacia lasiocarpa, Melaleuca huegelii, Melaleuca systema, Xanthorrhoea preissii, Acacia ?stenoptera, Hemiandra pungens, Trymalium ledifolium var. ledifolium with occasional Hakea prostrata, Cassytha ?racemosa, Tem	MOIST	SLOPE	LIMES TN		SAND	BROWN		ESE		
8208	90769	13091	Eucalyptus argutifolia	T	VU	8			SWAN COASTAL	CC	FOR		19/12/2013 0:00	ACT_CLMP	53	2	0	0	CLU MPS	31	Y	HEALTHY	EXCELLENT		VTrymalium ledifolium var. ledifolium, Xanthorrhoea preissii and occasional Spyridium globulosum, Grevillea preissii, Astroloma microcalyx (coln)	DRY	RIDGE	LIMES TN	GRVL_10	SAND	BROWN	WLL_DRND	SE	
8210	90756	13091	Eucalyptus argutifolia	T	VU	10			SWAN COASTAL	WAT	WAT		5/04/2012 0:00	ACT_CLMP	21		0		CLU MPS	290	N	MODERATE	VERYGOOD	Disturbance by rabbits has impacted the condition of the habitat.	DRY	SLOPE	LIMES TN		SAND	BROWN	WLL_DRND	E	Eucalyptus argutifolia, E. petrensis, E. foecunda, Melaleuca huegelii, Banksia sessilis, Xanthorrhoea preissii, Acacia lasiocarpa, Grevillea preissii subsp. preissii, Hibbertia hypericoides, Conostylis candicans, Desmodcladus asper.	
8213	90759	13091	Eucalyptus argutifolia	T	VU	13			SWAN COASTAL	LGA	REC		18/09/2013 0:00	ACT_IND	8		0		PLAN TS	38	N	HEALTHY	GOOD	HABITAT CONDITION: Good-degraded	MOIST	SL_MI_GE	LIMES TN		SAND	GREY	WLL_DRND			
8214	101581	13091	Eucalyptus argutifolia	T	VU	14	A		SWAN COASTAL	NON	UCL		13/12/2013 0:00	ACT_IND	32	0	0	0	PLAN TS	339	N	MODERATE	EXCELLENT		Hakea trifurcata, Xanthorrhoea preissii, Calothamnus quadrifidus, Hibbertia racemosa, Leucopogon parviflorus, Lepidosperma calcicola	MOIST	SL_UP_ST	LIMES TN	GRVL_10	SAND	BROWN		NE	
8215	101582	13091	Eucalyptus argutifolia	T	VU	14	B		SWAN COASTAL	NON	UCL		13/12/2013 0:00	ACT_IND	6		0		PLAN TS	10	N	HEALTHY	EXCELLENT		Leucopogon parviflorus, Lepidosperma calcicola	MOIST	RIDGE	LIMES TN		SAND	BROWN			

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumbr	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	MatC	JuvCo	Seedl	LiveT	Coun	Area	InFlo	PopC	HabC	HabNotes	SoilCo	Landfo	RockT	Gravel	SoilTy	SoilCol	Draina	Aspect	AssSpecies
8216	90760	13091	Eucalyptus argutifolia	T	VU	15			SWAN COASTAL	LGA	REC		5/11/2013 0:00	ACT_I	ND	20	0		PLAN	TS	143	N	HEALTHY	GOOD	Shrub Malle of Eucalyptus argutifolia over Shrubland Melaleuca huegelii, Melaleuca systema, Acacia rostellifera, Spyridium globulosum, Hakea trifurcata, over Hardenbergia comptoniana, Opercularia vaginata, Leucopogon parviflorus, Dianella revoluta, Comes	MOIST	SL_UP	LIMES		SAND	WHITE		
8218	101584	13091	Eucalyptus argutifolia	T	VU	17			SWAN COASTAL	PRI			3/08/2006 0:00	ACT_I	ND	1	0				N		MODERATE			MOIST	RIDGE	LIMES		SAND	BROWN		Eucalyptus sp., Desmodcladus sp., Melaleuca systema
9288	94987	20162	Fabronia hampeana	2		2			SWAN COASTAL	PRI			14/09/1994 0:00			0	0				N			Banksia, Macrozamia, Hibbertia, Xanthorrhoea, Dyandra, grasses, weeds.									Macrozamia riedlei
9290	104266	20162	Fabronia hampeana	2		4	A		SWAN COASTAL	PRI			12/01/2009 0:00			0	0				N			Dom sp: Xanthorrhoea preissii, Mesomelaena pseudostygia, Banksia sessilis, Spyridium globulosum					SAND				Macrozamia riedlei, Banksia attenuata, Hibbertia hypericoides, Hakea trifurcata
9291	104267	20162	Fabronia hampeana	2		4	B		SWAN COASTAL	PRI			12/01/2009 0:00			0	0				N			Dom sp: Macrozamia sp. & Banksia sp. Woodland.					SAND	YELLOW			Hakea trifurcata, Xanthorrhoea preissii, Hakea trifurcata
9292	104268	20162	Fabronia hampeana	2		4	C		SWAN COASTAL	PRI			12/01/2009 0:00			0	0				N			Banksia low open woodland. Dom sp: Acacia cyclops, Hibbertia hypericoides, Desmodcladus flexuosus			LIMES		SAND	YELLOW			Eucalyptus decipiens, Macrozamia riedlei, Acacia rostellifera, Hypocalymma angustifolium
9293	104269	20162	Fabronia hampeana	2		4	D		SWAN COASTAL	PRI			12/01/2009 0:00			0	0				N			Dom sp: Desmodcladus flexuosus, Xanthorrhoea preissii, Hibbertia hypericoides & Banksia nivea.									Acacia rostellifera, Acacia saligna, Mesomelaena pseudostygia, Macrozamia riedlei
11544	87398	5133	Hibbertia helianthemoides	4		3			SWAN COASTAL	CC	FOR		2/12/2002 0:00			0	0				N			Low woodland. Lechenaultia floribunda, Hibbertia subvaginata, Beaufortia elegans, Patersonia occidentalis.									Banksia menziesii, Banksia attenuata, Eucalyptus tottiana, Melaleuca seriata
11582	100789	49637	Hibbertia leptotheca	3		4	A		SWAN COASTAL	LGA	REC		21/09/1990 0:00			0	0				Y					SL_CLI	LIMES		SAND	GREY			Melaleuca cardiophylla
11583	100790	49637	Hibbertia leptotheca	3		4	B		SWAN COASTAL	LGA	REC		21/09/1990 0:00			0	0				N					SL_CLI	LIMES		SAND	GREY			Melaleuca cardiophylla
11588	100798	49637	Hibbertia leptotheca	3		9	A		SWAN COASTAL	PRI			14/10/2004 0:00	ESTM	T	50	50				Y					DRY	OUTC	LIMES		SAND	GREY		Acacia truncata, Grevillea preissii, Loxocarya flexuosa, Melaleuca systema

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumbr	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	MatC	JuvCo	Seedl	LiveT	Coun	Area	InFlo	PopC	HabC	HabNotes	SoilCo	Landfo	RockT	Gravel	SoilTy	SoilCol	Draina	Aspect	AssSpecies	
11589	100799	49637	Hibbertia leptotheca	3		9	B		SWAN COASTAL	PRI			14/10/2005 0:00	UNK NOW N	100		100			Y					DRY	OUTCROP	LIMESTN			WHITE		Melaleuca cardiophylla, Melaleuca huegelii, Diplolpeltis huegelii, Grevillea preissii		
11970	86874	4027	Jacksonia sericea	4		1			SWAN COASTAL	LGA	PAR	REC	15/11/1979 0:00		0		0			N												Dryandra sessilis, Eucalyptus gomphocephala, Jacksonia furcellata, Eucalyptus marginata		
11972	98915	4027	Jacksonia sericea	4		4	A		SWAN COASTAL	PRI			27/12/1989 0:00		0		0			N					DRY	RIDGE	LIMESTN	SAND	YELLOW		Dryandra sessilis, Eucalyptus gomphocephala, Jacksonia furcellata, Eucalyptus marginata			
11973	98916	4027	Jacksonia sericea	4		4	B		SWAN COASTAL	NON	UCL		27/12/1989 0:00		0		0			N					DRY	RIDGE	LIMESTN	SAND	YELLOW		Dryandra sessilis, Eucalyptus gomphocephala, Jacksonia furcellata, Eucalyptus marginata			
11974	98917	4027	Jacksonia sericea	4		4	C		SWAN COASTAL	PRI			27/12/1989 0:00		0		0			N					DRY	RIDGE	LIMESTN	SAND	YELLOW		Dryandra sessilis, Eucalyptus gomphocephala, Jacksonia furcellata, Eucalyptus marginata			
11975	98919	4027	Jacksonia sericea	4		5	A		SWAN COASTAL	RAI	RRE		27/12/1989 0:00		0		0			N														
11976	98920	4027	Jacksonia sericea	4		5	B		SWAN COASTAL	MRD	VER		27/12/1989 0:00		0		0			N														
11977	98921	4027	Jacksonia sericea	4		5	C		SWAN COASTAL	MRD	VER		27/12/1989 0:00		0		0			N														
11978	98922	4027	Jacksonia sericea	4		5	D		SWAN COASTAL	MRD	VER		27/12/1989 0:00		0		0			N														
11979	98923	4027	Jacksonia sericea	4		5	E		SWAN COASTAL	RAI	RRE		27/12/1989 0:00		0		0			N														
11980	98924	4027	Jacksonia sericea	4		5	F		SWAN COASTAL	PRI			27/12/1989 0:00		0		0			N														
11982	98926	4027	Jacksonia sericea	4		7	A		SWAN COASTAL	LGA	CON		7/11/1990 0:00	ESTMT	750		750			N										BROWN		Banksia attenuata, Xanthorrhoea, Macrozamia sp., Acacia pulchella		
11983	98927	4027	Jacksonia sericea	4		7	B		SWAN COASTAL	LGA	CON		7/11/1990 0:00	ESTMT	250		250			N										BROWN		Banksia attenuata, Xanthorrhoea, Macrozamia sp., Acacia pulchella		
11985	98929	4027	Jacksonia sericea	4		9	A		SWAN COASTAL	LGA	VER		26/03/1990 0:00	ESTMT	280		280			N						SLOPE	LIMESTN			BROWN		Banksia menziesii, Banksia attenuata, Acacia saligna		
11986	98930	4027	Jacksonia sericea	4		9	B		SWAN COASTAL	PRI			15/05/1990 0:00	ESTMT	7200		7200			N						SLOPE	LIMESTN	SAND	BROWN		Banksia attenuata, Banksia menziesii, Gompholobium aristatum, Acacia saligna			
12333	87329	5038	Lasiopetalum membranaceum	3		11			SWAN COASTAL	CC	NPK		4/11/1987 0:00		0		0			Y					FLAT	LIMESTN	SAND	GREY				Eucalyptus marginata (Jarrah).		
13233	95536	25819	Marianthus paralius	T	EN	2			SWAN COASTAL	LGA	PAR		26/10/2006 0:00	ACTIND	9		0		PLANTS	Y	HEALTHY	EXCELNT	Coastal limestone heath	DRY	SLOPE	LIMESTN			WHITE		Melaleuca cardiophylla, Thomasia triphylla, Templetonia retusa, Spyridium globulosum, Olearia axillaris, Acanthocarpus preissii, Scaevola crassifolia			
13234	107424	25819	Marianthus paralius	T	EN	3			SWAN COASTAL	LGA	REC		12/06/2013 0:00	ESTMT	4	0	0	0	CLUMPS	5	HEALTHY				MOIST	RIDGE	LIMESTN	GRVLS	SAND	GREY	WLLDRND			

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumb	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	MatC	JuvCo	Seed	LiveT	Coun	Area	InFlo	PopC	HabC	HabNotes	SoilCo	Landfo	RockT	Gravel	SoilTy	SoilCol	Draina	Aspect	AssSpecies	
13360	110769	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	1			SWAN COASTAL	LGA	GVT		8/07/2014 0:00	PART _CNT	50		0		PLAN TS	5364			HEALTHY	EXCE LENT	Almost on the top of the ridge, slightly SW - W aspect.	MOIST	RIDGE	LIMES TN		FSA_L OAM	WLL_ DRND	SW	Closed tall scrub of Melaleuca systema, M. Sp Wanneroo, M. sp Wanneroo x systema, M. huegelii, over low shrubland of Calothamnus quadrifidus, Banksia sessilis var cygnorum, Leucopogon parviflorus, Xanthorrhoea preissii, Templetonia retusa over low open s	
13361	110770	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	2			SWAN COASTAL	PRI	UNKNOW N		7/04/2008 0:00	ESTM T	100		0		PLAN TS	4022	Y			EXCE LENT		OU_SL OPE	LIMES TN		SAND	BLACK			Melaleuca cardiophylla, M. sp., M. systema tall closed shrubland.	
13362	110789	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	A		SWAN COASTAL	PRI			10/05/2017 0:00	ESTM T	15	1	0		PLAN TS	100	N		HEALTHY	EXCE LENT	Most of the plants occurred in: Tall open scrub of Melaleuca huegelii, Melaleuca sp Wanneroo with occasional Eucalyptus petrensis and Melaleuca systema, over open low heath of Acacia alata var. tetrantha, Thomasia triphylla over open sedgeland/herbland	DRY	OU_SL OPE	LIMES TN		SAND	GREY	WLL_ DRND		Banksia sessilis, Xanthorrhoea preissii, Conostylis pauciflora subsp. eurypipis (P4), Conostylis candicans,
13363	111492	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	B		SWAN COASTAL	RDL	MIN		27/11/2013 0:00	ACT_I ND	1		0		PLAN TS	4	N		EXCE LENT	NOTE - Fire information was taken from Corporate Mapping Data. Not confirmed in the field			LIMES TN							
13364	111509	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	3	C		SWAN COASTAL	RDL	MIN		30/09/2009 0:00	ACT_I ND	41		0			2047	N		EXCE LENT											
13365	110790	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	4	A		SWAN COASTAL	CC	FOR		26/11/2013 0:00	PART _CNT	46		0		PLAN TS	####	N		EXCE LENT	NOTE - Fire information was taken from Corporate Mapping Data. Not confirmed in the field			LIMES TN							
13366	111490	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	EN	4	B		SWAN COASTAL	CC	FOR		6/12/2013 0:00	ESTM T	20		0		PLAN TS	475	Y		EXCE LENT			DRY	RIDGE	LIMES TN		SAND	WLL_ DRND		Occ Eucalyptys argutifolia (pop7a) over Closed heath of Melaleuca huegelii, Melaleuca systema and Melaleuca sp Wanneroo, Banksia sessilis var. cygnorum, Acacia lasiocarpa, Hemiandra pungens, Acacia alata var. tetrantha with Lomandra maritima and Cassyth	

FID	Popld	Nameid	Taxon	ConsStatus	WARank	PopNumber	SubPopCode	PopStatus	District	Vesting	Purpose1	Purpose2	CountDate	Meth	Mat	Juv	Seed	Live	Count	Area	In	Pop	Hab	Hab	Hab	Notes	Soil	Land	Rock	Gravel	Soil	Soil	Drain	Aspect	AssSpecies	
15099	103688	17543	Sarcozona bicarinata	3		1	A		SWAN COASTAL	LGA	REC		4/08/1992 0:00		0			0							White sand over yellow sand.					SAND	WHITE				Banksia menziesii	
15100	103689	17543	Sarcozona bicarinata	3		1	B		SWAN COASTAL	LGA	REC		4/08/1992 0:00	ESTM	0			25							White sand over yellow sand.					SAND	WHITE				Banksia menziesii	
15652	89298	7756	Stylidium longitubum	4		16			SWAN COASTAL	SPC			10/11/1994 0:00		0			0									FL_PA LU		CLA_L OAM	BROW N	SEASI NUN			Calothamnus lateralis, Perischelia glomulifera		
15677	90804	13127	Stylidium maritimum	3		13			SWAN COASTAL	PRI			9/10/2004 0:00	ESTM	100			100							more illegible DomSp on RFRF	DRY	CREST	LIMES TN		SAND	GREY			Melaleuca cardiophylla, Melaleuca huegelii, Dryandra sessilis, Calothamnus quadrifidus		
15678	90805	13127	Stylidium maritimum	3		14			SWAN COASTAL	PRI			12/10/2005 0:00	UNK	200			200									DRY	RI_DU NE		SAND	WHITE			Leptorhynchos scaber, Melaleuca huegelii, Lomandra maritima		
16656	93721	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4		17			SWAN COASTAL	PRI			10/11/1994 0:00		0			0							VegClass: Open Herbs		FL_PA LU		CLA_L OAM	BLACK	SEASI NUN			Lepyrodia muiii, Baumea articulata, Baumea vaginalis		

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
714	8598320	3237	Acacia benthamii	2	Spindly shrub, 1 m high x 0.5 m wide.	Consolidated sand dune (Quindalup - Spearwood Dunes boundary). Light brown sand, leaf litter over Tamala Limestone. Area burnt > 5 years ago.	Woodland of Banksia menziesii, B. attenuata, Eucalyptus marginata, Allocasuarina fraseri (FCT 28). Associated species: Hibbertia hypericoides, Jacksonia sternbergiana, Opercularia vaginata, Orthrosanthus laxus var. laxus, Ricinocarpus glaucus, Schoenus c	2 plants only.		Hepburn Heights Bushland Padbury, N boundary	GPS	1	9/09/2013
715	1218697	3237	Acacia benthamii	2						Yanchep	AUTO	3	6/09/1990
716	920320	3237	Acacia benthamii	2						E [of] Wanneroo	AUTO	3	23/09/1965
723	718297	3237	Acacia benthamii	2						East Wanneroo	AUTO	3	23/09/1965
727	7622090	3237	Acacia benthamii	2		Flat, sand.	Areas of degraded - modified remnant jarrah woodland and weed dominated areas.			Kingsway Sporting Complex, Hepburn Avenue, Madeley, City of Wanneroo	UNK	2	22/11/2005
739	703656	3237	Acacia benthamii	2						Wanneroo	MAN	0	/09/1975
740	169579	3237	Acacia benthamii	2		Sand.				Woodville [Almost surely Woodvale in W.A.: R.S. Cowan].	MAN	1	/09/1901
741	8982627	3237	Acacia benthamii	2	Shrub, 1.3 m high.	Flat. Yellow brown sand.	Low open forest of Allocasuarina fraseriana, Banksia attenuata and B. menziesii over tall open shrubland of Xanthorrhoea preissii over low open heath of Hibbertia hypericoides and Acacia humilis over very open grassland/sedgeland of Mesomelaena pseudosty			Mineral lease M70/341 and M70/345 within Bush Forever Site 290, Nowergup, City of Wanneroo	GPS	1	12/10/2009
4928	1014773	11336	Adenanthos cygnorum subsp. chamaephyton	3	Prostrate mat like shrub.	Lateritic sandy loam. Roadside.			Abundance: Common, ca 10 plants.	8 km E of Muchea	MAN	3	13/11/1981
5695	8320926	18195	Amanita carneiphylla	3	Pileus 100 mm, 66 mm diameter, cream, applanate, non-striate appendiculate margin, slightly viscid, strong 'amanita' smell, context white. Universal veil on the pileus: white, floccose warts mainly in the central 2/3 of the pileus, adnate. Lamellae: pale	Emerging from deep sand.	Banksia woodland, species of trees and other woody plants nearby: Banksia attenuate, B. menziesii, Jacksonia furcellata.	gregarious		Yanchep	UNK	2	25/04/2003

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
5846	8616035	46333	Amanita wadulawitu	2	Macroscopic characters: Pileus: 67 mm, white, convex, margin appendiculate, non-sulcate, context white, no smell. Universal veil on pileus: white, as small warts over whole pileus, adnate. Lamellae: white, adnate, 10 mm broad, crowded, margin concolorous	In deep sand.	Banksia woodlands, near Banksia attenuata, B. menziesii, Eucalyptus todtiana nearby.			Yanchep National Park	UNK	2	25/04/2003
5848	8616027	46333	Amanita wadulawitu	2	Macroscopic characters: Pileus: up to 70 mm, white, plane, non-sulcate, context white, no smell. Universal veil on pileus: white, as small warts in centre of pileus, adnate. Lamellae: white, adnexed, 8 mm broad, crowded, margin concolorous, fimbriate. To	In deep sand.	Banksia woodlands, near Banksia attenuata, B. menziesii, Eucalyptus marginata and Jacksonia furcellata.			Yanchep National Park	UNK	2	25/04/2003
6678	8497257	11957	Anigozanthos humilis subsp. chrysanthus	4	In flower.	Crest - upper slope with grey sand.	Associated species: Pinus pinaster, Eucalyptus todtiana, Adenanthos cygnorum, Nuytsia floribunda, Alexgeorgea nitens, Hibbertia subvaginata, Scholtzia involucreta.		Condition of population: healthy. Potential threats: mining.	Gnangara pine plantation	GPS	1	16/09/2005
7784	5166071	35317	Austrostipa mundula	3			Tuart woodland.			Yanchep Road,	AUTO	4	/08/1963
8070	8443122	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Erect shrub 1 m high x 1 m wide.	Limestone outcrop/ridge. Yellow sand. Sand derived from Tamala Limestone - Spearwood Dune System. Limetone. Burnt 5+ years.	Heath thickets in good condition. Banksia sessilis var. cygnorum, Spyridium globulosum, Acacia rostellidera, Calothamnus quadrifidus, Melaleuca systena, Hibbertia hypericoides, Lechenaultia linarioides, Conostylis candicans subsp. candicans, Pelargonium	widespread on limestone, 100+ plants.		Edgewater Quarry, bound by Joondalup Drive, Treetop Avenue and Regatta Drive, City of Joondalup	GPS	1	17/09/2012
8072	3378632	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Open shrub 1 m high. Flowers white.					Trichet Road, Wanneroo	AUTO	3	9/12/1981

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
8074	3378640	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Tall compact-straggly shrub, 2 m high. Flowers white.	Grey sand. Hill side.	Banksia woodland.			Trischett Road, SW of Jandabup Lake, Wanneroo	MAN	0	21/12/1981
8076	3416119	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Shrub 1.8-2 m high, flowers white.	Limestone.				Neerabup Park	AUTO	3	21/10/1970
8081	3416089	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1						Wanneroo	AUTO	3	/11/1901
8082	7404808	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1		Limestone ridges SCP26a.			FCT26a Hadrell road. Transect road myhad 02, Yancheap 10 m transect ID JP05, preburn plot.		GPS	1	5/09/2005
8083	4424840	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2m.	Soil: Yellow sand and exposed limestone. Topography/drainage: Well drained gentle S facing slope of limestone ridge. Geomorphology: Tamala limestone (spearwood).	Vegetation: Eucalyptus patrensis Shrub Mallee over Bossiaea eriocarpa Dwarf Scrub C over mixed Open Dwarf Scrub D over Conostylis pauciflora Very Open Herbs.			Ridges MPA (M4) 250 m N of Bailey Rd, 1.5 km E of Wanneroo Rd (Yan-14).	MAN	0	22/10/1993
8084	9139419	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2 m. White flowers.	Flat, sandy soil. Limestone.	Vegetation dominated by Banksia sessilis and Baeckea sp.		extensive population, 2307 plants recorded.	Neerabup, to S of Water Corporation's treatment plant	GPS	1	26/09/2017
8085	9139532	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2.5 m. White flowers.	Moderate east-facing slope. Yellow grey sand.			120+ plants.	City of Wanneroo. Ca. 300 m W of Wanneroo Road, ca. 2.5 km N of the intersection with Romeo Road	GPS	1	9/11/2017
8086	9139540	34161	Baeckea sp. Limestone (N. Gibson & M.N. Lyons 1425)	1	Upright shrub to 2 m. White flowers.	Flat, sandy soil.	Banksia woodland.		7 plants.	Nanika Park, along Nanika Crescent, Neerabup	GPS	1	28/09/2017
10841	1202995	34236	Beyeria cinerea subsp. cinerea	3	Spreading low twiggy shrub, to 30 cm x 40 cm. Flowers inconspicuous, female green, male yellow. Dioecious.	Ridge. Sand over limestone.	Low shrubland.		common in area.	Parrot Ridge, Yancheap National Park, 50 km N of Perth	AUTO	3	23/09/1989

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
12530	255947	1596	Caladenia huegelii	T						Gnangara,	MAN	3	19/09/1945
13013	7215363	45757	Calectasia elegans	2	Herbaceous perennial shrub ca 40 cm x 50 cm in height with multiples stems and stilted roots. Flowers blue and fading to white.	On gentle slope above dampland, deep grey quartz sand. Last fire ca 20-30 years ago.	Banksia menziesii - Banksia attenuata - Banksia woodland (30-50% cover < 6m in height) over Regelia inops (2-10% cover <1.2 m in height) mixed low shrubs (10-30% cover <0.5 m in height) rushes, sedges, perennial monocots (10-30%) and herbs-grasses (2-10	only two plants found.		ca 300 m E of Perry Road in Chitty Road bushland (Bush Forever Site No. 398), Pinjar (City of Wanneroo)	GPS	1	8/11/2005
13014	8008213	45757	Calectasia elegans	2	Small compact shrub to 30 cm high and 30 cm wide. mature fruit present.	Flat to gentle slope. Grey sand.	With Banksia attenuata, Banksia menziesii, Stirlingia latifolia.			Ca 300 m E of Perry Road within Chitty Road Nature Reserve. Pinjar, City of Wanneroo	GPS	1	11/12/2008
13016	8617767	45757	Calectasia elegans	2	Erect perennial subshrub to c. 45 cm high. Typical purple flower with red anthers; stilt roots present; plants in full flower.	Flat plain with deep grey sand. Long unburnt area.	Low Banksia woodland with moderately dense vegetation. Associated species: Banksia spp., Stirlingia latifolia, Melaleuca spp., Eremaea spp., Hibbertia spp., Leucopogon spp.	several populations in this vicinity of 2 or 3 plants.		Melaleuca State Forest, ca 380 m W of powerline track, ca 2.7 km S from the intersection of Neaves and Gallagher Roads	GPS	1	16/09/2008
13017	8617740	45757	Calectasia elegans	2	Erect perennial subshrub to c. 45 cm high. Typical purple flower with red anthers; stilt roots present; plants in full flower.	Flat plain with deep grey sand. Long unburnt area.	Low Banksia woodland with moderately dense vegetation. Associated species: Banksia spp., Stirlingia latifolia, Melaleuca spp., Eremaea spp., Hibbertia spp., Leucopogon spp.	several populations in this vicinity of 2 or 3 plants.		Melaleuca State Forest, ca 170 m W of powerline track, ca 800 m S from the intersection of Neaves and Gallagher Roads	GPS	1	16/09/2008
13018	8008140	45757	Calectasia elegans	2	Small shrub.	Grey sand.	Associated species: Adenanthos cygnorum subsp. cygnorum, Jacksonia floribunda to 2.5 m, 20% cover, Beaufortia elegans to 1.7 m, 15% cover, Eremaea pauciflora subsp. pauciflora, Leucopogon conostephooides, Nuytsia floribunda to 0.9 m, 10% cover.	uncommon.		Gnangara - Moore River State Forest, Melaleuca Block, 10 m W of Walton Road, 190 m N from intersection of corner of Warbrook and Walton Road, 10.3 km SW from Bullsbrook, GSS site PC1C	GPS	1	11/09/2008
13019	8008132	45757	Calectasia elegans	2	Small shrub.	Grey sand.	Associated species: Banksia attenuata, Nuytsia floribunda to 5 m, 10% cover, Jacksonia floribunda, Adenanthos cygnorum subsp. cygnorum to 1.6 m, 5% cover, Verticordia nitens to 1.5 m, 2% cover.	uncommon.		Gnangara - Moore River State Forest, Melaleuca Block, 130 m E of St Patrick Road, 25 m S from intersection of corner of Warbrook Road and St Patrick Road, 11 km SW of Bullsbrook, GSS site PC4A	GPS	1	11/09/2008
15511	2052148	1425	Conostylis bracteata	3			Blackboy - Parrotbush association.			Yanchep National Park	AUTO	4	12/10/1965

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
15512	2052121	1425	<i>Conostylis bracteata</i>	3	Loosely tufted herb, leaves in flattened fascicles, margins with white appressed to spreading plumose hairs.	Swale in undulating consolidated dunes, some outcropping limestone.	In coastal scrub of <i>Dryandra sessilis</i> , <i>Acacia saligna</i> , <i>A. xanthina</i> , <i>Xanthorrhoea preissii</i> , <i>Banksia attenuata</i> , <i>Melaleuca acerosa</i> .			Mullaloo, c. 1 km inland, recreation reserve W of intersection of Waltham and Gunida Streets	AUTO	3	16/08/1986
15513	2052091	1425	<i>Conostylis bracteata</i>	3	Proliferous herb, leaves with hirsute, not spinescent margins.	On steep slope of consolidated sand dune.	Overlooking Blackboy Reserve, <i>Acacia saligna</i> scrub over dense low heath to 1m, on fringes of remnant tuart (<i>Eucalyptus gomphocephala</i>) woodland. Associated species include <i>Xanthorrhoea</i> and <i>Banksia attenuata</i> .			Vacant block, 47 Karalundie Way, Mullaloo, c. 1 km inland	MAN	0	29/03/1986
15514	5305691	1425	<i>Conostylis bracteata</i>	3	Perennial herb, flowers yellow.	Plain near lake. Grey sand.	Jarrah with <i>Banksia attenuata</i> , <i>B. menziesii</i> , <i>Burchardia congesta</i> , <i>Hibbertia hypericoides</i> , <i>Acacia</i> spp., <i>Ehrharta calycina</i> .	occasional		Remnant <i>Banksia</i> woodland (Block 9471), ca 2 km S of Burns Beach Road, E side of Lake Joondalup, Yellagonga Regional Park,	MAN	0	6/11/1997
15516	5931436	1425	<i>Conostylis bracteata</i>	3		Top of sand dune.				Mullaloo	MAN	3	19/11/1962
15518	1744321	1425	<i>Conostylis bracteata</i>	3	Loosely tufted herb to 80 cm diameter; leaf margins with white plumose appressed hairs <1 mm long; perianth 10-12 mm long, pale yellowish green outside, golden yellow inside tube, lobes cream inside, becoming golden yellow at base and near apex, conspicu	E slopes of a consolidated sand dune.	Low heath of <i>Acanthocarpus preissii</i> , <i>Acacia lasiocarpa</i> .		Rendered extinct by housing development on August 17.	Kallaroo, 25 km NNW of Perth; 50 m SSW of Juno Crescent on the verge of Dampier Avenue	MAN	0	16/08/1986
15519	8755388	1425	<i>Conostylis bracteata</i>	3	Tufted herb to 20 cm tall. Flowers yellow. Plants flowering at the time of collection. Leaves arranged into flattened, broadly fan-like clusters. The leaf margins glabrescent.	Grey sand, on mid-slope.	<i>Acacia rostellifera</i> and <i>Melaleuca systena</i> mid shrubland. <i>Lomandra maritima</i> low open herbs.	1 mature plant.	Project: 3536.	2 Quinns Road, Mindarie, within Bush Forever No 397	GPS	1	4/11/2015
15678	4525205	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhypis</i>	4	Perennial herb.	Soil: Yellow sand and exposed limestone. Topography/drainage: Well drained gentle S facing slope of limestone ridge. Geomorphology: Tamala limestone (spearwood).	Vegetation: <i>Eucalyptus patrensis</i> Shrub Mallee over <i>Bossiaea eriocarpa</i> Dwarf Scrub C over mixed Open Dwarf Scrub D over <i>Conostylis pauciflora</i> Very Open Herbs.			Ridges MPA (M4) 250 m N of Bailey Rd, 1.5 km E of Wanneroo Rd (Yan-14).	GPS	1	22/10/1993

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
15679	4966554	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4		N and NE aspect. Ridge. Dry yellow sand over limestone/sheet boulder.	Completely open, treeless but scrubby site with <i>Melaleuca heugelii</i> , <i>M. acerosa</i> , <i>Grevillea thelemanniana</i> , blackboys, <i>Acacia pulchella</i> , <i>Dryandra sessilis</i> , <i>D.</i> <i>nivea</i> , native <i>Wisteria</i> .	100+		Yanchep State Forest, situated 350 m S down Obidos Road from the junction of Mistletoe Road	MAN	0	26/07/1996
15684	4059034	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4	Tufted perennial herb, flowers yellow.	On grey calcareous sand.				Alkimos Block, W Carabooda Lake, Site 4	MAN	3	23/10/1989
15686	9208054	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4	Stoloniferous herb, 20 cm high.	Interdunal flat or swale. White calcareous sand. > 7 years since fire.	<i>Allocasuarina lehmanniana</i> subsp. <i>lehmanniana</i> high open shrubland over <i>Spyridium globulosum</i> , <i>Olearia axillaris</i> , <i>Acacia cyclops</i> high shrubland over <i>Melaleuca systema</i> , <i>Rhagodia baccata</i> low open shrubland over <i>Desmodcladus asper</i> , <i>Lepidosperma pubisquameum</i> ver			C. 1.9 km S of Yanchep, 6 km W of Yanchep Beach Road - Wanneroo Road intersection which is 54 km N of Perth CBD	GPS	1	1/10/2007
15689	5982138	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4		S slope, on sand dunes; dry white sand; long unburnt.	Low heath 0.3 m tall, 30-70% cover.	c. 20	mature plants in a 5 x 20 m area.	Site 18, NW corner of the Alkimos Estate, 100 m from the coast,	MAN	3	25/10/1996
15691	7836457	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4		Yellow-brown sand over limestone, slope, private lease. NW aspect.	<i>Acacia rosterlifera</i> and <i>Spyridium</i> <i>globulosum</i> Tall Open Scrub over <i>Melaleuca systema</i> Low Open Shrubland over mixed Herbland-Grassland.		Healthy populatio n with flowers. Potential threat from clearing.	Eglington, W of Marmion Avenue, S of Pipindinny Road	GPS	1	17/10/2007
15692	7858833	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4	Tufted perennial.	Sand, secondary dunes.	<i>Scaevola crassifolia</i> , <i>Lomandra maritima</i> , <i>Rhagodia baccata</i> , <i>Hardenbergia</i> <i>comptoniana</i> , <i>Threlkeldia diffusa</i> , <i>Hemiandra pungens</i> , <i>Acanthocarpus</i> <i>preissii</i> .			Alkimos	GPS	0	1/03/2007
15698	9039023	11388	<i>Conostylis pauciflora</i> subsp. <i>euryrhipis</i>	4	Herb.	Dunes.	<i>Acacia cochlearis</i> and <i>Melaleuca systema</i> low open shrubland.			Alkimos, Perth	GPS	1	20/10/2016
15711	7836449	11657	<i>Conostylis pauciflora</i> subsp. <i>pauciflora</i>	4		Grey sand over limestone, slope private lease, W aspect.	<i>Melaleuca systema</i> and <i>Scaevola</i> <i>globulifera</i> Open Low Heath over <i>Austrostipa flavescens</i> , <i>Lolium perenne</i> and <i>Bromus diandrus</i> Grassland.		Healthy populatio n with flowers. Potential threat from clearing.	Eglington, W of Marmion Avenue, S of Pipindinny Road	GPS	1	19/10/2007
16306	4098374	16245	<i>Cyathochaeta</i> <i>teretifolia</i>	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In <i>Melaleuca preissiana</i> and <i>Eucalyptus</i> <i>rudis</i> Open Low Woodland A over <i>Aotus</i> <i>gracillima</i> and <i>Astartea</i> aff. <i>fascicularis</i> Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			Site 02, Gngalara	MAN	0	//

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
16314	8122342	16245	Cyathochaeta teretifolia	3		Sandy loam.	Melaleuca preissiana to 7.0 m, 10% cover, over Xanthorrhoea preissii, Banksia ilicifolia to 5.0 m, 20% cover, over Pultenaea reticulata, Astartea scoparia to 1.8 m, 10% cover, over Hypocalymma angustifolium to 0.7 m, 10% cover, over Mixed to 0.2 m, 10% co			Gnangara-Moore River State Forest, Melaleuca Block, 130 m W of a point 320 m N of intersection of Quicke Road and St Patrick Road, Bullsbrook, 13.8 km ENE of Wanneroo, GSS site 19B	GPS	1	26/10/2008
16321	4097394	16245	Cyathochaeta teretifolia	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In Melaleuca preissiana and Eucalyptus rudis Open Low Woodland A over Aotus gracillima and Astartea aff. fascicularis Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			Site 02, Gnangara	MAN	0	//
16325	2076802	16245	Cyathochaeta teretifolia	3	Tall grass like plant 1 m high.	In peat swamp.				8.38 km N along Galacher Road off Neeves Road	MAN	0	7/02/1980
16327	4654773	16245	Cyathochaeta teretifolia	3	Perennial herb up to 2 m tall, clumped.	On grey sandy clay on seasonally wet slope beside permanent lake.	In Melaleuca preissiana and Eucalyptus rudis Open Low Woodland A over Aotus gracillima and Astartea aff. fascicularis Heath A over Herbs, Very Open Tall Sedges and Open Low Sedges.			Site 02, Gnangara	MAN	0	//
16330	6533078	16245	Cyathochaeta teretifolia	3	Erect tufted sedge to 1.5 m by 0.4 m.	Sumpland, black humic sand over ?clay. Plants in wettest section of sumpland.	Hakea varia and Melaleuca teretifolia Heath A.			SW corner of Della and ?Marshall Roads, Beechboro	GPS	1	8/12/1995
16335	6427774	16245	Cyathochaeta teretifolia	3	Tufted perennial herb, flowers straw colour.	Damp margin of lake, flat ground, grey sand with clay, poor drainage, wet during winter/spring.	Open Low Woodland A. Associated species: Melaleuca preissiana, Eucalyptus rudis.			E of Lake Gnangara in System 6 Update quadrat gnan02 (System 6 Area M8, Bush Forever Site 193)	GPS	1	27/10/1994
16338	6808077	16245	Cyathochaeta teretifolia	3	Grass like or sedge.		Low forest, Melaleuca preissiana, Astartea fascicularis, Hypocalymma angustifolium, Banksia littoralis.			Gnangara Mound	MAN	3	2/12/2002
16718	8190518	7485	Dampiera triloba	3		Loamy sand.	Melaleuca priessiana, Corymbia calophylla to 9.0 m, 5% cover, over Astartea scoparia to 2.1 m, 25% cover, over Hypocalymma angustifolia to 1.0 m, 40% cover, over Patersonia occidentalis, Hypochaeris glabra, Trachymene pilosa to 0.7 m, 10% cover, Lepidosp			Crown Reserve 8399, Lake Gnangara Park, 30 m W towards lake from track, 900 m N of a point in the recreation area 630 m N of intersection of Gnangara Road and Alexander Drive Gnangara, 7.5 km SE of Wanneroo, GSS site GN1	GPS	1	24/09/2009
16726	2554682	7485	Dampiera triloba	3						Gnangara	AUTO	3	/10/1945

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
16727	8138869	7485	Dampiera triloba	3	Erect perennial.	Loamy sand.	Melaleuca preissiana, Corymbia calophylla to 9 m, 5% cover, astartea scoparia to 2.1 m, 25% cover, Hypocalymma angustifolia to 1 m, 40% cover, Patersonia occidentalis, Hypochaeris glabra, Trachymene pilosa to 0.7 m, 10% cover, Lepidosperma striatum to 1.			Crown Reserve 8399, Lake Gngangara Park, 30 m W towards lake from track, 900 m N of a point in the recreation area, 630 m N of intersection of Gngangara Road and Alexander Drive, Gngangara, 7.5 km SE of Wanneroo, GSS site GN1	GPS	1	28/09/2008
16856	8429227	34773	Darwinia foetida	T	Low, spreading shrubs to 0.6m x 1m, the leaves somewhat glaucous. Inflorescences inclined to nodding; bracts glaucous green tinged pinkish.	Moist flat; dark grey sand.	Melaleuca raphiophylla, Hypocalymma angustifolia, Acacia pulchella shrubland beneath marri, with invasion by blackberry, brazilian peppertrees, weedy grasses.	frequent - hundreds of plants.		Private property in corner of Neaves Road and Bingham Road, Bullsbrook	GPS	1	24/10/2010
16869	7887442	34773	Darwinia foetida	T	Perennial, prostrate compact shrub 0.5 m high x 0.5 m wide.	Palusplain Multiple Use Wetland. Grey black soil. Burnt Spring 2006.	Corymbia calophylla, Melaleuca raphiophylla, Hypocalymma angustifolium.	21-50 plants (25 alive, 22 dead)	Percentage of population in fruit 30%.	SW corner of Lot 200, Neaves Road, Bullsbrook	GPS	1	9/03/2007
19224	7881282	31233	Drosera patens	1						Lake Gngangarra	GPS	1	31/01/1992
19225	7881312	31233	Drosera patens	1						Pinjar Road, Wanneroo	UNK	2	19/11/1991
19226	7881274	31233	Drosera patens	1	Fibrous rooted perennial herb with a solitary, compact leafy rosette, 1.8-2.5 cm diam.	On the margin of swamps, lakes and winter wet depression in sandy soils.				NW shore of Lake Gngangarra	GPS	1	17/01/1998
19314	8723303	30712	Drosera x sidjamesii	1		Grows on the northern margins of lake.				Lake Gngangarra, Wanneroo	GPS	1	5/02/1985
19315	7579101	30712	Drosera x sidjamesii	1						Pinjar Road, Wanneroo	GPS	1	4/12/1984
19316	7579152	30712	Drosera x sidjamesii	1						Shores of Lake Gngangarra [Gngangara]	UNK	2	17/01/1998
19317	7881525	30712	Drosera x sidjamesii	1						Pinjar Road, Wanneroo	UNK	2	4/12/1984
19318	7881533	30712	Drosera x sidjamesii	1						Shores of Lake Gngangarra, N of Perth	UNK	2	17/01/1998
19319	7881517	30712	Drosera x sidjamesii	1	A natural hybrid, fibrous rooted perennial herb.	On margins of swamps, lakes and winter wet depressions in sandy soil.				Northern shores of Lake Gngangarra	UNK	2	31/03/1992

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
21363	8153302	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 2.5 m. Flowers white.	Slight slope/ridge. Grey/white sand over limestone.	With <i>Acacia cyclops</i> , <i>Hakea prostrata</i> , <i>Lomandra maritima</i> , <i>rhagodia baccata</i> , <i>Spyridium globulosum</i> .			Within Beaumarks Park, Mindarie. Approach population from Beaumarks Court as park is fenced at the back. Population faces Long Beach Promenade	GPS	1	8/01/2009
21364	8153310	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 2.5 m. Flowers white.	Slight slope/ridge. Grey/white sand over limestone.	With <i>Acacia cyclops</i> , <i>Hakea prostrata</i> , <i>Lomandra maritima</i> , <i>rhagodia baccata</i> , <i>Spyridium globulosum</i> .			Within Beaumarks Park, Mindarie. Approach population from Beaumarks Court as park is fenced at the back. Population faces Long Beach Promenade	GPS	1	8/01/2009
21371	1051490	13091	<i>Eucalyptus argutifolia</i>	T	Mallee 1.5 m tall with smooth bark.	Brown sand and coarse limestone outcrops.				Parrot Ridge, N of Yanchep.	MAN	3	9/04/1987
21373	1123149	13091	<i>Eucalyptus argutifolia</i>	T		Lower ridge slope. Sheet sand/brown boulder/dry yellow soil.	Thickets of <i>Melaleuca</i> sp., <i>Melaleuca huegii</i> , <i>Dryandra sessilis</i> and <i>Dryandra nivea</i> , Blackboy (<i>Xanthorrhoea preissii</i>), <i>Hakea trifurcata</i> .			Yanchep State Forest, 200 metres from the most S point of Compt. 68 Yanchep Pine Plantation [6 km NNE of Yanchep].	MAN	2	27/04/1990
21376	1123130	13091	<i>Eucalyptus argutifolia</i>	T		At foot of and bordering very steep and rocky limestone ridge. Dry brown sheet sand.	Completely open, apart from odd <i>Nuytsia floribunda</i> and stands of <i>Euc. foecunda</i> . Blackboy (<i>Xanthorrhoea preissii</i>) <i>Hakea trifurcata</i> , <i>Dryandra sessilis</i> and <i>nivea</i> . <i>Ac. pulchella</i> , <i>Templetonia retusa</i> , <i>Mel. huegii</i> .			Yanchep State Forest, 400 metres S down Obidos Road, from junction Mistletoe Road.	MAN	4	16/03/1990
21379	1123661	13091	<i>Eucalyptus argutifolia</i>	T		ESE aspect. Lower ridgetop slope. Sheet sand/brown boulder. Completely open to treeless site.	<i>Melaleuca huegii</i> , <i>Xanthorrhoea preissii</i> , <i>Dryandra sessilis/nivea</i> , <i>Hakea trifurcata</i> , <i>Hibbertia hypericoides</i> , Native <i>wisteria</i> .			Ridge State Forest, 260 metres along Hopkins Road, from junction of Wesco Road [Near Lake Pinjar].	MAN	2	6/08/1990
21380	4110544	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 3 m.	Dune slope, grey sand over limestone.	Mallee, <i>Eucalyptus petrensis</i> over heath.	rare in area.		Mindarie South, 30 km N of Perth	AUTO	3	22/04/1991
21381	1452274	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 2.5 m. Flowers ?, in bud. Smooth barked.	Limestone ridge, shallow sand over limestone.		locally common.		Parrott Ridge, Yanchep, 50 km N of Perth	AUTO	3	17/11/1989
21384	1286471	13091	<i>Eucalyptus argutifolia</i>	T	Mall to 3 m high, conical, necked buds.	Top of gully adjacent to hill top, brown sand over limestone.	Shrubland.	occasional	Same population as 90017 & 90018.	Parrot Ridge near Trig Point	MAN	2	17/09/1990

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21385	1286463	13091	<i>Eucalyptus argutifolia</i>	T	Mallee 3 m high, squat necked buds.	Top of gully adjacent to hill top, brown sand over limestone.	Shrubland.	occasional	Same population as 90017 & 90019.	Parrot Ridge near Trig Point	MAN	2	17/09/1990
21386	1286455	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 3m high, ovoid buds.	Gully head next to hill top, brown sand over limestone.	Shrubland.	occasional		Parrot Ridge near Trig Point,	MAN	2	17/09/1990
21387	1050516	13091	<i>Eucalyptus argutifolia</i>	T	Mallee 1.5 m tall with smooth bark.	Brown sand and coarse limestone outcrops.				Parrot Ridge, N of Yanchep	MAN	3	9/04/1987
21392	5854814	13091	<i>Eucalyptus argutifolia</i>	T	Spreading, multi-stemmed, smooth barked mallee.	E-facing slope. Brown sand, exposed limestone over limestone.	Mallee over heath. With <i>Dryandra sessilis</i> , <i>Melaleuca</i> spp., <i>Xanthorrhoea preissii</i> , <i>Hibbertia</i> sp., <i>Hybanthus</i> sp. and <i>Conostylis</i> sp.	15		Parrot Ridge, NNE of limestone quarry, E side of hill,	GPS	1	11/10/2001
21401	9139524	13091	<i>Eucalyptus argutifolia</i>	T	Mallee to 2 m high.	At the base of a limestone ridge. Grey sand.		ca. 6 plants.		City of Wanneroo. Ca. 600 m S of Carabooda Road and ca. 300 m NE of Water Corporation's Carabooda tank	GPS	1	7/11/2017
21403	2160765	13091	<i>Eucalyptus argutifolia</i>	T		Slight gully situation nestled between two limestone ridges. Sand/boulder/brown/yellow/dry/limestone.	Completely open and treeless with dense scrubland. <i>Dryandra's nivea/ sessilis</i> , <i>Hakea trifurcata</i> , <i>Melaleuca huegelii</i> , <i>Blackboys (Xanthorrhoea preissii)</i> , <i>Templetonia retusa</i> .	32 clumps.		Quarry Reserve 5204, 250 m from junction of Myrtle road and 380 m at 195 deg.	MAN	0	15/11/1991
21404	2117223	13091	<i>Eucalyptus argutifolia</i>	T		Slight gully situation nestled between two limestone ridges. Limestone/boulder/sand/brown/yellow/dry.	Completely open & treeless with dense scrubland. <i>Dryandra's nivea/ sessilis</i> , <i>Hakea trifurcata</i> , <i>Melaleuca huegelii</i> , <i>Blackboys (Xanthorrhoea preissii)</i> , <i>Templetonia retusa</i> .	32 clumps, undisturbed.		Quarry Reserve 5204, 250 m from the junction of Myrtle road and 380 m at 195 deg. to rare mallees	MAN	0	15/11/1991
25114	8076626	20162	<i>Fabronia hampeana</i>	2		Private property in depression between limestone outcrops with yellow sand. Potential threat by urban development. Last burnt summer 2001.	Banksia low open woodland with occasional <i>Eucalyptus decipiens</i> , <i>Macrozamia riedlei</i> , <i>Acacia rostellifera</i> and <i>Hypocalymma angustifolium</i> .		Condition of population: Healthy.	Lot 17 Marmion Avenue, Clarkson (along W boundary of the site), 34 km N of Perth CBD	GPS	1	12/01/2009
25115	5939658	20162	<i>Fabronia hampeana</i>	2	Fertile moss.	On trunk of <i>Macrozamia</i> .	Emergent large <i>Banksia</i> over <i>Macrozamia</i> , <i>Hibbertia</i> , <i>Xanthorrhoea</i> , grasses, weeds and thick <i>Dryandra</i> regrowth.			Between Neerabup National Park and developing suburb of Kinross, 28 km NNW of Perth	MAN	3	14/09/1994
30017	8422710	33737	<i>Grevillea</i> sp. Ocean Reef (D. Pike Joon 4)	1	Erect, spreading shrub. To 1.5 m x 3 m.	Sand dune. Dry brown / grey sand.	Coastal sand scrub with <i>Acacia</i> , <i>Banksia sessilis</i> , <i>Spiridium globulosum</i> , <i>Clematis</i> , <i>Calothamnus</i> , <i>Pelargonium</i> , <i>Dianella</i> , <i>Hardenbergia</i> .	40 - 60 plants (D. Pike November 2008).		Ocean Reef Road, Ocean Reef	GPS	1	15/08/2012

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30018	8422605	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Erect, spreading shrub - clonal. To 1.5 m x 3 m.	Sand dune / gully. Dry brown / grey sand.	Coastal sand scrub with Acacia, Banksia sessilis, Spiridium globulosum, Clematis, Calothamnus, Pelargonium, Dianella, Hardenbergia.	40 - 60 plants (D. Pike November 2008).	Does not appear to set fruit (D. Pike's observation).	Ocean Reef Road, Ocean Reef: between the boat harbour and Ocean Reef Road	GPS	1	6/09/2012
30019	7860579	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Dense, spreading shrub to 2 m high x 3 m wide. Plants in late flower.	Quindalup dunes. Dry, bare, light yellow-brown sand.	Tall shrubland. With Acacia rostellifera, Dryandra sessilis, Spyridium globulosum.	One apparently clonal population of 40-60 plants.		Ocean Reef, suburb of Perth	GPS	1	/11/2008
30020	8509603	33737	Grevillea sp. Ocean Reef (D. Pike Joon 4)	1	Compact perennial shrub 150 cm high x 200-300 cm wide.	Broad dune swails. Grey shallow sand. Numerous limestone boulders.	Acacia rostellifera, Conostylis sp., Tetraria octandra, Spyridium globulosum, Acanthocarpus preissii, Desmodium flexuosum, Phyllanthus calycinus, Dianella revoluta, Lepidosperma sp., Banksia sessilis, Clematis sp., Hardenbergia comptoniana, Rhagodia bac	26-50 plants plus additional 6-10 juveniles within 40 m radius.		Bush Forever Site 325, bounded by Boat Harbour Quay and Ocean Reef Road in Ocean Reef	GPS	1	16/10/2013
32095	2625598	49637	Hibbertia leptotheca	3		Limestone.	Heath.			Yanchep road	AUTO	3	/09/1937
32097	9039058	49637	Hibbertia leptotheca	3	Low shrub.	Dunes.	Xanthorrhoea preissii mid open shrubland over Melaleuca systema low open shrubland.	5 plants.		Alkimos, Perth	GPS	1	20/10/2016
32112	7520859	49637	Hibbertia leptotheca	3		Outcrop, slope. Dry, red-brown-white, limestone.	Mixed low scrub. Melaleuca cardiophylla, Mel. huegelii, Diplopeltis huegelii, Grevillea preissii, Trymalium ledifolium.	> 100 plants.		Alkimos - Eglinton proposed housing development	GPS	1	16/10/2005
32116	3096424	49637	Hibbertia leptotheca	3	Domed green shrub, to 30 cm x 40 cm. Flowers yellow, reflexed over sepals when in flower. In full flower.	Sea cliff. Grey-black sand over limestone.	Low Melaleuca cardiophylla closed heath.		Abundance: common.	Burns Beach; 26 km N of Perth	AUTO	3	21/09/1990

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
32818	8836647	11074	Hydrocotyle striata	1	Spreading annual. Height: 5-10 cm.	Seasonally inundated depression within a Mound Spring. Moist, undulating slightly. Black peaty sand. Fire history: Autumn 1995.	Low Open forest of Melaleuca preissiana over Pteridium esculentum. With Cyathochaeta teretifolia (P3), Hibbertia perfoliata.	dense cover in localised ca 40 m x 30 m area. (Site not surveyed closely, plants maybe more widespread on Lot).	Collection made for identification as it had not been seen prior to removal of extremely dense cover of Blackberry initiated in 2012. Site is a Mound Spring of the Swan Coastal Plain threatened Ecological Community.	Lot 800, Pine Road, Bullsbrook. Land is vested within the Dept of Planning and Infrastructure and is adjoining Conservation Estate known as Neaves Road Nature Reserve	GPS	1	16/11/2016
33884	8755396	20462	Jacksonia gracillima	3	Perennial tufted herb with narrow leaves 10-40 cm long, with rose pink flowers.	Grey sand, on mid-slope with exposed limestone. Fire > 5 years.	Low open forest of Eucalyptus rudis and Melaleuca preissiana. Banksia attenuata shrubs. Tall shrubland of Gastrolobium ebracteolatum and Kunzea glabrescens. Sedgeland of Baumea preisii subsp. laxa.	1 mature plant.	Project: 3516.	The Roe Highway Extension area, ca 14 km S of Perth	GPS	1	9/10/2015
34006	1131192	4027	Jacksonia sericea	4	Prostrate shrub, 50 cm x 1.5 m diam. Flowers orange-yellow; eye yellow.	Hilltop, sand over limestone.	Banksia low woodland.		Abundance: common.	Ocean Reef Road, Wanneroo, 30 km N Perth	MAN	3	20/01/1988
34007	5437806	4027	Jacksonia sericea	4	Prostrate shrub 0.1 m high, 1 m wide; sterile.	Side of Spearwood Dune, grey sand over deep yellow sand.	Banksia attenuata and B. menziesii woodland.	scattered.		Bushplan Site 463, ca 1 km W of Gnaragara Road in bushland W of Sydney Road	AUTO	3	15/06/1999
34015	2171449	4027	Jacksonia sericea	4	Low spreading shrub to .3 m high. Brown pods.	In yellowish/brown sand on low ground.	In open woodland over low heath and disturbed areas, with Banksia attenuata, B. menziesii, Gomphobium aristatum, Xanthorrhoea sp., Eucalyptus gomphocephalum.			NW corner of Ocean Reef road and Joondalup Drive, Woodvale	MAN	0	15/05/1990
34016	1131176	4027	Jacksonia sericea	4	Low spreading shrub 0.5 m high.	Highly disturbed.	Highly disturbed Tuart/Jarrah forest.			Lake Joondalup (Edgewater)	MAN	3	/11/1979
34024	6410731	4027	Jacksonia sericea	4		Slope/flat. Dry grey sand over limestone.	Eucalyptus marginata, Banksia attenuata, B. menziesii Woodland. Associated species: Banksia attenuata, B. grandis, Allocasuarina fraseriana, Dryandra sessilis, Calothamnus sp.		Condition of population: healthy.	Lot 21, Flynn Drive, Neerabup, Shire of Wanneroo	MAN	3	/07/2001

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
34026	6730620	4027	Jacksonia sericea	4	Shrub 30-60 cm high x 1 m wide. Perennial, prostrate, dense spreading. Flowers orange.	Hillside. Dry sand. Old soil disturbance.	Tuart, Banksia, Allocasuarina woodland.	over 50 plants, quite widespread.		Periwinkle Park, Periwinkle Road, Mullaloo	MAN	3	14/10/2002
34029	7400160	4027	Jacksonia sericea	4	Low shrub.					Small remnant of Wanneroo road near Lake Neerabup	GPS	1	24/04/2001
34039	7885407	4027	Jacksonia sericea	4			In open Banksia woodland of Banksia menziesii, B. grandis with Eucalyptus calophylla and Acacia saligna.			In centre of Shepherds Bush Reserve in Kingsley Park	GPS	3	24/10/1994
34043	8001189	4027	Jacksonia sericea	4	Spreading shrub 0.3 m wide with orange flowers.	Residential plain with grey sand.	Low trees and low shrubland with Eucalyptus marginata, Banksia attenuata, Adenanthos cygnorum, Xanthorrhoea preissii, Calytrix fraseri, Mesomelaena pseudostygia, Laxmannia squarrosa, Waitzia suaveolens, Corynotheca micrantha, Alexgeorgea nitens, Conosper	2 - 5.	Alien species: Gladiolus caryophyllaceus, Ehrharta calycina, Briza maxima, Pentaschistis airoides, Pelagonium capitatum, Ursinia anthemoides. Infestation area: 1 - 10 m2.	Directly N of Gngangara Road, Landsdale (approximately 17 km N of Perth)	GPS	1	12/11/2008
34044	8148511	4027	Jacksonia sericea	4	50 cm.	Slope. Recently burnt.	Woodland. With Eucalyptus marginata, Allocasuarina fraseriana, Banksia menziesii, Banksia attenuata, Ehrharta calycinus, Hibbertia hypericoides.	6-20 plants.		End of Carmignani Road in Gngangara	GPS	1	22/10/2007
34048	8982643	4027	Jacksonia sericea	4	Shrub, 0.5 m high.	Gentle slope, slight ridge. Yellow brown loamy sand.	Tall open shrubland of Acacia rostellifera to 3 m over closed tall scrub of Banksia sessilis to 2.4 m over open shrubland of Xanthorrhoea preissii, Melaleuca systema and Hakea trifurcata to 2 m over low shrubland of Jacksonia sericea and Hibbertia hyperi	> 700 plants.		S of main track on ridge, mineral lease M70/013, Hopkins Road, Nowergup, City of Wanneroo	GPS	1	11/11/2010
34867	4158342	5038	Lasiopetalum membranaceum	3	Shrub to 1 m high, flowers purple.	Flat, gently undulating. Grey sand over ? limestone.	Under Jarrah tree in open woodland.	occasional		Yeal Swamp road - Yanchep National Park	MAN	0	4/11/1987
35231	4877799	27793	Lecania sylvestris	2		Roadside.				Picnic area N of Yanchep National Park, N of Perth	AUTO	3	28/08/1988

FID	Sheet	NameID	Taxon	Cons_Code	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Method	Precision	Date
35232	2973499	31312	Lecania turicensis var. turicensis	2		Coastal rocks, limestone.				Burns Beach, N of Perth	AUTO	3	28/08/1988
35233	7446667	31312	Lecania turicensis var. turicensis	2		Coastal rocks, limestone.				Yanchep Beach, N of Perth	TOPO	3	28/08/1988
35552	1421468	3042	Lepidium pseudotasmanicum	4						Yanchep	AUTO	3	16/12/1953
35561	3455114	3042	Lepidium pseudotasmanicum	4	Erect ? slender perennial herb to 20 cm.	Valley, grey sand over limestone.	Eucalyptus gomphocephala open woodland.	uncommon.		Pipidiny Swamp, Yanchep National Park	AUTO	4	3/10/1991
35564	6209939	3042	Lepidium pseudotasmanicum	4					Field No. 99.	Wydgee - S of Yanchep Beach Road	MAN	3	14/04/1966
36568	5456169	40801	Leucopogon maritimus	1		On stable dune.	Coastal heath.			Yanchep Beach,	AUTO	3	9/08/1960
36569	9208038	40801	Leucopogon maritimus	1	Low shrub, 35 cm high.	Gentle, NW-facing lower slope of lower ridge. Grey calcareous sands. > 5 - 7 years since fire.	Melaleuca huegelii, M. cardiophylla, Acacia truncata closed low heath over Thomasia triphylla, Leucopogon insularis, Melaleuca systema, Lysinema ciliatum low shrubland over Desmocladus asper, Lepidosperma pubisquamum very open sedgeland with Lomandra ma			C. 2 km S of Yanchep, 6 km W of Yanchep Beach Road - Wanneroo Road intersection, which is 54 km N of Perth CBD	GPS	1	30/09/2007
36570	7835213	40801	Leucopogon maritimus	1		White sand, sand dune, slope, private property.	Melaleuca systema, Lomandra maritima Low Open Heath Melaleuca systema, Scaevola thesioides, Acacia rostrilifera and Herbland of Lomandra martima.		Healthy population with potential threat from clearing. Field No. 166.	Eglinton, approximately 40 km N of the Perth CBD, W of Marmion Avenue, S of Pipidiny	GPS	1	20/10/2007
36572	6210082	40801	Leucopogon maritimus	1						Burns - Mullaloo	MAN	3	27/06/1966
36578	5536359	40801	Leucopogon maritimus	1	Low spreading shrub, 20 cm high x 20 cm wide. Flowers white, single stemmed at ground level. Ovary 3 celled glabrous.	Near coastal dunes ca 600 m from beach. Bare yellow sand over limestone.	Low Heath D (Muir 1977) with Acacia truncata, Melaleuca systema and Acanthocarpus preissii.	locally common.		Ca 200 m SW from the end of Pipidiny Road, S of Yanchep	GPS	1	10/05/1998
36584	5127742	40801	Leucopogon maritimus	1	Erect to spreading shrub to 30 cm tall. Corolla white, flowers just beginning.	In sand among limestone rocks on small hill.	In low kwongan, Scaevola, Pimelea, Acacia.			4 km along Pipidiny Road from Yanchep Road,	MAN	0	27/11/1996
36871	8263329	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						Yanchep	MAN	4	17/06/1965
36872	8263302	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						Yanchep	MAN	4	17/06/1965
36873	8263310	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						Yanchep	MAN	4	17/06/1965
36874	8263337	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						Yanchep	MAN	4	17/06/1965

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
36875	8263345	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	More or less spreading shrub to 70 cm; flowers white.	In sand.	In Banksia scrub.			Yanchep	MAN	4	21/05/1963
36876	8263353	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						[? Yanchep]	MAN	4	17/06/1965
36879	8262926	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						N end of Yanchep National Park	MAN	4	3/06/1965
36880	8262934	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3						Yanchep	MAN	4	17/06/1965
36883	3509311	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Dwarf shrub 40 cm high, flowers white, mucronate leaves.	Undulating, grey sand over limestone.	Woodland, Banksia.	frequent.		Map.1:25,000 Sheet: Yanchep, Grid Ref. 767108	AUTO	3	29/05/1993
36884	1147773	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Low twiggy woody shrub, 15-20 cm, flowers white, sweet honey scent.	Low hill, grey sand over limestone.	Limestone heath.	scattered in area.		Neerabup [Lake] National Park; 35 km N of Perth	AUTO	3	30/05/1990
36888	6154794	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Erect shrub 30 - 35 cm high. Fruit green and red.	Sandplain.	Disturbed scrub and heath.	occasional		4 km N of Yanchep turnoff on Wanneroo- Lancelin road. Rubbish tip entrance. Yanchep National Park	MAN	3	30/08/1979
36891	5918073	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Erect shrub 40 cm high x 30 cm wide. Fruiting. Fruit probably immature.	Coastal plain. Dry, bare yellow sand over limestone.	Thicket. Dryandra sessilis, Spyridium globulosum, Hakea costata.		Taken from same populatio n as flowering specimen MH 1986.	E-W track N of Minnie w Grotto, Yanchep National Park,	GPS	1	16/09/2001
36897	7293178	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Erect shrub to 60 cm high x 60 cm wide. Flowers white, strictly pendulous.	Coastal plain. Dry, yellow sand over limestone.	Heath (mostly 1-2 m). Dryandra sessilis, Jacksonia calcicola, Conostephium stoechadis.	locally common.		Yanchep National Park, Pigeon Road ca 1.8 km E of Wanneroo Road	GPS	1	19/05/2005
36898	5556325	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Low erect shrub, 40 cm high x 30 cm wide. Flowers white, pendulous. Single stemmed at ground level.	Coastal plain. Dry, bare yellow sand over limestone.	Thicket (Muir 1977) with Dryandra sessilis, Spyridium globulosum, Hakea costata. In limestone heath and Banksia woodland, sometimes growing with L. racemosus.	locally common in N areas of park.		Yanchep National Park, EW track N of Minnie w Grotto	GPS	1	16/04/2000
36899	5572223	19460	Leucopogon sp. Yanchep (M. Hislop 1986)	3	Erect open shrub, 70 cm high x 60 cm wide. Flowers white, pendulous. Plant single stemmed at ground level.	Coastal plain. Dry, littered, yellow sand.	Low Banksia Forest B (Muir 1977) with B. attenuata, B. menziesii, Hakea ruscifolia, Xanthorrhoea preissii.	occasional		Off Bailey Road, ca 200 m E of Wanneroo Road, N of Yanchep	GPS	1	21/05/2000

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
36959	4302672	40804	Leucopogon squarrosus subsp. trigynus	2	Erect shrub 0.4m.	Soil: Grey sand. Topography/drainage: Well drained gentle W facing dune slope. Geomorphology: Bassendean sands.	Vegetation: Banksia menziesii, Banksia attenuata Low Woodland A over Verticordia nitens Low Scrub B over Beaufortia elegans, Conostephium pendulum Low Heath D.			Location: Along Muchea - Eneabba powerline 12 km SSE GinGin airfield (plot pline-1).	MAN	0	20/07/1993
37666	8386811	25819	Marianthus paralius	T		Well drained dry white sand. Limestone ridge. Fire history: long ago.	Melaleuca cardiophylla, Scaevola crassifolia, Olearia axillaris, Rhagodia baccata Closed Low Heath.		Condition of plants: moderate.	Dual use path & north of Silver Sands Drive, Joondalup	TOPO	3	29/12/2010
37669	7782144	25819	Marianthus paralius	T	Prostrate shrub with red flowers.	Limestone cliff with dry, brown sand. Exposed limestone outcropping.	Dense Heath B. Coastal heath vegetation including Spyridium sp., Thomasia sp., Melaleuca sp., Scaevola sp., Acanthocarpus sp.	9 plants recorded.		Iluka foreshore reserve, Iluka R47831, plants are located approx 575 m and 870 m S of Ocean Parade along the pedestrian path	GPS	1	26/10/2006
38198	9196951	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Slender erect open shrub, 2-3 m high x 1 m wide. In fruit, not in flower.	Limestone hill. Skeletal white loam over limestone.	Banksia sessilis / Melaleuca tall shrubland.	locally common.	Co-occurring with Melaleuca systema which is in full flower.	Wattle Avenue West, Wanneroo - Nowergup	GPS	1	28/08/2004
38199	8815224	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect to spreading shrub to 1.5 m with yellow flowers.	Limestone ridge remnant within a mine pit.	Remnant.	occasional		SF 65 670 m NE of the Hopkins and Wesco intersection on the 'island' of vegetation in the middle of the mine pit	GPS	1	6/12/2013
38200	8816476	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect shrub 1 - 2.5 m x 2 m.	On fine sand to sandy loam soils with 30-70% outcropping limestone.	Closed tall scrub of Melaleuca systema, M. sp. Wanneroo, M. sp. Wanneroo x systema and M. huegelii, over low shrubland of Calothamnus quadrifidus, Banksia sessilis var. cygnorum, Leucopogon parviflorus and Templetonia retusa.	locally common.	Co-occurs with Melaleuca systema and M. systema x M. sp. Wanneroo . Population 1.	One Tree Hill (CR 25253), Nowergup	GPS	1	7/08/2014
38201	6972942	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Slender erect single 2-3 m high and 1-2 m wide. Flowers pale yellow; in full flower.	Rugged limestone ridge. Mossy black sand.	Melaleuca cardiophylla, M. sp., M. systema tall closed shrubland.	dominant locally.		Wanneroo Shire Reserve, Wattle Avenue, Neerabup	GPS	1	23/12/2004
38202	8816522	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Erect shrub 1-2.5 m x 2 m. Flowers yellow.	On well drained grey sand with 30-70% outcropping limestone.	Tall open scrub of Melaleuca huegelii, M. sp. Wanneroo with occasional Eucalyptus petrensis and Melaleuca systema, over open low heath of Acacia alata var. tetrantha, Thomasia triphylla over open sedgeland/herbland.	locally common.		SE corner of Lot 7 Wesco Road, Nowergup	GPS	1	28/11/2014

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
38203	9041443	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Shrub to 2 m tall. Yellow flowers.	NE face of limestone hill. Soil: shallow yellow/brown sand.	Dense shrubland to 2 m. Associated species: Calothamnus sp., Hakea trifurcata, Grevillea preissii and Banksia sessilis.	>100.		W of Hopkins Road, NE of Wesco Road	GPS	1	17/01/2019
38204	9137459	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Tall shrub to 2 m tall. Yellow flowers.	Hilltop and upper slopes. Soil: shallow brown sand.	Shrubland. Associated species: Thomasia sp., sedges, Hakea trifurcata, Grevillea preissii, Melaleuca systema, Banksia sessilis.	>1000.		Lot 7, S of Wesco Road. N of mine area	GPS	1	17/01/2019
38207	8982635	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T	Shrub, 2.5 m high. Flowers yellow.	Limestone ridge. Brown loamy sand.	Tall open scrub of Melaleuca huegelii and M. sp. Wanneroo (G.J. Keighery 16705) over open shrubland to 1.5 m of Melaleuca systema, Xanthorrhoea preissii and Acacia lasiocarpa over low open shrubland to 0.4 m of Grevillea preissii and Banksia nivea over v	40 plants.		Mineral lease M70/138, S of Wesco Road, Nowergup, City of Wanneroo	GPS	1	1/10/2009
38208	8997675	33022	Melaleuca sp. Wanneroo (G.J. Keighery 16705)	T		Hill slope. Yellow/brown sand.	Melaleuca shrubland. Associated species: Acacia alata var. tetrantha, Banksia sessilis, Melaleuca huegelii and M. systema.	1000+.		Lot 7 (north) Wesco Road, Nowergup	GPS	1	10/05/2017
41128	9136924	5237	Pimelea calcicola	3		Brown sandy loam soil on plain over limestone.	Isolated low Banksia attenuata trees over tall closed Banksia sessilis, Hakea trifurcata and Leptospermum laevigatum shrubland over low open Hibbertia hypericoides and Xanthorrhoea preissii shrubland.	1 mature plant.		20 m E of Indian Ocean Drive, 5.12 km NE of Yanchep	GPS	1	22/11/2018
41130	3409325	5237	Pimelea calcicola	3						Yanchep National Park: Between N end of Loch and main road (2)	AUTO	4	17/10/1963
41133	3409171	5237	Pimelea calcicola	3	Shrub-like herb up to 18 inches high. Flowers pale mauve.		Heathland.			N of Wanneroo	AUTO	3	16/10/1962
41142	3409341	5237	Pimelea calcicola	3	Shrub to 2.5 ft. Flowers light pink-white.	Sand-limestone.				Burns Beach Road (Quarry)	AUTO	3	27/09/1968
41143	1812130	5237	Pimelea calcicola	3	Slender erect shrub, to 60 cm. Flowers deep pink to very pale pink. In full flower.	Low hill. Shallow grey sand over massive limestone.	Dryandra sessilis closed heath.		Abundanc e: Common in area.	Hepburn Heights; Wanneroo, 25 km N of Perth	AUTO	3	7/11/1990
41144	3409368	5237	Pimelea calcicola	3	Shrub, erect 3 ft. Reddish pink flowers.					24 mile peg on Yanchep road, just S of lime quarries [ca 15 km S of Yanchep]	MAN	3	4/11/1964
41146	4948874	5237	Pimelea calcicola	3	Erect single stemmed shrub 1 m high x 1 m wide. Flowers grading from white through to pink.	Dry brown clayey sand over limestone.	Dense Low Forest A, Open Scrub, Heath A, Heath B, Low Heath C, Low Heath D, Very Open Herbs, Open Hummock Grass. Eucalyptus gomphocephala, Dryandra sessilis, Scaevola sp, purple Hemiandra and yellow flowered Melaleuca, Xanthorrhoea preissii.	frequent.		Yanchep National Park	GPS	1	13/10/1997

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41155	9220828	5237	<i>Pimelea calcicola</i>	3	1.5 m high.	Undulating plain. Brown sandy loam over limestone.	Isolated low <i>Banksia attenuata</i> trees over tall closed <i>Banksia sessilis</i> , <i>Hakea trifurcata</i> and <i>Leptospermum laevigatum</i> shrubland over low open <i>Hibbertia hypericoides</i> and <i>Xanthorrhoea preissii</i> shrubland.			5.14 km NE of Yanchep, beside Indian Ocean Drive	GPS	1	12/11/2018
41291	6209874	8163	<i>Pithocarpa corymbulosa</i>	3					Field No. Y 64.	3 miles N of Pinjar Forestry Headquarters, Wanneroo	MAN	3	6/06/1963
41462	3803406	27986	<i>Placynthium nigrum</i>	3		Roadside.				Picnic area, N of Yanchep National Park, N of Perth	AUTO	4	28/08/1988
41484	3578186	11132	<i>Platysace ramosissima</i>	3	Flowers cream.					32 mile peg, Great Northern Highway [ca 29 km SSW of Bindoon]	AUTO	3	//
41762	8766185	42022	<i>Poranthera moorokatta</i>	2	Small herb, 1 cm high.	Crest of low dune with yellow sand (ant mounds). Greater than 10 years since a fire.	<i>Banksia attenuata</i> , <i>Banksia menziesii</i> , <i>Allocasuarina fraseriana</i> low woodland over <i>Xanthorrhoea preissii</i> open shrubland over <i>Hibbertia hypericoides</i> , <i>Calothamnus sanguineus</i> , <i>Calytrix flavescens</i> low shrubland over <i>Mesomelaena pseudostygia</i> scattered sedges.			Corner of Joseph Banks Boulevard and Woolly Drive, Banksia Grove, 33 km N of Perth CBD	GPS	1	25/10/2012
43142	3807401	28049	<i>Rinodina bischoffii</i>	2		Roadside.				Picnic area N of Yanchep National Park, N of Perth, Yanchep State Forest	AUTO	4	28/08/1988
43467	8039364	17543	<i>Sarcosoma bicarinata</i>	3		Private property; limestone outcrops with dry white sand. Potential threat by urban development. Last burnt summer 2001.	Open <i>Banksia sessilis</i> heathland. <i>Banksia sessilis</i> , <i>Opercularia vaginata</i> , <i>Scaevola crassifolia</i> and <i>Desmodcladus flexuosus</i> .	5 mature plants over 5 m squared.	Condition of population: Healthy.	Lot 17, Marmion Avenue Clarkson (NW corner of site near Marmion Avenue and Neerabup Road intersection) 34 km N of Perth CBD	GPS	1	12/01/2009

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
43469	4583744	17543	<i>Sarcozona bicarinata</i>	3	Herbaceous succulent 8 cm high and spreading to generally less than 30 cm across the ground. Leaves dull grey, green in colour; seeds brown and rough all over.	Grey sand over rocky limestone outcrops. Exposed sunny areas.	Edge of <i>Dryandra sessilis</i> (Parrot Bush) heathlands and cleared area for housing.		No evidence of recent fire but few plants (3 only) found on edge of bushland where the area has been cleared for housing development.	Iluka-Beaumaris Estate near Sales Office, 100 m N of Miami Beach Promenade, Location B (refer to map attached)	AUTO	3	2/03/1997
43470	4583736	17543	<i>Sarcozona bicarinata</i>	3	Herbaceous succulent 8 cm high and spreading to generally less than 30 cm across the ground. Leaves dull grey, green in colour; seeds brown and rough all over.	Grey sand over rocky limestone outcrops. Exposed sunny areas. Fire approximately 12 months prior to collection. The fire most probably stimulates seed germination and opens up the very dense <i>Dryandra</i> heath providing a sunny environment for this species	<i>Dryandra sessilis</i> (Parrot Bush) heathlands.		Abundance: this species is common throughout the fire burnt area but did not occur outside where the <i>Dryandra sessilis</i> formed closed dense heath nor did it occur in adjacent unburnt <i>Banksia</i> bushland.	Iluka-Beaumaris Estate (near Burns Beach), track off Burns Beach Road, Location A (refer to map attached)	AUTO	3	2/03/1997
43743	4526422	17606	<i>Schoenus griffinianus</i>	4	Perennial sedge.	Soil: White sand. Topography/drainage: Well drained gentle SW facing slope. Geomorphology: Bassendean sands over guildford formation.	Vegetation: <i>Banksia attenuata</i> Open Low Woodland A over mixed Low Heath C over mixed Open Dwarf Scrub D over <i>Lyginia barbata</i> Very Open Low Sedges.			Melaleuca Park conservation area, N Cooper Rd, 12 km NE of Wanneroo (plot mela-8).	GPS	1	19/10/1993

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
44933	2922479	20348	Sphaerolobium calcicola	3						Yanchep National Park, near Golf Course	AUTO	3	18/11/1963
44936	6233090	20348	Sphaerolobium calcicola	3	Standard yellow, red around yellow eye. Red wings. Keel yellow with few red spots near apex. Ca 1 m tall.	Grey brown sand over limestone. Seasonally wet, fairly low lying area.	Shrubland with understorey of sedgeland. Associated species: Nuytsia and Acacia with Viminaria, Xanthorrhoea, Comesperma and Lepidospermum.	occasional		375 m W of Wanneroo Road on Yanchep Road, S side of road	MAN	3	10/11/1997
45475	4916972	19704	Stenanthemum sublineare	2	Low erect shrub, 8 cm high x 4 cm wide. Flowers spent, few fruits evident.	Sand plain. Littered white sand.	Low Forest B (Muir 1977) with Banksia attenuata, Xanthorrhoea preissii, Calytrix flavescens, Patersonia occidentalis.		apparentl y quite common in relatively small area.	Melaleuca Park, W of Bullsbrook, ca 3 km N of Neaves Road along walk trail,	GPS	1	21/12/1997
45476	7526989	19704	Stenanthemum sublineare	2		Low rise on an undulating plain. Dry, grey sand. Unburnt for 20 + years.	Open Banksia attenuata/Banksia menziesii low woodland, over heath (Beaufortia elegans, Eremaea pauciflora subsp. pauciflora, Regelia inops) Calytrix flavescens, Scholtzia involucreta, Bossiaea eriocarpa, Gompholobium tomentosum, Petrophile linearis, over	one plant.		Proposed Nerrabup Infiltration site, SE of Lake Pinjar, E of Wanneroo Golf Club, adjacent to Bush Forever site 398	GPS	1	17/11/2005
45478	4916964	19704	Stenanthemum sublineare	2	Low erect shrub, 10 cm high x 4 cm wide. Flowers greenish.	Sand plain. Littered white sand.	Low Forest B (Muir 1977) with Banksia attenuata, Xanthorrhoea preissii, Calytrix flavescens, Patersonia occidentalis.		Abundanc e: apparentl y quite common in relatively small area.	Melaleuca Park, W of Bullsbrook, ca 3 km N of Neaves Road along walk trail	GPS	1	27/10/1997
46213	6511546	7756	Stylidium longitubum	4	Flowers pink.	Seasonal Wetland, flat ground. Dark brown clay loam some peat, over ?clay. Poor drainage, wet during winter/spring.	Open Low Scrub A. Associated species: Astartea fascicularis.			SE end off Perry Road, Lake Pinjar Bushland (System 6 Area M8, Bush Forever 382). Lake Pinjar, in System 6 Update quadrat pinj 02	GPS	1	10/11/1994
46262	4430921	13127	Stylidium maritimum	3	Flowers pink-mauve, throat white, outer petal surface white to pale pink, upper winged throat appendages pink, lower throat appendages white-red tipped, leaves 3 per papery sheath.	On limestone outcrops in crater-like depressions filled with black sandy soil.	Area surrounded by low coastal heath and open Banksia menziesii woodland.			Just N of the tavern on Wanneroo Road, Carabooda,	MAN	0	22/10/1995

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
46271	4430913	13127	Stylidium maritimum	3	Flowers pink-mauve, throat white, outer petal surface white to pale pink, upper winged throat appendages pink, lower throat appendages white-red tipped, leaves 3 per papery-sheath.	On limestone outcrops in crater-like depressions filled with black sandy soil.	Area surrounded by low coastal heath and open Banksia menziesii woodland.			Limestone quarry on Yeal Swamp Road, c. 3 km E of Wanneroo-Lancelin road, Yanchepp,	MAN	0	22/10/1995
46274	9139559	13127	Stylidium maritimum	3	Sedge-like herb to 0.4 m high. In fruit.	Limestone ridge with outcropping. Sandy soil.	Melaleuca huegelii and Melaleuca systena TEC.	ca. 35 plants.		City of Wanneroo. Ca. 700 m S of Carabooda Road and 200 m NE of Water Corporation's Carabooda tank	GPS	1	7/11/2017
46278	7520840	13127	Stylidium maritimum	3		Side of dune. Dry, white-grey sand.	Low heath. Lomandra maritima, Leptorhynchos scabrus, Melaleuca huegelii.	> 200 plants.		Alkimos - Eglinton proposed housing development	GPS	1	12/10/2005
46279	5982103	13127	Stylidium maritimum	3		Slope; on stable sand dunes; dry white sand; long unburnt.	Low heath 0.5 m tall, 70-100 % cover.	c. 10 mature plants in a 5 x 5 m area.		200 m from coast, Alkimos Estate,	MAN	3	25/10/1996
46284	9207996	13127	Stylidium maritimum	3	Caespitose, perennial herb, 40 cm high. Flowers white/purple.	S-facing, midslope of low dune (ridge). Brown sand.	Olearia axillaris, Stylidium globulosum scattered shrubs over Melaleuca systena, Leucopogon parviflorus, Trymalium ledifolium var. ledifolium low shrubland over Austrostipa flavescens, Poa poiformis, Lomandra maritima herbland/grassland/sedgeland.			C. 2.5 km S of Yanchepp, 6 km W of Yanchepp Beach Road - Wanneroo Road intersection, which is 54 km N of Perth CBD	GPS	1	3/10/2007
46286	7836384	13127	Stylidium maritimum	3		Grey sand-loam, slope, ridge, limestone, private property.	Closed Tall Scrub of Melaleuca huegelii, Dryandra sessilis with occasional Spyridium globulosum.		Healthy population, in flower. Potential threat from clearing and weeds.	Lot 8 Butler Street, Butler, City of Wanneroo, Swan Coastal Plain	MAN	3	16/10/2007
46288	7836430	13127	Stylidium maritimum	3		Brown sand-loam over limestone, slope, private property.	Acacia rosteliifera Open Low Heath with Melaleuca huegelii, Acacia truncata and Melaleuca systena.		Healthy population with flowers. Potential threat from clearing and weeds.	Eglinton, W of Marmion Avenue, S of Pipindiny Road	TOPO	3	17/10/2007

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
46291	8755361	13127	<i>Stylidium maritimum</i>	3	Perennial tufted herb with narrow leaves 10-40 cm long, with rose pink flowers.	Grey sand, on mid-slope with exposed limestone.		1 mature plant.	Project: 3536.	2 Quinns Road, Mindarie, within Bush Forever No 397	GPS	1	4/11/2015
46297	9039066	13127	<i>Stylidium maritimum</i>	3	Herb.	Dune swale.	<i>Banksia sessilis</i> low open shrubland.	10 plants.		Alkimos, Perth	GPS	1	20/10/2016
46298	8982600	13127	<i>Stylidium maritimum</i>	3	Herb, 0.8 m high.	Limestone ridge. Brown loamy sand over limestone.	Tall shrubland of <i>Melaleuca systema</i> over open shrubland of <i>Melaleuca huegelii</i> and <i>Acacia lasiocarpa</i> over very open hermland of <i>Desmocladus flexuosus</i> . Associated species: <i>Grevillea preissii</i> .	15 plants.		Mineral lease M70/339, Nowergup, City of Wanneroo	GPS	1	2/10/2009
46378	8540942	25800	<i>Stylidium paludicola</i>	3		Sandy flats near winter-wet damplands.	Low woodland of <i>marri</i> and <i>Banksia grandis</i> over <i>Baumea juncea</i> sedgeland and mixed open heath adjacent to <i>Melaleuca preissiana</i> and <i>Banksia littorea</i> woodland.			Edith Cowan University campus, Joondalup, Perth	MAN	3	//2007
47230	8604223	48297	<i>Styphelia filifolia</i>	3		On brown sand on midslopes.	Woodland of <i>Banksia attenuata</i> , <i>B. menziesii</i> , <i>B. ilicifolia</i> over Heath dominated by <i>Allocasuarina humilis</i> .			Near Pinjar Powerstation	UNK	2	11/09/2007
47232	2997290	48297	<i>Styphelia filifolia</i>	3						Melaleuca Park 8.38 km N along	AUTO	3	11/06/1978
47234	1016539	48297	<i>Styphelia filifolia</i>	3	Erect shrub to 50 cm.	Sandy soil.				Galagher Road, Wanneroo	TOPO	3	7/02/1980
47237	6808468	48297	<i>Styphelia filifolia</i>	3	Shrub.		Open low woodland. <i>Allocasuarina fraseriana</i> , <i>Banksia attenuata</i> , <i>B. menziesii</i> , <i>B. grandis</i> , <i>Xanthorrhoea preissii</i> , <i>Acacia pulchella</i> , <i>Hakea prostrata</i> , <i>Calytrix flavescens</i> .			Gnangara Mound	MAN	3	3/12/2002
47239	5917905	48297	<i>Styphelia filifolia</i>	3	Erect shrub 60 cm high x 40 cm wide. Flowers white, strictly pendulous. Leaves patent. Plants single stemmed at ground level.	Coastal plain (Bassendean Sands). Dry, littered grey sand.	<i>Banksia</i> woodland with a few <i>marri</i> . <i>Corymbia calophylla</i> , <i>Banksia attenuata</i> , <i>Regelia inops</i> , <i>Xanthorrhoea preissii</i> .	very occasional (4-6).	Relatively low lying area.	Melaleuca Park, ca 4 km S of Wandoo Road on coastal plain track,	GPS	1	10/06/2001
47250	7337671	48297	<i>Styphelia filifolia</i>	3	Erect, well branched shrub to ca 50 cm high. White flowers. Mostly in bud.	Flat, slope. Dry, white sand.	<i>Banksia ilicifolia</i> , <i>B. menziesii</i> , <i>Nuytsia floribunda</i> , <i>Melaleuca</i> - paper bark trees and sandplain shrubs including <i>Scholtzia involucreta</i> .	10+ scattered plants.		Warbrook Road, Bullsbrook, ca 200 m S from Wise Road then 100 m W	GPS	1	25/02/2006
47259	4453719	48297	<i>Styphelia filifolia</i>	3	Erect shrub 0.4m.	Soil: Brown sand. Topography/drainage: Well drained flat. Geomorphology: Lagoonal deposits - bassendean dunes.	Vegetation: <i>Eucalyptus calophylla</i> , <i>E. marginata</i> Woodland over <i>Xanthorrhoea preissii</i> Heath B over <i>Conostephium pendulum</i> Dwarf Scrub D over <i>Phlebocarya ciliata</i> Open Herbs.			On Wandoo Rd S of Muchea - Eneabba powerline 11 km S Gingin airfield (adj. to plot pline-3)	GPS	1	21/10/1993
49018	8755442	35581	<i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)	2	Sedge c. 50 cm tall with very narrow leaves and culms. Inflorescence loose and branched, with dark brown florets.	Grey brown peaty soil in a swamp.	Low open forest of <i>Eucalyptus rudis</i> and <i>Melaleuca preissiana</i> . Tall open shrubland of <i>Astarea fascicularis</i> and <i>Kunzea glabrescens</i> . Pteridium esculentum mid ferns. Sedgeland of <i>Lepidosperma</i> .	100 mature plants.	Project: 3516.	The Roe Highway Extension area, ca 14 km S of Perth	GPS	1	8/10/2015

FID	Sheet	NameID	Taxon	Cons_Cod e	Plant_Desc	Site	Vegetation	Frequency	Notes	Locality	Geo_Met hod	Precision	Date
49019	4864743	35581	Tetraria sp. Chandala (G.J. Keighery 17055)	2	Rhizomatous herb 1.6 m high, 1 m wide; flowers brown; fruits brown.	Mound spring, black peat over clay & humic sand.	Assoc. vegn.: Melaleuca rhapsiophylla forest over sedges.		Abundanc e: very common.	Property on W side of Neaves Road, Wannereroo	TOPO	2	4/02/1997
49517	278696	1717	Thelymitra variegata	2	Petals purple, spotted. Sepals orange, purplish in the centre, with reddish- purple spots. Column purple with orange wings.	On limestone hills towards the coast.			'Leopard Orchid'	Wannereroo	AUTO	3	/09/1919
51147	6427405	44444	Tripterococcus sp. Brachylobus (A.S. George 14234)	4	Flowers yellow.	Seasonal Wetland, flat ground, black fine peaty clay loam sand, poor drainage, wet during winter/spring.	Open Herbs. Associated species: Lepyrodia muirii, Baumea articulata, Baumea vaginalis.			SE end off Perry Road, Lake Pinjar Bushland (System 6 Area M8, Bush Forever 382), Lake Pinjar, in System 6 Update quadrat pinj01	GPS	1	10/11/1994

APPENDIX 2
Naturemap Report

NatureMap Species Report

Created By Guest user on 22/12/2020

Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 115° 45' 51" E, 31° 38' 44" S
Buffer 10km
Group By Conservation Status

Conservation Status	Species	Records
Non-conservation taxon	781	5876
Other specially protected fauna	2	3
Presumed extinct	2	2
Priority 1	3	4
Priority 2	7	21
Priority 3	15	37
Priority 4	9	452
Protected under international agreement	8	18
Rare or likely to become extinct	18	573
TOTAL	845	6986

Name ID	Species Name	Naturalised	Conservation Code	Endemic To Query Area
Rare or likely to become extinct				
1.	24162 <i>Bettongia penicillata</i> subsp. <i>ogilbyi</i> (Woylie, Brush-tailed Bettong)		T	
2.	1213 <i>Calectasia cyanea</i> (Blue Tinsel Lily)		T	
3.	24733 <i>Calyptorhynchus baudinii</i> (Baudin's Cockatoo, White-tailed Long-billed Black Cockatoo)		T	
4.	24734 <i>Calyptorhynchus latirostris</i> (Carnaby's Cockatoo, White-tailed Short-billed Black Cockatoo)		T	
5.	48400 <i>Calyptorhynchus</i> sp. (white-tailed black cockatoo)		T	
6.	25335 <i>Caretta caretta</i> (Loggerhead Turtle)		T	
7.	25336 <i>Chelonia mydas</i> (Green Turtle)		T	
8.	24092 <i>Dasyurus geoffroi</i> (Chuditch, Western Quoll)		T	
9.	24043 <i>Eubalaena australis</i> (Southern Right Whale)		T	
10.	13091 <i>Eucalyptus argutifolia</i> (Wabling Hill Mallee)		T	
11.	33974 <i>Hesperocolletes douglasi</i> (Douglas's Broad-headed Bee, Short-tongued Native Bee)		T	
12.	25819 <i>Marianthus paralius</i>		T	
13.	33022 <i>Melaleuca</i> sp. <i>Wanneroo</i> (G.J. Keighery 16705)		T	
14.	24154 <i>Perameles bougainville</i> subsp. <i>bougainville</i> (Western Barred Bandicoot, Marl)		T	
15.	24142 <i>Petrogale lateralis</i> subsp. <i>lateralis</i> (Black-flanked Rock-wallaby, Black-footed Rock-wallaby)		T	
16.	24073 <i>Physeter macrocephalus</i> (Sperm Whale)		T	
17.	24157 <i>Trichosurus vulpecula</i> subsp. <i>arnhemensis</i> (northern brushtail possum (Kimberley))		T	
18.	34113 <i>Westralunio carteri</i> (Carter's Freshwater Mussel)		T	
Presumed extinct				
19.	24161 <i>Bettongia lesueur</i> subsp. <i>graii</i> (Boodie (inland), Burrowing Bettong (inland))		X	
20.	24155 <i>Perameles eremiana</i> (Desert Bandicoot, walilya)		X	
Protected under international agreement				
21.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
22.	25554 <i>Apus pacificus</i> (Fork-tailed Swift, Pacific Swift)		IA	
23.	48587 <i>Hydroprogne caspia</i> (Caspian Tern)		IA	
24.	48591 <i>Pandion cristatus</i> (Osprey, Eastern Osprey)		IA	
25.	24843 <i>Plegadis falcinellus</i> (Glossy Ibis)		IA	
26.	24716 <i>Puffinus pacificus</i> (Wedge-tailed Shearwater)		IA	
27.	48597 <i>Thalasseus bergii</i> (Crested Tern)		IA	
28.	24808 <i>Tringa nebularia</i> (Common Greenshank, greenshank)		IA	
Other specially protected fauna				
29.	25624 <i>Falco peregrinus</i> (Peregrine Falcon)		S	
30.	24051 <i>Megaptera novaeangliae</i> (Humpback Whale)		S	
Priority 1				

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
31.	34161 <i>Baeckea</i> sp. Limestone (N. Gibson & M.N. Lyons 1425)		P1	
32.	31233 <i>Drosera patens</i>		P1	
33.	30712 <i>Drosera</i> x <i>sidjamesii</i>		P1	
Priority 2				
34.	3237 <i>Acacia benthamii</i>		P2	
35.	33973 <i>Austrosaga spinifer</i> (spiny katydid (Swan Coastal Plain), bush cricket (Swan Coastal Plain))		P2	
36.	45757 <i>Calectasia elegans</i> (Elegant Tinsel Lily)		P2	
37.	20162 <i>Fabronia hampeana</i>		P2	
38.	42022 <i>Poranthera moorokatta</i>		P2	
39.	19704 <i>Stenanthemum sublineare</i>		P2	
40.	35581 <i>Tetraria</i> sp. Chandala (G.J. Keighery 17055)		P2	
Priority 3				
41.	11336 <i>Adenanthos cygnorum</i> subsp. <i>chamaephyton</i>		P3	
42.	1425 <i>Conostylis bracteata</i>		P3	
43.	16245 <i>Cyathochaeta teretifolia</i>		P3	
44.	11461 <i>Hibbertia spicata</i> subsp. <i>leptotheca</i>		P3	
45.	33977 <i>Hylaeus globuliferus</i> (woolybush bee)		P3	
46.	48935 <i>Idiosoma sigillatum</i> (Swan Coastal Plain shield-backed trapdoor spider)		P3	
47.	20462 <i>Jacksonia gracillima</i>		P3	
48.	33982 <i>Leioproctus contrarius</i> (a short-tongued bee)		P3	
49.	19460 <i>Leucopogon</i> sp. Yanchep (M. Hislop 1986)		P3	
50.	25249 <i>Neelaps calonotos</i> (Black-striped Snake, black-striped burrowing snake)		P3	
51.	5237 <i>Pimelea calcicola</i>		P3	
52.	8163 <i>Pithocarpa corymbulosa</i> (Corymbose Pithocarpa)		P3	
53.	17543 <i>Sarcozona bicarinata</i>		P3	
54.	13127 <i>Stylidium maritimum</i>		P3	
55.	48297 <i>Styphelia filifolia</i>		P3	
Priority 4				
56.	24215 <i>Hydromys chrysogaster</i> (Water-rat, Rakali)		P4	
57.	48588 <i>Isoodon fusciventer</i> (Quenda, southwestern brown bandicoot)		P4	
58.	4027 <i>Jacksonia sericea</i> (Waldjumi)		P4	
59.	48022 <i>Notamacropus irma</i> (Western Brush Wallaby)		P4	
60.	24328 <i>Oxyura australis</i> (Blue-billed Duck)		P4	
61.	25258 <i>Pseudonaja affinis</i> subsp. <i>exilis</i> (Rottneest Island Dugite)		P4	
62.	7756 <i>Stylidium longitubum</i> (Jumping Jacks)		P4	
63.	33992 <i>Synemon gratiosa</i> (Graceful Sunmoth)		P4	
64.	44444 <i>Tripterococcus</i> sp. <i>Brachylobus</i> (A.S. George 14234)		P4	
Non-conservation taxon				
65.	15470 <i>Acacia barbinervis</i> subsp. <i>borealis</i>			
66.	3282 <i>Acacia cyclops</i> (Coastal Wattle)			
67.	3374 <i>Acacia huegelii</i>			
68.	3409 <i>Acacia lasiocarpa</i> (Panjang)			
69.	11611 <i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
70.	3502 <i>Acacia pulchella</i> (Prickly Moses)			
71.	15481 <i>Acacia pulchella</i> var. <i>glaberrima</i>			
72.	15482 <i>Acacia pulchella</i> var. <i>goadbyi</i>			
73.	3525 <i>Acacia rostellifera</i> (Summer-scented Wattle)			
74.	3527 <i>Acacia saligna</i> (Orange Wattle, Kudjong)			
75.	30032 <i>Acacia saligna</i> subsp. <i>saligna</i>			
76.	3541 <i>Acacia sessilis</i>			
77.	3584 <i>Acacia truncata</i>			
78.	3602 <i>Acacia willdenowiana</i> (Grass Wattle)			
79.	24559 <i>Acanthagenys rufogularis</i> (Spiny-cheeked Honeyeater)			
80.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
81.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
82.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
83.	1208 <i>Acanthocarpus preissii</i>			
84.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
85.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
86.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
87.	24282 <i>Accipiter fasciatus</i> subsp. <i>fasciatus</i> (Brown Goshawk)			
88.	42368 <i>Acritoscincus trilineatus</i> (Western Three-lined Skink)			
89.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
90.	6295 <i>Acrotriche cordata</i> (Coast Ground Berry)			
91.	6205 <i>Actinotus leucocephalus</i> (Flannel Flower)			
92.	7818 <i>Actites megalocarpus</i> (Dune Thistle)			
93.	25544 <i>Aegotheles cristatus</i> (Australian Owlet-nightjar)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
94.	<i>Aetapcus maculatus</i>			
95.	184 <i>Aira caryophylla</i> (Silvery Hairgrass)	Y		
96.	1056 <i>Alexgeorgea nitens</i>			
97.	1728 <i>Allocasuarina fraseriana</i> (Sheoak, Kondil)			
98.	1732 <i>Allocasuarina humilis</i> (Dwarf Sheoak)			
99.	2668 <i>Amaranthus powellii</i> (Powell's Amaranth)	Y		
100.	2671 <i>Amaranthus viridis</i> (Green Amaranth)	Y		
101.	<i>Amblyomma triguttatum</i>			
102.	13380 <i>Amphibromus nervosus</i>			
103.	200 <i>Amphipogon turbinatus</i>			
104.	26458 <i>Amphiroa anceps</i>			
105.	<i>Aname mainae</i>			
106.	24310 <i>Anas castanea</i> (Chestnut Teal)			
107.	24312 <i>Anas gracilis</i> (Grey Teal)			
108.	24315 <i>Anas rhynchotis</i> (Australasian Shoveler)			
109.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
110.	6311 <i>Andersonia heterophylla</i>			
111.	6314 <i>Andersonia lehmanniana</i>			
112.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
113.	1409 <i>Anigozanthos humilis</i> (Catspaw)			
114.	11434 <i>Anigozanthos humilis</i> subsp. <i>humilis</i>			
115.	1411 <i>Anigozanthos manglesii</i> (Mangles Kangaroo Paw, Kurulbrang)			
116.	44629 <i>Anilios australis</i>			
117.	25241 <i>Antaresia stimsoni</i> subsp. <i>stimsoni</i> (Stimson's Python)			
118.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
119.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
120.	12724 <i>Anthotium junciforme</i>			
121.	6210 <i>Apium annuum</i>			
122.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
123.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
124.	<i>Araneus cyphoxis</i>			
125.	<i>Araneus senicaudatus</i>			
126.	7838 <i>Arctotheca calendula</i> (Cape Weed, African Marigold)	Y		
127.	41324 <i>Ardea modesta</i> (great egret, white egret)			
128.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
129.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
130.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
131.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
132.	20283 <i>Astartea scoparia</i> (Common Astartea)			
133.	7851 <i>Asteridea pulverulenta</i> (Common Bristle Daisy)			
134.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			
135.	6331 <i>Astroloma microcalyx</i> (Native Cranberry)			
136.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
137.	<i>Aureococrypta lugubris</i>			
138.	<i>Austracantha minax</i>			
139.	<i>Australomimetes djuka</i>			
140.	<i>Australomimetes ovidi</i>			
141.	17234 <i>Austrostipa compressa</i>			
142.	17237 <i>Austrostipa elegantissima</i>			
143.	17240 <i>Austrostipa flavescens</i>			
144.	231 <i>Avellinia michelii</i>	Y		
145.	233 <i>Avena barbata</i> (Bearded Oat)	Y		
146.	24318 <i>Aythya australis</i> (Hardhead)			
147.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
148.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
149.	11386 <i>Banksia leptophylla</i> var. <i>melletica</i>			
150.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
151.	1842 <i>Banksia prionotes</i> (Acorn Banksia)			
152.	32076 <i>Banksia sessilis</i> (Parrot Bush, Pudjak)			
153.	32077 <i>Banksia sessilis</i> var. <i>cygnorum</i>			
154.	<i>Barnardius zonarius</i>			
155.	38765 <i>Battarrea stevenii</i>			
156.	740 <i>Baumea arthrophylla</i>			
157.	743 <i>Baumea juncea</i> (Bare Twigrush)			
158.	5382 <i>Beaufortia elegans</i> (Elegant Beaufortia)			
159.	7046 <i>Bellardia trixago</i> (Bellardia)	Y		
160.	25788 <i>Billiardiera fraseri</i> (Elegant Pronaya)			
161.	24319 <i>Biziura lobata</i> (Musk Duck)			
162.	17665 <i>Boronia purdieana</i> subsp. <i>purdieana</i>			
163.	11381 <i>Boronia ramosa</i> subsp. <i>anethifolia</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
164.	24251 <i>Bos taurus</i> (European Cattle)	Y		
165.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
166.	42380 <i>Brachyurophis fasciolatus</i> subsp. <i>fasciolatus</i> (Narrow-banded Shovel-nosed Snake)			
167.	42381 <i>Brachyurophis semifasciatus</i> (Southern Shovel-nosed Snake)			
168.	11187 <i>Brassica barrelieri</i> subsp. <i>oxyrrhina</i> (Smooth-stem Turnip)	Y		
169.	2993 <i>Brassica fruticulosa</i> (Twiggy Turnip)	Y		
170.	3000 <i>Brassica tournefortii</i> (Mediterranean Turnip)	Y		
171.	244 <i>Briza maxima</i> (Blowfly Grass)	Y		
172.	245 <i>Briza minor</i> (Shivery Grass)	Y		
173.	249 <i>Bromus diandrus</i> (Great Brome)	Y		
174.	27602 <i>Buellia georgei</i>			
175.	12770 <i>Burchardia congesta</i>			
176.	<i>Byssomerulius corium</i>			
177.	25714 <i>Cacatua pastinator</i> (Western Long-billed Corella)			
178.	25715 <i>Cacatua roseicapilla</i> (Galah)			
179.	25716 <i>Cacatua sanguinea</i> (Little Corella)			
180.	24727 <i>Cacatua sanguinea</i> subsp. <i>westralensis</i> (Little Corella)			
181.	24729 <i>Cacatua tenuirostris</i> (Eastern Long-billed Corella)	Y		
182.	25598 <i>Cacomantis flabelliformis</i> (Fan-tailed Cuckoo)			
183.	42307 <i>Cacomantis pallidus</i> (Pallid Cuckoo)			
184.	1276 <i>Caesia micrantha</i> (Pale Grass Lily)			
185.	11038 <i>Caladenia bicallata</i>			
186.	1592 <i>Caladenia flava</i> (Cowslip Orchid)			
187.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>			
188.	15352 <i>Caladenia georgei</i>			
189.	1595 <i>Caladenia hirta</i> (Sugar Candy Orchid)			
190.	1599 <i>Caladenia latifolia</i> (Pink Fairy Orchid)			
191.	15361 <i>Caladenia longicauda</i> subsp. <i>calcigena</i>			
192.	2845 <i>Calandrinia brevipedata</i> (Short-stalked Purslane)			
193.	2848 <i>Calandrinia corrigioloides</i> (Strap Purslane)			
194.	2854 <i>Calandrinia granulifera</i> (Pygmy Purslane)			
195.	2856 <i>Calandrinia liniflora</i> (Parakeelya)			
196.	40827 <i>Calandrinia tholiformis</i>			
197.	26535 <i>Callophycus harveyanus</i>			
198.	26536 <i>Callophycus oppositifolius</i>			
199.	5415 <i>Calothamnus lateralis</i>			
200.	5426 <i>Calothamnus quadrifidus</i> (One-sided Bottlebrush, Kwowdjard)			
201.	5429 <i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
202.	25717 <i>Calyptorhynchus banksii</i> (Red-tailed Black-Cockatoo)			
203.	5439 <i>Calytrix angulata</i> (Yellow Starflower)			
204.	5458 <i>Calytrix flavescens</i> (Summer Starflower)			
205.	5460 <i>Calytrix fraseri</i> (Pink Summer Calytrix)			
206.	24254 <i>Camelus dromedarius</i> (Dromedary, Camel)	Y		
207.	48920 <i>Canis familiaris</i> (Dog, Dingo)	Y		
208.	7909 <i>Carduus pycnocephalus</i> (Slender Thistle)	Y		
209.	43241 <i>Carex thecata</i>			
210.	2798 <i>Carpobrotus virescens</i> (Coastal Pigface, Kolboko, Bain)			
211.	1162 <i>Cartonema philydroides</i>			
212.	2951 <i>Cassytha flava</i> (Dodder Laurel)			
213.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
214.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
215.	11799 <i>Cassytha racemosa</i> forma <i>racemosa</i>			
216.	26562 <i>Caulerpa fergusonii</i>			
217.	1125 <i>Centrolepis drummondiana</i>			
218.	1131 <i>Centrolepis inconspicua</i>			
219.	1132 <i>Centrolepis mutica</i>			
220.	1134 <i>Centrolepis polygyna</i> (Wiry Centrolepis)			
221.	2889 <i>Cerastium glomeratum</i> (Mouse Ear Chickweed)	Y		
222.	24186 <i>Chalinolobus gouldii</i> (Gould's Wattled Bat)			
223.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)			
224.	11299 <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>			
225.	24377 <i>Charadrius ruficapillus</i> (Red-capped Plover)			
226.	43380 <i>Chelodina colliei</i> (South-western Snake-necked Turtle)			
227.	24321 <i>Chenonetta jubata</i> (Australian Wood Duck, Wood Duck)			
228.	2483 <i>Chenopodium album</i> (Fat Hen)	Y		
229.	47909 <i>Cheramoeca leucosterna</i> (White-backed Swallow)			
230.	17833 <i>Chordifex microcodon</i>			
231.	24980 <i>Christinus marmoratus</i> (Marbled Gecko)			
232.	<i>Chroicocephalus novaehollandiae</i>			
233.	24431 <i>Chrysococcyx basalis</i> (Horsfield's Bronze Cuckoo)			

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234.	24288 <i>Circus approximans</i> (Swamp Harrier)			
235.	24289 <i>Circus assimilis</i> (Spotted Harrier)			
236.	7937 <i>Cirsium vulgare</i> (Spear Thistle, Scotch Thistle)	Y		
237.	24774 <i>Cladorhynchus leucocephalus</i> (Banded Stilt)			
238.	2929 <i>Clematis pubescens</i> (Common Clematis)			
239.	25675 <i>Colluricincla harmonica</i> (Grey Shrike-thrush)			
240.	24613 <i>Colluricincla harmonica</i> subsp. <i>rufiventris</i> (Grey Shrike-thrush)			
241.	24399 <i>Columba livia</i> (Domestic Pigeon)	Y		
242.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
243.	4552 <i>Comesperma confertum</i>			
244.	4554 <i>Comesperma flavum</i>			
245.	1857 <i>Conospermum acerosum</i> (Needle-leaved Smokebush)			
246.	15511 <i>Conospermum boreale</i>			
247.	1876 <i>Conospermum incurvum</i> (Plume Smokebush)			
248.	1882 <i>Conospermum stoechadis</i> (Common Smokebush)			
249.	15611 <i>Conospermum stoechadis</i> subsp. <i>stoechadis</i> (Common Smokebush)			
250.	1885 <i>Conospermum triplinervium</i> (Tree Smokebush)			
251.	6347 <i>Conostephium minus</i> (Pink-tipped Pearl flower)			
252.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
253.	1418 <i>Conostylis aculeata</i> (Prickly Conostylis)			
254.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
255.	11513 <i>Conostylis aculeata</i> subsp. <i>cygnorum</i>			
256.	1427 <i>Conostylis candicans</i> (Grey Cottonhead)			
257.	12027 <i>Conostylis candicans</i> subsp. <i>calcicola</i>			
258.	1436 <i>Conostylis juncea</i>			
259.	1443 <i>Conostylis pauciflora</i> (Dawesville Conostylis)			
260.	1454 <i>Conostylis setigera</i> (Bristly Cottonhead)			
261.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
262.	11870 <i>Conostylis teretifolia</i> subsp. <i>teretifolia</i>			
263.	20074 <i>Conyza sumatrensis</i>	Y		
264.	25568 <i>Coracina novaehollandiae</i> (Black-faced Cuckoo-shrike)			
265.	<i>Cormocephalus aurantiipes</i>			
266.	<i>Cormocephalus novaehollandiae</i>			
267.	<i>Cormocephalus rubriceps</i>			
268.	<i>Cormocephalus turneri</i>			
269.	24416 <i>Corvus bennetti</i> (Little Crow)			
270.	25592 <i>Corvus coronoides</i> (Australian Raven)			
271.	24417 <i>Corvus coronoides</i> subsp. <i>perplexus</i> (Australian Raven)			
272.	17104 <i>Corymbia calophylla</i> (Marri)			
273.	1285 <i>Corynotheca micrantha</i> (Sand Lily)			
274.	25701 <i>Coturnix ypsilophora</i> (Brown Quail)			
275.	24420 <i>Cracticus nigrogularis</i> (Pied Butcherbird)			
276.	25595 <i>Cracticus tibicen</i> (Australian Magpie)			
277.	24422 <i>Cracticus tibicen</i> subsp. <i>dorsalis</i> (White-backed Magpie)			
278.	25596 <i>Cracticus torquatus</i> (Grey Butcherbird)			
279.	24424 <i>Cracticus torquatus</i> subsp. <i>torquatus</i> (Grey Butcherbird)			
280.	42009 <i>Craspedia</i> sp. Yalgorup National Park (G.J. Keighery 14449)			
281.	3137 <i>Crassula colorata</i> (Dense Stonecrop)			
282.	11563 <i>Crassula colorata</i> var. <i>colorata</i>			
283.	3146 <i>Crassula thunbergiana</i>	Y		
284.	24918 <i>Crenadactylus ocellatus</i> subsp. <i>ocellatus</i> (Clawless Gecko)			
285.	25400 <i>Crinia insignifera</i> (Squelching Froglet)			
286.	4802 <i>Cryptandra mutila</i>			
287.	4810 <i>Cryptandra scoparia</i>			
288.	30893 <i>Cryptoblepharus buchananii</i>			
289.	26709 <i>Cryptonemia undulata</i>			
290.	30899 <i>Ctenophorus adelaidensis</i> (Southern Heath Dragon, Western Heath Dragon)			
291.	25027 <i>Ctenotus australis</i>			
292.	25039 <i>Ctenotus fallens</i>			
293.	25825 <i>Cucurbita pepo</i>	Y		
294.	11021 <i>Cuscuta planiflora</i>	Y		
295.	25087 <i>Cyclodomorphus celatus</i> (Western Slender Blue-tongue)			
296.	24322 <i>Cygnus atratus</i> (Black Swan)			
297.	815 <i>Cyperus tenellus</i> (Tiny Flatsedge)	Y		
298.	10916 <i>Cyrtostylis huegelii</i>			
299.	30901 <i>Dacelo novaeguineae</i> (Laughing Kookaburra)	Y		
300.	7454 <i>Dampiera linearis</i> (Common Dampiera)			
301.	25673 <i>Daphoenositta chrysoptera</i> (Varied Sittella)			
302.	1218 <i>Dasyopogon bromeliifolius</i> (Pineapple Bush)			
303.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			

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304.	3793 <i>Daviesia angulata</i>			
305.	19747 <i>Daviesia decurrens</i> subsp. <i>decurrens</i>			
306.	3807 <i>Daviesia divaricata</i> (Marno)			
307.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
308.	3824 <i>Daviesia nudiflora</i>			
309.	3845 <i>Daviesia triflora</i>			
310.	30906 <i>Delma concinna</i> (Javelin Legless Lizard)			
311.	30905 <i>Delma concinna</i> subsp. <i>concinna</i> (Javelin Legless Lizard)			
312.	25766 <i>Delma fraseri</i> (Fraser's Legless Lizard)			
313.	24999 <i>Delma grayii</i>			
314.	25468 <i>Demansia psammophis</i> (Yellow-faced Whipsnake)			
315.	25296 <i>Demansia psammophis</i> subsp. <i>reticulata</i> (Yellow-faced Whipsnake)			
316.	17663 <i>Desmocladus asper</i>			
317.	299 <i>Deyeuxia quadriseta</i> (Reed Bentgrass)			
318.	1259 <i>Dianella revoluta</i> (Blueberry Lily)			
319.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
320.	25607 <i>Dicaeum hirundinaceum</i> (Mistletoebird)			
321.	306 <i>Dichelachne crinita</i> (Longhair Plumegrass)			
322.	1287 <i>Dichopogon capillipes</i>			
323.	27392 <i>Dictyota dichotoma</i> var. <i>intricata</i>			
324.	26778 <i>Dictyota furcellata</i>			
325.	24939 <i>Diplodactylus polyophthalmus</i>			
326.	4453 <i>Diplolaena angustifolia</i> (Yanchep Rose)			
327.	4746 <i>Diplopeltis huegelii</i>			
328.	18541 <i>Diplopeltis huegelii</i> subsp. <i>huegelii</i>			
329.	19649 <i>Disa bracteata</i>	Y		
330.	11049 <i>Diuris corymbosa</i>			
331.	1635 <i>Diuris longifolia</i> (Common Donkey Orchid)			
332.	1640 <i>Drakaea glyptodon</i> (King-in-his-carriage)			
333.	24470 <i>Dromaius novaehollandiae</i> (Emu)			
334.	48751 <i>Drosera drummondii</i>			
335.	3095 <i>Drosera erythrorhiza</i> (Red Ink Sundew)			
336.	48769 <i>Drosera indumenta</i>			
337.	3106 <i>Drosera macrantha</i> (Bridal Rainbow)			
338.	3109 <i>Drosera menziesii</i> (Pink Rainbow)			
339.	48710 <i>Drosera micrantha</i>			
340.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
341.	25251 <i>Echiopsis curta</i> (Bardick)			
342.	25096 <i>Egernia kingii</i> (King's Skink)			
343.	25100 <i>Egernia napoleonis</i>			
344.	<i>Egretta garzetta</i>			
345.	<i>Egretta novaehollandiae</i>			
346.	347 <i>Ehrharta calycina</i> (Perennial Veldt Grass)	Y		
347.	349 <i>Ehrharta longiflora</i> (Annual Veldt Grass)	Y		
348.	<i>Elanus axillaris</i>			
349.	1643 <i>Elythranthera brunonis</i> (Purple Enamel Orchid)			
350.	<i>Eolophus roseicapillus</i>			
351.	24651 <i>Eopsaltria australis</i> subsp. <i>griseogularis</i> (Western Yellow Robin)			
352.	24652 <i>Eopsaltria georgiana</i> (White-breasted Robin)			
353.	1645 <i>Epiblema grandiflorum</i> (Babe-in-a-cradle)			
354.	6132 <i>Epilobium ciliatum</i>	Y		
355.	6133 <i>Epilobium hirtigerum</i> (Hairy Willow Herb)			
356.	376 <i>Eragrostis curvula</i> (African Lovegrass)	Y		
357.	13950 <i>Eremaea asterocarpa</i> subsp. <i>asterocarpa</i>			
358.	14104 <i>Eremaea pauciflora</i> var. <i>pauciflora</i>			
359.	7215 <i>Eremophila glabra</i> (Tar Bush)			
360.	1646 <i>Eriochilus dilatatus</i> (White Bunny Orchid)			
361.	<i>Eriophora biapicata</i>			
362.	4332 <i>Erodium botrys</i> (Long Storksbill)	Y		
363.	6219 <i>Eryngium pinnatifidum</i> (Blue Devils)			
364.	15446 <i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			
365.	5615 <i>Eucalyptus decipiens</i> (Limestone Marlock, Moit)			
366.	5628 <i>Eucalyptus drummondii</i> (Drummond's Gum)			
367.	5649 <i>Eucalyptus foecunda</i> (Narrow-leaved Red Mallee)			
368.	5659 <i>Eucalyptus gomphocephala</i> (Tuart, Duart)			
369.	5708 <i>Eucalyptus marginata</i> (Jarrah, Djara)			
370.	20808 <i>Eucalyptus petiolaris</i>	Y		
371.	13541 <i>Eucalyptus petrensis</i>			
372.	13511 <i>Eucalyptus rudis</i> subsp. <i>rudis</i>			
373.	5790 <i>Eucalyptus todtiana</i> (Coastal Blackbutt)			

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374.	24818 <i>Eudyptula minor</i> subsp. <i>novaehollandiae</i> (Little Penguin)			
375.	4648 <i>Euphorbia terracina</i> (Geraldton Carnation Weed)	Y		
376.	24368 <i>Eurostopodus argus</i> (Spotted Nightjar)			
377.	25621 <i>Falco berigora</i> (Brown Falcon)			
378.	25622 <i>Falco cenchroides</i> (Australian Kestrel, Nankeen Kestrel)			
379.	25623 <i>Falco longipennis</i> (Australian Hobby)			
380.	24041 <i>Felis catus</i> (Cat)	Y		
381.	20216 <i>Ficinia nodosa</i> (Knotted Club Rush)			
382.	5209 <i>Frankenia pauciflora</i> (Seaheath)			
383.	25727 <i>Fulica atra</i> (Eurasian Coot)			
384.	24761 <i>Fulica atra</i> subsp. <i>australis</i> (Eurasian Coot)			
385.	7976 <i>Galinsoga parviflora</i> (Potato Weed)	Y		
386.	7323 <i>Galium murale</i> (Small Goosegrass)	Y		
387.	25729 <i>Gallinula tenebrosa</i> (Dusky Moorhen)			
388.	24763 <i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (Dusky Moorhen)			
389.	20473 <i>Gastrolobium ebracteolatum</i>			
390.	20483 <i>Gastrolobium linearifolium</i>			
391.	42314 <i>Gavicalis virescens</i> (Singing Honeyeater)			
392.	16311 <i>Gazania linearis</i>	Y		
393.	26850 <i>Gelinaria ulvoidea</i>			
394.	4339 <i>Geranium molle</i> (Dove's Foot Cranesbill)	Y		
395.	25530 <i>Gerygone fusca</i> (Western Gerygone)			
396.	1520 <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	Y		
397.	33620 <i>Glischrocaryon angustifolium</i>			
398.	6143 <i>Glischrocaryon aureum</i> (Common Popflower)			
399.	47962 <i>Glyciphila melanops</i> (Tawny-crowned Honeyeater)			
400.	3957 <i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
401.	6161 <i>Gonocarpus pithyoides</i>			
402.	19286 <i>Goodenia pulchella</i> subsp. <i>Coastal Plain A</i> (M. Hislop 634)			
403.	24443 <i>Grallina cyanoleuca</i> (Magpie-lark)			
404.	15839 <i>Grevillea preissii</i> subsp. <i>preissii</i>			
405.	2119 <i>Grevillea vestita</i>			
406.	12824 <i>Grevillea vestita</i> subsp. <i>vestita</i>			
407.	2784 <i>Gyrostemon ramulosus</i> (Corkybark)			
408.	1468 <i>Haemodorum laxum</i>			
409.	2146 <i>Hakea costata</i> (Ribbed Hakea)			
410.	2175 <i>Hakea lissocarpha</i> (Honey Bush)			
411.	2197 <i>Hakea prostrata</i> (Harsh Hakea)			
412.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
413.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
414.	2216 <i>Hakea varia</i> (Variable-leaved Hakea)			
415.	24295 <i>Haliastur sphenurus</i> (Whistling Kite)			
416.	24689 <i>Halobaena caerulea</i> (Blue Petrel)			
417.	3961 <i>Hardenbergia comptoniana</i> (Native Wisteria)			
418.	25410 <i>Heleioporus eyrei</i> (Moaning Frog)			
419.	3016 <i>Heliophila pusilla</i>	Y		
420.	439 <i>Hemarthria uncinata</i> (Matgrass)			
421.	16933 <i>Hemiandra glabra</i>			
422.	6838 <i>Hemiandra linearis</i> (Speckled Snakebush)			
423.	6839 <i>Hemiandra pungens</i> (Snakebush)			
424.	25119 <i>Hemiergis quadrilineata</i>			
425.	1293 <i>Hensmania turbinata</i>			
426.	<i>Hexagonia vesparia</i>			
427.	5112 <i>Hibbertia aurea</i>			
428.	5134 <i>Hibbertia huegelii</i>			
429.	5135 <i>Hibbertia hypericoides</i> (Yellow Buttercups)			
430.	45534 <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			
431.	5162 <i>Hibbertia racemosa</i> (Stalked Guinea Flower)			
432.	43280 <i>Hibbertia sericosepala</i>			
433.	48381 <i>Hibbertia striata</i>			
434.	5173 <i>Hibbertia subvaginata</i>			
435.	47965 <i>Hieraaetus morphnoides</i> (Little Eagle)			
436.	25734 <i>Himantopus himantopus</i> (Black-winged Stilt)			
437.	24491 <i>Hirundo neoxena</i> (Welcome Swallow)			
438.	445 <i>Holcus setiger</i> (Annual Fog)	Y		
439.	6222 <i>Homalosciadium homalocarpum</i>			
440.	26946 <i>Hormophysa cuneiformis</i>			
441.	3966 <i>Hovea pungens</i> (Devil's Pins, Puyenak)			
442.	12859 <i>Hovea trisperma</i> var. <i>trisperma</i>			
443.	12741 <i>Hyalosperma cotula</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
444.	5216 <i>Hybanthus calycinus</i> (Wild Violet)			
445.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
446.	6229 <i>Hydrocotyle diantha</i>			
447.	6232 <i>Hydrocotyle hispidula</i>			
448.	43384 <i>Hydrophis platurus</i> (Yellow-bellied Seasnake)			
449.	35898 <i>Hypnea musciformis</i>			
450.	5825 <i>Hypocalymma robustum</i> (Swan River Myrtle)			
451.	8086 <i>Hypochaeris glabra</i> (Smooth Catsear)	Y		
452.	1070 <i>Hypolaena exsulca</i>			
453.	<i>Idiommatia blackwallii</i>			
454.	<i>Indolpium</i> sp.			
455.	910 <i>Isolepis cernua</i> (Nodding Club-rush)			
456.	917 <i>Isolepis marginata</i> (Coarse Club-rush)			
457.	921 <i>Isolepis producta</i>			
458.	<i>Isopeda leishmanni</i>			
459.	7398 <i>Isotoma pusilla</i> (Small Isotome)			
460.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
461.	14783 <i>Jacksonia calcicola</i>			
462.	4010 <i>Jacksonia floribunda</i> (Holly Pea)			
463.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
464.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
465.	26995 <i>Kuetzingia canaliculata</i>			
466.	15498 <i>Kunzea glabrescens</i> (Spearwood)			
467.	16091 <i>Lachenalia bulbifera</i>	Y		
468.	20019 <i>Lachnagrostis filiformis</i>			
469.	8096 <i>Lactuca serriola</i> (Prickly Lettuce)	Y		
470.	467 <i>Lagurus ovatus</i> (Hare's Tail Grass)	Y		
471.	24367 <i>Lalage tricolor</i> (White-winged Triller)			
472.	<i>Lampona cylindrata</i>			
473.	28342 <i>Landoltia punctata</i> (Thin Duckweed)			
474.	24511 <i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Silver Gull)			
475.	25638 <i>Larus pacificus</i> (Pacific Gull)			
476.	<i>Latrodectus hasseltii</i>			
477.	26998 <i>Laurencia brongniartii</i>			
478.	27001 <i>Laurencia filiformis</i>			
479.	11911 <i>Laxmannia ramosa</i> subsp. <i>ramosa</i>			
480.	1309 <i>Laxmannia squarrosa</i>			
481.	7574 <i>Lechenaultia floribunda</i> (Free-flowering Leschenaultia)			
482.	7580 <i>Lechenaultia linarioides</i> (Yellow Leschenaultia)			
483.	1075 <i>Lepidobolus preissianus</i>			
484.	925 <i>Lepidosperma angustatum</i>			
485.	42742 <i>Lepidosperma calcicola</i>			
486.	944 <i>Lepidosperma scabrum</i>			
487.	945 <i>Lepidosperma squamatum</i>			
488.	946 <i>Lepidosperma striatum</i>			
489.	1653 <i>Leporella fimbriata</i> (Hare Orchid)			
490.	1080 <i>Leptocarpus scariosus</i>			
491.	2344 <i>Leptomeria empetriformis</i>			
492.	2352 <i>Leptomeria preissiana</i>			
493.	17852 <i>Leptorhynchus scaber</i> (Lanky Buttons)			
494.	5850 <i>Leptospermum laevigatum</i> (Coast Teatree)	Y		
495.	5857 <i>Leptospermum spinescens</i>			
496.	1090 <i>Lepyrodia muirii</i>			
497.	25131 <i>Lerista distinguenda</i>			
498.	25133 <i>Lerista elegans</i>			
499.	25148 <i>Lerista lineopunctulata</i>			
500.	25165 <i>Lerista praepedita</i>			
501.	6374 <i>Leucopogon conostephioides</i>			
502.	6425 <i>Leucopogon oxycedrus</i>			
503.	6427 <i>Leucopogon parviflorus</i> (Coast Beard-heath)			
504.	6434 <i>Leucopogon polymorphus</i>			
505.	6436 <i>Leucopogon propinquus</i>			
506.	40803 <i>Leucopogon squarrosus</i> subsp. <i>squarrosus</i>			
507.	7677 <i>Levenhookia stipitata</i> (Common Stylewort)			
508.	25005 <i>Lialis burtonis</i>			
509.	25659 <i>Lichenostomus leucotis</i> (White-eared Honeyeater)			
510.	25661 <i>Lichmera indistincta</i> (Brown Honeyeater)			
511.	25415 <i>Limnodynastes dorsalis</i> (Western Banjo Frog)			
512.	25378 <i>Litoria adelaidensis</i> (Slender Tree Frog)			
513.	25388 <i>Litoria moorei</i> (Motorbike Frog)			

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514.	7408 <i>Lobelia tenuior</i> (Slender Lobelia)			
515.	8682 <i>Lolium loliaceum</i> (Stiff Ryegrass)	Y		
516.	475 <i>Lolium multiflorum</i> (Italian Ryegrass)	Y		
517.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
518.	1228 <i>Lomandra hermaphrodita</i>			
519.	1231 <i>Lomandra maritima</i>			
520.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			
521.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
522.	1234 <i>Lomandra nigricans</i>			
523.	1239 <i>Lomandra preissii</i>			
524.	1243 <i>Lomandra sericea</i> (Silky Mat Rush)			
525.	1246 <i>Lomandra suaveolens</i>			
526.	<i>Lophocitnia isura</i>			
527.	4066 <i>Lupinus cosentinii</i>	Y		
528.	1097 <i>Lyginia barbata</i>			
529.	6456 <i>Lysinema ciliatum</i> (Curry Flower)			
530.	34736 <i>Lysinema pentapetalum</i>			
531.	2839 <i>Macarthuria australis</i>			
532.	24132 <i>Macropus fuliginosus</i> (Western Grey Kangaroo)			
533.	85 <i>Macrozamia riedlei</i> (<i>Zamia</i> , Djiridji)			
534.	25651 <i>Malurus lamberti</i> (Variegated Fairy-wren)			
535.	24544 <i>Malurus lamberti</i> subsp. <i>assimilis</i> (Variegated Fairy-wren)			
536.	25652 <i>Malurus leucopterus</i> (White-winged Fairy-wren)			
537.	25654 <i>Malurus splendens</i> (Splendid Fairy-wren)			
538.	24552 <i>Malurus splendens</i> subsp. <i>splendens</i> (Splendid Fairy-wren)			
539.	24583 <i>Manorina flavigula</i> (Yellow-throated Miner)			
540.	<i>Maratus pavonis</i>			
541.	<i>Masasteron sampeyae</i>			
542.	4075 <i>Medicago littoralis</i> (Strand Medic)	Y		
543.	4079 <i>Medicago polymorpha</i> (Burr Medic)	Y		
544.	25758 <i>Megalurus gramineus</i> (Little Grassbird)			
545.	5887 <i>Melaleuca cardiophylla</i> (Tangling Melaleuca)			
546.	5920 <i>Melaleuca huegelii</i> (Chenille Honey-myrtle)			
547.	13271 <i>Melaleuca huegelii</i> subsp. <i>huegelii</i>			
548.	5952 <i>Melaleuca preissiana</i> (Moonah)			
549.	5964 <i>Melaleuca serjata</i>			
550.	18598 <i>Melaleuca systema</i>			
551.	5978 <i>Melaleuca teretifolia</i> (Banbar)			
552.	5983 <i>Melaleuca trichophylla</i>			
553.	5986 <i>Melaleuca urceolaris</i>			
554.	25663 <i>Melithreptus brevirostris</i> (Brown-headed Honeyeater)			
555.	25184 <i>Menetia greyii</i>			
556.	24598 <i>Merops ornatus</i> (Rainbow Bee-eater)			
557.	955 <i>Mesomelaena pseudostygia</i>			
558.	27068 <i>Metagoniolithon radiatum</i>			
559.	<i>Meuschenia freycineti</i>			
560.	<i>Microcarbo melanoleucos</i>			
561.	25693 <i>Microeca fascinans</i> (Jacky Winter)			
562.	485 <i>Microlaena stipoides</i> (Weeping Grass)			
563.	15419 <i>Microtis media</i> subsp. <i>media</i>			
564.	8106 <i>Millotia tenuifolia</i> (Soft Millotia)			
565.	16693 <i>Minuartia mediterranea</i>	Y		
566.	<i>Missulena occatoria</i>			
567.	4666 <i>Monotaxis occidentalis</i>			
568.	25240 <i>Morelia spilota</i> subsp. <i>imbricata</i> (Carpet Python)			
569.	25191 <i>Morethia lineocellata</i>			
570.	25192 <i>Morethia obscura</i>			
571.	48008 <i>Morus serrator</i> (Australasian Gannet)			
572.	24223 <i>Mus musculus</i> (House Mouse)	Y		
573.	25610 <i>Myiagra inquieta</i> (Restless Flycatcher)			
574.	25420 <i>Myobatrachus gouldii</i> (Turtle Frog)			
575.	7291 <i>Myoporum insulare</i> (Blueberry Tree, boobialla)			
576.	6192 <i>Myriophyllum drummondii</i>			
577.	6199 <i>Myriophyllum tillaeoides</i>			
578.	25248 <i>Neelaps bimaculatus</i> (Black-naped Snake)			
579.	24738 <i>Neophema elegans</i> (Elegant Parrot)			
580.	<i>Nephila edulis</i>			
581.	25252 <i>Notechis scutatus</i> (Tiger Snake)			
582.	2401 <i>Nuytsia floribunda</i> (Christmas Tree, Mudja)			
583.	25564 <i>Nycticorax caledonicus</i> (Rufous Night Heron)			

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584.	24194 <i>Nyctophilus geoffroyi</i> (Lesser Long-eared Bat)			
585.	<i>Occiperipatoides gilesii</i>			
586.	24407 <i>Ocyphaps lophotes</i> (Crested Pigeon)			
587.	<i>Odax cyanomelas</i>			
588.	<i>Oecobius navus</i>			
589.	8127 <i>Olearia axillaris</i> (Coastal Daisybush)			
590.	32716 <i>Olearia lehmanniana</i>			
591.	<i>Ommatoiulus moreletii</i>			
592.	18255 <i>Opercularia vaginata</i> (Dog Weed)			
593.	<i>Oratemnus curtus</i>			
594.	36177 <i>Ornduffia albiflora</i>			
595.	7122 <i>Orobanche minor</i> (Lesser Broomrape)	Y		
596.	1537 <i>Orthrosanthus laxus</i> (Morning Iris)			
597.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
598.	24085 <i>Oryctolagus cuniculus</i> (Rabbit)	Y		
599.	34016 <i>Ovis aries</i> (Sheep)			
600.	4356 <i>Oxalis pes-caprae</i> (Soursob)	Y		
601.	25680 <i>Pachycephala rufiventris</i> (Rufous Whistler)			
602.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (Rufous Whistler)			
603.	33988 <i>Pachysaga munggai</i> (cricket)			
604.	1667 <i>Paracaleana nigrita</i> (Flying Duck Orchid)			
605.	<i>Paraplectanoides crassipes</i>			
606.	25253 <i>Parasuta gouldii</i>			
607.	25681 <i>Pardalotus punctatus</i> (Spotted Pardalote)			
608.	25682 <i>Pardalotus striatus</i> (Striated Pardalote)			
609.	1550 <i>Patersonia occidentalis</i> (Purple Flag, Koma)			
610.	4343 <i>Pelargonium capitatum</i> (Rose Pelargonium)	Y		
611.	4346 <i>Pelargonium littorale</i>			
612.	24648 <i>Pelecanus conspicillatus</i> (Australian Pelican)			
613.	2258 <i>Persoonia comata</i>			
614.	2273 <i>Persoonia saccata</i> (Snottygobble)			
615.	24156 <i>Petaurus breviceps</i> subsp. <i>ariel</i> (Sugar Glider)			
616.	48061 <i>Petrochelidon nigricans</i> (Tree Martin)			
617.	48066 <i>Petroica boodang</i> (Scarlet Robin)			
618.	24659 <i>Petroica goodenovii</i> (Red-capped Robin)			
619.	20368 <i>Petrophile axillaris</i>			
620.	2286 <i>Petrophile brevifolia</i>			
621.	2299 <i>Petrophile linearis</i> (Pixie Mops)			
622.	2301 <i>Petrophile macrostachya</i>			
623.	2309 <i>Petrophile serruriae</i>			
624.	25697 <i>Phalacrocorax carbo</i> (Great Cormorant)			
625.	25698 <i>Phalacrocorax melanoleucos</i> (Little Pied Cormorant)			
626.	24667 <i>Phalacrocorax sulcirostris</i> (Little Black Cormorant)			
627.	25699 <i>Phalacrocorax varius</i> (Pied Cormorant)			
628.	24409 <i>Phaps chalcoptera</i> (Common Bronzewing)			
629.	18529 <i>Philothea spicata</i> (Pepper and Salt)			
630.	1478 <i>Phlebocarya ciliata</i>			
631.	<i>Pholcus phalangoides</i>			
632.	<i>Pholiota communis</i>			
633.	48071 <i>Phylidonyris niger</i> (White-cheeked Honeyeater)			
634.	24596 <i>Phylidonyris novaehollandiae</i> (New Holland Honeyeater)			
635.	16177 <i>Phyllangium paradoxum</i>			
636.	4675 <i>Phyllanthus calycinus</i> (False Boronia)			
637.	39079 <i>Physarum viride</i>			
638.	2793 <i>Phytolacca octandra</i> (Red Ink Plant)	Y		
639.	<i>Phytophthora cinnamomi</i>			
640.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)			
641.	5243 <i>Pimelea ferruginea</i>			
642.	18117 <i>Pimelea rosea</i> subsp. <i>rosea</i>			
643.	5268 <i>Pimelea sulphurea</i> (Yellow Banjine)			
644.	5272 <i>Pimelea villifera</i>			
645.	<i>Pinkfloydia harveii</i>			
646.	42281 <i>Pithocarpa cordata</i>			
647.	24841 <i>Platalea flavipes</i> (Yellow-billed Spoonbill)			
648.	27144 <i>Platoma cyclocolpum</i>			
649.	25720 <i>Platycercus icterotis</i> (Western Rosella)			
650.	24747 <i>Platycercus spurius</i> (Red-capped Parrot)			
651.	25721 <i>Platycercus zonarius</i> (Australian Ringneck, Ring-necked Parrot)			
652.	24750 <i>Platycercus zonarius</i> subsp. <i>semitorquatus</i> (Twenty-eight Parrot)			
653.	4524 <i>Platytheca galioides</i>			

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654.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (Keeled Legless Lizard)			
655.	571 <i>Poa annua</i> (Winter Grass)	Y		
656.	573 <i>Poa drummondiana</i> (Knotted Poa)			
657.	578 <i>Poa porphyroclados</i>			
658.	25703 <i>Podargus strigoides</i> (Tawny Frogmouth)			
659.	25704 <i>Podiceps cristatus</i> (Great Crested Grebe)			
660.	8175 <i>Podolepis gracilis</i> (Slender Podolepis)			
661.	8177 <i>Podolepis lessonii</i>			
662.	8182 <i>Podotheca angustifolia</i> (Sticky Longheads)			
663.	8183 <i>Podotheca chrysantha</i> (Yellow Podotheca)			
664.	8184 <i>Podotheca gnaphalioides</i> (Golden Long-heads)			
665.	25510 <i>Pogona minor</i> (Dwarf Bearded Dragon)			
666.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (Dwarf Bearded Dragon)			
667.	24681 <i>Poliocephalus poliocephalus</i> (Hoary-headed Grebe)			
668.	25722 <i>Polytelis anthopeplus</i> (Regent Parrot)			
669.	4691 <i>Poranthera microphylla</i> (Small Poranthera)			
670.	<i>Poronia erici</i>			
671.	25731 <i>Porphyrio porphyrio</i> (Purple Swamphen)			
672.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (Purple Swamphen)			
673.	24770 <i>Porzana pusilla</i> subsp. <i>palustris</i> (Baillon's Crake)			
674.	24771 <i>Porzana tabuensis</i> (Spotless Crake)			
675.	1672 <i>Prasophyllum fimbria</i> (Fringed Leek Orchid)			
676.	<i>Protochelifer cavernarum</i>			
677.	25261 <i>Pseudechis australis</i> (Mulga Snake)			
678.	25511 <i>Pseudonaja affinis</i> (Dugite)			
679.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (Dugite)			
680.	25433 <i>Pseudophryne guentheri</i> (Crawling Toadlet)			
681.	<i>Pterostylis</i> aff. <i>nana</i>			
682.	17267 <i>Pterostylis brevisepala</i>			
683.	1693 <i>Pterostylis recurva</i> (Jug Orchid)			
684.	12217 <i>Pterostylis sanguinea</i>			
685.	1698 <i>Pterostylis vittata</i> (Banded Greenhood)			
686.	2718 <i>Ptilotus drummondii</i> (Narrowleaf Mulla Mulla)			
687.	11260 <i>Ptilotus drummondii</i> var. <i>drummondii</i> (Pussytail)			
688.	2742 <i>Ptilotus manglesii</i> (Pom Poms, Mulamula)			
689.	2751 <i>Ptilotus polystachyus</i> (Prince of Wales Feather)			
690.	40841 <i>Ptilotus stirlingii</i> subsp. <i>stirlingii</i>			
691.	<i>Purpleicephalus spurius</i>			
692.	25008 <i>Pygopus lepidopodus</i> (Common Scaly Foot)			
693.	8195 <i>Quinetia urvillei</i>			
694.	49072 <i>Ramaria gracilis</i>			
695.	3061 <i>Raphanus raphanistrum</i> (Wild Radish)	Y		
696.	24243 <i>Rattus fuscipes</i> (Western Bush Rat)			
697.	24245 <i>Rattus rattus</i> (Black Rat)	Y		
698.	<i>Raveniella arenacea</i>			
699.	<i>Raveniella cirrata</i>			
700.	<i>Raveniella peckorum</i>			
701.	24776 <i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
702.	6012 <i>Regelia ciliata</i>			
703.	2578 <i>Rhagodia baccata</i> (Berry Saltbush)			
704.	11341 <i>Rhagodia baccata</i> subsp. <i>baccata</i>			
705.	48096 <i>Rhipidura albiscapa</i> (Grey Fantail)			
706.	25614 <i>Rhipidura leucophrys</i> (Willie Wagtail)			
707.	15035 <i>Rhodanthe corymbosa</i>			
708.	13312 <i>Rhodanthe pyrethrum</i>			
709.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
710.	40426 <i>Rytidosperma occidentale</i>			
711.	2906 <i>Sagina apetala</i> (Annual Pearlwort)	Y		
712.	2356 <i>Santalum acuminatum</i> (Quandong, Warnga)			
713.	27238 <i>Sargassum distichum</i>			
714.	27249 <i>Sargassum linearifolium</i>			
715.	27260 <i>Sargassum tristichum</i>			
716.	29957 <i>Sargassum vestitum</i>			
717.	7603 <i>Scaevola canescens</i> (Grey Scaevola)			
718.	7606 <i>Scaevola crassifolia</i> (Thick-leaved Fan-flower)			
719.	13182 <i>Scaevola repens</i> var. <i>repens</i>			
720.	13152 <i>Scaevola thesioides</i> subsp. <i>thesioides</i>			
721.	<i>Schizophyllum commune</i>			
722.	973 <i>Schoenus asperocarpus</i> (Poison Sedge)			
723.	979 <i>Schoenus caespititius</i>			

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724.	982 <i>Schoenus clandestinus</i>			
725.	984 <i>Schoenus curvifolius</i>			
726.	985 <i>Schoenus discifer</i>			
727.	992 <i>Schoenus grandiflorus</i> (Large Flowered Bogrush)			
728.	997 <i>Schoenus lanatus</i> (Woolly Bog-rush)			
729.	1002 <i>Schoenus nanus</i> (Tiny Bog Rush)			
730.	1006 <i>Schoenus odontocarpus</i>			
731.	1018 <i>Schoenus subfascicularis</i>			
732.	1023 <i>Schoenus tenellus</i>			
733.	25534 <i>Sericornis frontalis</i> (White-browed Scrubwren)			
734.	<i>Seriola lalandi</i>			
735.	2909 <i>Silene gallica</i> (French Catchfly)	Y		
736.	2910 <i>Silene nocturna</i> (Mediterranean Catchfly)	Y		
737.	8225 <i>Siloxerus humifusus</i> (Procumbent Siloxerus)			
738.	25266 <i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
739.	42785 <i>Sirophsyalis trinodis</i>			
740.	30948 <i>Smicromis brevirostris</i> (Weebill)			
741.	6988 <i>Solanum americanum</i> (Glossy Nightshade)	Y		
742.	7022 <i>Solanum nigrum</i> (Black Berry Nightshade)	Y		
743.	8230 <i>Sonchus asper</i> (Rough Sowthistle)	Y		
744.	9367 <i>Sonchus hydrophilus</i> (Native Sowthistle)			
745.	8231 <i>Sonchus oleraceus</i> (Common Sowthistle)	Y		
746.	1312 <i>Sowerbaea laxiflora</i> (Purple Tassels)			
747.	1558 <i>Sparaxis bulbifera</i>	Y		
748.	4207 <i>Sphaerolobium medium</i>			
749.	4828 <i>Spyridium globulosum</i> (Basket Bush)			
750.	4713 <i>Stachystemon axillaris</i> (Leafy Stachystemon)			
751.	4733 <i>Stackhousia monogyna</i>			
752.	9070 <i>Stackhousia pubescens</i> (Downy Stackhousia)			
753.	2918 <i>Stellaria media</i> (Chickweed)	Y		
754.	3080 <i>Stenopetalum robustum</i>			
755.	2316 <i>Stirlingia latifolia</i> (Blueboy)			
756.	25597 <i>Strepera versicolor</i> (Grey Currawong)			
757.	25589 <i>Streptopelia chinensis</i> (Spotted Turtle-Dove)	Y		
758.	25590 <i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)	Y		
759.	25518 <i>Strophurus spinigerus</i>			
760.	24943 <i>Strophurus spinigerus</i> subsp. <i>inornatus</i>			
761.	24942 <i>Strophurus spinigerus</i> subsp. <i>spinigerus</i>			
762.	30278 <i>Stylidium androsaceum</i>			
763.	25831 <i>Stylidium araeophyllum</i> (Stilt Walker)			
764.	7693 <i>Stylidium brunonianum</i> (Pink Fountain Triggerplant)			
765.	7696 <i>Stylidium calcaratum</i> (Book Triggerplant)			
766.	7709 <i>Stylidium crossocephalum</i> (Posy Triggerplant)			
767.	7710 <i>Stylidium cygnorum</i>			
768.	7716 <i>Stylidium diuroides</i> (Donkey Triggerplant)			
769.	7717 <i>Stylidium divaricatum</i> (Daddy-long-legs)			
770.	7745 <i>Stylidium junceum</i> (Reed Triggerplant)			
771.	25829 <i>Stylidium neurophyllum</i> (Coastal Plain Triggerplant)			
772.	7774 <i>Stylidium pilliferum</i> (Common Butterfly Triggerplant)			
773.	7785 <i>Stylidium repens</i> (Matted Triggerplant)			
774.	20521 <i>Stylidium rigidulum</i>			
775.	7798 <i>Stylidium schoenoides</i> (Cow Kicks)			
776.	7806 <i>Stylidium utricularioides</i> (Pink Fan Triggerplant)			
777.	1260 <i>Stypantra glauca</i> (Blind Grass)			
778.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
779.	25705 <i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
780.	24682 <i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
781.	24207 <i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
782.	24331 <i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
783.	<i>Taphiassa robertsi</i>			
784.	24167 <i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
785.	<i>Tasmanicosa leuckartii</i>			
786.	4256 <i>Templetonia retusa</i> (Cockies Tongues)			
787.	2820 <i>Tetragonia decumbens</i> (Sea Spinach)	Y		
788.	1036 <i>Tetralia octandra</i>			
789.	1702 <i>Thelymitra campanulata</i> (Shirt Orchid)			
790.	5105 <i>Thomasia triphylla</i>			
791.	24845 <i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
792.	1338 <i>Thysanotus manglesianus</i> (Fringed Lily)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
793.	1339 <i>Thysanotus multiflorus</i> (Many-flowered Fringe Lily)			
794.	1343 <i>Thysanotus patersonii</i>			
795.	1351 <i>Thysanotus sparteus</i>			
796.	1357 <i>Thysanotus thyrsoides</i>			
797.	25203 <i>Tiliqua occipitalis</i> (Western Bluetongue)			
798.	25519 <i>Tiliqua rugosa</i>			
799.	25204 <i>Tiliqua rugosa subsp. aspera</i>			
800.	25207 <i>Tiliqua rugosa subsp. rugosa</i>			
801.	25549 <i>Todiramphus sanctus</i> (Sacred Kingfisher)			
802.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
803.	39094 <i>Trichia affinis</i>			
804.	39098 <i>Trichia favoginea</i>			
805.	39100 <i>Trichia persimilis</i>			
806.	25723 <i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
807.	25521 <i>Trichosurus vulpecula</i> (Common Brushtail Possum)			
808.	24158 <i>Trichosurus vulpecula subsp. vulpecula</i> (Common Brushtail Possum)			
809.	1361 <i>Tricoryne elatior</i> (Yellow Autumn Lily)			
810.	1363 <i>Tricoryne tenella</i>			
811.	4292 <i>Trifolium campestre</i> (Hop Clover)	Y		
812.	17763 <i>Trifolium campestre var. campestre</i> (Hop Clover)	Y		
813.	4295 <i>Trifolium dubium</i> (Suckling Clover)	Y		
814.	4297 <i>Trifolium glomeratum</i> (Cluster Clover)	Y		
815.	4309 <i>Trifolium scabrum</i> (Rough Clover)	Y		
816.	152 <i>Triglochin trichophora</i>			
817.	4737 <i>Tripteroctococcus brunonis</i> (Winged Stackhousia)			
818.	1141 <i>Trithuria submersa</i>			
819.	25762 <i>Tyto alba</i> (Barn Owl)			
820.	<i>Upeneichthys stotti</i>			
821.	<i>Urodacus novaehollandiae</i>			
822.	8254 <i>Urospermum picroides</i> (False Hawkbit)	Y		
823.	8255 <i>Ursinia anthemoides</i> (Ursinia)	Y		
824.	38388 <i>Ursinia anthemoides subsp. anthemoides</i>	Y		
825.	7153 <i>Utricularia tenella</i>			
826.	7157 <i>Utricularia violacea</i> (Violet Bladderwort)			
827.	25218 <i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
828.	25526 <i>Varanus tristis</i> (Racehorse Monitor)			
829.	<i>Venator immansueta</i>			
830.	<i>Venatrix pullastra</i>			
831.	15725 <i>Verbesina encelioides</i>	Y		
832.	15432 <i>Verticordia densiflora var. densiflora</i>			
833.	6101 <i>Verticordia nitens</i> (Morrison Featherflower, Kodjeningara)			
834.	4322 <i>Vicia sativa</i> (Common Vetch)	Y		
835.	11474 <i>Vicia sativa subsp. nigra</i>	Y		
836.	4325 <i>Viminaria juncea</i> (Swishbush, Koweda)			
837.	24040 <i>Vulpes vulpes</i> (Red Fox)	Y		
838.	724 <i>Vulpia myuros</i> (Rat's Tail Fescue)	Y		
839.	7389 <i>Wahlenbergia preissii</i>			
840.	8282 <i>Waitzia suaveolens</i> (Fragrant Waitzia)			
841.	17910 <i>Washingtonia filifera</i>	Y		
842.	<i>Westrarchaea spinosa</i>			
843.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)			
844.	6289 <i>Xanthosia huegellii</i>			
845.	25765 <i>Zosterops lateralis</i> (Grey-breasted White-eye, Silvereye)			

Conservation Codes

T - Rare or likely to become extinct
X - Presumed extinct
IA - Protected under international agreement
S - Other specially protected fauna
1 - Priority 1
2 - Priority 2
3 - Priority 3
4 - Priority 4
5 - Priority 5

¹ For NatureMap's purposes, species flagged as endemic are those whose records are wholly contained within the search area. Note that only those records complying with the search criterion are included in the calculation. For example, if you limit records to those from a specific datasource, only records from that datasource are used to determine if a species is restricted to the query area.

APPENDIX 3

Protected Matters Search Tool Report



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.

Information on the coverage of this report and qualifications on data supporting this report are contained in the caveat at the end of the report.

Information is available about [Environment Assessments](#) and the EPBC Act including significance guidelines, forms and application process details.

Report created: 22/12/20 12:58:27

[Summary](#)

[Details](#)

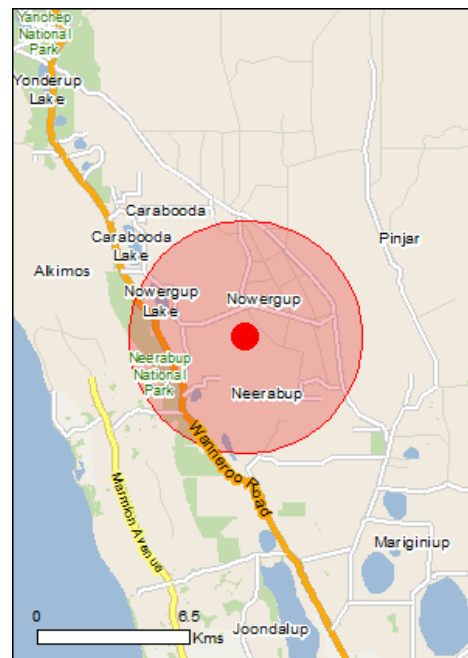
[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

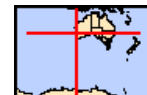
[Acknowledgements](#)



This map may contain data which are
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[Coordinates](#)

Buffer: 5.0Km



Summary

Matters of National Environmental Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance:	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	2
Listed Threatened Species:	20
Listed Migratory Species:	10

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 <http://www.environment.gov.au/heritage>

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

Commonwealth Land:	1
Commonwealth Heritage Places:	None
Listed Marine Species:	15
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None

Extra Information

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

State and Territory Reserves:	2
Regional Forest Agreements:	None
Invasive Species:	35
Nationally Important Wetlands:	None
Key Ecological Features (Marine)	None

Details

Matters of National Environmental Significance

Listed Threatened Ecological Communities

[[Resource Information](#)]

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

Name	Status	Type of Presence
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community likely to occur within area

Listed Threatened Species

[[Resource Information](#)]

Name	Status	Type of Presence
------	--------	------------------

Birds

Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calyptorhynchus banksii naso Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat likely to occur within area
Calyptorhynchus latirostris Carnaby's Cockatoo, Short-billed Black-Cockatoo [59523]	Endangered	Species or species habitat known 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 likely to occur within area
Sternula nereis nereis Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area

Insects

Hesperocolletes douglasi Douglas' Broad-headed Bee, Rottnest Bee [66734]	Critically Endangered	Species or species habitat may occur within area
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Mammals

Name	Status	Type of Presence
Dasyurus geoffroii Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area
Plants		
Andersonia gracilis Slender Andersonia [14470]	Endangered	Species or species habitat may occur within area
Anigozanthos viridis subsp. terraspectans Dwarf Green Kangaroo Paw [3435]	Vulnerable	Species or species habitat may occur within area
Caladenia huegelii King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area
Diuris micrantha Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
Diuris purdiei Purdie's Donkey-orchid [12950]	Endangered	Species or species habitat may occur within area
Drakaea elastica Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area
Drakaea micrantha Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat may occur within area
Eleocharis keigheryi Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area
Eucalyptus argutifolia Yanchep Mallee, Wabbling Hill Mallee [24263]	Vulnerable	Species or species habitat known to occur within area
Melaleuca sp. Wanneroo (G.J. Keighery 16705) [89456]	Endangered	Species or species habitat known to occur within area

Listed Migratory Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
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 likely to occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area

Name	Threatened	Type of Presence
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to 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
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Other Matters Protected by the EPBC Act

Commonwealth Land [\[Resource Information \]](#)

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

Name
Commonwealth Land -

Listed Marine Species [\[Resource Information \]](#)

* Species is listed under a different scientific name on the EPBC Act - Threatened Species list.

Name	Threatened	Type of Presence
Birds		
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat likely to occur within area
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Ardea alba Great Egret, White Egret [59541]		Species or species habitat known to occur within area
Ardea ibis Cattle Egret [59542]		Species or species habitat may occur within area
Calidris acuminata Sharp-tailed Sandpiper [874]		Species or species habitat likely to occur within area
Calidris canutus Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat likely to occur within area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species

Name	Threatened	Type of Presence
Merops ornatus Rainbow Bee-eater [670]		habitat likely to occur within area Species or species habitat may occur within area
Motacilla cinerea Grey Wagtail [642]		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
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Tringa nebularia Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Name	State
Neerabup	WA
Neerabup	WA

Invasive Species [\[Resource Information \]](#)

Weeds reported here are the 20 species of national significance (WoNS), along with other introduced plants that are considered by the States and Territories to pose a particularly significant threat to biodiversity. The following feral animals are reported: Goat, Red Fox, Cat, Rabbit, Pig, Water Buffalo and Cane Toad. Maps from Landscape Health Project, National Land and Water Resources Audit, 2001.

Name	Status	Type of Presence
Birds		
<i>Acridotheres tristis</i> Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
<i>Anas platyrhynchos</i> Mallard [974]		Species or species habitat likely to occur within area
<i>Carduelis carduelis</i> European Goldfinch [403]		Species or species habitat likely to occur within area
<i>Columba livia</i> Rock Pigeon, Rock Dove, Domestic Pigeon [803]		Species or species habitat likely to occur within area
<i>Passer domesticus</i> House Sparrow [405]		Species or species habitat likely to occur

Name	Status	Type of Presence
Passer montanus Eurasian Tree Sparrow [406]		within area Species or species habitat likely to occur within area
Streptopelia chinensis Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
Streptopelia senegalensis Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
Sturnus vulgaris Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
Bos taurus Domestic Cattle [16]		Species or species habitat likely to occur within area
Canis lupus familiaris Domestic Dog [82654]		Species or species habitat likely to occur within area
Felis catus Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
Funambulus pennantii Northern Palm Squirrel, Five-striped Palm Squirrel [129]		Species or species habitat likely to occur within area
Mus musculus House Mouse [120]		Species or species habitat likely to occur within area
Oryctolagus cuniculus Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
Rattus norvegicus Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
Rattus rattus Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
Vulpes vulpes Red Fox, Fox [18]		Species or species habitat likely to occur within area
Plants		
Asparagus aethiopicus Asparagus Fern, Ground Asparagus, Basket Fern, Sprengi's Fern, Bushy Asparagus, Emerald Asparagus [62425]		Species or species habitat likely to occur within area
Asparagus asparagoides Bridal Creeper, Bridal Veil Creeper, Smilax, Florist's Smilax, Smilax Asparagus [22473]		Species or species habitat likely to occur within area
Brachiaria mutica Para Grass [5879]		Species or species habitat may occur within area
Cenchrus ciliaris Buffel-grass, Black Buffel-grass [20213]		Species or species habitat may occur within area
Chrysanthemoides monilifera Bitou Bush, Boneseed [18983]		Species or species

Name	Status	Type of Presence
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		habitat may occur within area Species or species habitat likely to occur within area
Genista linifolia Flax-leaved Broom, Mediterranean Broom, Flax Broom [2800]		Species or species habitat likely to occur within area
Genista sp. X Genista monspessulana Broom [67538]		Species or species habitat may occur within area
Lantana camara Lantana, Common Lantana, Kamara Lantana, Large-leaf Lantana, Pink Flowered Lantana, Red Flowered Lantana, Red-Flowered Sage, White Sage, Wild Sage [10892] Lycium ferocissimum African Boxthorn, Boxthorn [19235]		Species or species habitat likely to occur within area Species or species habitat likely to occur within area
Olea europaea Olive, Common Olive [9160]		Species or species habitat may occur within area
Pinus radiata Radiata Pine Monterey Pine, Insignis Pine, Wilding Pine [20780]		Species or species habitat may occur within area
Rubus fruticosus aggregate Blackberry, European Blackberry [68406]		Species or species habitat likely to occur within area
Salix spp. except S.babylonica, S.x calodendron & S.x reichardtii Willows except Weeping Willow, Pussy Willow and Sterile Pussy Willow [68497]		Species or species habitat likely to occur within area
Salvinia molesta Salvinia, Giant Salvinia, Aquarium Watermoss, Kariba Weed [13665]		Species or species habitat likely to occur within area
Tamarix aphylla Athel Pine, Athel Tree, Tamarisk, Athel Tamarisk, Athel Tamarix, Desert Tamarisk, Flowering Cypress, Salt Cedar [16018]		Species or species habitat likely to occur within area
Reptiles		
Hemidactylus frenatus Asian House Gecko [1708]		Species or species habitat likely to occur within area

Caveat

The information presented in this report has been provided by a range of data sources as acknowledged at the end of the report.

This report is designed to assist in identifying the locations of places which may be relevant in determining obligations under the Environment Protection and Biodiversity Conservation Act 1999. It holds mapped locations of World and National Heritage properties, Wetlands of International and National Importance, Commonwealth and State/Territory reserves, listed threatened, migratory and marine species and listed threatened ecological communities. Mapping of Commonwealth land is not complete at this stage. Maps have been collated from a range of sources at various resolutions.

Not all species listed under the EPBC Act have been mapped (see below) and therefore a report is a general guide only. Where available data supports mapping, the type of presence that can be determined from the data is indicated in general terms. People using this information in making a referral may need to consider the qualifications below and may need to seek and consider other information sources.

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

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

Where very little information is available for 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 reliable distribution mapping methods are used to update these distributions as time permits.

Only selected species covered by the following provisions of the EPBC Act have been mapped:

- migratory and
- marine

The following species and ecological communities have not been mapped and do not appear in reports produced from this database:

- threatened species listed as extinct or considered as vagrants
- some species and ecological communities that have only recently been listed
- some terrestrial species that overfly the Commonwealth marine area
- migratory species that are very widespread, vagrant, or only occur in small numbers

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

- non-threatened seabirds which have only been mapped for recorded breeding sites
- seals which have only been mapped for breeding sites near the Australian continent

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

Coordinates

-31.64587 115.76467

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.

APPENDIX 4

Conservation Codes

Conservation Codes for Western Australian Flora and Fauna

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

T Threatened species – Schedules 1-4

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

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

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

CR Critically endangered species

Threatened species considered to be “*facing an extremely high risk of extinction in the wild in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines*”.

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

EN Endangered species

Threatened species considered to be “*facing a very high risk of extinction in the wild in the near future, as determined in accordance with criteria set out in the ministerial guidelines*”.

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

VU Vulnerable species

Threatened species considered to be “*facing a high risk of extinction in the wild in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines*”.

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

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

EX Presumed extinct species

Species where “*there is no reasonable doubt that the last member of the species has died*”, and listing is otherwise in accordance with the ministerial guidelines (section 24 of the BC Act).

Published as presumed extinct under schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* for extinct fauna or the *Wildlife Conservation (Rare Flora) Notice 2018* for extinct flora.

EW Extinct in the wild species

Species that “*is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; and it has not been recorded in its known habitat or expected habitat, at appropriate seasons, anywhere in its past range, despite surveys over a time frame appropriate to its life cycle and form*”, and listing is otherwise in accordance with the ministerial guidelines (section 25 of the BC Act).

Currently there are no threatened fauna or threatened flora species listed as extinct in the wild. If listing of a species as extinct in the wild occurs, then a schedule will be added to the applicable notice.

Specially protected species

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

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

MI Migratory species

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

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

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

CD Species of special conservation interest (conservation dependent fauna)

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

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

OS Other specially protected species

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

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

P Priority species

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

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

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

Priority 1: Poorly-known species

Species that are known from one or a few locations (generally five or less) which are potentially at risk. All occurrences are either: very small; or on lands not managed for conservation, e.g. agricultural or pastoral lands, urban areas, road and rail reserves, gravel reserves and active mineral leases; or otherwise under threat of habitat destruction or degradation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under immediate threat from known threatening processes. Such species are in urgent need of further survey.

Priority 2: Poorly-known species

Species that are known from one or a few locations (generally five or less), some of which are on lands managed primarily for nature conservation, e.g. national parks, conservation parks, nature reserves and other lands with secure tenure being managed for conservation. Species may be included if they are comparatively well known from one or more locations but do not meet adequacy of survey requirements and appear to be under threat from known threatening processes. Such species are in urgent need of further survey.

Priority 3: Poorly-known species

Species that are known from several locations, and the species does not appear to be under imminent threat, or from few but widespread locations with either large population size or significant remaining areas of apparently suitable habitat, much of it not under imminent threat. Species may be included if they are comparatively well known from several locations but do not meet adequacy of survey requirements and known threatening processes exist that could affect them. Such species are in need of further survey.

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

- (a) Rare. Species that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection but could be if present circumstances change. These species are usually represented on conservation lands.
- (b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.
- (c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

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

Western Australian Ecological Communities

Threatened Ecological Communities

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

Presumed Totally Destroyed (PD)

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

Critically Endangered (CR)

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

Endangered (EN)

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

Vulnerable (VU)

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

Priority Ecological Communities

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

Priority One: Poorly-known ecological communities

Ecological communities that are known from very few occurrences with a very restricted distribution (generally ≤ 5 occurrences or a total area of ≤ 100 ha).

Occurrences are believed to be under threat either due to limited extent, or being on lands under immediate threat (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) or for which current threats exist. May include communities with occurrences on protected lands. Communities may be included if they are comparatively well-known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under immediate threat from known threatening processes across their range.

Priority Two: Poorly-known ecological communities

Communities that are known from few occurrences with a restricted distribution (generally ≤ 10 occurrences or a total area of ≤ 200 ha). At least some occurrences are not believed to be under immediate threat (within approximately 10 years) of destruction or degradation. Communities may be included if they are comparatively well known from one or more localities but do not meet adequacy of survey requirements, and/or are not well defined, and appear to be under threat from known threatening processes.

Priority Three: Poorly known ecological communities

- (i) Communities that are known from several to many occurrences, a significant number or area of which are not under threat of habitat destruction or degradation or:
- (ii) communities known from a few widespread occurrences, which are either large or with significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat (within approximately 10 years), or;
- (iii) munities made up of large, and/or widespread occurrences, that may or may not be represented in the reserve system, but are under threat of modification across much of their range from processes such as grazing by domestic and/or feral stock, inappropriate fire regimes, clearing, hydrological change etc.

Communities may be included if they are comparatively well known from several localities but do not meet adequacy of survey requirements and/or are not well defined, and known threatening processes exist that could affect them.

Priority Four: Ecological communities that are adequately known, rare but not threatened or meet criteria for Near Threatened, or that have been recently removed from the threatened list. These communities require regular monitoring.

- (i) Rare. Ecological communities known from few occurrences that are considered to have been adequately surveyed, or for which sufficient knowledge is available, and that are considered not currently threatened or in need of special protection, but could be if present circumstances change. These communities are usually represented on conservation lands.
- (ii) Near Threatened. Ecological communities that are considered to have been adequately surveyed and that do not qualify for Conservation Dependent, but that are close to qualifying for a higher threat category.
- (iii) Ecological communities that have been removed from the list of threatened communities during the past five years.

Priority Five: Conservation Dependent ecological communities

Ecological communities that are not threatened but are subject to a specific conservation program, the cessation of which would result in the community becoming threatened within five years.

Commonwealth of Australia Conservation Codes

Threatened Flora and Fauna

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

Extinct

A native species is eligible to be included in the extinct category at a particular time if, at that time, there is no reasonable doubt that the last member of the species has died.

Extinct in the wild

A native species is eligible to be included in the extinct in the wild category at a particular time if, at that time:

- a) it is known only to survive in cultivation, in captivity or as a naturalised population well outside its past range; or
- b) it has not been recorded in its known and/or expected habitat, at appropriate seasons, anywhere in its past range, despite exhaustive surveys over a time frame appropriate to its life cycle and form.

Critically endangered

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

Endangered

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

Vulnerable

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

Conservation dependent

A native species is eligible to be included in the conservation dependent category at a particular time if, at that time:

- a) the species is the focus of a specific conservation program the cessation of which would result in the species becoming vulnerable, endangered or critically endangered; or
- b) the following subparagraphs are satisfied:
 - i. the species is a species of fish;

- ii. the species is the focus of a plan of management that provides for management actions necessary to stop the decline of, and support the recovery of, the species so that its chances of long term survival in nature are maximised;
- iii. the plan of management is in force under a law of the Commonwealth or of a State or Territory;
- iv. cessation of the plan of management would adversely affect the conservation status of the species.

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

Threatened Ecological Communities

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

Critically endangered

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

Endangered

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

Vulnerable

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

APPENDIX 5

DBCA TEC/PEC Database Search

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368	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		JP05	MYHADRO2	500	211	115
367	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		MYHADRO1		500	213	117
602	SCP19b	Woodlands over sedgeland in Holocene dune swales of the southern Swan Coastal Plain (original description; Gibson et al. (1994).	Critically Endangered	Endangered	XYAN10		2000	214	118
727	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP03		500	217	121
728	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP04		500	218	122
729	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP05		500	219	123
726	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP02		500	220	124
725	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP01		500	221	125
957	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		butler01	butler02	500	223	127
758	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		NEERABUP07		500	225	128
1838	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		DAYRELL01	DAYRELL04	500	226	129
417	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		SVH01		500	228	131
1871	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		DAYRELL05		500	229	132
1898	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		CARABOODA01		500	572	440
1899	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		CARABOODA02		500	573	441
1893	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		WATTLE01	WATTLE03	500	574	442
1889	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		ONETREEHILL01	onetree01	500	575	443
1890	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		ONETREEHILL02		500	604	467
1933	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		ONETREEHILL03		500	605	468
1858	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Honey01	Honey04	500	607	470
191	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	CABAR01		5000	882	718
190	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	YN99		5000	883	719
192	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	WATER01		5000	884	720
187	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	CARPK01		5000	885	721

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189	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	TWILGHT01		5000	886	722
188	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	GILGIE01		5000	887	723
1921	CAVES SCP01	Aquatic Root Mat Community Number 1 of Caves of the Swan Coastal Plain	Critically Endangered	Endangered	YN555		5000	888	724
2526	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	NeerabupEast		500	1137	919
2646	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer01		500	1386	1110
3615	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer_East_03		500	1387	1111
3614	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer_East_04		500	1388	1112
3616	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer_East_02		500	1389	1113
3611	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		NEER07		500	1390	1114
2647	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer_East_01		500	1391	1115
3612	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		NEER09	NEER10	500	1392	1116
3613	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		NEER11		500	1473	1189
4022	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		HOPKINSRD02	Hopkins02Photo	500	2070	1589
4025	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		HOPKINSRD01		500	2071	1590
4023	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		CUTLER02		500	2072	1591
4024	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		CUTLER06		500	2073	1592
4026	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		HOPKINSRD06		500	2074	1593
4058	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	MARIJINUP01		500	2091	1607
4066	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		Neer_East_06		500	2357	1869
5112	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Nowergup01		500	2877	2455
5113	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Nowergup02		500	2878	2456
5114	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Nowergup03		500	2879	2457
5228	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Flynn01		500	2911	2491
17227	SCP20a	Banksia attenuata woodlands over species rich dense shrublands (floristic community type 20a as originally described in Gibson et al. (1994))	Endangered	Endangered	JosephBanksBlvd		500	14908	14399
107262	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01544		200	104261	16461
107267	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01549		200	104266	16466
107269	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01551		200	104268	16468
107291	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01573		200	104290	16490
107310	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01592		200	104309	16509
107341	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01623		200	104340	16539
107377	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01659		200	104376	16575
107456	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01738		200	104455	16654
107462	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01744		200	104461	16660
107468	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01750		200	104467	16666
107469	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01751		200	104468	16667
107487	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01769		200	104486	16685
107510	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01792		200	104509	16708
107522	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01804		200	104521	16720

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118321	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12603		200	115320	27509
118322	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12604		200	115321	27510
118323	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12605		200	115322	27511
118329	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12611		200	115328	27517
118339	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12621		200	115338	27527
118344	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12626		200	115343	27532
118345	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12627		200	115344	27533
118346	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12628		200	115345	27534
118347	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12629		200	115346	27535
118348	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12630		200	115347	27536
118349	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12631		200	115348	27537
118350	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12632		200	115349	27538
118351	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12633		200	115350	27539
118381	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12663		200	115380	27569
118382	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12664		200	115381	27570
122303	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16585		200	119302	31489
122304	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16586		200	119303	31490
122696	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16978		200	119695	31882
122697	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16979		200	119696	31883
122698	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16980		200	119697	31884
122699	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16981		200	119698	31885
122700	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16982		200	119699	31886
122701	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16983		200	119700	31887
122752	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld17034		200	119751	31938
125102	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0001		500	122171	120420
125103	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0002		500	122172	120421
125104	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0003		500	122173	120422
125105	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0004		500	122174	120423
125106	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0005		500	122175	120424
125107	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0006		500	122176	120425
125108	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0007		500	122177	120426
125109	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0008		500	122178	120427
125110	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0009		500	122179	120428
125111	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0010		500	122180	120429
125112	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0011		500	122181	120430
125113	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0012		500	122182	120431

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125118	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0017		500	122187	120436
125119	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0018		500	122188	120437
125120	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0019		500	122189	120438
125124	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0023		500	122193	120442
125125	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0024		500	122194	120443
125126	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0025		500	122195	120444
125129	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0028		500	122198	120447
125130	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0029		500	122199	120448
125131	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0030		500	122200	120449
125132	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0031		500	122201	120450
125300	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0199		500	122369	120618
125301	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0200		500	122370	120619
125302	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0201		500	122371	120620
125303	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0202		500	122372	120621
125304	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0203		500	122373	120622
125305	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0204		500	122374	120623
125309	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0208		500	122378	120627
125313	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0212		500	122382	120631
125314	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0213		500	122383	120632
125315	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0214		500	122384	120633
125316	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0215		500	122385	120634
125322	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0221		500	122391	120640
125323	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0222		500	122392	120641
125324	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0223		500	122393	120642

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125421	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0320		500	122490	120739
125422	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0321		500	122491	120740
125431	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0330		500	122500	120749
125432	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0331		500	122501	120750
125433	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0332		500	122502	120751
125434	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0333		500	122503	120752
125436	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0335		500	122505	120754
125437	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0336		500	122506	120755
125438	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0337		500	122507	120756
125439	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0338		500	122508	120757
125440	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0339		500	122509	120758
125441	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0340		500	122510	120759
125442	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0341		500	122511	120760
125443	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0342		500	122512	120761
125444	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0343		500	122513	120762
125445	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0344		500	122514	120763
125446	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0345		500	122515	120764
125447	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0346		500	122516	120765
125448	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0347		500	122517	120766
125449	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0348		500	122518	120767
125450	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0349		500	122519	120768
125451	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0350		500	122520	120769
125452	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0351		500	122521	120770
125453	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0352		500	122522	120771

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125478	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0377		500	122547	120796
125479	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0378		500	122548	120797
125480	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0379		500	122549	120798
125481	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0380		500	122550	120799
125482	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0381		500	122551	120800
125483	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0382		500	122552	120801
125484	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0383		500	122553	120802
125485	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0384		500	122554	120803
125486	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0385		500	122555	120804
125487	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0386		500	122556	120805
125488	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0387		500	122557	120806
125489	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0388		500	122558	120807
126034	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0933		500	123103	121352
126035	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld0934		500	123104	121353
126114	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1013		500	123183	121432
126115	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1014		500	123184	121433
126116	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1015		500	123185	121434
126117	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1016		500	123186	121435
126118	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1017		500	123187	121436
126119	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1018		500	123188	121437
126120	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1019		500	123189	121438
126121	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1020		500	123190	121439
126122	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1021		500	123191	121440
126123	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1022		500	123192	121441

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126124	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1023		500	123193	121442
126125	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1024		500	123194	121443
126126	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1025		500	123195	121444
126127	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1026		500	123196	121445
126128	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1027		500	123197	121446
126600	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1499		500	123669	121918
126601	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1500		500	123670	121919
126602	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1501		500	123671	121920
126603	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1502		500	123672	121921
126638	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1537		500	123707	121956
107336	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01618		200	104335	16534
107337	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01619		200	104336	16535
107338	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01620		200	104337	16536
107339	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01621		200	104338	16537
107340	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01622		200	104339	16538
107509	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01791		200	104508	16707
107523	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01805		200	104522	16721
107568	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01850		200	104567	16765
107659	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01941		200	104658	16855
107661	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01943		200	104660	16857
107662	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01944		200	104661	16858
107666	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01948		200	104665	16862
107669	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01951		200	104668	16865
107670	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01952		200	104669	16866
107675	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01957		200	104674	16871
107688	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01970		200	104687	16884
107691	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01973		200	104690	16887
107692	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld01974		200	104691	16888
113414	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld07696		200	110413	22607
115710	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld09992		200	112709	24901
115711	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld09993		200	112710	24902
115716	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld09998		200	112715	24907
115717	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld09999		200	112716	24908
115994	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld10276		200	112993	25185
116418	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld10700		200	113417	25609
116420	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld10702		200	113419	25611
116424	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld10706		200	113423	25615
117814	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12096		200	114813	27002
117816	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12098		200	114815	27004

OCC_UNI QUE	COM_ID	COM_NAME	STATE_CATG	COMM_CATG	FIRST_S_ID	LAST_S_ID	BUFFER	BDY_ID	ORIG_FID
117982	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12264		200	114981	27170
118011	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12293		200	115010	27199
118028	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12310		200	115027	27216
118194	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12476		200	115193	27382
118207	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12489		200	115206	27395
118328	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld12610		200	115327	27516
122553	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16835		200	119552	31739
122561	Banksia WL SCP	Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region	Priority 3	Endangered	BanksiaWld16843		200	119560	31747
126815	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Eglinton02		500	0	354
126816	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		Eglinton03		500	0	355
3174	SCP21c	Low lying Banksia attenuata woodlands or shrublands	Priority 3	Endangered	BAS20		200	0	925
3001	SCP23b	Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands	Priority 3	Endangered	BAW2		200	0	943
2986	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	BIW20		200	0	958
2970	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	BIW4		200	0	967
2971	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	BIW5		200	0	968
4968	SCP29a	Coastal shrublands on shallow sands	Priority 3		BU01		500	0	1006
4970	SCP29a	Coastal shrublands on shallow sands	Priority 3		BU04		500	0	1008
1881	SCP26a	Melaleuca huegelii - Melaleuca systema shrublands on limestone ridges (floristic community type 26a as originally described in Gibson et al. (1994))	Endangered		ALKIMOS01		2000	0	1017
5002	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI01		500	0	1107
5003	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI02		500	0	1108
5004	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI03		500	0	1109
5005	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI06		500	0	1110
5006	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI07		500	0	1111
5007	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI09		500	0	1112
5008	SCP29b	Acacia shrublands on taller dunes	Priority 3		MI18		500	0	1113
5009	SCP29a	Coastal shrublands on shallow sands	Priority 3		MI21		500	0	1114
5010	SCP24	Northern Spearwood shrublands and woodlands	Priority 3		MI23		500	0	1115
3112	SCP23b	Swan Coastal Plain Banksia attenuata - Banksia menziesii woodlands	Priority 3	Endangered	SINT01		500	0	1219
126868	Tuart woodlands	Tuart (Eucalyptus gomphocephala) woodlands and forests of the Swan Coastal Plain	Priority 3	Critically Endangered	TuartWld1572		500	0	1364
3116	SCP25	Southern Eucalyptus gomphocephala-Agonis flexuosa woodlands	Priority 3		yela03		700	0	1644
5020	SCP10a	Shrublands on dry clay flats (floristic community type 10a as originally described in Gibson et al. (1994))	Endangered	Critically Endangered	pinj10		500	0	1725
5021	SCP22	Banksia ilicifolia woodlands	Priority 3	Endangered	pinj12		500	0	1726

APPENDIX 6
Flora Species List

SPECIES LIST – Wesco Road M70/138

MONOCOTYLEDONS

ASPARAGACEAE

Acanthocarpus preissii

Lomandra maritima

Thysanotus sparteus

ASPHODELACEAE

**Asphodelus fistulosus*

COLCHICACEAE

Burchardia congesta

CYPERACEAE

Lepidosperma calcicola

Mesomelaena pseudostygia

HAEMODORACEAE

Anigozanthos humilis

Anigozanthos manglesii

Conostylis aculeata subsp. *aculeata*

Conostylis candicans

Conostylis setigera

Haemodorum laxum

Haemodorum spicatum

HEMEROCALLIDACEAE

Tricoryne elatior

IRIDACEAE

**Gladiolus caryophyllaceus*

ORCHIDACEAE

Caladenia flava

POACEAE

**Aira caryophyllea*

Austrostipa flavescens

**Avena fatua*

**Briza maxima*

**Briza minor*

**Bromus diandrus*

**Bromus sp*

**Ehrharta calycina*

**Ehrharta longiflora*

**Vulpia myuros*

RESTIONACEAE

Desmocladius flexuosus

XANTHORRHOEACEAE

Xanthorrhoea brunonis

Xanthorrhoea preissii

DICOTYLEDONS

APIACEAE

Daucus glochidiatus

ARALIACEAE

Trachymene pilosa

ASTERACEAE

Hyalosperma cotula

**Hypochoeris glabra*

Millotia myosotidifolia

Olearia axillaris

Podotheca angustifolia

**Sonchus oleraceus*

**Urospermum picroides*

**Ursinia anthemoides*

Waitzia suaveolens

BRASSICACEAE

**Raphanus raphanistrum*

CAMPANULACEAE

**Wahlenbergia capensis*

CARYOPHYLLACEAE

**Cerastium glomeratum*

**Petrorhagia dubia*

**Silene gallica*

CASUARINACEAE

Allocasuarina humilis

CRASSULACEAE

Crassula colorata

DILLENIACEAE

Hibbertia hypericoides

ERICACEAE

Leucopogon polymorphus

Leucopogon propinquus

FABACEAE

Acacia alata var. *tetrantha*

Acacia lasiocarpa

Acacia pulchella

Acacia truncata

Acacia willdenowiana

Bossiaea eriocarpa

Gompholobium tomentosum

Hardenbergia comptoniana

Jacksonia calcicola

Mirbelia spinosa

Sphaerolobium medium

GENTIANACEAE

**Centaurium erythraea*

GOODENIACEAE

Lechenaultia linarioides

Scaevola canescens

Scaevola repens

Scaevola thesioides

LAMIACEAE

Hemiandra pungens

LAURACEAE

Cassytha racemosa

LORANTHACEAE

Nuytsia floribunda

MALVACEAE

Thomasia triphylla

MYRTACEAE

Calothamnus quadrifidus

Eucalyptus decipiens

Melaleuca huegelii

Melaleuca systema

PHYLLANTHACEAE

Phyllanthus calycinus

POLYGALACEAE

Comesperma calymega

PRIMULACEAE

**Lysimachia arvensis*

PROTEACEAE

Banksia dallaneyi

Banksia sessilis

Grevillea preissii

Hakea prostrata

Hakea trifurcata

Petrophile macrostachya

Petrophile serruriae

Templetonia retusa

RHAMNACEAE

Trymalium ledifolium

RUBIACEAE

**Galium murale*

Opercularia vaginata

RUTACEAE

Diplolaena angustifolia

SAPINDACEAE

Diplopeltis huegelii

STYLIDIACEAE

Stylidium brunonianum

Stylidium maritimum P3

Stylidium scariosum

THYMELEACEAE

Pimelea calcicola **P3**

Pimelea rosea

VIOLACEAE

Hybanthus calycinus

APPENDIX 7

Quadrat Data

QUADRAT Q1

50 382801 E 6498085 N

Vegetation: *Banksia sessilis*/*Hakea trifurcata*/*Xanthorrhoea preissii* Tall Open Scrub over *Hibbertia hypericoides*/*Calothamnus quadrifidus* Open Low Heath

Condition: Excellent

Soil Type: Orange-brown sand, surface limestone

Landform: Flat

Date: 12.10.20

Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Xanthorrhoea preissii</i>	1.9	2
<i>Hakea trifurcata</i>	1.5	20
<i>Banksia sessilis</i>	1.4	10
<i>Melaleuca systema</i>	1	10
<i>Haemodorum spicatum</i>	0.7	<1
<i>Calothamnus quadrifidus</i>	0.6	5
<i>Acacia pulchella</i>	0.6	1
<i>Xanthorrhoea brunonis</i>	0.6	<1
<i>Hibbertia hypericoides</i>	0.5	10
<i>Jacksonia calcicola</i>	0.5	10
<i>Olearia axillaris</i>	0.5	<1
<i>Haemodorum laxum</i>	0.5	<1
<i>Mirbelia spinosa</i>	0.4	1
<i>Austrostipa flavescens</i>	0.4	<1
<i>Tricoryne elatior</i>	0.4	<1
<i>Hemiandra pungens</i>	0.3	5
<i>Conostylis candicans</i>	0.3	1

SPECIES	HEIGHT (m)	COVER (%)
<i>Mesomelaena pseudostygia</i>	0.3	<1
<i>Scaevola canescens</i>	0.3	<1
<i>Allocasuarina humilis</i>	0.3	<1
* <i>Briza maxima</i>	0.3	<1
<i>Conostylis aculeata</i>	0.3	<1
* <i>Vulpia myuros</i>	0.2	<1
<i>Daucus glochidiatus</i>	0.2	<1
* <i>Briza minor</i>	0.2	<1
<i>Trachymene pilosa</i>	0.1	<1
<i>Desmocladius flexuosus</i>	0.1	<1
* <i>Lysimachia arvensis</i>	0.1	<1
<i>Scaevola repens</i>	0.1	<1
* <i>Silene gallica</i>	0.1	<1
<i>Millotia myosotidifolia</i>	<0.1	<1
<i>Crassula colorata</i>	<0.1	<1
* <i>Hypochaeris glabra</i>	Flat	<1

* introduced species

QUADRAT Q2

50 383150 E 6497904 N

Vegetation: *Banksia sessilis*/*Hakea trifurcata* Tall Open Scrub over *Hibbertia hypericoides*/*Calothamnus quadrifidus* Open Low Heath

Condition: Excellent

Soil Type: Orange-brown sand, abundant surface limestone

Landform: Top of low ridge

Date: 12.10.20

Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Banksia sessilis</i>	1.6	70
<i>Hakea trifurcata</i>	1.4	20
<i>Xanthorrhoea preissii</i>	1	1
<i>Xanthorrhoea brunonis</i>	0.8	<1
<i>Hemiandra pungens</i>	0.6	5
<i>Calothamnus quadrifidus</i>	0.5	25
<i>Acacia pulchella</i>	0.5	5
<i>Acacia lasiocarpa</i>	0.5	4
<i>Hibbertia hypericoides</i>	0.5	2
* <i>Gladiolus caryophyllaceus</i>	0.5	<1
<i>Melaleuca systema</i>	0.4	2
<i>Lechenaultia linarioides</i>	0.4	1
<i>Tricoryne elatior</i>	0.4	<1
<i>Lepidosperma calcicola</i>	0.4	<1
<i>Bossiaea eriocarpa</i>	0.4	<1
<i>Jacksonia calcicola</i>	0.3	10
<i>Hybanthus calycinus</i>	0.3	<1

SPECIES	HEIGHT (m)	COVER (%)
<i>*Ursinia anthemoides</i>	0.3	<1
<i>Austrostipa flavescens</i>	0.3	<1
<i>Banksia dallanneyi</i>	0.3	<1
<i>Conostylis candicans</i>	0.2	<1
<i>Anigozanthos humilis</i>	0.2	<1
<i>Podotheca angustifolia</i>	0.2	<1
<i>*Briza maxima</i>	0.2	<1
<i>*Petroragia dubia</i>	0.2	<1
<i>Desmocladus flexuosus</i>	0.1	2
<i>Waitzia suaveolens</i>	0.1	<1
<i>Caladenia flava</i>	0.1	<1
<i>Conostylis aculeata</i>	0.1	<1
<i>*Aira caryophylla</i>	0.1	<1
<i>*Lysimachia arvensis</i>	0.1	<1
<i>*Vulpia myuros</i>	0.1	<1
<i>Trachymene pilosa</i>	<0.1	<1
<i>Crassula colorata</i>	<0.1	<1
<i>*Hypochaeris glabra</i>	Flat	<1

* introduced species

QUADRAT Q3

50 383294 E 6497904 N

Vegetation: *Banksia sessilis*/*Hakea trifurcata*/*Xanthorrhoea preissii* Tall Open Scrub over *Hibbertia hypericoides*/*Acacia pulchella*/*Acacia lasiocarpa*/*Jacksonia calcicola* Open Low Heath

Condition: Excellent

Soil Type: Orange-brown sand, some surface limestone

Landform: Upper slope

Date: 12.10.20

Recorder: Paul van der Moezel



Quadrat (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Xanthorrhoea preissii</i>	1.9	2
<i>Banksia sessilis</i>	1.8	25
<i>Hakea trifurcata</i>	1.5	25
<i>Acacia pulchella</i>	0.8	10
<i>Melaleuca systema</i>	0.8	5
<i>Acacia lasiocarpa</i>	0.7	20
<i>Xanthorrhoea brunonis</i>	0.7	1
<i>Sphaerolobium medium</i>	0.6	<1
<i>Hibbertia hypericoides</i>	0.5	10
<i>Jacksonia calcicola</i>	0.5	10
<i>Calothamnus quadrifidus</i>	0.5	2
<i>Hemiandra pungens</i>	0.5	1
* <i>Gladiolus caryophyllaceus</i>	0.5	<1
<i>Mesomelaena pseudostygia</i>	0.4	1
<i>Haemodorum laxum</i>	0.4	<1
<i>Tricoryne elatior</i>	0.4	<1

SPECIES	HEIGHT (m)	COVER (%)
<i>Lepidosperma calcicola</i>	0.4	<1
<i>Gompholobium tomentosum</i>	0.3	<1
<i>Conostylis aculeata</i>	0.3	1
<i>Bossiaea eriocarpa</i>	0.3	<1
<i>Austrostipa flavescens</i>	0.3	<1
<i>Hybanthus calycinus</i>	0.3	<1
* <i>Aira caryophylla</i>	0.2	<1
* <i>Vulpia myuros</i>	0.1	<1
<i>Conostylis setigera</i>	0.1	<1
<i>Caladenia flava</i>	0.1	<1
<i>Daucus glochidiatus</i>	0.1	<1
* <i>Hypochaeris glabra</i>	Flat	<1

* introduced species

QUADRAT Q4

50 383214 E 6498077 N

Vegetation: *Melaleuca systema*/*Melaleuca huegelii* Open Heath
Condition: Good
Soil Type: Orange-brown sand, some surface limestone
Landform: Flat, top of low rise
Date: 12.10.20
Recorder: Paul van der Moezel



QUADRAT (10 x 10m)

SPECIES	HEIGHT (m)	COVER (%)
<i>Melaleuca huegelii</i>	1.5	5
<i>Melaleuca systema</i>	1	60
<i>Trymalium ledifolium</i>	1	2
<i>Olearia axillaris</i>	1	1
<i>Acacia truncata</i>	1	<1
<i>Scaevola thesioides</i>	0.9	5
<i>Acacia pulchella</i>	0.8	5
<i>Pimelea rosea</i>	0.8	2
<i>Xanthorrhoea preissii</i>	0.7	1
<i>Xanthorrhoea brunonis</i>	0.7	<1
* <i>Gladiolus caryophyllaceus</i>	0.6	<1
<i>Leucopogon polymorphus</i>	0.5	<1
<i>Diplopeltis huegelii</i>	0.5	<1
<i>Templetonia retusa</i>	0.5	<1
<i>Austrostipa flavescens</i>	0.5	<1
* <i>Avena fatua</i>	0.5	<1
<i>Opercularia vaginata</i>	0.4	4
<i>Grevillea preissii</i>	0.4	2
<i>Hibbertia hypericoides</i>	0.4	1

SPECIES	HEIGHT (m)	COVER (%)
<i>Phyllanthus calycinus</i>	0.4	<1
* <i>Bromus diandrus</i>	0.4	<1
<i>Conostylis candicans</i>	0.4	<1
<i>Desmocladius flexuosus</i>	0.3	2
<i>Lepidosperma calcicola</i>	0.3	1
<i>Hemiandra pungens</i>	0.3	1
<i>Stylidium maritimum</i>	0.3	<1
* <i>Ehrharta longiflora</i>	0.3	<1
* <i>Sonchus oleraceus</i>	0.3	<1
<i>Daucus glochidiatus</i>	0.2	2
* <i>Urospermum picroides</i>	0.2	1
<i>Leucopogon parviflorus</i>	0.2	<1
* <i>Lysimachia arvensis</i>	0.1	2
<i>Trachymene pilosa</i>	0.1	1
* <i>Vulpia myuros</i>	0.1	<1
* <i>Cerastium glomeratum</i>	0.1	<1
* <i>Aira caryophyllea</i>	0.1	<1
* <i>Galium murale</i>	<0.1	<1
<i>Cassytha racemosa</i>	Climber	<1
<i>Hardenbergia comptoniana</i>	Climber	<1

* introduced species