

7.0 Fauna

7.1 Fauna Habitats

Approximately 60% of the total survey area (174.2 ha in the Level 1 survey area and 51.4 ha in the Level 2 survey area section) comprised cleared roads, buildings or heavily-degraded agricultural land, with negligible value as fauna habitat.

Seven fauna habitats were identified in the remainder of the survey area using on-ground habitat assessment in combination with the vegetation mapping. These are outlined in Table 7.1 and mapped in Figure 7.1. The Level 1 survey area contained four fauna habitats, whilst the Level 2 survey area contained all seven fauna habitat types.

Table 7.1: Fauna habitats identified within the survey area.

Habitat (Equivalent Vegetation Units)	Extent of Habitat in Survey Area (Proportion of Total Extent in Survey Area)		Photograph
	Level 1 Survey Area	Level 2 Survey Area	
Scattered Eucalyptus/Marri in cleared areas	6.8 ha (3.7%)	9.7 ha (5.1%)	

Habitat (Equivalent Vegetation Units)	Extent of Habitat in Survey Area (Proportion of Total Extent in Survey Area)		Photograph
	Level 1 Survey Area	Level 2 Survey Area	
Eucalyptus/Marri in road reserve	4.8 ha (2.9%)	38.5 ha (20.2%)	

Habitat (Equivalent Vegetation Units)	Extent of Habitat in Survey Area (Proportion of Total Extent in Survey Area)		Photograph
	Level 1 Survey Area	Level 2 Survey Area	
Banksia woodland with scattered Eucalyptus/Marri	0.02 ha (0.01%)	39.0 ha (20.5%)	
Flooded Gum over grasslands	-	36.7 ha (19.2%)	

Habitat (Equivalent Vegetation Units)	Extent of Habitat in Survey Area (Proportion of Total Extent in Survey Area)		Photograph
	Level 1 Survey Area	Level 2 Survey Area	
Wetlands/River	3.0 (1.8%) ¹	13.9 ha (7.3%) ²	
Planted Eucalyptus/Marri	-	3.7 ha (1.9%)	

Habitat (Equivalent Vegetation Units)	Extent of Habitat in Survey Area (Proportion of Total Extent in Survey Area)		Photograph
	Level 1 Survey Area	Level 2 Survey Area	
Fabaceous heathland	-	1.3 ha (0.7%)	

¹ represented in survey area by industrial evaporation ponds

² includes 2.9 ha of open water

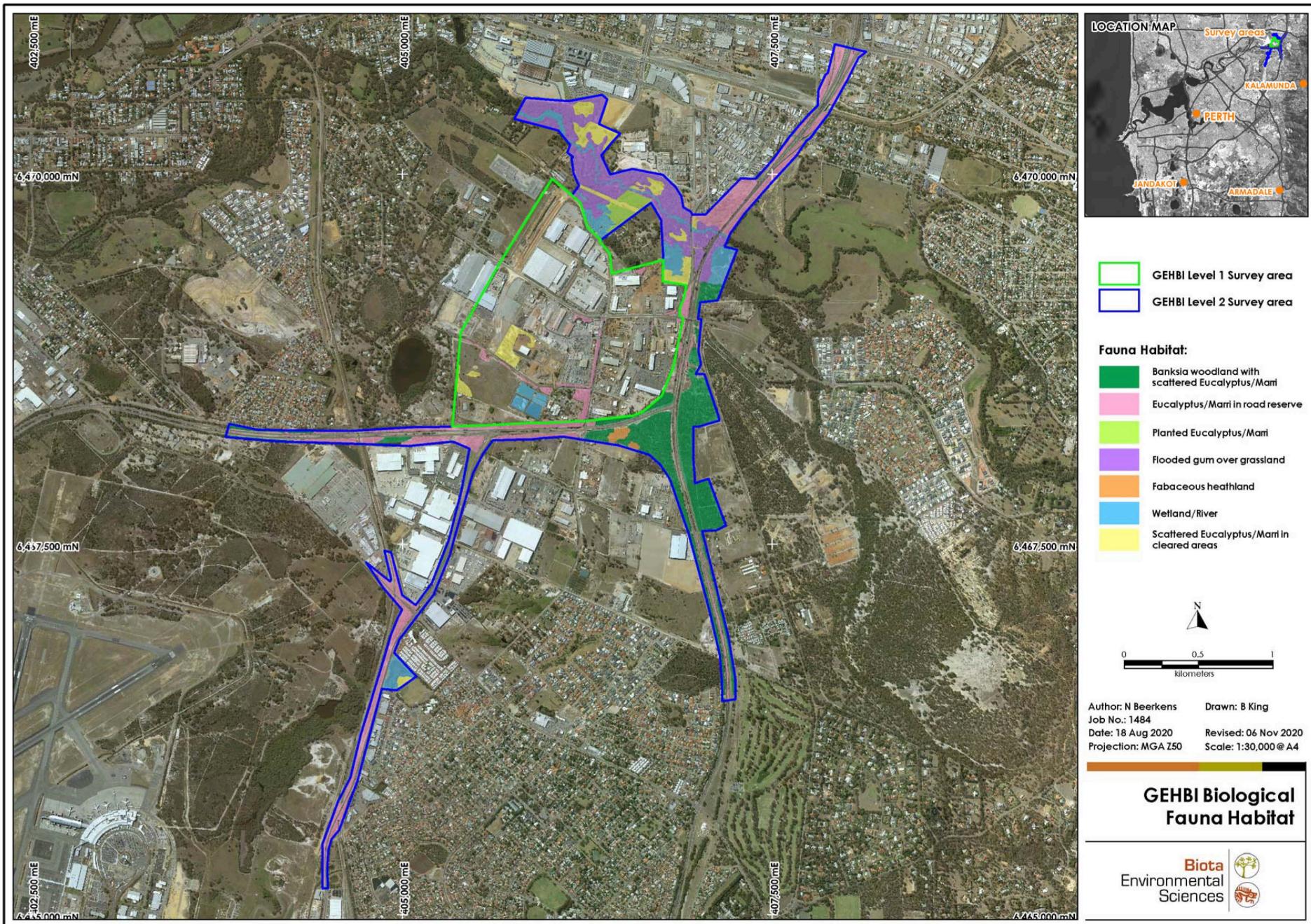


Figure 7.1: Fauna habitats identified within the survey area.

7.2 Fauna Recorded During the Survey

7.2.1 Level 1 Survey Area

The only native fauna observed within the Level 1 survey area were two species of birds: Australian White Ibis (*Threskiornis molucca*) and Willie Wagtail (*Rhipidura leucophrys*). Neither are of significance. European Cattle (*Bos taurus*) were also observed within the survey area, but only inside a fenced paddock (Figure 7.2).

7.2.2 Level 2 Survey Area

A total of 62 species were recorded in the Level 2 survey area. The full assemblage of vertebrate fauna recorded within the study area, including their conservation status and method of observation, is presented in Table 7.2.

Seven mammal species (three native and four introduced) were recorded, through a combination of direct observation, remains, secondary evidence (e.g. diggings) and motion cameras. One mammal species of significance was recorded; the Quenda (*Isoodon fusciventer*; Priority 4). Quenda were recorded throughout the Level 2 survey area, via diggings, motion camera (Plate 7.1) and direct observation (Figure 7.2).



Plate 7.1: Quenda (*Isoodon fusciventer*) captured on motion camera at site MC03.

In total, 49 bird species were recorded opportunistically and via motion camera during the field survey (Table 7.2), including direct observations of the significant Carnaby's Black-Cockatoo and foraging evidence of Forest Red-tailed Black-Cockatoo. These black cockatoo records are discussed further in Section 7.3. No other bird species recorded were of significance.

Five reptile species were recorded from the survey area, through opportunistic sightings and remains (Table 7.2). None were of significance. One amphibian species, the Squelching Froglet (*Crinia insignifera*), was heard within the survey area (Table 7.2). It is not of significance.

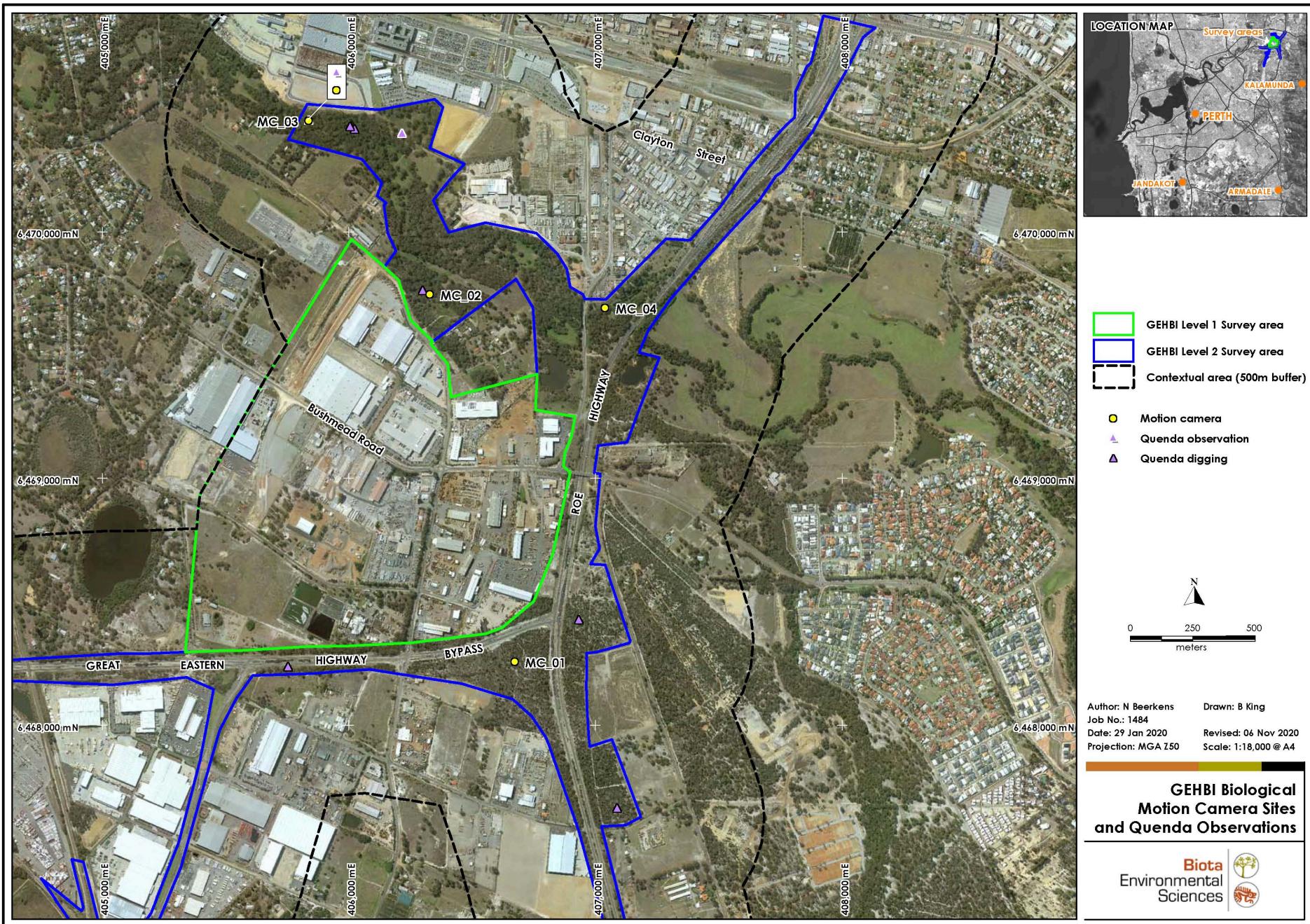


Figure 7.2: Location of motion camera sites and Quenda (*Isoodon fusciventer*) observations.

Table 7.2: Vertebrate species identified during the Level 1 fauna survey.

Class	Common Name	Conservation Status		Survey Area		Record Type								
		State	Federal	Level 1	Level 2	Observed	Heard only	Diggings	Remains	Chewed nuts	MC01	MC02	MC03	MC04
Species														
Amphibia														
<i>Crinia insignifera</i>	Squelching Froglet				•		•							
Aves														
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill				•	•								
<i>Anas gracilis</i>	Grey Teal				•	•								
<i>Anas superciliosa</i>	Pacific Black Duck				•	•								
<i>Anhinga novaehollandiae</i>	Australasian Darter				•	•								
<i>Anthochaera carunculata</i>	Red Wattlebird				•	•								
<i>Anthochaera lunulata</i>	Western Wattlebird				•	•								
<i>Aquila audax</i>	Wedge-tailed Eagle				•	•								
<i>Ardea alba</i>	Great Egret				•	•								
<i>Aythya australis</i>	Hardhead				•	•								
<i>Barnardius zonarius</i>	Australian Ringneck				•	•			•					
<i>Cacatua sanguinea</i>	Little Corella				•	•								
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo	VU	VU		•					•				
<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	EN	EN		•	•				•				
<i>Chenonetta jubata</i>	Australian Wood Duck				•	•								
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike		MA		•	•								
<i>Corvus coronoides</i>	Australian Raven				•	•								
<i>Cracticus tibicen</i>	Australian Magpie				•	•					•	•		
<i>Dacelo novaeguineae</i>	Laughing Kookaburra				•	•								
<i>Egretta novaehollandiae</i>	White-faced Heron				•	•								
<i>Eolophus roseicapillus</i>	Galah				•	•								

Class	Common Name	Conservation Status		Survey Area		Record Type								
		State	Federal	Level 1	Level 2	Observed	Heard only	Diggings	Remains	Chewed nuts	MC01	MC02	MC03	MC04
<i>Species</i>														
<i>Fulica atra</i>	Eurasian Coot				•	•								
<i>Gallinula tenebrosa</i>	Dusky Moorhen				•	•								
<i>Gavicalis virescens</i>	Singing Honeyeater				•	•								
<i>Grallina cyanoleuca</i>	Magpie-lark		MA		•	•								
<i>Haliastur sphenurus</i>	Whistling Kite				•	•								
<i>Hirundo neoxena</i>	Welcome Swallow		MA		•	•								
<i>Lichmera indistincta</i>	Brown Honeyeater				•	•								
<i>Malurus splendens</i>	Splendid Fairy-wren				•	•								
<i>Nycticorax caledonicus</i>	Nankeen Night-Heron				•	•								
<i>Pachycephala rufiventris</i>	Rufous Whistler				•	•								
<i>Pardalotus striatus</i>	Striated Pardalote				•	•								
<i>Petrochelidon nigricans</i>	Tree Martin		MA		•	•								
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant				•	•								
<i>Phylidonyris niger</i>	White-cheeked Honeyeater				•	•								
<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater				•	•								
<i>Platalea flavipes</i>	Yellow-billed Spoonbill				•	•								
<i>Porphyrio porphyrio</i>	Purple Swamphen				•	•								
<i>Purpureicephalus spurius</i>	Red-capped Parrot				•	•								
<i>Rhipidura albiscapa</i>	Grey Fantail				•	•								
<i>Rhipidura leucophrys</i>	Willie Wagtail			•	•	•								
<i>Smicromys brevirostris</i>	Weebill				•	•								
<i>Streptopelia chinensis</i>	Spotted Dove				•	•								

Class	Common Name	Conservation Status		Survey Area		Record Type								
		State	Federal	Level 1	Level 2	Observed	Heard only	Diggings	Remains	Chewed nuts	MC01	MC02	MC03	MC04
<i>Streptopelia senegalensis</i>	Laughing Dove				•	•								
<i>Tachybaptus novaehollandiae</i>	Australasian Grebe				•	•								
<i>Threskiornis molucca</i>	Australian White Ibis			•	•	•								
<i>Threskiornis spinicollis</i>	Straw-necked Ibis		MA		•	•								
<i>Todiramphus sanctus</i>	Sacred Kingfisher		MA		•	•								
<i>Trichoglossus moluccanus</i>	Rainbow Lorikeet				•	•								
<i>Zosterops lateralis</i>	Silveryeye		MA		•	•								
Mammalia														
<i>Bos taurus</i>	European Cattle			•		• (1)								
<i>Capra hircus</i>	Goat				•	•					•	•		
<i>Felis catus</i>	Cat				•									•
<i>Isoodon fusciventer</i>	Quenda, Southern Brown Bandicoot	P4			•	•		•					•	
<i>Macropus fuliginosus</i>	Western Grey Kangaroo				•	•			•					
<i>Oryctolagus cuniculus</i>	Rabbit				•			•	•					
<i>Trichosurus vulpecula</i>	Common Brushtail Possum				•	•			•					•
<i>Vulpes vulpes</i>	Red Fox				•						•	•		
Reptilia														
<i>Chelodina colliei</i>	Oblong Turtle				•	•								
<i>Cryptoblepharus buchananii</i>	Buchanan's Snake-eyed Skink				•	•								
<i>Pseudonaja affinis</i>	Dugite				•	•								
<i>Tiliqua rugosa</i>	Bobtail, Shingleback				•	•			•					
<i>Varanus gouldii</i>	Sand Goanna, Bungarra				•				•					

(1) Present only within a fenced paddock.

7.3 Targeted Black Cockatoo Assessment

7.3.1 Breeding Habitat

7.3.1.1 Level 1 Survey Area

A total of 19 breeding habitat trees were recorded within the Level 1 survey area (Figure 7.3 and Appendix 14). These included 15 Flooded Gum, three Marri and one Jarrah tree. Based on ground-level assessment, none of the trees contained hollows suitable for black cockatoo breeding.

7.3.1.2 Level 2 Survey Area

A total of 1,622 breeding habitat trees were recorded within the Level 2 survey area (Figure 7.3 and Appendix 14). The majority of recorded habitat trees were Flooded Gum (386), with a much smaller number of Marri (128), Jarrah (101) and Tuart (one). Six trees could not be identified to species, all of which were dead stags.

Based on ground-level assessment, 27 hollows from 21 trees were described as potentially suitable for black cockatoo breeding. However, following camera assessment of these hollows, only four hollows from four trees were deemed suitable for black cockatoo breeding (Table 7.3, Figure 7.3). Still images from camera assessment are presented in Appendix 15.

Of the potentially suitable hollows, one displayed chew marks around its entrance, a potential sign of black cockatoo use (Plate 7.2), one was empty and two displayed signs of occupation by non-target species (a nest of duck eggs, and a Common Brushtail Possum (*Trichosurus vulpecula*)).

Evidence of occupation by a different species does not necessarily discount the possibility that these hollows may be used by black cockatoos in the future.

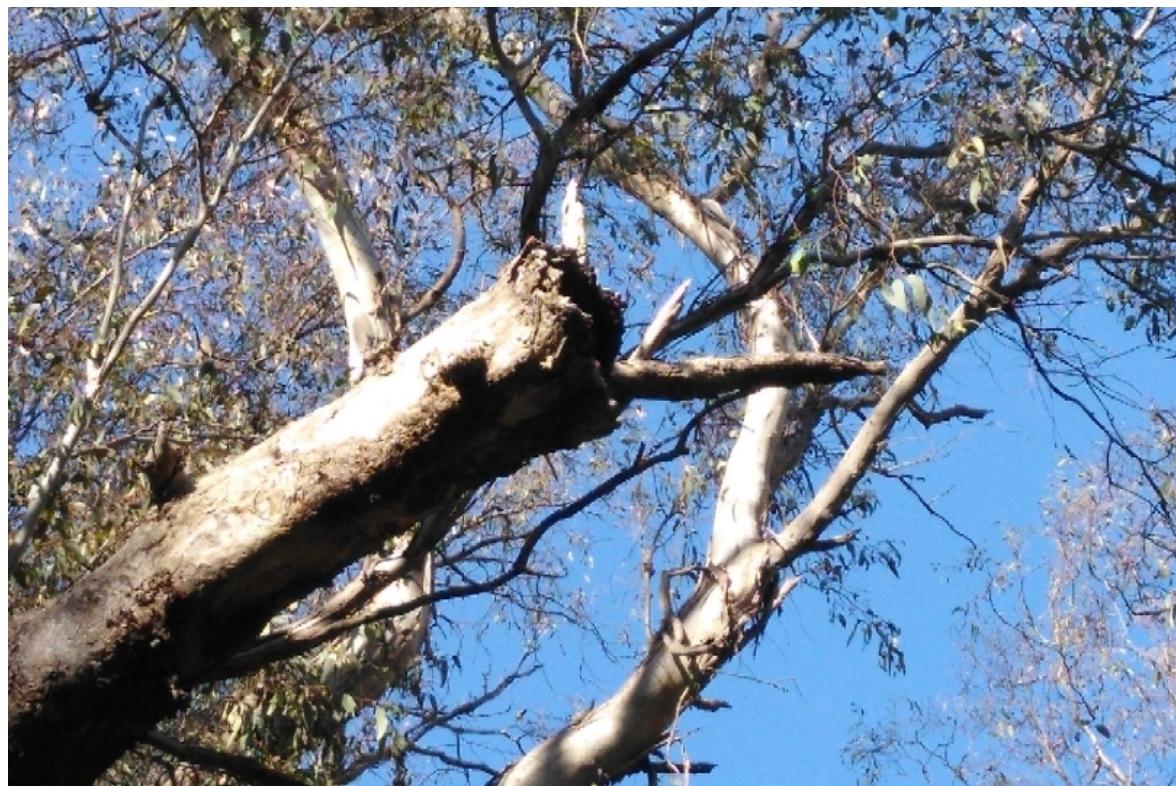


Plate 7.2: Suitable tree hollow with chew marks.

Table 7.3: Trees with hollows potentially suitable for breeding by black cockatoos (all in the Level 2 survey area). Still images are presented in Appendix 15.

Tree ID	Tree Species	Location		DBH (cm)	Height Category (m)	Signs of Use
		Latitude	Longitude			
Tree 04	Dead	-31.902009	116.008496	87	0-10	Nil.
Tree 10	Flooded Gum	-31.907045	116.016210	184	15-20	Occupied by Common Brushtail Possum (<i>Trichosurus vulpecula</i>). No signs of use by black cockatoos.
Tree 15	Flooded Gum	-31.901506	116.008786	131	15-20	Contains duck eggs. No signs of use by black cockatoos.
Tree 17	Flooded Gum	-31.901886	116.009757	136	15-20	Chewing around hollow.

7.3.2 Foraging Habitat

7.3.2.1 Level 1 Survey Area

Overall, the available foraging habitat within the Level 1 survey area is restricted to scattered trees contained within a total area of 9.1 ha, representing 12.9% of the survey area. This area is comprised of two fauna habitats, defined as Eucalyptus/Marri in road reserve and scattered Eucalypt Marri (Figure 7.1). No evidence of black cockatoo foraging was identified during the field survey. However, given the close proximity of nearby foraging records in the Level 2 survey area, it is possible this area may on occasion be visited for foraging.

7.3.2.2 Level 2 Survey Area

The Level 2 survey area contains multiple habitats suitable for black cockatoo foraging, including Banksia woodland with scattered Eucalyptus/Marri, Eucalyptus/Marri in road reserve, Scattered Eucalyptus/Marri in cleared areas, and Fabaceous heathland, totalling 88.4 ha. Black cockatoo foraging was recorded from each of these habitat types (Figure 7.4).

The Level 2 survey area also contains a combined 50.7 ha of Flooded gum over grasslands, Planted Eucalyptus/Marri, and Wetlands/River habitat. These habitats may occasionally be used for foraging, however, no evidence was recorded in this survey.

Carnaby's Black-Cockatoo were observed directly foraging in Banksia trees in the Banksia woodland surrounding the Roe Highway / Great Eastern Highway Bypass intersection (Plate 7.3). Chewed Marri nuts were also a common indicator of black cockatoo foraging, and bite marks indicative of both Carnaby's Black-Cockatoo and Forest Red-tailed Black-Cockatoo were recorded on these (Plate 7.4 and Plate 7.5 respectively). Chewed pinecones were observed in a small section of habitat north of the Helena River and west of Roe Highway, and could not be identified to black cockatoo species level (Plate 7.6). There was no evidence of foraging by Baudin's Black-Cockatoo, however, the survey area is situated at the edge of their known foraging range as identified in (DotEE 2017a), and therefore may not be commonly utilised by the species.



Plate 7.3 Carnaby's Black-Cockatoos emerging from Banksia after foraging.



Plate 7.4 Marri nut chewed by Carnaby's Black-Cockatoo.



Plate 7.5 Marri nut chewed by Forest Red-tailed Black-Cockatoo.



Plate 7.6 Pinecone chewed by black cockatoo sp.

7.3.3 Roosting Habitat

No evidence of black cockatoo roosting was recorded within either the Level 1 or Level 2 survey area. A review of previously recorded black cockatoo roosts revealed roosts scattered widely within the 5 km study area, but none within the survey area or the contextual area (Figure 7.5).

7.3.3.1 Level 1 Survey Area

The only permanent water within the Level 1 survey area are industrial evaporation ponds, and tall trees are scattered within the industrial estate. As such, it is unlikely to represent important roosting habitat.

7.3.3.2 Level 2 Survey Area

The riparian *Eucalyptus* trees present along the banks of the Helena River should be considered as potentially suitable roosting habitat, given their tall heights and proximity to permanent water (DotEE 2017a, EPA 2019).

7.3.4 Individuals

7.3.4.1 Level 1 Survey Area

No black cockatoo individuals were recorded within the Level 1 study area.

7.3.4.2 Level 2 Survey Area

Carnaby's Black-Cockatoo were regularly heard and observed within the Banksia woodland habitat at the Roe Highway / Great Eastern Highway Bypass intersection. The largest group totalled 15 individuals, flying low over the woodland. A group of six individuals was observed foraging on Banksia spp., and the remaining records consisted of small flocks of one to three individuals flying or sitting in Banksia trees.

No Forest Red-tailed Black-Cockatoos or Baudin's Black-Cockatoos were observed.

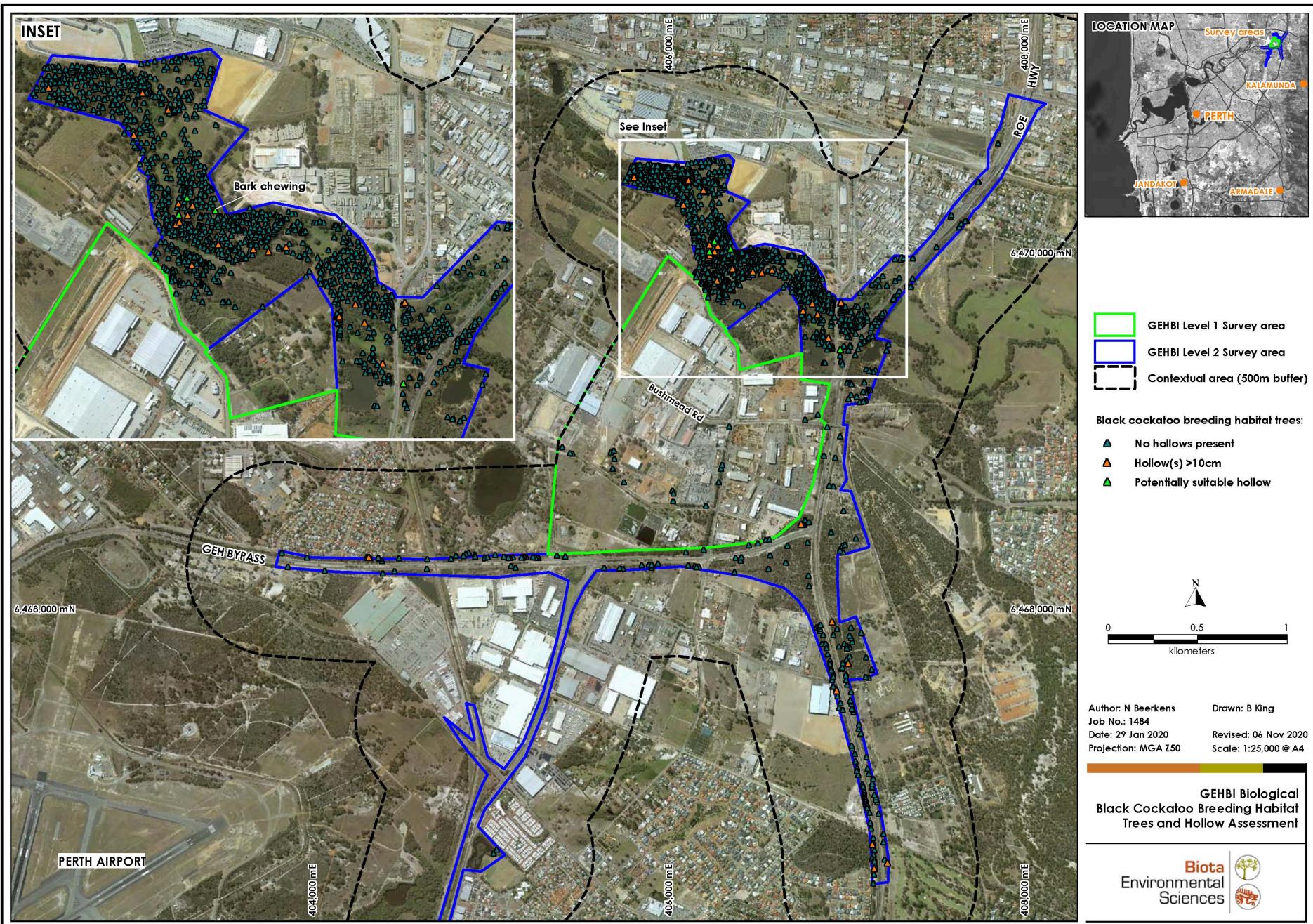


Figure 7.3: Black cockatoo breeding habitat trees recorded within the survey area.

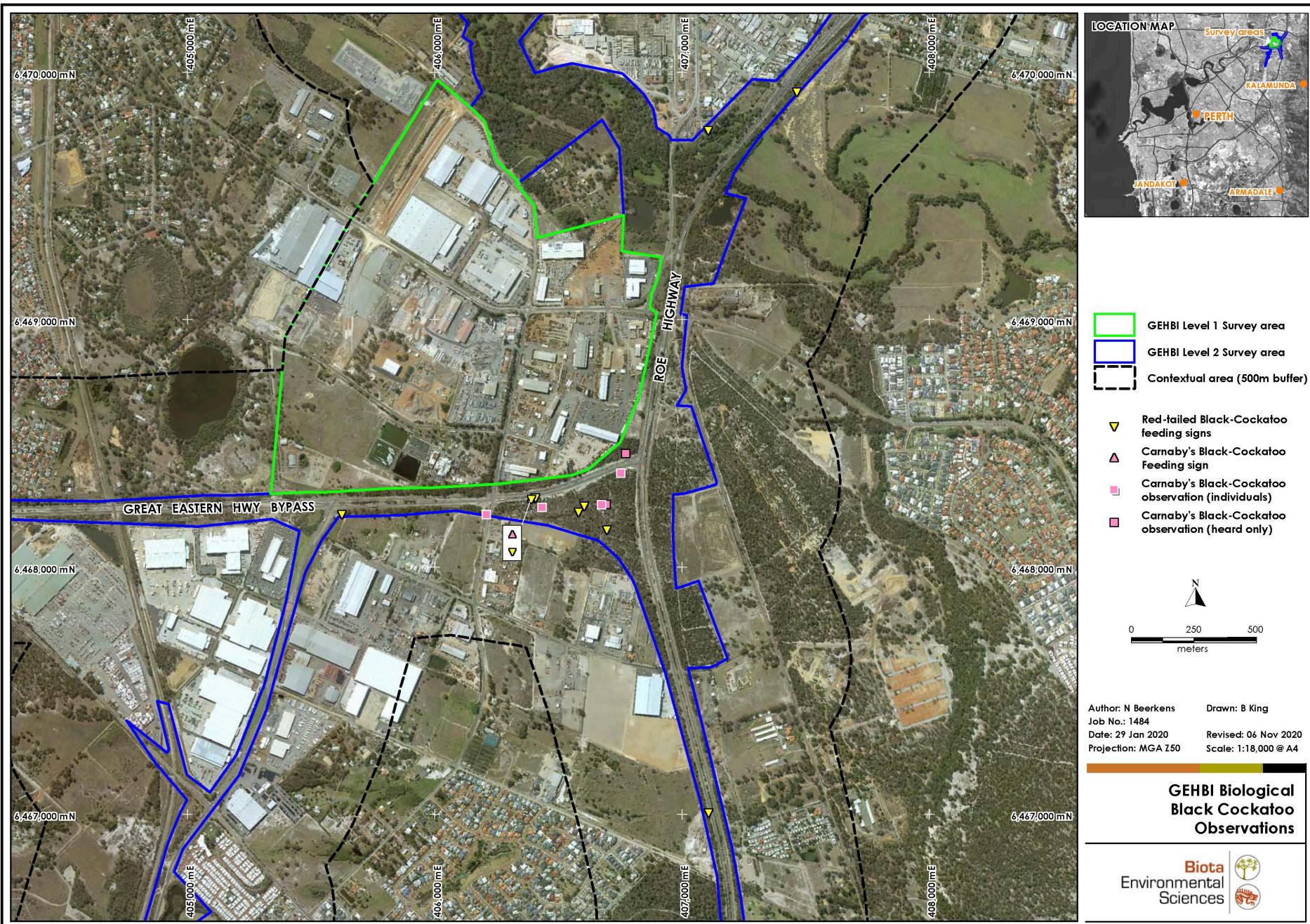


Figure 7.4: Black cockatoo foraging records and individual observations recorded within the survey area.

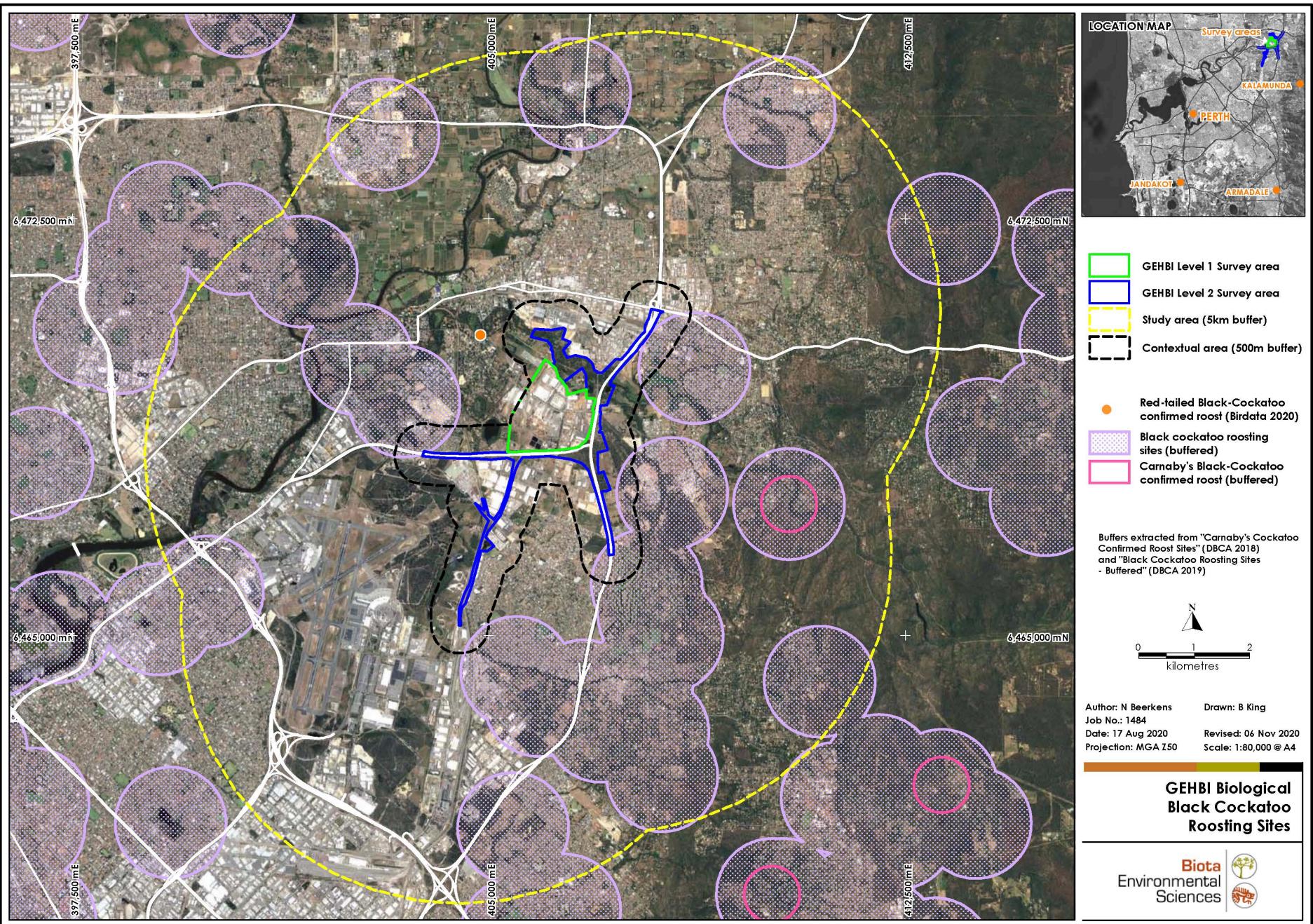


Figure 7.5: Known black cockatoo roosting sites in the vicinity of the study area.

7.4 Carter's Mussel Targeted Assessment

No evidence of Carter's Freshwater Mussel was observed during the field survey. Within the survey area, the Helena River appears degraded, being weed-choked and turbid to the point where the shallow river bed could not be effectively observed (Plate 7.7 and Plate 7.8). In comparison, reference sites in which Carter's Mussel have been recently recorded have clear water and native riparian vegetation (Plate 7.9 and Plate 7.10).

The degraded and turbid nature of the Helena River within the survey area is unlikely to represent optimal habitat for *Westratalunio carteri*. Klunzinger et al. (2012) state that sedimentation may be causing localised declines in *W. carteri*, and that the presence of suspended sediment is likely to impede filtration and reduce feeding efficiency. Additionally, in many freshwater systems, elevated turbidity contributes to reduced dissolved oxygen (Butler 2008), with hypoxic conditions potentially causing abortion of brooding embryos or adult mortality (Walker et al. 2013).



Plate 7.7: Turbid and weed-choked section of Helena River within the study area (site GEH06SRE).



Plate 7.8: Turbid and weed-choked section of Helena River within the study area (site GEH01SRE).



Plate 7.9: Reference site GEH13SRE showing clear water (with tannins) and native sedge.

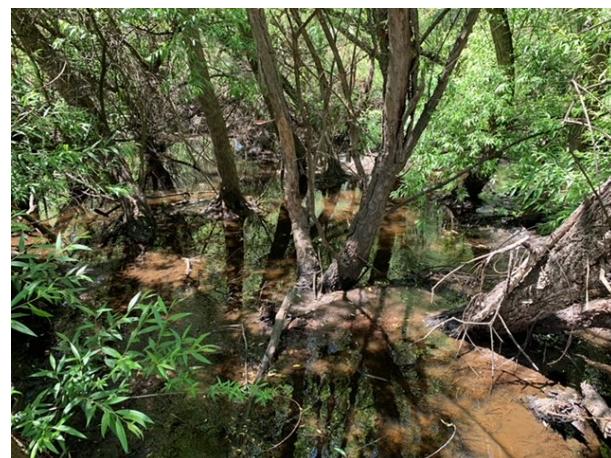


Plate 7.10: Reference site GEH14SRE showing clear water.

7.5 Significant Fauna

One mammal, seven bird, and one reptile species of significance were identified as potentially occurring within the survey area based on the results of the desktop study (see Section 4.9.2). The likelihood of occurrence of these taxa in each of the two parts of the survey area was reassessed following the field survey, taking into consideration the results.

Based on this assessment, one mammal, seven bird, and one reptile taxa have been either recorded or assessed as “Likely to occur” or “May potentially occur” in the Level 2 survey area (see Table 7.4). Eight of these species have some potential to occur in the Level 1 survey area, although only four of these are considered likely, and habitat for all is marginal (Table 7.4). Each species is discussed in the Sections 7.5.1.1 to 7.5.1.9.

Table 7.4: Significant fauna potentially occurring in the survey area.

TAXON	COMMON NAME	CONSERVATION STATUS	Likelihood of Occurrence	
			LEVEL 1 SURVEY AREA	LEVEL 2 SURVEY AREA
Mammals				
<i>Isoodon fusciventer</i>	Quenda	Priority 4	May occur	Recorded
Birds				
<i>Plegadis falcinellus</i>	Glossy Ibis	Migratory	May occur	May occur
<i>Falco peregrinus</i>	Peregrine Falcon	Specially Protected	Likely to occur (foraging)	Likely to occur
<i>Tringa glareola</i>	Wood Sandpiper	Migratory	May occur	May occur
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo	Vulnerable	Likely to occur (foraging)	Recorded
<i>Calyptorhynchus baudinii</i>	Baudin's Black-Cockatoo	Endangered	Likely to occur (foraging)	Likely to occur
<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	Endangered	Likely to occur (foraging)	Recorded
<i>Apus pacificus</i>	Fork-tailed Swift	Migratory	May occur (aerial only)	May occur (aerial only)
Reptiles				
<i>Ctenotus gemmula</i>	Jewelled Sandplain Ctenotus	Priority 3	Unlikely to occur	May occur

7.5.1.1 Quenda (*Isoodon fusciventer*)

Conservation Status: DBCA Priority 4

Distribution and habitat: The Quenda occurs patchily through south-western Australia from just north of Perth to Esperance. It occurs in a variety of habitat types, including forest, woodland, shrubland, and heathland, but preferring areas with denser vegetation. It also favours sandy substrates to allow for digging up food, and often occurs in association with wetland areas (van Dyck and Strahan 2008).

Ecology: The Quenda is a medium-sized ground-dwelling marsupial that is primarily nocturnal, but may be active during the day on occasions. It is territorial and defends a home range. Breeding in this species is opportunistic, but typically begins in winter and peaks in spring, and lasts 6 – 8 months. Nests of ground litter over shallow depressions are constructed next to or under logs, shrubs or debris piles. It feeds on invertebrates, fungi and subterranean plant material (van Dyck and Strahan 2008).

Likelihood of occurrence (Level 1 survey area): May potentially occur. However, there is significantly less habitat in this section compared to the Level 2 study area, and the habitat that does exist is of marginal quality.

Likelihood of occurrence (Level 2 survey area): Recorded during the survey. Suitable fauna habitats existing in the Level 2 survey area includes Banksia woodland with scattered Eucalyptus/Marri, Flooded Gum over grassland and Fabaceous heathland.

7.5.1.2 Glossy Ibis (*Plegadis falcinellus*)

Conservation Status: Migratory – EPBC Act and BC Act.

Distribution and habitat: Widely distributed globally, within Western Australia this species is particularly concentrated in well-watered flatlands of the Kimberley and Swan Coastal Plain (Johnstone and Storr 1998).

Ecology: A non-breeding visitor to the Swan Coastal Plain, where it is generally rare to uncommon, but increasing in abundance (Johnstone and Storr 1998). This species mainly forages on aquatic invertebrates, as well as terrestrial invertebrates and small vertebrates.

Likelihood of occurrence (Level 1 survey area): May potentially occur. Suitable foraging habitat exists, although there is significantly less habitat suitable than in the Level 2 survey area.

Likelihood of occurrence (Level 2 survey area): May potentially occur. Wetland/River fauna habitat present in the Level 2 survey area is considered suitable foraging habitat for this species.

7.5.1.3 Peregrine Falcon (*Falco peregrinus*)

Conservation Status: Specially Protected – BC Act.

Distribution and habitat: This species occurs Australia-wide, and inhabits a wide range of habitats including forest, woodlands, wetlands and open country (Pizzey and Knight 2007).

Ecology: Home ranges are probably defended year-round and are variable in size, though not typically less than 480 ha (Marchant and Higgins 1993). The species typically nests on ledges in cliffs, granite outcrops and quarries, but also in hollow trees and in old nests constructed by other species such as Wedge-tailed Eagles and Ravens (Johnstone and Storr 1998).

Likelihood of occurrence (Level 1 survey area): Likely to occur at least occasionally. There are recent records of the species in close proximity to the survey area and may forage across all fauna habitats within the Level 1 survey area

Likelihood of occurrence (Level 2 survey area): Likely to occur at least occasionally. There are recent records of the species in close proximity to the survey area and may forage across all fauna habitats within the Level 2 survey area

7.5.1.4 Wood Sandpiper (*Tringa glareola*)

Conservation Status: Migratory – EPBC Act and BC Act.

Distribution and habitat: This species breeds in northern European and Africa, and overwinters in Africa, south Asia and Australia, where it is widely distributed, favouring well-watered regions. It inhabits shallow bodies of freshwater such as lagoons, swamps, claypans, river pools, dams, bore overflows and sewage ponds (Johnstone and Storr 1998).

Ecology: A non-breeding winter visitor (Johnstone and Storr 1998). This species forages for aquatic invertebrates in moist or dry mud.

Likelihood of occurrence (Level 1 survey area): May potentially occur. Suitable foraging habitat exists, although there is significantly less habitat than in the Level 2 study area.

Likelihood of occurrence (Level 2 survey area): May potentially occur. Wetland/River fauna habitat present in the Level 2 survey area is considered suitable foraging habitat for this species.

7.5.1.5 Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*)

Conservation Status: Vulnerable – EPBC Act and BC Act.

Distribution and habitat: Forest Red-tailed Black-Cockatoos are restricted to the southwest corner of Western Australia, from Gingin to the Albany area. It occurs primarily in eucalypt forests of the Darling Scarp and far South-west, but in the last 10 years has become more common in suburban Perth.

Ecology: Forest Red-tailed Black-Cockatoos nest in hollows in Jarrah, Marri and Karri trees, with eggs laid in October and November. They feed primarily on seeds of eucalypts, and other species such as *Allocasuarina* (Johnstone and Storr 1998). More recently, they have begun foraging on introduced Cape Lilac (**Melia azedarach*) on the coastal plain near Perth.

Likelihood of occurrence (Level 1 survey area): Likely to occur. Suitable foraging habitat trees exist (Section 7.3.2.1), although there are significantly fewer trees than in the Level 2 survey area.

Likelihood of occurrence (Level 2 survey area): Recorded during this survey. Suitable breeding and foraging habitat exist within the Level 2 survey area (Sections 7.3.1.2 and 7.3.2.2).

7.5.1.6 Baudin's Black-Cockatoo (*Calyptorhynchus baudinii*)

Conservation Status: Endangered – EPBC Act and BC Act.

Distribution and habitat: Baudin's Black-Cockatoo is endemic to the South-west of Western Australia, approximately southwest of the line from Bullsbrook to Bremer Bay in an area generally bounded by the 750 mm isohyet (Department of the Environment 2017). This species inhabits mainly eucalypt forests, especially Jarrah, Marri and Karri. It also occurs less commonly in woodlands of Wandoo, Blackbutt, Flooded Gum and Yate, as well as partially cleared farmlands and urban areas.

Ecology: Baudin's Black-Cockatoo is a long-lived species, with an annual productivity of 0.6 young per pair (Department of the Environment 2017). Breeding takes place from October to January, primarily in the South-west forests. Following breeding, birds leave the nesting areas and family groups merge to form larger foraging flocks (Saunders 1974), which arrive in the Darling plateau from February – March (Johnstone and Kirkby 2008). They shift west onto the southern Swan Coastal Plain in August, before returning south to breed (Johnstone and Kirkby 2008).

The species feeds primarily on Marri, consuming its seeds, flowers, nectar and buds (Johnstone and Kirkby 2008). Birds have also been observed eating the seeds of Hakea, Banksia, Allocasuarina, Eucalyptus, Grevillea, Jacaranda, Macadamia, Quercus, Kingia, Xanthorrhoea, kangaroo paw, apples, pears, pecans, persimmons and insects (Department of the Environment 2017).

Likelihood of occurrence (Level 1 survey area): Likely to occur. Suitable foraging habitat exist within the Level 1 survey area (Section 7.3.2.1), although there are significantly fewer trees than in the Level 2 survey area.

Likelihood of occurrence (Level 2 survey area): Likely to occur. Suitable foraging habitat exist within the Level 2 survey area (Section 7.3.2.2).

7.5.1.7 Carnaby's Black-Cockatoo (*Calyptorhynchus latirostris*)

Conservation Status: Endangered – EPBC Act and BC Act.

Distribution and habitat: Carnaby's Black-Cockatoo is endemic to the South-west of Western Australia, approximately southwest of the line from Kalbarri to Esperance. This species inhabits mainly Proteaceous shrublands and heaths, and Eucalypt woodlands and forests (Johnstone and Storr 1998). Breeding activity is usually restricted to smooth-barked eucalypts, including Salmon Gum and Wandoo (Johnstone and Storr 1998).

Ecology: Carnaby's Black-Cockatoo is a long-lived species, and breeds annually from four years of age (Saunders 1986). Breeding takes place from July to October, primarily in the Wheatbelt. Following breeding, many individuals disperse towards the coast, and during this time they are common in the Perth metropolitan area. The species feeds primarily on the seeds of hakeas, banksias, grevilleas, eucalypts and introduced pines, as well as insect larvae (Johnstone and Storr 1998).

Likelihood of occurrence (Level 1 survey area): Likely to occur. Suitable foraging habitat trees exist (Section 7.3.2.1), although there are significantly fewer suitable trees than in the Level 2 survey area.

Likelihood of occurrence (Level 2 survey area): Recorded during the current survey. Suitable breeding and foraging habitat exist within the Level 2 survey area (Sections 7.3.1.2 and 7.3.2.2).

7.5.1.8 Fork-tailed Swift (*Apus pacificus*)

Conservation Status: Migratory – EPBC Act and BC Act.

Distribution and habitat: In Western Australia, the species is most common in the Kimberley and in coastal areas elsewhere, but will visit most parts of the state. It is often seen in association with unsettled weather conditions and tropical low pressure systems (Johnstone and Storr 1998), and occurs over all terrestrial habitats (Menkhorst et al. 2017).

Ecology: A non-breeding summer visitor (September to April) to Australia. Swifts are highly specialised aerial insectivores, which very rarely land except when nesting (Menkhorst et al. 2017), and thus are almost entirely aerial in habit while in Australia.

Likelihood of occurrence (Level 1 survey area): May potentially occur. The species is highly mobile and known to occur in the region over all habitat types, so is likely to utilise airspace over the Level 1 survey area on occasion. However, regional records are sparse, so it is likely to occur only rarely, particularly in association with unsettled weather conditions.

Likelihood of occurrence (Level 2 survey area): May potentially occur. The species is highly mobile and known to occur in the region over all habitat types, so is likely to utilise airspace over the Level 2 survey area on occasion. However, regional records are sparse, so it is likely to occur only rarely, particularly in association with unsettled weather conditions.

7.5.1.9 Jewelled Sandplain Ctenotus (*Ctenotus gemmula*)

Conservation Status: DBCA Priority 3

Distribution and habitat: The Jewelled Sandplain Ctenotus is distributed across the south coast and southern hinterland of south-western Western Australia (Cogger 2014). It inhabits pale, heath-supporting sandplains in association with Banksia or mallee woodlands (Wilson and Swan 2017).

Ecology: This is a cryptic species, and difficult to identify without a targeted survey. Skinks of the *Ctenotus* genus tend to be generalist predators of invertebrates, although some, particularly desert species, specialise into targeting termites (Wilson and Swan 2017).

Likelihood of occurrence (Level 1 survey area): Unlikely to occur. Suitable habitat does not exist within the Level 1 survey area.

Likelihood of occurrence (Level 2 survey area): May potentially occur. Suitable fauna habitat types defined as Banksia woodland with scattered Eucalyptus/Marri and Fabaceous heathland exist in the Level 2 survey area.

8.0 Key Biological Constraints

8.1 Matters of National Environmental Significance

8.1.1 Vegetation

The survey area includes six mapped areas of the Commonwealth listed 'Banksia Woodlands of the Swan Coastal Plain ecological community' TEC. The extent within the survey area comprised 27.44 ha, or 22.1% of the total extent of this TEC mapped within the broader contextual area. Included within this is one mapped area of the Commonwealth listed 'Shrublands and Woodlands of the eastern Swan Coastal Plain', which comprised 1.65 ha of the survey area. The 'Shrublands and Woodlands of the eastern Swan Coastal Plain' TEC is not only a component of the 'Banksia woodlands of the Swan Coastal Plain' Commonwealth TEC, but also represents a separate Commonwealth TEC in its own right.

8.1.2 Flora

One species recorded within the survey area, *Conospermum undulatum*, is listed as Vulnerable under the EPBC Act and Threatened under the BC Act. Three individuals were recorded from two locations in the survey area.

8.1.3 Fauna

The study area contains black cockatoo breeding habitat trees and habitat considered suitable for foraging (DSEWPaC 2012a, EPA 2019). Foraging was evident for both the Forest Red-tailed Black Cockatoo and the Carnaby's Black Cockatoo in the Level 2 survey area. Carnaby's Black-Cockatoo were regularly heard and observed within the Banksia woodland habitat foraging and flying overhead, with the largest group totalling 15 individuals. No evidence of Baudin's Black Cockatoo was observed during the field survey.

Although no evidence of black cockatoo roosting was recorded during the survey, potential roost sites have been previously recorded within 5 km of the survey area. Additionally, four trees containing hollows potentially suitable for breeding were identified.

8.2 Other Features of Significance

8.2.1 Vegetation

Two state-level TECs were identified within the survey area: 'Banksia attenuata woodlands over species rich dense shrublands' (FCT20a) and 'Shrublands and woodlands of the eastern side of the Swan Coastal Plain' (FCT20c) (see Section 5.4.1).

The areas identified as the Commonwealth 'Banksia Woodlands of the Swan Coastal Plain ecological community' TEC (Section 5.4.1) also correspond with the DBCA listed PEC ('Banksia woodlands of the Swan Coastal Plain'). Within this PEC, the 'Low lying Banksia attenuata woodlands or shrublands' (FCT21c) sub-community was also identified as a State-listed Priority 3 PEC.

8.2.2 Flora

One species listed as Threatened in WA was recorded. The shrub *Conospermum undulatum* was known to occur within the survey area prior to the field survey, and a total of three individuals were recorded from two previously known locations.

Five DBCA-listed Priority species from natural populations were also recorded:

- *Johnsonia pubescens* subsp. *clygnorum* (Priority 2): 10 individuals recorded from four quadrats and two locations during targeted searches within the survey area.
- *Isopogon autumnalis* (Priority 3): 128 individuals recorded from five locations during targeted searches and two quadrats during the survey.
- *Hypolaena robusta* (Priority 4): one individual was recorded through targeted searching.
- *Verticordia lindleyi* subsp. *lindleyi* (Priority 4): one individual was recorded through targeted searching.

8.2.3 Fauna

One DBCA listed Priority 4 species was confirmed as present during the field survey. The Quenda (*Isodon fusciventer*) was observed on a motion camera along with signs of diggings in the Level 2 survey area. No other state or DBCA listed species were observed across the survey area.

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Appendix 1

Framework for Significance Ranking
of Communities and Species in WA



A. Categories for Threatened and Priority Ecological Communities**A1. Categories and Criteria for Threatened Ecological Communities under the BC Act****Division 2****Subdivision 1 — Threatened ecological communities****27. Listing of threatened ecological communities**

- (1) The Minister may, by order, list an ecological community as a threatened ecological community in one of the following categories —
 - (a) critically endangered ecological community;
 - (b) endangered ecological community;
 - (c) vulnerable ecological community.
- (2) An ecological community is not eligible for listing as a threatened ecological community if it is a collapsed ecological community.
- (3) When deciding whether or not to list an ecological community as a threatened ecological community or to amend or repeal such a listing, the Minister must have regard only to matters relating to the survival of the ecological community.
- (4) An order made under subsection (1) may describe or identify an ecological community by reference to a map or plan held in the Department.
- (5) Section 258 applies to an order made under subsection (1).

28. Criteria for categorisation as critically endangered ecological community

An ecological community is eligible for listing in the category of critically endangered ecological community at a particular time if, at that time —

- (a) it is facing an extremely high risk of becoming eligible for listing as a collapsed ecological community in the immediate future, as determined in accordance with criteria set out in the ministerial guidelines; and
- (b) listing in that category is otherwise in accordance with the ministerial guidelines.

29. Criteria for categorisation as endangered ecological community

An ecological community is eligible for listing in the category of endangered ecological community at a particular time if, at that time —

- (a) it is not a critically endangered ecological community; and
- (b) it is facing a very high risk of becoming eligible for listing as a collapsed ecological community in the near future, as determined in accordance with criteria set out in the ministerial guidelines; and
- (c) listing in that category is otherwise in accordance with the ministerial guidelines.

30. Criteria for categorisation as vulnerable ecological community

An ecological community is eligible for listing in the category of vulnerable ecological community at a particular time if, at that time —

- (a) it is not a critically endangered ecological community or an endangered ecological community; and
- (b) it is facing a high risk of becoming eligible for listing as a collapsed ecological community in the medium-term future, as determined in accordance with criteria set out in the ministerial guidelines; and
- (c) listing in that category is otherwise in accordance with the ministerial guidelines.

Subdivision 2 — Collapsed ecological communities

31. Listing of collapsed ecological communities

- (1) The Minister may, by order, list an ecological community as a collapsed ecological community.
- (2) Section 258 applies to an order made under subsection (1).

32. Criteria for listing as collapsed ecological community

An ecological community is eligible for listing as a collapsed ecological community at a particular time if, at that time —

- (a) there is no reasonable doubt that the last occurrence of the ecological community has collapsed; or
- (b) the ecological community has been so extensively modified throughout its range that no occurrence of it is likely to recover —
 - (i) its species composition or structure; or
 - (ii) its species composition and structure.

33. Rediscovered ecological communities

If a collapsed ecological community is discovered in a state that no longer makes it eligible for listing as a collapsed ecological community, it is to be regarded as a threatened ecological community for the purposes of this Act until —

- (a) it is listed as a threatened ecological community; or
- (b) the Minister declares, by instrument published in the Gazette, that it is not to be so listed.

A2. Categories and Criteria for Priority Ecological Communities (DEC 2010)

Possible threatened ecological communities that do not meet survey criteria or that are not adequately defined are added to the DBCA Priority Ecological Community Lists under Priorities 1, 2 and 3. These three categories are ranked in order of priority for survey and/or definition of the community, and evaluation of conservation status, so that consideration can be given to their declaration as threatened ecological communities. 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 with apparently few, small occurrences, all or most not actively managed for conservation (e.g. within agricultural or pastoral lands, urban areas, active mineral leases) and for which current threats exist. 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 small occurrences, all or most of which are actively managed for conservation (e.g. within national parks, conservation parks, nature reserves, State forest, unallocated Crown land, water reserves, etc.) and not under imminent threat 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 within significant remaining areas of habitat in which other occurrences may occur, much of it not under imminent threat, or;
- (iii) communities made up of large, and/or widespread occurrences, that may or 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, and inappropriate fire regimes.

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.

- (a) 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.
- (b) 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 Vulnerable.
- (c) 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.

B. Categories for Flora and Fauna Species

B1. Western Australian BC Act, and Priority Species Classification

In Western Australia, 'Threatened', 'Extinct' and 'Specially Protected' fauna and flora species are protected under the *Biodiversity Conservation Act 2016* (the BC Act), making it an offence to take or disturb these species without Ministerial approval. The definition of 'take' is broad, and includes killing, injuring, harvesting or capturing fauna, and gathering, cutting, destroying, harvesting or damaging flora.

Such species are classified within a framework of several categories.

Species of the highest significance are designated as Threatened species and are protected under sections 19(1)(a), 19(1)(b) and 19(1)(c) of the BC Act. Species are listed within one of three categories:

- Critically endangered (CR), Endangered (EN), or Vulnerable (V), representing those species listed in Schedules 1 to 3 respectively of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* or the *Wildlife Conservation (Rare Flora) Notice 2018*.

Presumed extinct species are protected under sections 24 and 25 of the BC Act and are listed in one of two categories:

- Extinct (EX), representing those species listed in Schedule 4 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* or the *Wildlife Conservation (Rare Flora) Notice 2018*; or
- Extinct in the wild (EW); there are currently no listed species under this category.

Specially protected species are protected under section 13(1) of the BC Act, and include species of special conservation interest, migratory species, cetaceans, species subject to international agreement, or species otherwise in need of special protection. Of these:

- Migratory species (MI) are those listed under schedule 5 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*;
- Species of special conservation interest (conservation dependent fauna) (CD) are those listed under schedule 6 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*; and
- Other specially protected fauna (OS) are those listed under schedule 7 of the *Wildlife Conservation (Specially Protected Fauna) Notice 2018*;

In addition to the species formally designated as protected under the BC Act, the WA Department of Biodiversity, Conservation and Attractions (DBCA) also maintains a list of 'Priority species'.

Species that appear to be rare or threatened, but for which there is insufficient information to properly evaluate their significance, are assigned to one of three Priority categories (Priority 1 to Priority 3), while species that are adequately known but require regular monitoring are assigned to Priority 4.

Note that of the above classifications, only 'Threatened', 'Extinct' and 'Specially Protected' species have statutory standing. The Priority flora and fauna classifications are employed by the WA DBCA to manage and classify their database of species considered potentially rare or at risk, but these categories have no legislative status.

Further explanations of the categories is provided in more detail in the following pages.



CONSERVATION CODES

For Western Australian Flora and Fauna

Threatened, Extinct and Specially Protected fauna or flora¹ are species² which have been adequately searched for and are deemed to be, in the wild, threatened, extinct or in need of special protection, and have been gazetted as such.

The *Wildlife Conservation (Specially Protected Fauna) Notice 2018* and the *Wildlife Conservation (Rare Flora) Notice 2018* have been transitioned under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018* to be the lists of Threatened, Extinct and Specially Protected species under Part 2 of the *Biodiversity Conservation Act 2016*.

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

T Threatened species

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

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

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

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

CR Critically endangered species

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

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

EN Endangered species

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

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

VU Vulnerable species

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

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

Extinct species

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

EX Extinct species

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

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.

1 **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.

2 **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.

3 **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.

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

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

(b) Near Threatened. Species that are considered to have been adequately surveyed and that are close to qualifying for vulnerable but are not listed as Conservation Dependent.

(c) Species that have been removed from the list of threatened species during the past five years for reasons other than taxonomy.

¹The definition of flora includes algae, fungi and lichens

²Species 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).

B2. Commonwealth Environment Protection and Biodiversity Conservation Act 1999

Many of the species that are specially protected at State level are also listed as Threatened species at the Federal level, as one of the Matters of National Environmental Significance (MNES) identified under the Commonwealth Environment Protection and Biodiversity Conservation Act 1999 (the EPBC Act). These may be classified as 'critically endangered', 'endangered', 'vulnerable' or 'lower risk', consistent with IUCN categories:

1. **Critically Endangered (CR)**: a taxon is Critically Endangered when it is facing an extremely high risk of extinction in the wild in the immediate future.
2. **Endangered (EN)**: a taxon is Endangered when it is not Critically Endangered but is facing a very high risk of extinction in the wild in the near future.
3. **Vulnerable (VU)**: a taxon is Vulnerable when it is not Critically Endangered or Endangered but is facing a high risk of extinction in the wild in the medium-term future.
4. **Lower Risk (LR)**: a taxon is Lower Risk when it has been evaluated, does not satisfy the criteria for any of the categories Critically Endangered, Endangered or Vulnerable. Taxa included in the Lower Risk category can be separated into three subcategories:
 - **Conservation Dependent (CD)**. Taxa which are the focus of a continuing taxon-specific or habitat-specific conservation program targeted towards the taxon in question, the cessation of which would result in the taxon qualifying for one of the threatened categories above within a period of five years.
 - **Near Threatened (NT)**. Taxa which do not qualify for Conservation Dependent, but which are close to qualifying for Vulnerable.
 - **Least Concern (LC)**. Taxa which do not qualify for Conservation Dependent or Near Threatened.

In addition, numerous **Migratory (MI)** species are listed as MNES under the EPBC Act (some of which are also listed as Threatened). Migratory species are those animals that migrate to Australia and its external territories, or pass through or over Australian waters during their annual migrations. The list of migratory species consists of those species listed under the following international conventions:

1. Convention on the Conservation of Migratory Species of Wild Animals (Bonn Convention);
2. China-Australia Migratory Bird Agreement (CAMBA);
3. Japan-Australia Migratory Bird Agreement (JAMBA); and,
4. Republic of Korea-Australia Migratory Bird Agreement (ROKAMBA).

Marine (MA) species are also protected under the EPBC Act, and are listed to ensure the long-term conservation of the species. Marine species include all Australian sea snakes, seals, crocodiles, dugongs, marine turtles, seahorses and seabirds that naturally occur in the Commonwealth marine area.

Under the terms of the EPBC Act, an action (e.g. a project or development) is required to be referred to the Australian Government Environment Minister for approval if it has, will have, or is likely to have, a significant impact on an MNES. The term 'action' includes projects and developments subsequent to commencement of the Act, however there are a number of exemptions (e.g. projects in Commonwealth areas). According to Department of the Environment (2013), a 'significant impact' is an impact which is important, notable, or of consequence, having regard to its context or intensity. Whether or not an action is likely to have a significant impact depends upon the sensitivity, value, and quality of the environment which is impacted, and upon the intensity, duration, magnitude and geographic extent of the impacts.

References:

Department of the Environment (2013). Matters of National Environmental Significance - Significant Impact Guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999. Department of the Environment, Canberra, Australia.

Appendix 2

Database Searches





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: 30/03/20 16:08:04

[Summary](#)

[Details](#)

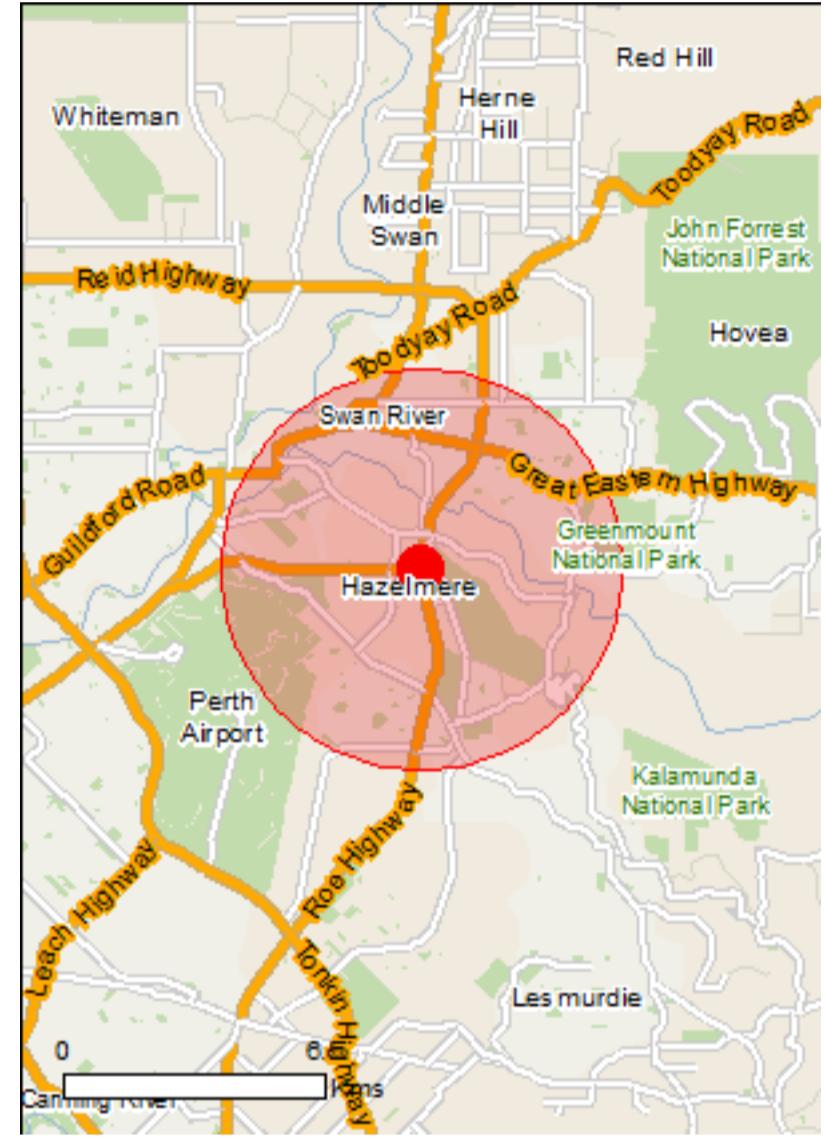
[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)



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[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:	6
Listed Threatened Species:	36
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

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

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <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:	4
Commonwealth Heritage Places:	None
Listed Marine Species:	16
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:	8
Regional Forest Agreements:	1
Invasive Species:	40
Nationally Important Wetlands:	1
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
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area
Corymbia calophylla - Kingia australis woodlands on heavy soils of the Swan Coastal Plain	Endangered	Community known to occur within area
Corymbia calophylla - Xanthorrhoea preissii woodlands and shrublands of the Swan Coastal Plain	Endangered	Community known to occur within area
Shrublands and Woodlands of the eastern Swan Coastal Plain	Endangered	Community known to occur within area
Tuart (Eucalyptus gomphocephala) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area

Listed Threatened Species

[Resource Information]

Name	Status	Type of Presence
Birds		
Botaurus poiciloptilus		
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area
Calidris ferruginea		
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
Calyptorhynchus banksii naso		
Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area
Calyptorhynchus baudinii		
Baudin's Cockatoo, Long-billed Black-Cockatoo [769]	Endangered	Roosting known 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
Pachyptila turtur subantarctica		
Fairy Prion (southern) [64445]	Vulnerable	Species or species habitat likely to occur within area

Name	Status	Type of Presence
<u><i>Rostratula australis</i></u>		
Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area
<u>Sternula nereis nereis</u>		
Australian Fairy Tern [82950]	Vulnerable	Species or species habitat known to occur within area
Mammals		
<u><i>Bettongia penicillata ogilbyi</i></u>		
Woylie [66844]	Endangered	Species or species habitat may occur within area
<u><i>Dasyurus geoffroii</i></u>		
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area
<u><i>Setonix brachyurus</i></u>		
Quokka [229]	Vulnerable	Species or species habitat likely to occur within area
Other		
<u><i>Westralunio carteri</i></u>		
Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area
Plants		
<u><i>Acacia anomala</i></u>		
Grass Wattle, Chittering Grass Wattle [8153]	Vulnerable	Species or species habitat may occur within area
<u><i>Acacia aphylla</i></u>		
Leafless Rock Wattle [13553]	Vulnerable	Species or species habitat known to occur within area
<u><i>Andersonia gracilis</i></u>		
Slender Andersonia [14470]	Endangered	Species or species habitat likely to occur within area
<u><i>Anthocercis gracilis</i></u>		
Slender Tailflower [11103]	Vulnerable	Species or species habitat likely to occur within area
<u><i>Calytrix breviseta subsp. breviseta</i></u>		
Swamp Starflower [23879]	Endangered	Species or species habitat may occur within area
<u><i>Chamelaucium sp. Gingin (N.G.Merchant 6)</i></u>		
Gingin Wax [88881]	Endangered	Species or species habitat may occur within area
<u><i>Conospermum undulatum</i></u>		
Wavy-leaved Smokebush [24435]	Vulnerable	Species or species habitat likely to occur within area
<u><i>Darwinia apiculata</i></u>		
Scarp Darwinia [8763]	Endangered	Species or species habitat may occur within area
<u><i>Diplolaena andrewsii</i></u>		
[6601]	Endangered	Species or species habitat likely to occur within area
<u><i>Diuris drummondii</i></u>		
Tall Donkey Orchid [4365]	Vulnerable	Species or species habitat likely to occur within area
<u><i>Diuris micrantha</i></u>		
Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area
<u><i>Diuris purdiei</i></u>		
Purdie's Donkey-orchid [12950]	Endangered	Species or species

Name	Status	Type of Presence
<u>Drakaea elastica</u> Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	habitat likely to occur within area
<u>Drakaea micrantha</u> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area
<u>Eleocharis keigheryi</u> Keighery's Eleocharis [64893]	Vulnerable	Species or species habitat may occur within area
<u>Eucalyptus x balanites</u> Cadda Road Mallee, Cadda Mallee [87816]	Endangered	Species or species habitat may occur within area
<u>Grevillea curviloba subsp. incurva</u> Narrow curved-leaf Grevillea [64909]	Endangered	Species or species habitat may occur within area
<u>Lepidosperma rostratum</u> Beaked Lepidosperma [14152]	Endangered	Species or species habitat likely to occur within area
<u>Macarthuria keigheryi</u> Keighery's Macarthuria [64930]	Endangered	Species or species habitat likely to occur within area
<u>Synaphea sp. Fairbridge Farm (D. Papenfus 696)</u> Selena's Synaphea [82881]	Critically Endangered	Species or species habitat likely to occur within area
<u>Thelymitra dedmaniarum</u> Cinnamon Sun Orchid [65105]	Endangered	Species or species habitat likely to occur within area
<u>Thelymitra stellata</u> Star Sun-orchid [7060]	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		
<u>Apus pacificus</u> Fork-tailed Swift [678]		Species or species habitat likely to occur within area
Migratory Terrestrial Species		
<u>Motacilla cinerea</u> Grey Wagtail [642]		Species or species habitat may occur within area
Migratory Wetlands Species		
<u>Actitis hypoleucus</u> Common Sandpiper [59309]		Species or species habitat known to occur within area
<u>Calidris acuminata</u> Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area
<u>Calidris melanotos</u> Pectoral Sandpiper [858]		Species or species habitat likely to occur within area

Name	Threatened	Type of Presence
<u>Numenius madagascariensis</u>		
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area
<u>Pandion haliaetus</u>		
Osprey [952]		Species or species habitat known to occur within area
<u>Tringa nebularia</u>		
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 -				
Defence - BUSHMEAD RIFLE RANGE				
Defence - BUSHMEAD TRAINING AREA				
Defence - PALMER BARRACKS - SOUTH GUILDFORD				
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				
<u>Actitis hypoleucus</u>				
Common Sandpiper [59309]		Species or species habitat known to occur within area		
<u>Apus pacificus</u>				
Fork-tailed Swift [678]		Species or species habitat likely to occur within area		
<u>Ardea alba</u>				
Great Egret, White Egret [59541]		Species or species habitat known to occur within area		
<u>Ardea ibis</u>				
Cattle Egret [59542]		Species or species habitat may occur within area		
<u>Calidris acuminata</u>				
Sharp-tailed Sandpiper [874]		Species or species habitat known to occur within area		
<u>Calidris ferruginea</u>				
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area		
<u>Calidris melanotos</u>				
Pectoral Sandpiper [858]		Species or species habitat likely to occur within area		
<u>Haliaeetus leucogaster</u>				
White-bellied Sea-Eagle [943]		Species or species habitat likely to occur		

Name	Threatened	Type of Presence within area
Merops ornatus Rainbow Bee-eater [670]		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
Pachyptila turtur Fairy Prion [1066]		Species or species habitat likely to occur within area
Pandion haliaetus Osprey [952]		Species or species habitat known to occur within area
Rostratula benghalensis (sensu lato) Painted Snipe [889]	Endangered*	Species or species habitat likely to occur within area
Thinornis rubricollis Hooded Plover [59510]		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
Beelu		WA
Gooseberry Hill		WA
Greenmount		WA
Helena River		WA
NTWA Bushland covenant (0074)		WA
Swan River		WA
Unnamed WA45106		WA
Unnamed WA49079		WA

Regional Forest Agreements		[Resource Information]
Note that all areas with completed RFAs have been included.		

Name	State
South West WA RFA	Western Australia

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		
Acridotheres tristis		
Common Myna, Indian Myna [387]		Species or species habitat likely to occur within area
Anas platyrhynchos		
Mallard [974]		Species or species habitat likely to occur within area
Carduelis carduelis		
European Goldfinch [403]		Species or species

Name	Status	Type of Presence
<i>Columba livia</i> Rock Pigeon, Rock Dove, Domestic Pigeon [803]		habitat likely to occur within area
<i>Passer domesticus</i> House Sparrow [405]		Species or species habitat likely to occur within area
<i>Passer montanus</i> Eurasian Tree Sparrow [406]		Species or species habitat likely to occur within area
<i>Streptopelia chinensis</i> Spotted Turtle-Dove [780]		Species or species habitat likely to occur within area
<i>Streptopelia senegalensis</i> Laughing Turtle-dove, Laughing Dove [781]		Species or species habitat likely to occur within area
<i>Sturnus vulgaris</i> Common Starling [389]		Species or species habitat likely to occur within area
Mammals		
<i>Bos taurus</i> Domestic Cattle [16]		Species or species habitat likely to occur within area
<i>Canis lupus familiaris</i> Domestic Dog [82654]		Species or species habitat likely to occur within area
<i>Capra hircus</i> Goat [2]		Species or species habitat likely to occur within area
<i>Felis catus</i> Cat, House Cat, Domestic Cat [19]		Species or species habitat likely to occur within area
<i>Feral deer</i> Feral deer species in Australia [85733]		Species or species habitat likely to occur within area
<i>Funambulus pennantii</i> Northern Palm Squirrel, Five-striped Palm Squirrel [129]		Species or species habitat likely to occur within area
<i>Mus musculus</i> House Mouse [120]		Species or species habitat likely to occur within area
<i>Oryctolagus cuniculus</i> Rabbit, European Rabbit [128]		Species or species habitat likely to occur within area
<i>Rattus norvegicus</i> Brown Rat, Norway Rat [83]		Species or species habitat likely to occur within area
<i>Rattus rattus</i> Black Rat, Ship Rat [84]		Species or species habitat likely to occur within area
<i>Sus scrofa</i> Pig [6]		Species or species habitat likely to occur within area
<i>Vulpes vulpes</i> Red Fox, Fox [18]		Species or species

Name	Status	Type of Presence
Plants		habitat likely to occur within area
Anredera cordifolia Madeira Vine, Jalap, Lamb's-tail, Mignonette Vine, Anredera, Gulf Madeiravine, Heartleaf Madeiravine, Potato Vine [2643]		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 habitat may occur within area
Chrysanthemoides monilifera subsp. monilifera Boneseed [16905]		Species or species habitat likely to occur within area
Eichhornia crassipes Water Hyacinth, Water Orchid, Nile Lily [13466]		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]		Species or species habitat likely to occur within area
Lycium ferocissimum African Boxthorn, Boxthorn [19235]		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
Sagittaria platyphylla Delta Arrowhead, Arrowhead, Slender Arrowhead [68483]		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

Name	Status	Type of Presence
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

Nationally Important Wetlands	[Resource Information]
Name	State
Perth Airport Woodland Swamps	WA

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

-31.9175 116.01444

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.

NatureMap Species Report

Created By Guest user on 26/11/2019

Kingdom Plantae
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 116° 00' 34" E, 31° 55' 04" S
Buffer 5km
Group By Family

Family	Species	Records
Acanthaceae	1	1
Alliaceae	1	1
Alstroemeriaceae	1	1
Amaranthaceae	6	22
Amaryllidaceae	1	1
Anarthriaceae	2	6
Apiaceae	16	55
Apocynaceae	2	2
Araceae	1	2
Araliaceae	9	34
Asparagaceae	29	134
Asphodelaceae	1	1
Aspleniaceae	1	1
Asteraceae	64	176
Aytoniaceae	1	1
Bignoniaceae	1	1
Boraginaceae	2	5
Boryaceae	2	12
Brassicaceae	3	4
Byblidaceae	1	3
Campanulaceae	10	38
Caprifoliaceae	2	2
Caryophyllaceae	6	7
Casuarinaceae	4	15
Celastraceae	3	17
Centrolepidaceae	8	23
Chenopodiaceae	3	3
Colchicaceae	6	34
Commelinaceae	1	4
Convolvulaceae	1	3
Crassulaceae	5	11
Cucurbitaceae	1	1
Cyperaceae	57	177
Dasygagnaceae	4	15
Dicranaceae	2	2
Dilleniaceae	17	71
Dioscoreaceae	1	7
Droseraceae	23	90
Elaeocarpaceae	3	7
Ericaceae	23	109
Euphorbiaceae	7	12
Fabaceae	121	448
Gentianaceae	3	10
Geraniaceae	4	5
Goodeniaceae	22	86
Haemodoraceae	31	152
Halaragaceae	10	31
Hemerocallidaceae	11	74
Hydatellaceae	2	9
Hydrocharitaceae	3	4
Hypericaceae	1	2
Hypoxidaceae	4	5
Iridaceae	23	82
Juncaceae	4	8
Juncaginaceae	6	9
Lamiaceae	8	28
Lauraceae	3	18
Lentibulariaceae	4	8
Linaceae	2	6
Loganiaceae	4	5
Loranthaceae	1	1
Lythraceae	1	2
Macarthuriaceae	3	9
Malvaceae	9	39
Marsileaceae	1	1
Menyanthaceae	4	6
Montiaceae	2	3
Myrtaceae	67	200
Olaceaceae	1	1
Oleaceae	2	2
Onagraceae	2	4
Orchidaceae	69	207
Orobanchaceae	2	4
Oxalidaceae	8	15
Papaveraceae	2	2

Philydraceae	2	4
Phyllanthaceae	4	18
Phytolaccaceae	1	1
Pittosporaceae	6	11
Plantaginaceae	4	6
Poaceae	66	178
Polygalaceae	3	10
Polygonaceae	3	3
Potamogetonaceae	1	4
Pottiaceae	1	1
Primulaceae	3	3
Proteaceae	74	443
Pteridaceae	3	13
Ranunculaceae	1	1
Restionaceae	18	51
Rhamnaceae	7	35
Rosaceae	1	2
Rubiaceae	4	8
Rutaceae	4	20
Salicaceae	2	3
Salviniaceae	1	1
Santalaceae	3	6
Sapindaceae	2	5
Scrophulariaceae	2	3
Selaginellaceae	1	1
Solanaceae	5	5
Styliadiaceae	40	144
Tecophilaeaceae	1	1
Thymelaeaceae	6	19
Typhaceae	1	1
Verbenaceae	1	1
Violaceae	2	5
Xanthorrhoeaceae	7	40
Zamiaceae	1	6
TOTAL	1053	3650

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
Acanthaceae				
1.	19716 <i>Thunbergia alata</i>	Y		
Alliaceae				
2.	1377 <i>Allium porrum</i> (Leek)	Y		
Alstroemeriaceae				
3.	20755 <i>Alstroemeria psittacina</i>	Y		
Amaranthaceae				
4.	2648 <i>Alternanthera denticulata</i> (Lesser Joyweed)			
5.	2716 <i>Ptilotus declinatus</i> (Curved Mulla Mulla)			
6.	11260 <i>Ptilotus drummondii</i> var. <i>drummondii</i> (Pussytail)			
7.	11797 <i>Ptilotus drummondii</i> var. <i>minor</i>			
8.	2720 <i>Ptilotus esquamatus</i>			
9.	2742 <i>Ptilotus manglesii</i> (Pom Poms, Mulamula)			
Amaryllidaceae				
10.	1495 <i>Narcissus tazetta</i> (Jonquil)	Y		
Anarthriaceae				
11.	1097 <i>Lyginia barbata</i>			
12.	18049 <i>Lyginia imberbis</i>			
Apiaceae				
13.	6205 <i>Actinotus leucocephalus</i> (Flannel Flower)			
14.	6209 <i>Ammi majus</i> (Bishop's Weed)			
15.	12040 <i>Apium prostratum</i> subsp. <i>prostratum</i> var. <i>prostratum</i> (Sea Celery)			
16.	6214 <i>Centella asiatica</i>			
17.	6218 <i>Daucus glochidiatus</i> (Australian Carrot)			
18.	6219 <i>Eryngium pinnatifidum</i> (Blue Devils)			
19.	15446 <i>Eryngium pinnatifidum</i> subsp. <i>pinnatifidum</i>			
20.	41810 <i>Eryngium</i> sp. <i>Subdecumbens</i> (G.J. Keighery 5390)		P3	
21.	6222 <i>Homalosciadium homalocarpum</i>			
22.	6245 <i>Pentapeltis peltigera</i>			
23.	6253 <i>Platysace filiformis</i>			
24.	6255 <i>Platysace juncea</i>			
25.	6263 <i>Schoenolaena juncea</i>			
26.	6284 <i>Xanthosia candida</i>			
27.	6285 <i>Xanthosia ciliata</i>			
28.	6289 <i>Xanthosia huegelii</i>			
Apocynaceae				
29.	6587 <i>Gomphocarpus fruticosus</i> (Narrowleaf Cottonbush)	Y		
30.	6575 <i>Vinca major</i> (Blue Periwinkle)	Y		
Araceae				
31.	1049 <i>Zantedeschia aethiopica</i> (Arum Lily)	Y		
Araliaceae				
32.	6223 <i>Hydrocotyle alata</i>			
33.	6226 <i>Hydrocotyle callicarpa</i> (Small Pennywort)			
34.	6229 <i>Hydrocotyle diantha</i>			
35.	6233 <i>Hydrocotyle lemnoides</i> (Aquatic Pennywort)		P4	
36.	11847 <i>Hydrocotyle pilifera</i> var. <i>pilifera</i>			
37.	11074 <i>Hydrocotyle striata</i>		P1	
38.	6266 <i>Trachymene coerulea</i> (Blue Lace Flower)			
39.	19041 <i>Trachymene coerulea</i> subsp. <i>coerulea</i>			
40.	6280 <i>Trachymene pilosa</i> (Native Parsnip)			
Asparagaceae				
41.	8779 <i>Asparagus asparagoides</i> (Bridal Creeper)	Y		
42.	1287 <i>Dichopogon capillipes</i>			
43.	1289 <i>Dichopogon preissii</i>			
44.	11815 <i>Laxmannia grandiflora</i> subsp. <i>grandiflora</i>			
45.	11911 <i>Laxmannia ramosa</i> subsp. <i>ramosa</i>			
46.	11464 <i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			
47.	1309 <i>Laxmannia squarrosa</i>			
48.	1222 <i>Lomandra brittanii</i>			
49.	1223 <i>Lomandra caespitosa</i> (Tufted Mat Rush)			
50.	1228 <i>Lomandra hermaphrodita</i>			
51.	1232 <i>Lomandra micrantha</i> (Small-flower Mat-rush)			

Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
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52.	14542 <i>Lomandra micrantha</i> subsp. <i>micrantha</i>			
53.	1234 <i>Lomandra nigricans</i>			
54.	1236 <i>Lomandra odora</i> (<i>Tiered Matrush</i>)			
55.	1239 <i>Lomandra preissii</i>			
56.	1240 <i>Lomandra purpurea</i> (<i>Purple Mat Rush</i>)			
57.	1243 <i>Lomandra sericea</i> (<i>Silky Mat Rush</i>)			
58.	1245 <i>Lomandra sparteo</i>			
59.	1246 <i>Lomandra suaveolens</i>			
60.	1312 <i>Sowerbaea laxiflora</i> (<i>Purple Tassels</i>)			
61.	1318 <i>Thysanotus arbustula</i>			
62.	1319 <i>Thysanotus arenarius</i>			
63.	1338 <i>Thysanotus manglesianus</i> (<i>Fringed Lily</i>)			
64.	1339 <i>Thysanotus multiflorus</i> (<i>Many-flowered Fringe Lily</i>)			
65.	1350 <i>Thysanotus scaber</i>			
66.	1351 <i>Thysanotus sparteus</i>			
67.	1354 <i>Thysanotus tenellus</i>			
68.	1357 <i>Thysanotus thyrsoides</i>			
69.	1358 <i>Thysanotus triandrus</i>			

Asphodelaceae

70.	1364 <i>Asphodelus fistulosus</i> (<i>Onion Weed</i>)	Y
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Aspleniaceae

71.	66 <i>Pleurosorus subglandulosus</i>	
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Asteraceae

72.	7838 <i>Arctotheca calendula</i> (<i>Cape Weed, African Marigold</i>)	Y
73.	7867 <i>Brachyscome bellidifolia</i>	
74.	7875 <i>Brachyscome glandulosa</i>	
75.	7878 <i>Brachyscome iberidifolia</i>	
76.	7882 <i>Brachyscome perpusilla</i>	
77.	7902 <i>Calotis erinacea</i> (<i>Tangled Burr-daisy</i>)	
78.	7935 <i>Cichorium intybus</i> (<i>Chicory</i>)	Y
79.	7937 <i>Cirsium vulgare</i> (<i>Spear Thistle, Scotch Thistle</i>)	Y
80.	7939 <i>Conyza bonariensis</i> (<i>Flaxleaf Fleabane</i>)	Y
81.	44528 <i>Coreopsis lanceolata</i> (<i>Common Tickseed, Showy Tickseed, Garden Coreopsis</i>)	Y
82.	7943 <i>Cotula australis</i> (<i>Common Cotula</i>)	
83.	7945 <i>Cotula coronopifolia</i> (<i>Waterbuttons</i>)	Y
84.	7946 <i>Cotula cotuloides</i> (<i>Smooth Cotula</i>)	
85.	13354 <i>Craspedia variabilis</i>	
86.	7953 <i>Crepis foetida</i> (<i>Foetid Hawksbeard</i>)	Y
87.	15137 <i>Euchiton sphaericus</i>	
88.	8002 <i>Gnephosis tenuissima</i>	
89.	8010 <i>Helianthus tuberosus</i> (<i>Jerusalem Artichoke</i>)	Y
90.	12741 <i>Hyalosperma cotula</i>	
91.	8086 <i>Hypochaeris glabra</i> (<i>Smooth Catsear</i>)	Y
92.	9352 <i>Hypochaeris radicata</i> (<i>Flat Weed, Cats-ear</i>)	Y
93.	18585 <i>Lagenophora huegelii</i>	
94.	13284 <i>Lawrencella rosea</i>	
95.	9356 <i>Logfia gallica</i>	Y
96.	8105 <i>Millotia myosotidifolia</i>	
97.	8106 <i>Millotia tenuifolia</i> (<i>Soft Millotia</i>)	
98.	14344 <i>Millotia tenuifolia</i> var. <i>tenuifolia</i> (<i>Soft Millotia</i>)	
99.	29418 <i>Monoculus monstrosus</i>	Y
100.	8114 <i>Myriocephalus appendiculatus</i> (<i>White-tip Myriocephalus</i>)	
101.	14187 <i>Myriocephalus occidentalis</i>	
102.	8143 <i>Olearia paucidentata</i> (<i>Autumn Scrub Daisy</i>)	
103.	8163 <i>Pithocarpa corymbulosa</i> (<i>Corymbose Pithocarpa</i>)	P3
104.	18352 <i>Pithocarpa pulchella</i> var. <i>melanostigma</i>	
105.	45237 <i>Podolepis aristata</i> subsp. <i>aristata</i>	
106.	8175 <i>Podolepis gracilis</i> (<i>Slender Podolepis</i>)	
107.	8177 <i>Podolepis lessonii</i>	
108.	8182 <i>Podotheca angustifolia</i> (<i>Sticky Longheads</i>)	
109.	8183 <i>Podotheca chrysanthia</i> (<i>Yellow Podotheca</i>)	
110.	13255 <i>Pterochaeta paniculata</i>	
111.	8195 <i>Quinetia urvillei</i>	
112.	13300 <i>Rhodanthe citrina</i>	
113.	15035 <i>Rhodanthe corymbosa</i>	
114.	13312 <i>Rhodanthe pyrethrum</i>	
115.	13309 <i>Rhodanthe spicata</i>	
116.	8205 <i>Senecio gilbertii</i>	P1
117.	20663 <i>Senecio multicaulis</i> subsp. <i>multicaulis</i>	

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
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118.	20161 <i>Senecio pinnatifolius</i>			
119.	8224 <i>Siloxerus filifolius</i>			
120.	8225 <i>Siloxerus humifusus (Procumbent Siloxerus)</i>			
121.	14583 <i>Siloxerus multiflorus</i>			
122.	8231 <i>Sonchus oleraceus (Common Sowthistle)</i>	Y		
123.	25902 <i>Symphytum squatum (Bushy Starwort)</i>	Y		
124.	8248 <i>Tolpis barbata (Yellow Hawkweed)</i>	Y		
125.	8250 <i>Tragopogon porrifolius</i>	Y		
126.	8251 <i>Trichocline spathulata (Native Gerbera)</i>			
127.	8255 <i>Ursinia anthemoides (Ursinia)</i>	Y		
128.	38388 <i>Ursinia anthemoides subsp. anthemoides</i>	Y		
129.	8257 <i>Vellereophytum dealbatum (White Cudweed)</i>	Y		
130.	13328 <i>Waitzia nitida</i>			
131.	8281 <i>Waitzia podolepis</i>			
132.	8282 <i>Waitzia suaveolens (Fragrant Waitzia)</i>			
133.	13333 <i>Waitzia suaveolens var. suaveolens</i>			
134.	8287 <i>Xanthium spinosum (Bathurst Burr, Common Cockleburr, Spiny Cockleburr, Spiny Clotburr)</i>	Y		
135.	44861 <i>Xerochrysum macranthum</i>			

Aytoniaceae

136.	Asterella drummondii			
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Bignoniaceae

137.	Jacaranda mimosifolia			Y
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Boraginaceae

138.	6681 <i>Echium plantagineum (Paterson's Curse)</i>	Y		
139.	6686 <i>Halgania corymbosa</i>		P3	

Boryaceae

140.	1272 <i>Borya scirpoidea</i>			
141.	1273 <i>Borya sphaerocephala (Pincushions)</i>			

Brassicaceae

142.	3016 <i>Heliotrope pusilla</i>	Y		
143.	19989 <i>Lepidium didymum</i>	Y		
144.	3061 <i>Raphanus raphanistrum (Wild Radish)</i>	Y		

Byblidaceae

145.	3178 <i>Byblis gigantea (Rainbow Plant)</i>		P3	
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Campanulaceae

146.	7396 <i>Isotoma hypocrateiformis (Woodbridge Poison)</i>			
147.	7398 <i>Isotoma pusilla (Small Isotome)</i>			
148.	9289 <i>Lobelia anceps (Angled Lobelia)</i>			
149.	7402 <i>Lobelia gibbosa (Tall Lobelia)</i>			
150.	7403 <i>Lobelia heterophylla (Wing-seeded Lobelia)</i>			
151.	7406 <i>Lobelia rhombifolia (Tufted Lobelia)</i>			
152.	7407 <i>Lobelia rhytidosperma (Wrinkled-seeded Lobelia)</i>			
153.	37440 <i>Monopsis debilis var. depressa</i>	Y		
154.	7384 <i>Wahlenbergia capensis (Cape Bluebell)</i>	Y		
155.	7389 <i>Wahlenbergia preissii</i>			

Caprifoliaceae

156.	7366 <i>Centranthus macrosiphon</i>	Y		
157.	35322 <i>Centranthus ruber subsp. ruber</i>	Y		

Caryophyllaceae

158.	2889 <i>Cerastium glomeratum (Mouse Ear Chickweed)</i>	Y		
159.	2891 <i>Corrigiola litoralis (Strapwort)</i>	Y		
160.	19825 <i>Petrorhagia dubia</i>	Y		
161.	2905 <i>Polycarpon tetraphyllum (Fourleaf Allseed)</i>	Y		
162.	2909 <i>Silene gallica (French Catchfly)</i>	Y		
163.	15972 <i>Silene gallica var. gallica</i>	Y		

Casuarinaceae

164.	1732 <i>Allocasuarina humilis (Dwarf Sheoak)</i>			
165.	1734 <i>Allocasuarina microstachya</i>			
166.	1739 <i>Allocasuarina thuyoides (Horned Sheoak)</i>			
167.	1742 <i>Casuarina obesa (Swamp Sheoak, Kuli)</i>			

Celastraceae

168.	4733 <i>Stackhousia monogyna</i>			
169.	9070 <i>Stackhousia pubescens (Downy Stackhousia)</i>			
170.	4737 <i>Tripterococcus brunonis (Winged Stackhousia)</i>			

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.



Department of Biodiversity,
Conservation and Attractions



Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
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Centrolepidaceae

171.	1116 <i>Aphelia brizula</i>
172.	1117 <i>Aphelia cyperoides</i>
173.	1118 <i>Aphelia drummondii</i>
174.	43548 <i>Aphelia</i> sp. Albany (B.G. Briggs 596)
175.	1120 <i>Centrolepis alepyroides</i>
176.	1121 <i>Centrolepis aristata</i> (Pointed Centrolepis)
177.	1125 <i>Centrolepis drummondiana</i>
178.	1129 <i>Centrolepis glabra</i> (Smooth Centrolepis)

Chenopodiaceae

179.	11368 <i>Dysphania glomulifera</i> subsp. <i>glomulifera</i>
180.	33480 <i>Dysphania pumilio</i> (Clammy Goosefoot)
181.	2639 <i>Suaeda australis</i> (Seablite)

Colchicaceae

182.	1382 <i>Baeometra uniflora</i>
183.	12770 <i>Burchardia congesta</i>
184.	1385 <i>Burchardia multiflora</i> (Dwarf Burchardia)
185.	1394 <i>Wurmbea dioica</i> (Early Nancy)
186.	12072 <i>Wurmbea dioica</i> subsp. <i>alba</i>
187.	1401 <i>Wurmbea pygmaea</i>

Commelinaceae

188.	1162 <i>Cartonema philydroides</i>
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Convolvulaceae

189.	6614 <i>Convolvulus remotus</i>
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Crassulaceae

190.	11709 <i>Crassula colorata</i> var. <i>acuminata</i>
191.	11563 <i>Crassula colorata</i> var. <i>colorata</i>
192.	11349 <i>Crassula decumbens</i> var. <i>decumbens</i>
193.	3139 <i>Crassula exserta</i>
194.	15706 <i>Crassula natans</i> var. <i>minus</i>

Y

Cucurbitaceae

195.	48865 <i>Cucumis myriocarpus</i> subsp. <i>myriocarpus</i>
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Y

Cyperaceae

196.	744 <i>Baumea laxa</i>
197.	749 <i>Bolboschoenus caldwellii</i> (Marsh Club-rush)
198.	48689 <i>Bolboschoenus fluviatilis</i>
199.	753 <i>Carex appressa</i> (Tall Sedge)
200.	756 <i>Carex inversa</i> (Knob Sedge)
201.	759 <i>Carex tereticaulis</i>
202.	760 <i>Caustis dioica</i>
203.	763 <i>Chorizandra enodis</i> (Black Bristlerush)
204.	764 <i>Chorizandra multiarticulata</i>
205.	768 <i>Cyathochaeta avenacea</i>
206.	769 <i>Cyathochaeta clandestina</i>
207.	17618 <i>Cyathochaeta equitans</i>
208.	783 <i>Cyperus congestus</i> (Dense Flat-sedge)
209.	792 <i>Cyperus eragrostis</i> (Umbrella Sedge)
210.	815 <i>Cyperus tenellus</i> (Tiny Flatsedge)
211.	894 <i>Fimbristylis velata</i>
212.	900 <i>Gahnia aristata</i>
213.	907 <i>Gahnia trifida</i> (Coast Saw-sedge)
214.	20200 <i>Isolepis cernua</i> var. <i>setiformis</i>
215.	917 <i>Isolepis marginata</i> (Coarse Club-rush)
216.	42741 <i>Lepidosperma apricola</i>
217.	41620 <i>Lepidosperma asperatum</i>
218.	930 <i>Lepidosperma costale</i>
219.	931 <i>Lepidosperma drummondii</i>
220.	936 <i>Lepidosperma leptostachyum</i>
221.	937 <i>Lepidosperma longitudinale</i> (Pithy Sword-sedge)
222.	939 <i>Lepidosperma pruinosum</i>
223.	940 <i>Lepidosperma pubisquamum</i>
224.	944 <i>Lepidosperma scabrum</i>
225.	<i>Lepidosperma</i> sp.
226.	29141 <i>Lepidosperma</i> sp. Gosnells (A. Markey 1145)
227.	945 <i>Lepidosperma squamatum</i>
228.	947 <i>Lepidosperma tenuie</i>

P1

P3

Y

Y

Y

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
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229.	955 <i>Mesomelaena pseudostygia</i>
230.	957 <i>Mesomelaena tetragona</i> (<i>Semaphore Sedge</i>)
231.	971 <i>Schoenus andrewsii</i>
232.	975 <i>Schoenus bifidus</i>
233.	978 <i>Schoenus brevisetis</i>
234.	979 <i>Schoenus caespititus</i>
235.	982 <i>Schoenus clandestinus</i>
236.	991 <i>Schoenus grammatocephalus</i>
237.	17606 <i>Schoenus griffinianus</i>
238.	1002 <i>Schoenus nanus</i> (<i>Tiny Bog Rush</i>)
239.	1007 <i>Schoenus pedicellatus</i>
240.	17614 <i>Schoenus plumosus</i>
241.	1011 <i>Schoenus rigens</i>
242.	1013 <i>Schoenus sculptus</i> (<i>Gimlet Bog-rush</i>)
243.	18164 <i>Schoenus</i> sp. <i>smooth culms</i> (K.R. Newbey 7823)
244.	1016 <i>Schoenus subbarbatus</i> (<i>Bearded Bog-rush</i>)
245.	1017 <i>Schoenus subbulbosus</i>
246.	1019 <i>Schoenus subflavus</i> (<i>Yellow Bog-rush</i>)
247.	1020 <i>Schoenus sublateralis</i>
248.	1026 <i>Schoenus unispiculatus</i>
249.	17409 <i>Schoenus varicellae</i>
250.	1034 <i>Tetaria capillaris</i> (<i>Hair Sedge</i>)
251.	1036 <i>Tetaria octandra</i>
252.	43207 <i>Tricostularia exsul</i>

Dasypogonaceae

253.	1213 <i>Calectasia cyanea</i> (<i>Blue Tinsel Lily</i>)
254.	19309 <i>Calectasia narragara</i>
255.	1218 <i>Dasypogon bromeliifolius</i> (<i>Pineapple Bush</i>)
256.	1220 <i>Dasypogon obliquifolius</i>

Dicranaceae

257.	32460 <i>Campylopus acuminatus</i> var. <i>kirkii</i>
258.	32338 <i>Campylopus introflexus</i>

Y

Dilleniaceae

259.	5108 <i>Hibbertia acerosa</i> (<i>Needle Leaved Guinea Flower</i>)
260.	5109 <i>Hibbertia amplexicaulis</i>
261.	5112 <i>Hibbertia aurea</i>
262.	5114 <i>Hibbertia commutata</i>
263.	20051 <i>Hibbertia diamesogenos</i>
264.	19778 <i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>
265.	5134 <i>Hibbertia huegelii</i>
266.	5135 <i>Hibbertia hypericoides</i> (<i>Yellow Buttercups</i>)
267.	45534 <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>
268.	5150 <i>Hibbertia nymphaea</i>
269.	5162 <i>Hibbertia racemosa</i> (<i>Stalked Guinea Flower</i>)
270.	5169 <i>Hibbertia serrata</i> (<i>Serrate Leaved Guinea Flower</i>)
271.	5171 <i>Hibbertia spicata</i>
272.	11481 <i>Hibbertia spicata</i> subsp. <i>spicata</i>
273.	5172 <i>Hibbertia stellaris</i> (<i>Orange Stars</i>)
274.	48381 <i>Hibbertia striata</i>
275.	5173 <i>Hibbertia subvaginata</i>

Dioscoreaceae

276.	1509 <i>Dioscorea hastifolia</i> (<i>Warrine, Wararn</i>)
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Droseraceae

277.	3092 <i>Drosera bulbosa</i> (<i>Red-leaved Sundew</i>)
278.	13204 <i>Drosera callistos</i>
279.	48724 <i>Drosera collina</i>
280.	48751 <i>Drosera drummondii</i>
281.	3095 <i>Drosera erythrorhiza</i> (<i>Red Ink Sundew</i>)
282.	3097 <i>Drosera gigantea</i> (<i>Giant Sundew</i>)
283.	3098 <i>Drosera glanduligera</i> (<i>Pimpernel Sundew</i>)
284.	3101 <i>Drosera heterophylla</i> (<i>Swamp Rainbow</i>)
285.	48768 <i>Drosera hirsuta</i>
286.	3106 <i>Drosera macrantha</i> (<i>Bridal Rainbow</i>)
287.	3109 <i>Drosera menziesii</i> (<i>Pink Rainbow</i>)
288.	15710 <i>Drosera miniata</i> (<i>Orange Sundew</i>)
289.	48709 <i>Drosera minutiflora</i>
290.	3113 <i>Drosera neesii</i> (<i>Jewel Rainbow</i>)
291.	3114 <i>Drosera nitidula</i> (<i>Shining Sundew</i>)

Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
292.	3118 <i>Drosera pallida</i> (Pale Rainbow)			
293.	3123 <i>Drosera platystigma</i> (Black-eyed Sundew)			
294.	29178 <i>Drosera porrecta</i>			
295.	3125 <i>Drosera pycnoblasta</i> (Pearly Sundew)			
296.	8911 <i>Drosera rosulata</i>			
297.	49090 <i>Drosera</i> sp. Branched styles (S.C. Coffey 193)			
298.	3131 <i>Drosera stolonifera</i> (Leafy Sundew)			
299.	3135 <i>Drosera zonaria</i> (Painted Sundew)			
Elaeocarpaceae				
300.	48342 <i>Tetrapetala hirsuta</i> subsp. <i>hirsuta</i>			
301.	48341 <i>Tetrapetala hirsuta</i> subsp. <i>viminea</i>			
302.	4537 <i>Tetrapetala nuda</i>			
Ericaceae				
303.	6300 <i>Andersonia aristata</i> (Rice Flower)			
304.	6311 <i>Andersonia heterophylla</i>			
305.	6314 <i>Andersonia lehmanniana</i>			
306.	11471 <i>Andersonia lehmanniana</i> subsp. <i>lehmanniana</i>			
307.	6323 <i>Astroloma ciliatum</i> (Candle Cranberry)			
308.	6330 <i>Astroloma macrocalyx</i> (Swan Berry)			
309.	6334 <i>Astroloma pallidum</i> (Kick Bush)			
310.	6337 <i>Astroloma stomarrhena</i> (Red Swamp Cranberry)			
311.	6339 <i>Astroloma xerophyllum</i>			
312.	6347 <i>Conostephium minus</i> (Pink-tipped Pearl flower)			
313.	6348 <i>Conostephium pendulum</i> (Pearl Flower)			
314.	6349 <i>Conostephium preissii</i>			
315.	6360 <i>Leucopogon australis</i> (Spiked Beard-heath)			
316.	6374 <i>Leucopogon conostephoides</i>			
317.	6397 <i>Leucopogon glaucifolius</i>			
318.	6400 <i>Leucopogon gracillimus</i>			
319.	6436 <i>Leucopogon propinquus</i>			
320.	6439 <i>Leucopogon pulchellus</i> (Beard-heath)			
321.	6440 <i>Leucopogon racemulosus</i>			
322.	28311 <i>Leucopogon</i> sp. Great Southern (R.S. Cowan A 586)			
323.	40803 <i>Leucopogon squarrosum</i> subsp. <i>squarrosum</i>			
324.	34736 <i>Lysinema pentapetalum</i>			
325.	6476 <i>Styphelia tenuiflora</i> (Common Pinheath)			
Euphorbiaceae				
326.	4598 <i>Beyeria lechenaultii</i> (Pale Turpentine Bush)			
327.	4626 <i>Euphorbia drummondii</i> (Caustic Weed, Piwi)			
328.	4638 <i>Euphorbia peplus</i> (Petty Spurge)			
329.	4662 <i>Monotaxis grandiflora</i> (Diamond of the Desert)			
330.	19585 <i>Monotaxis grandiflora</i> var. <i>grandiflora</i>			
331.	4666 <i>Monotaxis occidentalis</i>			
332.	4716 <i>Stachystemon vermicularis</i>			
Fabaceae				
333.	3220 <i>Acacia aphylla</i> (Leafless Rock Wattle)		T	
334.	15466 <i>Acacia applanata</i>			
335.	3231 <i>Acacia auronitens</i>			
336.	3233 <i>Acacia barbinervis</i>			
337.	3294 <i>Acacia dentifera</i>			
338.	11229 <i>Acacia drummondii</i> subsp. <i>affinis</i>		P3	
339.	3323 <i>Acacia ericifolia</i>			
340.	3331 <i>Acacia extensa</i> (Wiry Wattle)			
341.	3374 <i>Acacia huegelii</i>			
342.	3382 <i>Acacia incrassata</i>			
343.	11611 <i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			
344.	15721 <i>Acacia lasiocarpa</i> var. <i>sedifolia</i>			
345.	3442 <i>Acacia microbotrya</i> (Manna Wattle, Kalyang)			
346.	3454 <i>Acacia nervosa</i> (Rib Wattle)			
347.	14129 <i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>		P3	
348.	3482 <i>Acacia paradoxa</i> (Kangaroo Thorn)		Y	
349.	3502 <i>Acacia pulchella</i> (Prickly Moses)			
350.	15481 <i>Acacia pulchella</i> var. <i>glaberrima</i>			
351.	15483 <i>Acacia pulchella</i> var. <i>pulchella</i>			
352.	3504 <i>Acacia pycnantha</i> (Golden Wattle)		Y	
353.	3527 <i>Acacia saligna</i> (Orange Wattle, Kudjong)			
354.	30034 <i>Acacia saligna</i> subsp. <i>pruinescens</i>			
355.	30032 <i>Acacia saligna</i> subsp. <i>saligna</i>			

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356.	3541 <i>Acacia sessilis</i>			
357.	3557 <i>Acacia stenoptera</i> (Narrow Winged Wattle)			
358.	3574 <i>Acacia teretifolia</i>			
359.	3602 <i>Acacia willdenowiana</i> (Grass Wattle)			
360.	3686 <i>Aotus cordifolia</i>			
361.	3688 <i>Aotus gracillima</i>			
362.	48782 <i>Bossiaea angustifolia</i>			
363.	3710 <i>Bossiaea eriocarpa</i> (Common Brown Pea)			
364.	3714 <i>Bossiaea ornata</i> (Broad Leaved Brown Pea)			
365.	18156 <i>Chamaecytisus palmensis</i> (Tagasaste)	Y		
366.	8971 <i>Chorizema cordatum</i>			
367.	3753 <i>Chorizema dicksonii</i> (Yellow-eyed Flame Pea)			
368.	35838 <i>Cristonia biloba</i> subsp. <i>biloba</i>			
369.	17368 <i>Crotalaria agatiflora</i> subsp. <i>agatiflora</i>	Y		
370.	3793 <i>Daviesia angulata</i>			
371.	3799 <i>Daviesia cordata</i> (Bookleaf)			
372.	3805 <i>Daviesia decurrents</i> (Prickly Bitter-pea)			
373.	19747 <i>Daviesia decurrents</i> subsp. <i>decurrents</i>			
374.	3807 <i>Daviesia divaricata</i> (Marno)			
375.	18560 <i>Daviesia divaricata</i> subsp. <i>divaricata</i>			
376.	11879 <i>Daviesia hakeoides</i> subsp. <i>hakeoides</i>			
377.	3815 <i>Daviesia horrida</i> (Prickly Bitter-pea)			
378.	3824 <i>Daviesia nudiflora</i>			
379.	16585 <i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>			
380.	3831 <i>Daviesia pedunculata</i>			
381.	3832 <i>Daviesia physodes</i>			
382.	3833 <i>Daviesia podophylla</i>			
383.	3834 <i>Daviesia polyphylla</i>			
384.	3835 <i>Daviesia preissii</i>			
385.	3845 <i>Daviesia triflora</i>			
386.	3872 <i>Euchilopsis linearis</i> (Swamp Pea)			
387.	3880 <i>Eutaxia virgata</i>			
388.	3887 <i>Gastrolobium acutum</i>			
389.	3895 <i>Gastrolobium calycinum</i> (York Road Poison)			
390.	20475 <i>Gastrolobium capitatum</i>			
391.	20505 <i>Gastrolobium celsianum</i>			
392.	20513 <i>Gastrolobium dilatatum</i>			
393.	20473 <i>Gastrolobium ebracteolatum</i>			
394.	20483 <i>Gastrolobium linearifolium</i>			
395.	3912 <i>Gastrolobium oxylobioides</i> (Champion Bay Poison)			
396.	3923 <i>Gastrolobium spathulatum</i> (Poison Bush)			
397.	3933 <i>Gastrolobium villosum</i> (Crinkle-leaved Poison)			
398.	3936 <i>Genista linifolia</i> (Flaxleaf Broom)	Y		
399.	3945 <i>Gompholobium aristatum</i>			
400.	10909 <i>Gompholobium confertum</i>			
401.	3950 <i>Gompholobium knightianum</i>			
402.	3951 <i>Gompholobium marginatum</i>			
403.	3954 <i>Gompholobium polymorphum</i>			
404.	3955 <i>Gompholobium preissii</i>			
405.	3956 <i>Gompholobium shuttleworthii</i>			
406.	3957 <i>Gompholobium tomentosum</i> (Hairy Yellow Pea)			
407.	3964 <i>Hovea chorizemifolia</i> (Holly-leaved Hovea)			
408.	3966 <i>Hovea pungens</i> (Devil's Pins, Puyenak)			
409.	3968 <i>Hovea trisperma</i> (Common Hovea)			
410.	12907 <i>Hovea trisperma</i> var. <i>grandiflora</i>			
411.	12859 <i>Hovea trisperma</i> var. <i>trisperma</i>			
412.	3973 <i>Indigofera colutea</i> (Sticky Indigo)			
413.	3992 <i>Isotropis cuneifolia</i> (Granny Bonnets)			
414.	19700 <i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>			
415.	3997 <i>Jacksonia alata</i>			
416.	14783 <i>Jacksonia calcicola</i>			
417.	4010 <i>Jacksonia floribunda</i> (Holly Pea)			
418.	4018 <i>Jacksonia lehmannii</i>			
419.	4025 <i>Jacksonia restioides</i>			
420.	4027 <i>Jacksonia sericea</i> (Waldjumi)	P4		
421.	4029 <i>Jacksonia sternbergiana</i> (Stinkwood, Kapur)			
422.	4037 <i>Kennedia coccinea</i> (Coral Vine)			
423.	4044 <i>Kennedia prostrata</i> (Scarlet Runner)			
424.	4045 <i>Kennedia stirlingii</i> (Bushy Kennedia)			
425.	11289 <i>Labichea lanceolata</i> subsp. <i>lanceolata</i>			

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426.	3669 <i>Labichea punctata</i> (Lance-leaved Cassia)			
427.	4047 <i>Lathyrus tingitanus</i> (Tangier Pea)	Y		
428.	4059 <i>Lotus angustissimus</i> (Narrowleaf Trefoil)	Y		
429.	4063 <i>Lotus uliginosus</i> (Greater Lotus)	Y		
430.	4065 <i>Lupinus angustifolius</i> (Narrowleaf Lupin)	Y		
431.	4066 <i>Lupinus cosentinii</i>	Y		
432.	4067 <i>Lupinus luteus</i> (Yellow Lupin)	Y		
433.	4072 <i>Medicago arabica</i> (Spotted Medic)	Y		
434.	4100 <i>Mirbelia spinosa</i>			
435.	17114 <i>Paraserianthes lophantha</i> subsp. <i>lophantha</i>			
436.	4172 <i>Pultenaea ericifolia</i>			
437.	4205 <i>Sphaerolobium linophyllum</i>			
438.	4206 <i>Sphaerolobium macranthum</i>			
439.	4207 <i>Sphaerolobium medium</i>			
440.	4211 <i>Sphaerolobium vimineum</i> (Leafless Globe Pea)			
441.	4251 <i>Templetonia drummondii</i>			
442.	17145 <i>Trifolium angustifolium</i> var. <i>angustifolium</i>	Y		
443.	4291 <i>Trifolium arvense</i> (Hare's Foot Clover)	Y		
444.	4292 <i>Trifolium campestre</i> (Hop Clover)	Y		
445.	17759 <i>Trifolium fragiferum</i> var. <i>fragiferum</i>	Y		
446.	4297 <i>Trifolium glomeratum</i> (Cluster Clover)	Y		
447.	4298 <i>Trifolium hirtum</i> (Rose Clover)	Y		
448.	17758 <i>Trifolium hybridum</i> var. <i>hybridum</i>	Y		
449.	4303 <i>Trifolium micranthum</i> (Slender Suckling Clover)	Y		
450.	4315 <i>Trifolium tomentosum</i> (Woolly Clover)	Y		
451.	34772 <i>Vachellia karroo</i>	Y		
452.	4319 <i>Vicia benghalensis</i> (Purple Vetch)	Y		
453.	4325 <i>Viminaria juncea</i> (Swishbush, Koweda)			

Gentianaceae

454.	6539 <i>Centaurium erythraea</i> (Common Centaury)	Y
455.	6542 <i>Centaurium tenuiflorum</i>	Y
456.	6543 <i>Cicendia filiformis</i> (Slender Cicendia)	Y

Geraniaceae

457.	4332 <i>Erodium botrys</i> (Long Storksbill)	Y
458.	4335 <i>Erodium cygnorum</i> (Blue Heronsbill)	
459.	4336 <i>Erodium moschatum</i> (Musky Crowfoot)	Y
460.	4343 <i>Pelargonium capitatum</i> (Rose Pelargonium)	Y

Goodeniaceae

461.	12724 <i>Anthotium junciforme</i>	
462.	7420 <i>Dampiera alata</i> (Winged-stem Dampiera)	
463.	7428 <i>Dampiera coronata</i> (Wedge-leaved Dampiera)	
464.	7454 <i>Dampiera linearis</i> (Common Dampiera)	
465.	7462 <i>Dampiera pedunculata</i>	
466.	7484 <i>Dampiera trigona</i> (Angled-stem Dampiera)	
467.	8614 <i>Goodenia claytoniacea</i>	
468.	29362 <i>Goodenia coerulea</i>	
469.	12520 <i>Goodenia fasciculata</i>	
470.	12551 <i>Goodenia micrantha</i>	
471.	19286 <i>Goodenia pulchella</i> subsp. <i>Coastal Plain A</i> (M. Hislop 634)	
472.	7568 <i>Lechenaultia biloba</i> (Blue Leschenaultia)	
473.	7572 <i>Lechenaultia expansa</i>	
474.	7574 <i>Lechenaultia floribunda</i> (Free-flowering Leschenaultia)	
475.	7602 <i>Scaevola calliptera</i>	
476.	7603 <i>Scaevola canescens</i> (Grey Scaevola)	
477.	7613 <i>Scaevola glandulifera</i> (Viscid Hand-flower)	
478.	7635 <i>Scaevola pilosa</i> (Hairy Fan-flower)	
479.	7636 <i>Scaevola platyphylla</i> (Broad-leaved Fanflower)	
480.	12585 <i>Scaevola repens</i>	
481.	13182 <i>Scaevola repens</i> var. <i>repens</i>	
482.	7665 <i>Velleia trinervis</i>	

Haemodoraceae

483.	11470 <i>Anigozanthos bicolor</i> subsp. <i>bicolor</i>	
484.	1409 <i>Anigozanthos humilis</i> (Catspaw)	
485.	11434 <i>Anigozanthos humilis</i> subsp. <i>humilis</i>	
486.	1411 <i>Anigozanthos manglesii</i> (Mangles Kangaroo Paw, Kurulbrang)	
487.	11261 <i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	
488.	11566 <i>Anigozanthos viridis</i> subsp. <i>viridis</i>	
489.	1417 <i>Blancaea canescens</i> (Winter Bell)	

Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
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490.	11826 <i>Conostylis aculeata</i> subsp. <i>aculeata</i>			
491.	12109 <i>Conostylis aculeata</i> subsp. <i>preissii</i>			
492.	1420 <i>Conostylis androstemma</i> (<i>Trumpets</i>)			
493.	1423 <i>Conostylis aurea</i> (<i>Golden Conostylis</i>)			
494.	11438 <i>Conostylis candicans</i> subsp. <i>candicans</i>			
495.	12035 <i>Conostylis caricina</i> subsp. <i>caricina</i>			
496.	11695 <i>Conostylis festucacea</i> subsp. <i>festucacea</i>			
497.	1436 <i>Conostylis juncea</i>			
498.	1454 <i>Conostylis setigera</i> (<i>Bristly Cottonhead</i>)			
499.	11597 <i>Conostylis setigera</i> subsp. <i>setigera</i>			
500.	1455 <i>Conostylis setosa</i> (<i>White Cottonhead</i>)			
501.	1464 <i>Haemodorum brevisepalum</i>			
502.	1465 <i>Haemodorum discolor</i>			
503.	1468 <i>Haemodorum laxum</i>			
504.	1470 <i>Haemodorum paniculatum</i> (<i>Mardja</i>)			
505.	1472 <i>Haemodorum simplex</i>			
506.	1474 <i>Haemodorum sparsiflorum</i>			
507.	1475 <i>Haemodorum spicatum</i> (<i>Mardja</i>)			
508.	1478 <i>Phlebocarya ciliata</i>			
509.	1479 <i>Phlebocarya filifolia</i>			
510.	1482 <i>Tribonanthes brachypetala</i> (<i>Nodding Tiurndin</i>)			
511.	1483 <i>Tribonanthes longipetala</i> (<i>Branching Tiurndin</i>)			
512.	8798 <i>Tribonanthes uniflora</i> (<i>Woolly Tiurndin</i>)			
513.	1485 <i>Tribonanthes violacea</i> (<i>Violet Tiurndin</i>)			

Haloragaceae

514.	6143 <i>Glischrocaryon aureum</i> (<i>Common Popflower</i>)			
515.	6149 <i>Gonocarpus cordiger</i>			
516.	6161 <i>Gonocarpus pithyoides</i>			
517.	34676 <i>Meionectes brownii</i> (<i>Swamp Raspwort</i>)			
518.	33638 <i>Meionectes tenuifolia</i>	P3		
519.	6189 <i>Myriophyllum crispatum</i>			
520.	6192 <i>Myriophyllum drummondii</i>			
521.	6193 <i>Myriophyllum echinatum</i>	P3		
522.	6195 <i>Myriophyllum limnophilum</i>			
523.	35016 <i>Trihaloragis hexandra</i> subsp. <i>integrifolia</i>			

Hemerocallidaceae

524.	23474 <i>Agrostocrinum hirsutum</i>			
525.	1261 <i>Agrostocrinum scabrum</i> (<i>Blue Grass Lily</i>)			
526.	1264 <i>Arnocrinum preissii</i>			
527.	1276 <i>Caesia micrantha</i> (<i>Pale Grass Lily</i>)			
528.	1277 <i>Caesia occidentalis</i>			
529.	1259 <i>Dianella revoluta</i> (<i>Blueberry Lily</i>)			
530.	11636 <i>Dianella revoluta</i> var. <i>divaricata</i>			
531.	19632 <i>Johnsonia pubescens</i> subsp. <i>pubescens</i>			
532.	1260 <i>Stypandra glauca</i> (<i>Blind Grass</i>)			
533.	1361 <i>Tricoryne elatior</i> (<i>Yellow Autumn Lily</i>)			
534.	1362 <i>Tricoryne humilis</i>			

Hydatellaceae

535.	1139 <i>Trithuria bibracteata</i>			
536.	32658 <i>Trithuria occidentalis</i> (<i>Swan Hydatella</i>)	T		

Hydrocharitaceae

537.	159 <i>Egeria densa</i> (<i>Dense Waterweed</i>)	Y		
538.	166 <i>Hydrilla verticillata</i> (<i>Water Thyme</i>)			
539.	168 <i>Ottelia ovalifolia</i> (<i>Swamp Lily</i>)			

Hypericaceae

540.	5180 <i>Hypericum gramineum</i> (<i>Small St John's Wort</i>)			
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Hypoxidaceae

541.	43765 <i>Pauridia glabella</i> var. <i>glabella</i>			
542.	43760 <i>Pauridia occidentalis</i>			
543.	43761 <i>Pauridia occidentalis</i> var. <i>occidentalis</i>			
544.	43762 <i>Pauridia occidentalis</i> var. <i>quadriloba</i>			

Iridaceae

545.	18279 <i>Babiana angustifolia</i>	Y		
546.	1513 <i>Chasmanthe floribunda</i> (<i>African Cornflag</i>)	Y		
547.	18392 <i>Freesia alba</i> x <i>leichtlinii</i>	Y		
548.	1518 <i>Gladiolus angustus</i> (<i>Long Tubed Painted Lady</i>)	Y		
549.	1520 <i>Gladiolus caryophyllaceus</i> (<i>Wild Gladiolus</i>)			

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.



Department of Biodiversity,
Conservation and Attractions



Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
550.	1524 <i>Gladiolus undulatus</i> (Wild Gladiolus)	Y		
551.	20854 <i>Gladiolus watsonius</i>	Y		
552.	1526 <i>Hesperantha falcata</i>	Y		
553.	19179 <i>Moraea flaccida</i> (One-leaf Cape Tulip)	Y		
554.	19180 <i>Moraea miniatia</i> (Two-leaf Cape Tulip)	Y		
555.	11442 <i>Orthrosanthus laxus</i> var. <i>gramineus</i> (Grass-leaved Orthrosanthus)			
556.	11749 <i>Orthrosanthus laxus</i> var. <i>laxus</i> (Morning Iris)			
557.	1546 <i>Patersonia juncea</i> (Rush Leaved Patersonia)			
558.	1550 <i>Patersonia occidentalis</i> (Purple Flag, Koma)			
559.	1551 <i>Patersonia pygmaea</i> (Pygmy Patersonia)			
560.	14433 <i>Patersonia rudis</i> subsp. <i>rudis</i>			
561.	1554 <i>Romulea flava</i>	Y		
562.	1556 <i>Romulea rosea</i> (Guildford Grass)	Y		
563.	11544 <i>Romulea rosea</i> var. <i>australis</i> (Guildford Grass)	Y		
564.	1558 <i>Sparaxis bulbifera</i>	Y		
565.	18375 <i>Watsonia knysnana</i>	Y		
566.	1566 <i>Watsonia marginata</i>	Y		
567.	18118 <i>Watsonia meriana</i> var. <i>meriana</i>	Y		
Juncaceae				
568.	1178 <i>Juncus bufonius</i> (Toad Rush)	Y		
569.	1180 <i>Juncus capitatus</i> (Capitate Rush)	Y		
570.	1188 <i>Juncus pallidus</i> (Pale Rush)			
571.	1195 <i>Juncus subsecundus</i> (Finger Rush)			
Juncaginaceae				
572.	40660 <i>Cycnogeton huegelii</i>			
573.	40661 <i>Cycnogeton lineare</i>			
574.	33677 <i>Triglochin centrocarpa</i>			
575.	147 <i>Triglochin mucronata</i>			
576.	18587 <i>Triglochin nana</i>			
577.	151 <i>Triglochin striata</i>			
Lamiaceae				
578.	6836 <i>Hemiandra incana</i>			
579.	6838 <i>Hemiandra linearis</i> (Speckled Snakebush)			
580.	6839 <i>Hemiandra pungens</i> (Snakebush)			
581.	33277 <i>Hemigenia argentea</i>			
582.	6856 <i>Hemigenia incana</i> (Silky Hemigenia)			
583.	29632 <i>Hemigenia parviflora</i>			
584.	41020 <i>Hemiphora bartlingii</i> (Woolly Dragon)			
585.	6930 <i>Stachys arvensis</i> (Staggerweed)	Y		
Lauraceae				
586.	2952 <i>Cassytha glabella</i> (Tangled Dodder Laurel)			
587.	2956 <i>Cassytha pomiformis</i> (Dodder Laurel)			
588.	2957 <i>Cassytha racemosa</i> (Dodder Laurel)			
Lentibulariaceae				
589.	7138 <i>Utricularia inaequalis</i>			
590.	7145 <i>Utricularia menziesii</i> (Redcoats)			
591.	7148 <i>Utricularia multifida</i>			
592.	7157 <i>Utricularia violacea</i> (Violet Bladderwort)			
Linaceae				
593.	4363 <i>Linum trigynum</i> (French Flax)	Y		
594.	4364 <i>Linum usitatissimum</i> (Flax)	Y		
Loganiaceae				
595.	46255 <i>Orianthera campanulata</i>			
596.	46313 <i>Orianthera flaviflora</i>			
597.	16825 <i>Phyllangium divergens</i>			
598.	17366 <i>Phyllangium palustre</i>		P2	
Loranthaceae				
599.	2383 <i>Amyema preissii</i> (Wireleaf Mistletoe)			
Lythraceae				
600.	5281 <i>Lythrum hyssopifolia</i> (Lesser Loosestrife)	Y		
Macarthuriaceae				
601.	2838 <i>Macarthuria apetala</i>			
602.	2839 <i>Macarthuria australis</i>			
603.	17106 <i>Macarthuria keigheryi</i>		T	

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Malvaceae				
604.	<i>Commersonia corniculata</i>			
605.	<i>Guichenotia micrantha</i> (Small Flowered Guichenotia)			
606.	<i>Lasiopetalum bracteatum</i> (Helena Velvet Bush)		P4	
607.	<i>Lasiopetalum glutinosum</i> subsp. <i>glutinosum</i>		P3	
608.	<i>Malva parviflora</i> (Marshmallow)		Y	
609.	<i>Sida hookeriana</i>			
610.	<i>Thomasia foliosa</i>			
611.	<i>Thomasia grandiflora</i> (Large Flowered Thomasia)			
612.	<i>Thomasia macrocarpa</i> (Large Fruited Thomasia)			
Marsileaceae				
613.	74 <i>Marsilea drummondii</i> (Common Nardoo)			
Menyanthaceae				
614.	<i>Liparophyllum capitatum</i>			
615.	<i>Liparophyllum violifolium</i>			
616.	<i>Ornduffia albiflora</i>			
617.	<i>Ornduffia submersa</i>		P4	
Montiaceae				
618.	2848 <i>Calandrinia corrigioloides</i> (Strap Purslane)			
619.	16365 <i>Calandrinia</i> sp. Kenwick (G.J. Keighery 10905)			
Myrtaceae				
620.	<i>Astartea affinis</i> (West-coast Astartea)			
621.	<i>Astartea scoparia</i> (Common Astartea)			
622.	<i>Babingtonia camphorosmae</i> (Camphor Myrtle)			
623.	<i>Beaufortia purpurea</i> (Purple Beaufortia)		P3	
624.	<i>Callistemon phoeniceus</i> (Lesser Bottlebrush, Dubarda)			
625.	<i>Calothamnus accedens</i>		P4	
626.	<i>Calothamnus quadrifidus</i> (One-sided Bottlebrush, Kwoqdjard)			
627.	<i>Calothamnus quadrifidus</i> subsp. <i>quadrifidus</i>			
628.	<i>Calothamnus sanguineus</i> (Silky-leaved Blood flower, Pindak)			
629.	<i>Calytrix angulata</i> (Yellow Starflower)			
630.	<i>Calytrix aurea</i>			
631.	<i>Calytrix breviseta</i> subsp. <i>breviseta</i>		T	
632.	<i>Calytrix flavescens</i> (Summer Starflower)			
633.	<i>Calytrix fraseri</i> (Pink Summer Calytrix)			
634.	<i>Calytrix glutinosa</i>			
635.	<i>Calytrix leschenaultii</i>			
636.	<i>Chamelaucium uncinatum</i> (Geraldton Wax)			
637.	<i>Corymbia calophylla</i> (Marri)			
638.	<i>Darwinia citriodora</i> (Lemon-scented Darwinia)			
639.	<i>Darwinia thymoides</i>			
640.	<i>Eremaea fimbriata</i>			
641.	<i>Eremaea pauciflora</i>			
642.	14104 <i>Eremaea pauciflora</i> var. <i>pauciflora</i>			
643.	<i>Eucalyptus marginata</i> (Jarrah, Djara)			
644.	<i>Eucalyptus marginata</i> subsp. <i>marginata</i> (Jarrah)			
645.	<i>Eucalyptus marginata</i> subsp. <i>thalassica</i> (Blue-leaved Jarrah)			
646.	<i>Eucalyptus patens</i> (Swan River Blackbutt, Dwuda)			
647.	<i>Eucalyptus rudis</i> (Flooded Gum, Kulurda)			
648.	<i>Eucalyptus rudis</i> subsp. <i>rudis</i>			
649.	<i>Eucalyptus todtniana</i> (Coastal Blackbutt)			
650.	<i>Eucalyptus wandoo</i> (Wandoo, Wondu)			
651.	12905 <i>Eucalyptus wandoo</i> subsp. <i>pulverea</i>			
652.	12906 <i>Eucalyptus wandoo</i> subsp. <i>wandoo</i>			
653.	5817 <i>Hypocalymma angustifolium</i> (White Myrtle, Kudjid)			
654.	35074 <i>Hypocalymma angustifolium</i> subsp. <i>Dandaragan plateau</i> (S. Patrick 702A)			
655.	35070 <i>Hypocalymma angustifolium</i> subsp. <i>Swan Coastal Plain</i> (G.J. Keighery 16777)			
656.	17461 <i>Kunzea micrantha</i> subsp. <i>micrantha</i>			
657.	17785 <i>Kunzea micrantha</i> subsp. <i>petiolata</i>			
658.	17505 <i>Kunzea praestans</i>			
659.	5847 <i>Leptospermum erubescens</i> (Roadside Teatree)			
660.	5926 <i>Melaleuca lateritia</i> (Robin Redbreast Bush)			
661.	20297 <i>Melaleuca osullivanii</i>			
662.	18394 <i>Melaleuca parviceps</i>			
663.	5952 <i>Melaleuca preissiana</i> (Moonah)			
664.	5958 <i>Melaleuca radula</i> (Graceful Honeymyrtle)			
665.	5959 <i>Melaleuca rhamphophylla</i> (Swamp Paperbark)			
666.	5961 <i>Melaleuca scabra</i> (Rough Honeymyrtle, Wurru Bush)			

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667.	5964 <i>Melaleuca seriata</i>			
668.	5975 <i>Melaleuca subtrigona</i>			
669.	5978 <i>Melaleuca teretifolia</i> (Banbar)			
670.	5983 <i>Melaleuca trichophylla</i>			
671.	13280 <i>Melaleuca viminea</i> subsp. <i>viminea</i>			
672.	16477 <i>Pericalymma ellipticum</i> var. <i>ellipticum</i>			
673.	16478 <i>Pericalymma ellipticum</i> var. <i>floridum</i>			
674.	6012 <i>Regelia ciliata</i>			
675.	6019 <i>Rinzia communis</i> (Mallee Rinzia)			
676.	6020 <i>Rinzia crassifolia</i> (Darling Range Rinzia)			
677.	15431 <i>Verticordia acerosa</i> var. <i>acerosa</i>			
678.	12388 <i>Verticordia acerosa</i> var. <i>preissii</i>			
679.	15432 <i>Verticordia densiflora</i> var. <i>densiflora</i>			
680.	6077 <i>Verticordia drummondii</i> (Drummond's Featherflower)			
681.	6088 <i>Verticordia huegelii</i> (Variegated Featherflower)			
682.	15433 <i>Verticordia huegelii</i> var. <i>huegelii</i>			
683.	14714 <i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	P4		
684.	6101 <i>Verticordia nitens</i> (Morrison Featherflower, Kodjeningara)			
685.	6107 <i>Verticordia pennigera</i>			
686.	12449 <i>Verticordia plumosa</i> var. <i>brachyphylla</i>			

Olacaceae

687.	2367 <i>Olax scalariformis</i>
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Oleaceae

688.	40241 <i>Fraxinus angustifolia</i>	Y
689.	11937 <i>Olea europaea</i> subsp. <i>europaea</i>	Y

Onagraceae

690.	6133 <i>Epilobium hirtigerum</i> (Hairy Willow Herb)
691.	20052 <i>Oenothera jamesii</i>

Y

Orchidaceae

692.	11136 <i>Caladenia denticulata</i>
693.	44900 <i>Caladenia denticulata</i> subsp. <i>rubella</i>
694.	1586 <i>Caladenia discoidea</i> (Dancing Orchid)
695.	1592 <i>Caladenia flava</i> (Cowslip Orchid)
696.	15348 <i>Caladenia flava</i> subsp. <i>flava</i>
697.	15502 <i>Caladenia footeana</i>
698.	17980 <i>Caladenia hiemalis</i>
699.	15354 <i>Caladenia hirta</i> subsp. <i>hirta</i>
700.	1599 <i>Caladenia latifolia</i> (Pink Fairy Orchid)
701.	15361 <i>Caladenia longicauda</i> subsp. <i>calcigena</i>
702.	15365 <i>Caladenia longicauda</i> subsp. <i>longicauda</i>
703.	1604 <i>Caladenia macrostylis</i> (Leaping Spider Orchid)
704.	15503 <i>Caladenia paludosa</i>
705.	15377 <i>Caladenia reptans</i> subsp. <i>reptans</i>
706.	15114 <i>Cyanicula gemmata</i>
707.	19649 <i>Disa bracteata</i>
708.	12943 <i>Diuris brumalis</i>
709.	11049 <i>Diuris corymbosa</i>
710.	10796 <i>Diuris drummondii</i> (Tall Donkey Orchid)
711.	1634 <i>Diuris laxiflora</i> (Bee Orchid)
712.	12939 <i>Diuris magnifica</i>
713.	46859 <i>Diuris ostrina</i>
714.	15436 <i>Diuris porrifolia</i>
715.	15406 <i>Drakaea gracilis</i>
716.	1643 <i>Elythranthera brunonis</i> (Purple Enamel Orchid)
717.	1644 <i>Elythranthera emarginata</i> (Pink Enamel Orchid)
718.	1646 <i>Eriochilus dilatatus</i> (White Bunny Orchid)
719.	15412 <i>Eriochilus dilatatus</i> subsp. <i>multiflorus</i>
720.	15414 <i>Eriochilus helonomos</i>
721.	15415 <i>Eriochilus scaber</i> subsp. <i>scaber</i>
722.	1653 <i>Leporella fimbriata</i> (Hare Orchid)
723.	15418 <i>Leptoceras menziesii</i>
724.	1656 <i>Lyperanthus serratus</i> (Rattle Beak Orchid)
725.	1657 <i>Microtis alba</i> (White Mignonette Orchid)
726.	34158 <i>Microtis alboviridis</i>
727.	1658 <i>Microtis atrata</i> (Swamp Mignonette Orchid)
728.	12199 <i>Microtis familiaris</i>
729.	10954 <i>Microtis media</i> (Tall Mignonette Orchid)
730.	12761 <i>Microtis media</i> subsp. <i>densiflora</i>



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731.	15419 <i>Microtis media</i> subsp. <i>media</i>			
732.	23500 <i>Paracaleana hortiorum</i>			
733.	20460 <i>Pheladenia deformis</i>			
734.	1669 <i>Prasophyllum cyphochilum</i> (<i>Pouched Leek Orchid</i>)			
735.	1670 <i>Prasophyllum drummondii</i> (<i>Swamp Leek Orchid</i>)			
736.	1671 <i>Prasophyllum elatum</i> (<i>Tall Leek Orchid</i>)			
737.	1672 <i>Prasophyllum fimbria</i> (<i>Fringed Leek Orchid</i>)			
738.	1674 <i>Prasophyllum giganteum</i> (<i>Bronze Leek Orchid</i>)			
739.	16688 <i>Prasophyllum gracile</i>			
740.	1676 <i>Prasophyllum hians</i> (<i>Yawning Leek Orchid</i>)			
741.	1677 <i>Prasophyllum macrostachyum</i> (<i>Laughing Leek Orchid</i>)			
742.	1680 <i>Prasophyllum parvifolium</i> (<i>Autumn Leek Orchid</i>)			
743.	10853 <i>Prasophyllum plumiforme</i>			
744.	48675 <i>Pterostylis atrosanguinea</i>			
745.	1686 <i>Pterostylis barbata</i> (<i>Bird Orchid</i>)			
746.	48484 <i>Pterostylis crebriflora</i>			
747.	11118 <i>Pterostylis pyramidalis</i> (<i>Snail Orchid</i>)			
748.	1693 <i>Pterostylis recurva</i> (<i>Jug Orchid</i>)			
749.	12217 <i>Pterostylis sanguinea</i>			
750.	1698 <i>Pterostylis vittata</i> (<i>Banded Greenhood</i>)			
751.	16367 <i>Pyrorchis nigricans</i> (<i>Red beaks, Elephants ears</i>)			
752.	1700 <i>Spiculaea ciliata</i> (<i>Elbow Orchid</i>)			
753.	1701 <i>Theelymitra antennifera</i> (<i>Vanilla Orchid</i>)			
754.	10856 <i>Theelymitra benthamiana</i> (<i>Leopard Orchid</i>)			
755.	1705 <i>Theelymitra crinita</i> (<i>Blue Lady Orchid</i>)			
756.	1707 <i>Theelymitra flexuosa</i> (<i>Twisted Sun Orchid</i>)			
757.	11053 <i>Theelymitra macrophylla</i>			
758.	20736 <i>Theelymitra maculata</i>			
759.	20729 <i>Theelymitra magnifica</i> (<i>Crystal Brook Star Orchid</i>)		P1	
760.	20731 <i>Theelymitra vulgaris</i>			
Orobanchaceae				
761.	7122 <i>Orobanche minor</i> (<i>Lesser Broomrape</i>)	Y		
762.	7089 <i>Parentucellia latifolia</i> (<i>Common Bartsia</i>)	Y		
Oxalidaceae				
763.	4349 <i>Oxalis corniculata</i> (<i>Yellow Wood Sorrel</i>)	Y		
764.	18331 <i>Oxalis debilis</i> var. <i>corymbosa</i> (<i>Pink Shamrock</i>)	Y		
765.	30375 <i>Oxalis exilis</i>			
766.	4352 <i>Oxalis glabra</i>	Y		
767.	4354 <i>Oxalis incarnata</i>	Y		
768.	4355 <i>Oxalis perennans</i>			
769.	4356 <i>Oxalis pes-caprae</i> (<i>Soursof</i>)	Y		
770.	4358 <i>Oxalis purpurea</i> (<i>Largeflower Wood Sorrel</i>)	Y		
Papaveraceae				
771.	2971 <i>Fumaria muralis</i> (<i>Wall Fumitory</i>)	Y		
772.	31532 <i>Fumaria muralis</i> subsp. <i>muralis</i>	Y		
Philydraceae				
773.	1172 <i>Philydrella drummondii</i>			
774.	1173 <i>Philydrella pygmaea</i> (<i>Butterfly Flowers</i>)			
Phyllanthaceae				
775.	4675 <i>Phyllanthus calycinus</i> (<i>False Boronia</i>)			
776.	4688 <i>Poranthera drummondii</i>			
777.	4690 <i>Poranthera huegelii</i>			
778.	4691 <i>Poranthera microphylla</i> (<i>Small Poranthera</i>)			
Phytolaccaceae				
779.	2793 <i>Phytolacca octandra</i> (<i>Red Ink Plant</i>)	Y		
Pittosporaceae				
780.	25788 <i>Billardiera fraseri</i> (<i>Elegant Pronaya</i>)			
781.	25798 <i>Billardiera fusiformis</i> (<i>Australian Bluebell</i>)			
782.	25796 <i>Billardiera heterophylla</i> (<i>Australian Bluebell</i>)			
783.	19421 <i>Marianthus bicolor</i> (<i>Painted Marianthus</i>)			
784.	17635 <i>Marianthus drummondianus</i>			
785.	17633 <i>Marianthus erubescens</i>			
Plantaginaceae				
786.	4717 <i>Callitricha stagnalis</i> (<i>Common Starwort</i>)	Y		
787.	14282 <i>Gratiola pubescens</i>			
788.	7067 <i>Kickxia elatine</i> (<i>Pointed Toadflax</i>)	Y		

Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
789.	7068 <i>Kickxia spuria</i> (<i>Roundleaf Toadflax</i>)	Y		
Poaceae				
790.	184 <i>Aira caryophyllea</i> (<i>Silvery Hairgrass</i>)	Y		
791.	185 <i>Aira cupaniana</i> (<i>Silvery Hairgrass</i>)	Y		
792.	194 <i>Amphipogon amphipogonoides</i>			
793.	197 <i>Amphipogon debilis</i>			
794.	199 <i>Amphipogon strictus</i> (<i>Greybeard Grass</i>)			
795.	200 <i>Amphipogon turbinatus</i>			
796.	12063 <i>Aristida holathera</i> var. <i>holathera</i>			
797.	222 <i>Aristida ramosa</i> (<i>Purple Wiregrass</i>)	Y		
798.	226 <i>Arundo donax</i> (<i>Giant Reed</i>)	Y		
799.	17233 <i>Austrostipa campylachne</i>			
800.	17234 <i>Austrostipa compressa</i>			
801.	17237 <i>Austrostipa elegantissima</i>			
802.	<i>Austrostipa</i> sp.			
803.	17257 <i>Austrostipa variabilis</i>			
804.	231 <i>Avellinia michelii</i>	Y		
805.	233 <i>Avena barbata</i> (<i>Bearded Oat</i>)	Y		
806.	8661 <i>Brachypodium distachyon</i> (<i>False Brome</i>)	Y		
807.	244 <i>Briza maxima</i> (<i>Blowfly Grass</i>)	Y		
808.	245 <i>Briza minor</i> (<i>Shivery Grass</i>)	Y		
809.	248 <i>Bromus catharticus</i> (<i>Prairie Grass</i>)	Y		
810.	249 <i>Bromus diandrus</i> (<i>Great Brome</i>)	Y		
811.	250 <i>Bromus hordeaceus</i> (<i>Soft Brome</i>)	Y		
812.	252 <i>Bromus madritensis</i> (<i>Madrid Brome</i>)	Y		
813.	41566 <i>Cenchrus longisetus</i> (<i>Feathertop</i>)	Y		
814.	41567 <i>Cenchrus macrorhynchus</i> (<i>African Feather Grass</i>)	Y		
815.	41563 <i>Cenchrus purpureus</i> (<i>Elephant Grass</i>)	Y		
816.	48259 <i>Cortaderia selloana</i> subsp. <i>selloana</i>	Y		
817.	285 <i>Cynosurus echinatus</i> (<i>Rough Dogtail</i>)	Y		
818.	306 <i>Dichelachne crinita</i> (<i>Longhair Plumegrass</i>)			
819.	347 <i>Ehrharta calycina</i> (<i>Perennial Veldt Grass</i>)	Y		
820.	349 <i>Ehrharta longiflora</i> (<i>Annual Veldt Grass</i>)	Y		
821.	376 <i>Eragrostis curvula</i> (<i>African Lovegrass</i>)	Y		
822.	429 <i>Eustachys distichophylla</i> (<i>Evergreen Chloris</i>)	Y		
823.	430 <i>Festuca arundinacea</i> (<i>Tall Fescue</i>)	Y		
824.	431 <i>Festuca pratensis</i> (<i>Meadow Fescue</i>)	Y		
825.	434 <i>Gastridium phleoides</i> (<i>Nitgrass</i>)	Y		
826.	439 <i>Hemarthria uncinata</i> (<i>Matgrass</i>)			
827.	20019 <i>Lachnagrostis filiformis</i>			
828.	14985 <i>Melinis repens</i>	Y		
829.	485 <i>Microlaena stipoides</i> (<i>Weeping Grass</i>)			
830.	492 <i>Neurachne alopecuroidea</i> (<i>Foxtail Mulga Grass</i>)			
831.	41961 <i>Panicum hillmanii</i>	Y		
832.	527 <i>Paspalum dilatatum</i>	Y		
833.	532 <i>Paspalum urvillei</i> (<i>Vasey Grass</i>)	Y		
834.	40422 <i>Pentameris pallida</i>	Y		
835.	548 <i>Phalaris aquatica</i> (<i>Phalaris</i>)	Y		
836.	571 <i>Poa annua</i> (<i>Winter Grass</i>)	Y		
837.	573 <i>Poa drummondiana</i> (<i>Knotted Poa</i>)			
838.	582 <i>Polypogon monspeliensis</i> (<i>Annual Beardgrass</i>)	Y		
839.	40425 <i>Rytidosperma caespitosum</i>			
840.	40426 <i>Rytidosperma occidentale</i>			
841.	40427 <i>Rytidosperma setaceum</i>			
842.	19453 <i>Setaria parviflora</i>	Y		
843.	613 <i>Setaria verticillata</i> (<i>Whorled Pigeon Grass</i>)	Y		
844.	617 <i>Sorghum halepense</i> (<i>Johnson Grass</i>)	Y		
845.	35236 <i>Sorghum x drummondii</i> (<i>Sudan Grass</i>)	Y		
846.	8710 <i>Sporobolus africanus</i> (<i>Parramatta Grass</i>)	Y		
847.	45118 <i>Sporobolus schoenoides</i>	Y		
848.	635 <i>Sporobolus virginicus</i> (<i>Marine Couch</i>)			
849.	636 <i>Stenotaphrum secundatum</i> (<i>Buffalo Grass</i>)	Y		
850.	667 <i>Tetrarrhena laevis</i> (<i>Forest Ricegrass</i>)			
851.	673 <i>Themeda triandra</i>			
852.	722 <i>Vulpia bromoides</i> (<i>Squirrel Tail Fescue</i>)	Y		
853.	724 <i>Vulpia myuros</i> (<i>Rat's Tail Fescue</i>)	Y		
854.	12052 <i>Vulpia myuros</i> forma <i>megalura</i>	Y		
855.	33101 <i>Vulpia myuros</i> forma <i>myuros</i>	Y		

Polygalaceae

NatureMap is a collaborative project of the Department of Biodiversity, Conservation and Attractions and the Western Australian Museum.



Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
856.	4550 <i>Comesperma calymega</i> (Blue-spike Milkwort)			
857.	4551 <i>Comesperma ciliatum</i>			
858.	4554 <i>Comesperma flavum</i>			
Polygonaceae				
859.	2412 <i>Muehlenbeckia adpressa</i> (Climbing Lignum)			
860.	16984 <i>Persicaria lapathifolia</i>	Y		
861.	16983 <i>Persicaria maculosa</i>	Y		
Potamogetonaceae				
862.	44492 <i>Stuckenia pectinata</i>			
Pottiaceae				
863.	32315 <i>Barbula calycina</i>			
Primulaceae				
864.	36375 <i>Lysimachia arvensis</i> (Pimpernel)	Y		
865.	36373 <i>Lysimachia minima</i>	Y		
866.	6483 <i>Samolus junceus</i>			
Proteaceae				
867.	14970 <i>Adenanthes barbiger</i>			
868.	1775 <i>Adenanthes cygnorum</i> (Common Woollybush)			
869.	1791 <i>Adenanthes obovatus</i> (Basket Flower)			
870.	32682 <i>Banksia armata</i> var. <i>armata</i>			
871.	1800 <i>Banksia attenuata</i> (Slender Banksia, Piara)			
872.	32580 <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>			
873.	32577 <i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>mellicula</i>			
874.	1819 <i>Banksia grandis</i> (Bull Banksia, Pulgarla)			
875.	1822 <i>Banksia ilicifolia</i> (Holly-leaved Banksia)			
876.	1823 <i>Banksia incana</i>			
877.	1834 <i>Banksia menziesii</i> (Firewood Banksia)			
878.	32202 <i>Banksia nivea</i> (Honeypot Dryandra, Pudjarn)			
879.	32138 <i>Banksia pteridifolia</i> subsp. <i>vernalis</i>		P3	
880.	32080 <i>Banksia sessilis</i> var. <i>sessilis</i>			
881.	1852 <i>Banksia telmatiae</i> (Swamp Fox Banksia)			
882.	1857 <i>Conospermum acerosum</i> (Needle-leaved Smokebush)			
883.	15607 <i>Conospermum acerosum</i> subsp. <i>acerosum</i>			
884.	15041 <i>Conospermum canaliculatum</i>			
885.	1875 <i>Conospermum huegelii</i> (Slender Smokebush)			
886.	1876 <i>Conospermum incurvum</i> (Plume Smokebush)			
887.	15520 <i>Conospermum stoechadis</i> subsp. <i>sclerophyllum</i>			
888.	15611 <i>Conospermum stoechadis</i> subsp. <i>stoechadis</i> (Common Smokebush)			
889.	13999 <i>Conospermum undulatum</i>		T	
890.	1964 <i>Grevillea bipinnatifida</i> (Fuchsia Grevillea)			
891.	19628 <i>Grevillea bipinnatifida</i> subsp. <i>bipinnatifida</i>			
892.	14409 <i>Grevillea curviflora</i> subsp. <i>incurva</i>		T	
893.	13429 <i>Grevillea diversifolia</i> subsp. <i>diversifolia</i>			
894.	1997 <i>Grevillea endlicheriana</i> (Spindly Grevillea)			
895.	13451 <i>Grevillea manglesii</i> subsp. <i>dissectifolia</i>		P3	
896.	13450 <i>Grevillea manglesii</i> subsp. <i>manglesii</i>			
897.	2066 <i>Grevillea pulchella</i> (Woolly-flowered Grevillea)			
898.	2101 <i>Grevillea synapheae</i> (Catkin Grevillea)			
899.	2122 <i>Grevillea wilsonii</i> (Native Fuchsia)			
900.	2128 <i>Hakea amplexicaulis</i> (Prickly Hakea)			
901.	2136 <i>Hakea candolleana</i>			
902.	2143 <i>Hakea conchifolia</i> (Shell-leaved Hakea)			
903.	2149 <i>Hakea cristata</i> (Snail Hakea)			
904.	2152 <i>Hakea cyclocarpa</i> (Ramshorn)			
905.	2158 <i>Hakea erinacea</i> (Hedge-hog Hakea)			
906.	2166 <i>Hakea incrassata</i> (Marble Hakea)			
907.	2175 <i>Hakea lissocarpa</i> (Honey Bush)			
908.	2185 <i>Hakea myrtoides</i> (Myrtle Hakea)			
909.	45333 <i>Hakea neospathulata</i>			
910.	2197 <i>Hakea prostrata</i> (Harsh Hakea)			
911.	2203 <i>Hakea ruscifolia</i> (Candle Hakea)			
912.	2206 <i>Hakea stenocarpa</i> (Narrow-fruited Hakea)			
913.	2212 <i>Hakea sulcata</i> (Furrowed Hakea)			
914.	2214 <i>Hakea trifurcata</i> (Two-leaf Hakea)			
915.	2215 <i>Hakea undulata</i> (Wavy-leaved Hakea)			
916.	2216 <i>Hakea varia</i> (Variable-leaved Hakea)			
917.	2221 <i>Isopogon asper</i>			
918.	29775 <i>Isopogon drummondii</i>			

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919.	2229 <i>Isopogon dubius</i> (<i>Pincushion Coneflower</i>)			P3
920.	2249 <i>Lambertia multiflora</i> (<i>Many-flowered Honeysuckle</i>)			
921.	14083 <i>Lambertia multiflora</i> var. <i>darlingensis</i>			
922.	2255 <i>Persoonia angustiflora</i>			
923.	2262 <i>Persoonia elliptica</i> (<i>Spreading Snottygobble</i>)			
924.	2273 <i>Persoonia saccata</i> (<i>Snottygobble</i>)			
925.	2284 <i>Petrophile biloba</i> (<i>Granite Petrophile</i>)			
926.	2299 <i>Petrophile linearis</i> (<i>Pixie Mops</i>)			
927.	2301 <i>Petrophile macrostachya</i>			
928.	2306 <i>Petrophile rigidula</i>			
929.	2308 <i>Petrophile seminuda</i>			
930.	20053 <i>Petrophile squamata</i> subsp. <i>northern</i> (J. Monks 40)			
931.	2312 <i>Petrophile striata</i>			
932.	2316 <i>Stirlingia latifolia</i> (<i>Blueboy</i>)			
933.	2317 <i>Stirlingia simplex</i>			
934.	2321 <i>Synaphea acutiloba</i> (<i>Granite Synaphea</i>)			
935.	2323 <i>Synaphea gracilima</i>			
936.	16864 <i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>			
937.	2325 <i>Synaphea pinnata</i> (<i>Helena Synaphea</i>)			
938.	30751 <i>Synaphea</i> sp. <i>Pinjarra Plain</i> (A.S. George 17182)		T	
939.	2329 <i>Synaphea spinulosa</i>			
940.	15532 <i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			
Pteridaceae				
941.	29 Anogramma leptophylla (<i>Annual Fern</i>)			
942.	31 Cheilanthes austrotenuifolia			
943.	12818 <i>Cheilanthes sieberi</i> subsp. <i>sieberi</i>			
Ranunculaceae				
944.	2929 Clematis pubescens (<i>Common Clematis</i>)			
Restionaceae				
945.	1056 Alexgeorgea nitens			
946.	17706 Chordifex sinuosus			
947.	17692 Cytonidium leptocarpoides			
948.	17663 Desmocladus asper			
949.	17691 Desmocladus fasciculatus			
950.	16595 Desmocladus flexuosus			
951.	17838 Dielsia stenosstachya			
952.	1070 Hypolaena exsulca			
953.	1075 Lepidobolus preissianus			
954.	18074 Lepidobolus preissianus subsp. <i>preissianus</i>			
955.	1077 Leptocarpus canus (<i>Hoary Twine-rush</i>)			
956.	1078 Leptocarpus coangustatus			
957.	46375 Leptocarpus decipiens			
958.	46380 Leptocarpus kraussii			
959.	19241 Lepyrodia curvescens		P2	
960.	1088 Lepyrodia macra (<i>Large Scale Rush</i>)			
961.	15562 Lepyrodia riparia			
962.	15835 Loxocarya striata			
Rhamnaceae				
963.	13470 Cryptandra arbutiflora var. <i>arbutiflora</i>			
964.	13484 Cryptandra arbutiflora var. <i>tubulosa</i>			
965.	4804 Cryptandra nutans			
966.	4810 Cryptandra scoparia			
967.	16197 Stenantherum emarginatum			
968.	13479 Trymalium ledifolium var. <i>rosmarinifolium</i>			
969.	33418 Trymalium odoratissimum subsp. <i>odoratissimum</i>			
Rosaceae				
970.	3184 Acaena echinata (<i>Sheep's Burr</i>)			
Rubiaceae				
971.	7321 Galium divaricatum		Y	
972.	18254 Opercularia apiciflora			
973.	7346 Opercularia echinocephala (<i>Bristly Headed Stink Weed</i>)			
974.	18255 Opercularia vaginata (<i>Dog Weed</i>)			
Rutaceae				
975.	4414 Boronia cymosa (<i>Granite Boronia</i>)			
976.	4432 Boronia ovata			
977.	11381 Boronia ramosa subsp. <i>anethifolia</i>			

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978.	18529 <i>Philoteca spicata</i> (<i>Pepper and Salt</i>)			
Salicaceae				
979.	20063 <i>Salix babylonica</i>	Y		
980.	43840 <i>Salix matsudana</i>	Y		
Salviniaceae				
981.	42902 <i>Azolla rubra</i>			
Santalaceae				
982.	2342 <i>Leptomeria cunninghamii</i>			
983.	2344 <i>Leptomeria empetriformis</i>			
984.	2356 <i>Santalum acuminatum</i> (<i>Quandong, Warng'a</i>)			
Sapindaceae				
985.	18589 <i>Diplopeltis huegelii</i> subsp. <i>lehmannii</i>			
986.	4761 <i>Dodonaea ericoides</i>			
Scrophulariaceae				
987.	13405 <i>Phyllopodium cordatum</i>	Y		
988.	7113 <i>Zaluzianskya divaricata</i> (<i>Spreading Night Phlox</i>)	Y		
Selaginellaceae				
989.	6 <i>Selaginella gracillima</i> (<i>Tiny Clubmoss</i>)			
Solanaceae				
990.	6946 <i>Anthocercis gracilis</i> (<i>Slender Tailflower</i>)		T	
991.	6970 <i>Nicandra physalodes</i> (<i>Apple of Peru</i>)	Y		
992.	11114 <i>Solanum giganteum</i>	Y		
993.	7020 <i>Solanum linnaeanum</i> (<i>Apple of Sodom</i>)	Y		
994.	7022 <i>Solanum nigrum</i> (<i>Black Berry Nightshade</i>)	Y		
Stylidiaceae				
995.	7674 <i>Levenhookia preissii</i> (<i>Preiss's Stylewort</i>)			
996.	7676 <i>Levenhookia pusilla</i> (<i>Midget Stylewort</i>)			
997.	7677 <i>Levenhookia stipitata</i> (<i>Common Stylewort</i>)			
998.	7679 <i>Stylium adpressum</i> (<i>Trigger-on-stilts</i>)			
999.	7681 <i>Stylium affine</i> (<i>Queen Triggerplant</i>)			
1000.	7684 <i>Stylium amoenum</i> (<i>Lovely Triggerplant</i>)			
1001.	30278 <i>Stylium androsaceum</i>			
1002.	30276 <i>Stylium bicolor</i>			
1003.	48457 <i>Stylium bindoon</i>			
1004.	7693 <i>Stylium brunonianum</i> (<i>Pink Fountain Triggerplant</i>)			
1005.	7694 <i>Stylium bulbiferum</i> (<i>Circus Triggerplant</i>)			
1006.	7696 <i>Stylium calcaratum</i> (<i>Book Triggerplant</i>)			
1007.	7698 <i>Stylium caricifolium</i> (<i>Milkmaids</i>)			
1008.	7699 <i>Stylium carnosum</i> (<i>Fleshy-leaved Triggerplant</i>)			
1009.	7702 <i>Stylium ciliatum</i> (<i>Golden Triggerplant</i>)			
1010.	7712 <i>Stylium despectum</i> (<i>Dwarf Triggerplant</i>)			
1011.	7713 <i>Stylium dichotomum</i> (<i>Pins-and-needles</i>)			
1012.	7716 <i>Stylium diuroides</i> (<i>Donkey Triggerplant</i>)			
1013.	11808 <i>Stylium diuroides</i> subsp. <i>diuroides</i>			
1014.	7717 <i>Stylium divaricatum</i> (<i>Daddy-long-legs</i>)		P4	
1015.	7719 <i>Stylium ecorne</i> (<i>Foot Triggerplant</i>)			
1016.	7734 <i>Stylium guttatum</i> (<i>Dotted Triggerplant</i>)			
1017.	7736 <i>Stylium hispidum</i> (<i>White Butterfly Triggerplant</i>)			
1018.	7756 <i>Stylium longitubum</i> (<i>Jumping Jacks</i>)			
1019.	7768 <i>Stylium obtusatum</i> (<i>Pinafore Triggerplant</i>)			
1020.	7773 <i>Stylium petiolare</i> (<i>Horn Triggerplant</i>)			
1021.	7781 <i>Stylium pubigerum</i> (<i>Yellow Butterfly Triggerplant</i>)			
1022.	7782 <i>Stylium pulchellum</i> (<i>Thumbelina Triggerplant</i>)			
1023.	7783 <i>Stylium pycnostachyum</i> (<i>Downy Triggerplant</i>)			
1024.	33106 <i>Stylium recurvum</i>			
1025.	7785 <i>Stylium repens</i> (<i>Matted Triggerplant</i>)			
1026.	7790 <i>Stylium roseoalatum</i> (<i>Pink-wing Triggerplant</i>)			
1027.	25806 <i>Stylium scariosum</i>			
1028.	7798 <i>Stylium schoenoides</i> (<i>Cow Kicks</i>)			
1029.	<i>Stylium sp.</i>			
1030.	7803 <i>Stylium striatum</i> (<i>Fan-leaved Triggerplant</i>)		P4	
1031.	45594 <i>Stylium tenue</i> subsp. <i>majusculum</i> (<i>Showy Fountain Triggerplant</i>)			
1032.	23511 <i>Stylium thesioides</i> (<i>Delicate Triggerplant</i>)			
1033.	7806 <i>Stylium utricularioides</i> (<i>Pink Fan Triggerplant</i>)			
1034.	40947 <i>Stylium xanthellum</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
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Tecophilaeaceae

1035.	1487 <i>Cyanella hyacinthoides</i>	Y
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Thymelaeaceae

1036.	5231 <i>Pimelea angustifolia</i> (Narrow-leaved Pimelea)
1037.	5232 <i>Pimelea argentea</i> (Silvery Leaved Pimelea)
1038.	11928 <i>Pimelea ciliata</i> subsp. <i>ciliata</i>
1039.	11404 <i>Pimelea imbricata</i> var. <i>major</i>
1040.	11402 <i>Pimelea imbricata</i> var. <i>piligera</i>
1041.	12041 <i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>

Typhaceae

1042.	99 <i>Typha orientalis</i> (Bulrush, Cumbungi)
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Verbenaceae

1043.	19511 <i>Verbena officinalis</i>	Y
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Violaceae

1044.	5216 <i>Hybanthus calycinus</i> (Wild Violet)
1045.	12007 <i>Hybanthus floribundus</i> subsp. <i>floribundus</i>

Xanthorrhoeaceae

1046.	1280 <i>Chamaescilla corymbosa</i> (Blue Squill)
1047.	11299 <i>Chamaescilla corymbosa</i> var. <i>corymbosa</i>
1048.	8788 <i>Chamaescilla versicolor</i>
1049.	1249 <i>Xanthorrhoea acanthostachya</i>
1050.	1252 <i>Xanthorrhoea drummondii</i>
1051.	1253 <i>Xanthorrhoea gracilis</i> (Graceful Grass Tree, Mimidi)
1052.	1256 <i>Xanthorrhoea preissii</i> (Grass tree, Palga)

Zamiaceae

1053.	85 <i>Macrozamia riedlei</i> (Zamia, Djiridji)
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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.

1484/DesktopFauna

Created By Nathan Beerken on 29/07/2020

Kingdom Animalia
Current Names Only Yes
Core Datasets Only Yes
Method 'By Circle'
Centre 116° 00' 52" E, 31° 55' 03" S
Buffer 5km

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
1.	24260 <i>Acanthiza apicalis</i> (Broad-tailed Thornbill, Inland Thornbill)			
2.	24261 <i>Acanthiza chrysorrhoa</i> (Yellow-rumped Thornbill)			
3.	24262 <i>Acanthiza inornata</i> (Western Thornbill)			
4.	24560 <i>Acanthorhynchus superciliosus</i> (Western Spinebill)			
5.	<i>Acariformes</i> sp.			
6.	25535 <i>Accipiter cirrocephalus</i> (Collared Sparrowhawk)			
7.	25536 <i>Accipiter fasciatus</i> (Brown Goshawk)			
8.	24283 <i>Accipiter fasciatus</i> subsp. <i>didimus</i> (Brown Goshawk)			
9.	<i>Acentrogobius bifrenatus</i>			
10.	25751 <i>Acridotheres tristis</i> (Common Myna)	Y		
11.	42368 <i>Acratoscincus trilineatus</i> (Western Three-lined Skink)			
12.	<i>Acroaspis olorina</i>			Y
13.	25755 <i>Acrocephalus australis</i> (Australian Reed Warbler)			
14.	41323 <i>Actitis hypoleucos</i> (Common Sandpiper)		IA	
15.	<i>Akamptogonus novarae</i>			
16.	<i>Aldrichetta forsteri</i>			
17.	<i>Allotereua maculata</i>			
18.	<i>Ambicodamus kochi</i>			
19.	<i>Aname mainae</i>			
20.	<i>Aname tepperi</i>			
21.	24310 <i>Anas castanea</i> (Chestnut Teal)			
22.	24312 <i>Anas gracilis</i> (Grey Teal)			
23.	24313 <i>Anas platyrhynchos</i> (Mallard)			
24.	<i>Anas platyrhynchos</i> subsp. <i>domesticus</i>			
25.	24315 <i>Anas rhynchos</i> (Australasian Shoveler)			
26.	24316 <i>Anas superciliosa</i> (Pacific Black Duck)			
27.	47414 <i>Anhinga novaehollandiae</i> (Australasian Darter)			
28.	24506 <i>Anous tenuirostris</i> subsp. <i>melanops</i> (Australian Lesser Noddy)		T	
29.	<i>Anser anser</i>			
30.	25241 <i>Antaresia stimsoni</i> subsp. <i>stimsoni</i> (Stimson's Python)			
31.	24561 <i>Anthochaera carunculata</i> (Red Wattlebird)			
32.	24562 <i>Anthochaera lunulata</i> (Western Little Wattlebird)			
33.	25670 <i>Anthus australis</i> (Australian Pipit)			
34.	24990 <i>Aprasia pulchella</i> (Granite Worm-lizard)			
35.	24991 <i>Aprasia repens</i> (Sand-plain Worm-lizard)			
36.	24285 <i>Aquila audax</i> (Wedge-tailed Eagle)			
37.	<i>Arachnura higginsi</i>			
38.	<i>Araneus cyphoxis</i>			
39.	<i>Araneus senicaudatus</i>			
40.	25558 <i>Ardea ibis</i> (Cattle Egret)			
41.	25559 <i>Ardea intermedia</i> (Intermediate Egret)			
42.	41324 <i>Ardea modesta</i> (great egret, white egret)			
43.	24340 <i>Ardea novaehollandiae</i> (White-faced Heron)			
44.	24341 <i>Ardea pacifica</i> (White-necked Heron)			
45.	<i>Argiope protensa</i>			
46.	25566 <i>Artamus cinereus</i> (Black-faced Woodswallow)			
47.	24353 <i>Artamus cyanopterus</i> (Dusky Woodswallow)			
48.	<i>Artoria flavimana</i>			
49.	<i>Artoria linnaei</i>			
50.	<i>Artoriopsis expolita</i>			
51.	<i>Aspidopus kunderang</i>			
52.	<i>Atherinosoma wallacei</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
53.	<i>Australacantha minax</i>			
54.	<i>Australomimetus ovidi</i>			
55.	48574 <i>Australotomurus morbidus</i> (<i>cemetery springtail</i> , <i>Guildford springtail</i>)		P3	
56.	24318 <i>Aythya australis</i> (<i>Hardhead</i>)			
57.	<i>Backobourkia brounii</i>			
58.	<i>Backobourkia heroine</i>			
59.	<i>Baiami volucipes</i>			
60.	<i>Barnardius zonarius</i>			
61.	24319 <i>Biziura lobata</i> (<i>Musk Duck</i>)			
62.	24345 <i>Botaurus poiciloptilus</i> (<i>Australasian Bittern</i>)		T	
63.	42381 <i>Brachyurophis semifasciatus</i> (<i>Southern Shovel-nosed Snake</i>)			
64.	24359 <i>Burhinus grallarius</i> (<i>Bush Stone-curlew</i>)			
65.	25713 <i>Cacatua galerita</i> (<i>Sulphur-crested Cockatoo</i>)			
66.	24721 <i>Cacatua galerita</i> subsp. <i>galerita</i> (<i>Sulphur-crested Cockatoo</i>)		Y	
67.	24722 <i>Cacatua leadbeateri</i> (<i>Major Mitchell's Cockatoo</i>)			
68.	25714 <i>Cacatua pastinator</i> (<i>Western Long-billed Corella</i>)			
69.	24723 <i>Cacatua pastinator</i> subsp. <i>butleri</i> (<i>Butler's Corella</i>)			
70.	24724 <i>Cacatua pastinator</i> subsp. <i>pastinator</i> (<i>Muir's Corella</i> , <i>Muir's Corella</i> (<i>Western Corella SW WA</i>))			S
71.	25715 <i>Cacatua roseicapilla</i> (<i>Galah</i>)			
72.	25716 <i>Cacatua sanguinea</i> (<i>Little Corella</i>)			
73.	24727 <i>Cacatua sanguinea</i> subsp. <i>westralensis</i> (<i>Little Corella</i>)			
74.	<i>Cacatua sulphurea</i> subsp. <i>galerita</i>			Y
75.	24729 <i>Cacatua tenuirostris</i> (<i>Eastern Long-billed Corella</i>)		Y	
76.	25598 <i>Cacomantis flabelliformis</i> (<i>Fan-tailed Cuckoo</i>)			
77.	42307 <i>Cacomantis pallidus</i> (<i>Pallid Cuckoo</i>)			
78.	25717 <i>Calyptorhynchus banksii</i> (<i>Red-tailed Black-Cockatoo</i>)			
79.	24731 <i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (<i>Forest Red-tailed Black Cockatoo</i>)		T	
80.	24733 <i>Calyptorhynchus baudinii</i> (<i>Baudin's Cockatoo</i> , <i>White-tailed Long-billed Black Cockatoo</i>)		T	
81.	24734 <i>Calyptorhynchus latirostris</i> (<i>Carnaby's Cockatoo</i> , <i>White-tailed Short-billed Black Cockatoo</i>)		T	
82.	48400 <i>Calyptorhynchus</i> sp. (<i>white-tailed black cockatoo</i>)		T	
83.	<i>Carassius auratus</i>			
84.	24480 <i>Carduelis carduelis</i> subsp. <i>britannica</i> (<i>Goldfinch</i>)		Y	
85.	<i>Celaenia excavata</i>			
86.	<i>Ceratopogonidae</i> sp.			
87.	24086 <i>Cercartetus concinnus</i> (<i>Western Pygmy-possum</i> , <i>Mundarda</i>)			
88.	<i>Cercophonius sulcatus</i>			
89.	<i>Ceryerda cursitans</i>			
90.	24186 <i>Chalinolobus gouldii</i> (<i>Gould's Wattled Bat</i>)			
91.	24187 <i>Chalinolobus morio</i> (<i>Chocolate Wattled Bat</i>)			
92.	24377 <i>Charadrius ruficollis</i> (<i>Red-capped Plover</i>)			
93.	43380 <i>Chelodina collaris</i> (<i>South-western Snake-necked Turtle</i>)			
94.	24321 <i>Chenonetta jubata</i> (<i>Australian Wood Duck</i> , <i>Wood Duck</i>)			
95.	47909 <i>Cheramoeca leucosterna</i> (<i>White-backed Swallow</i>)			
96.	24980 <i>Christinus marmoratus</i> (<i>Marbled Gecko</i>)			
97.	<i>Choicocephalus novaehollandiae</i>			
98.	24431 <i>Chrysococcyx basalis</i> (<i>Horsfield's Bronze Cuckoo</i>)			
99.	24432 <i>Chrysococcyx lucidus</i> subsp. <i>plagiosus</i> (<i>Shining Bronze Cuckoo</i>)			
100.	24288 <i>Circus approximans</i> (<i>Swamp Harrier</i>)			
101.	25675 <i>Colluricinclla harmonica</i> (<i>Grey Shrike-thrush</i>)			
102.	24399 <i>Columba livia</i> (<i>Domestic Pigeon</i>)		Y	
103.	24361 <i>Coracina maxima</i> (<i>Ground Cuckoo-shrike</i>)			
104.	25568 <i>Coracina novaehollandiae</i> (<i>Black-faced Cuckoo-shrike</i>)			
105.	<i>Corixidae</i> sp.			
106.	<i>Cormocephalus aurantiipes</i>			
107.	<i>Cormocephalus rubriceps</i>			
108.	<i>Cormocephalus strigosus</i>			
109.	25592 <i>Corvus coronoides</i> (<i>Australian Raven</i>)			
110.	24420 <i>Cracticus nigrogularis</i> (<i>Pied Butcherbird</i>)			
111.	25595 <i>Cracticus tibicen</i> (<i>Australian Magpie</i>)			
112.	24422 <i>Cracticus tibicen</i> subsp. <i>dorsalis</i> (<i>White-backed Magpie</i>)			
113.	25596 <i>Cracticus torquatus</i> (<i>Grey Butcherbird</i>)			
114.	24918 <i>Crenadactylus ocellatus</i> subsp. <i>ocellatus</i> (<i>Clawless Gecko</i>)			
115.	25398 <i>Crinia georgiana</i> (<i>Quacking Frog</i>)			
116.	25399 <i>Crinia glauerti</i> (<i>Clicking Frog</i>)			
117.	25400 <i>Crinia insignifera</i> (<i>Squelching Froglet</i>)			
118.	25401 <i>Crinia pseudinsignifera</i> (<i>Bleating Froglet</i>)			
119.	30893 <i>Cryptoblepharus buchananii</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
120.	<i>Ctenophorus ornatus</i> (<i>Ornate Crevice-Dragon</i>)			
121.	<i>Ctenotus australis</i>			
122.	<i>Ctenotus delii</i> (<i>Dell's skink, Darling Range southwest Ctenotus</i>)		P4	
123.	<i>Ctenotus fallens</i>			
124.	<i>Ctenotus impar</i>			
125.	<i>Ctenotus labillardieri</i>			
126.	<i>Cyanorhamphus auriceps</i>			Y
127.	<i>Cygnus atratus</i> (<i>Black Swan</i>)			
128.	<i>Cygnus olor</i> (<i>Mute Swan</i>)		Y	
129.	<i>Cyrtophora parnasia</i>			
130.	<i>Dacelo novaeguineae</i> (<i>Laughing Kookaburra</i>)		Y	
131.	<i>Dacelo novaeguineae</i> subsp. <i>novaeguineae</i> (<i>Laughing Kookaburra</i>)		Y	
132.	<i>Daphoenositta chrysoptera</i> (<i>Varied Sittella</i>)			
133.	<i>Daphoenositta chrysoptera</i> subsp. <i>pileata</i> (<i>Varied Sittella, Black-capped Sitella</i>)			
134.	<i>Dasyurus geoffroii</i> (<i>Chuditch, Western Quoll</i>)		T	
135.	<i>Delma fraseri</i> (<i>Fraser's Legless Lizard</i>)			
136.	<i>Delma grayii</i>			
137.	<i>Demansia psammophis</i> subsp. <i>reticulata</i> (<i>Yellow-faced Whipsnake</i>)			
138.	<i>Dendrocygna eytoni</i> (<i>Plumed Whistling Duck</i>)			
139.	<i>Dicaeum hirundinaceum</i> (<i>Mistletoebird</i>)			
140.	<i>Dingosa serrata</i>			
141.	<i>Dinocambala ingens</i>			
142.	<i>Diplodactylus granariensis</i> subsp. <i>granariensis</i>			
143.	<i>Diplodactylus polyophthalmus</i>			
144.	<i>Diplodactylus pulcher</i>			
145.	<i>Dromaius novaehollandiae</i> (<i>Emu</i>)			
146.	<i>Dytiscidae</i> sp.			
147.	<i>Egretta garzetta</i>			
148.	<i>Egretta novaehollandiae</i>			
149.	<i>Elanus axillaris</i>			
150.	<i>Elanus caeruleus</i> subsp. <i>axillaris</i> (<i>Australian Black-shouldered Kite</i>)			
151.	<i>Elapognathus coronatus</i> (<i>Crowned Snake</i>)			
152.	<i>Elseyornis melanops</i> (<i>Black-fronted Dotterel</i>)			
153.	<i>Engraulis australis</i>			
154.	<i>Eolophus roseicapillus</i>			
155.	<i>Eopsaltria georgiana</i> (<i>White-breasted Robin</i>)			
156.	<i>Equus caballus</i> (<i>Horse</i>)		Y	
157.	<i>Eriophora biapicata</i>			
158.	<i>Eriophora pustulosa</i>			
159.	<i>Erythrogenys cinctus</i> (<i>Red-kneed Dotterel</i>)			
160.	<i>Eucyrtops latior</i>			
161.	<i>Falco berigora</i> (<i>Brown Falcon</i>)			
162.	<i>Falco berigora</i> subsp. <i>berigora</i> (<i>Brown Falcon</i>)			
163.	<i>Falco cenchroides</i> (<i>Australian Kestrel, Nankeen Kestrel</i>)			
164.	<i>Falco cenchroides</i> subsp. <i>chenchroides</i> (<i>Australian Kestrel, Nankeen Kestrel</i>)			
165.	<i>Falco longipennis</i> (<i>Australian Hobby</i>)			
166.	<i>Falco peregrinus</i> (<i>Peregrine Falcon</i>)		S	
167.	<i>Favonigobius</i> sp.			
168.	<i>Felis catus</i> (<i>Cat</i>)		Y	
169.	<i>Fulica atra</i> (<i>Eurasian Coot</i>)			
170.	<i>Fulica atra</i> subsp. <i>australis</i> (<i>Eurasian Coot</i>)			
171.	<i>Galaxias occidentalis</i> (<i>Western Minnow</i>)			
172.	<i>Gallinula tenebrosa</i> (<i>Dusky Moorhen</i>)			
173.	<i>Gallinula tenebrosa</i> subsp. <i>tenebrosa</i> (<i>Dusky Moorhen</i>)			
174.	<i>Gallirallus philippensis</i> (<i>Buff-banded Rail</i>)			
175.	<i>Gehyra variegata</i>			
176.	<i>Geocrinia leai</i> (<i>Ticking Frog</i>)			
177.	<i>Geopelia cuneata</i> (<i>Diamond Dove</i>)			
178.	<i>Geotria australis</i> (<i>Pouched Lamprey</i>)		P3	
179.	<i>Gerygone fusca</i> (<i>Western Gerygone</i>)			
180.	<i>Glossiphoniidae</i> sp.			
181.	<i>Glyciphila melanops</i> (<i>Tawny-crowned Honeyeater</i>)			
182.	<i>Gracula religiosa</i>			
183.	<i>Grallina cyanoleuca</i> (<i>Magpie-lark</i>)			
184.	<i>Haliaeetus leucogaster</i> (<i>White-bellied Sea-Eagle</i>)			
185.	<i>Haliastur sphenurus</i> (<i>Whistling Kite</i>)			
186.	<i>Halobaena caerulea</i> (<i>Blue Petrel</i>)			
187.	<i>Hamirostra isura</i> (<i>Square-tailed Kite</i>)			
188.	<i>Heleiodorus albopunctatus</i> (<i>Western Spotted Frog</i>)			
189.	<i>Heleiodorus barycragus</i> (<i>Hooting Frog</i>)			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
190.	<i>Heleioporus eyrei</i> (<i>Moaning Frog</i>)			
191.	<i>Heleioporus psammophilus</i> (<i>Sand Frog</i>)			
192.	<i>Hemicloea</i> sp.			Y
193.	<i>Hemicloea sublimbata</i>			
194.	<i>Hemicordulidae</i> sp.			
195.	<i>Hemiergis initialis</i> subsp. <i>initialis</i>			
196.	<i>Hemiergis quadrilineata</i>			
197.	<i>Hieraetus morphnoides</i> (<i>Little Eagle</i>)			
198.	<i>Himantopus himantopus</i> (<i>Black-winged Stilt</i>)			
199.	<i>Hirundo neoxena</i> (<i>Welcome Swallow</i>)			
200.	<i>Hogna crispipes</i>			
201.	<i>Hogna kuyani</i>			
202.	<i>Holconia westralia</i>			
203.	<i>Hydromys chrysogaster</i> (<i>Water-rat, Rakali</i>)		P4	
204.	<i>Idiomma blackwalli</i>			
205.	<i>Idiosoma signatum</i> (<i>Swan Coastal Plain shield-backed trapdoor spider</i>)		P3	
206.	<i>Isometroides vescus</i>			
207.	<i>Isodon fusciventer</i> (<i>Quenda, southwestern brown bandicoot</i>)		P4	
208.	<i>Isopeda leishmanni</i>			
209.	<i>Isopedella cana</i>			
210.	<i>Isopedella tindalei</i>			
211.	<i>Ixobrychus flavicollis</i> subsp. <i>australis</i> (<i>Black Bittern (southwest subpop.), Australian Black Bittern</i>)		P2	
212.	<i>Lalage tricolor</i> (<i>White-winged Triller</i>)			
213.	<i>Lampona cylindrata</i>			
214.	<i>Larus novaehollandiae</i> subsp. <i>novaehollandiae</i> (<i>Silver Gull</i>)			
215.	<i>Latrodectus hasseltii</i>			
216.	<i>Leptoceridae</i> sp.			
217.	<i>Lerista distinguenda</i>			
218.	<i>Lerista elegans</i>			
219.	<i>Lerista praepedita</i>			
220.	<i>Lialis burtonis</i>			
221.	<i>Libellulidae</i> sp.			
222.	<i>Lichenostomus leucotis</i> (<i>White-eared Honeyeater</i>)			
223.	<i>Lichmera indistincta</i> (<i>Brown Honeyeater</i>)			
224.	<i>Lichmera indistincta</i> subsp. <i>indistincta</i> (<i>Brown Honeyeater</i>)			
225.	<i>Limnodynastes dorsalis</i> (<i>Western Banjo Frog</i>)			
226.	<i>Litoria adelaidensis</i> (<i>Slender Tree Frog</i>)			
227.	<i>Litoria moorei</i> (<i>Motorbike Frog</i>)			
228.	<i>Lophoictinia isura</i>			
229.	<i>Lymnaeidae</i> sp.			
230.	<i>Macropus fuliginosus</i> (<i>Western Grey Kangaroo</i>)			
231.	<i>Macropus robustus</i> subsp. <i>erubescens</i> (<i>Euro, Biggada</i>)			
232.	<i>Malacorhynchus membranaceus</i> (<i>Pink-eared Duck</i>)			
233.	<i>Malurus elegans</i> (<i>Red-winged Fairy-wren</i>)			
234.	<i>Malurus lamberti</i> (<i>Variegated Fairy-wren</i>)			
235.	<i>Malurus splendens</i> (<i>Splendid Fairy-wren</i>)			
236.	<i>Malurus splendens</i> subsp. <i>splendens</i> (<i>Splendid Fairy-wren</i>)			
237.	<i>Manorina flavigula</i> (<i>Yellow-throated Miner</i>)			
238.	<i>Maratus pavonis</i>			
239.	<i>Masasteron mas</i>			
240.	<i>Megalurus gramineus</i> (<i>Little Grassbird</i>)			
241.	<i>Melithreptus brevirostris</i> (<i>Brown-headed Honeyeater</i>)			
242.	<i>Menetia greyii</i>			
243.	<i>Merops ornatus</i> (<i>Rainbow Bee-eater</i>)			
244.	<i>Microcarbo melanoleucus</i>			
245.	<i>Missulena granulosa</i>			
246.	<i>Missulena hoggi</i>			
247.	<i>Missulena occatoria</i>			
248.	<i>Morelia spilota</i> subsp. <i>imbricata</i> (<i>Carpet Python</i>)			
249.	<i>Morethia obscura</i>			
250.	<i>Mus musculus</i> (<i>House Mouse</i>)			Y
251.	<i>Myobatrachus gouldii</i> (<i>Turtle Frog</i>)			
252.	<i>Nannoperca vittata</i>			
253.	<i>Neatypus obliquus</i>			
254.	<i>Neelaps bimaculatus</i> (<i>Black-naped Snake</i>)			
255.	<i>Neochmia temporalis</i> (<i>Red-browed Finch</i>)			
256.	<i>Neophema elegans</i> (<i>Elegant Parrot</i>)			
257.	<i>Neophema pulchella</i>			
258.	<i>Nephila edulis</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹ Endemic To Query Area
259.	<i>Nicodamus mainae</i>			
260.	25252 <i>Notechis scutatus</i> (<i>Tiger Snake</i>)			
261.	<i>Novakiella trituberculosa</i>			
262.	25564 <i>Nycticorax caledonicus</i> (<i>Rufous Night Heron</i>)			
263.	24194 <i>Nyctophilus geoffroyi</i> (<i>Lesser Long-eared Bat</i>)			
264.	<i>Occiperipatoides gilesii</i>			
265.	24407 <i>Ocyphaps lophotes</i> (<i>Crested Pigeon</i>)			
266.	<i>Oecobius navus</i>			
267.	<i>Oligochaeta</i> sp.			
268.	<i>Ommatoiulus moreletii</i>			
269.	<i>Ommatoiulus moreletii</i>			
270.	<i>Oniscidae</i> sp.			
271.	<i>Ornithaeus brevibarbus</i>			
272.	<i>Orthocladiinae</i> sp.			
273.	24085 <i>Oryctolagus cuniculus</i> (<i>Rabbit</i>)		Y	
274.	<i>Ostearius melanopygus</i>			
275.	34016 <i>Ovis aries</i> (<i>Sheep</i>)			
276.	<i>Oxyopes gracilipes</i>			
277.	<i>Oxyopes punctatus</i>			
278.	24328 <i>Oxyura australis</i> (<i>Blue-billed Duck</i>)		P4	
279.	25680 <i>Pachycephala rufiventris</i> (<i>Rufous Whistler</i>)			
280.	24624 <i>Pachycephala rufiventris</i> subsp. <i>rufiventris</i> (<i>Rufous Whistler</i>)			
281.	48591 <i>Pandion cristatus</i> (<i>Osprey, Eastern Osprey</i>)		IA	
282.	25253 <i>Parasuta gouldii</i>			
283.	25681 <i>Pardalotus punctatus</i> (<i>Spotted Pardalote</i>)			
284.	24625 <i>Pardalotus punctatus</i> subsp. <i>punctatus</i> (<i>Spotted Pardalote</i>)			
285.	25682 <i>Pardalotus striatus</i> (<i>Striated Pardalote</i>)			
286.	<i>Pediana occidentalis</i>			
287.	24648 <i>Pelecanus conspicillatus</i> (<i>Australian Pelican</i>)			
288.	48060 <i>Petrochelidon ariel</i> (<i>Fairy Martin</i>)			
289.	48061 <i>Petrochelidon nigricans</i> (<i>Tree Martin</i>)			
290.	48066 <i>Petroica boodang</i> (<i>Scarlet Robin</i>)			
291.	24659 <i>Petroica goodenovii</i> (<i>Red-capped Robin</i>)			
292.	25697 <i>Phalacrocorax carbo</i> (<i>Great Cormorant</i>)			
293.	25698 <i>Phalacrocorax melanoleucos</i> (<i>Little Pied Cormorant</i>)			
294.	24667 <i>Phalacrocorax sulcirostris</i> (<i>Little Black Cormorant</i>)			
295.	25699 <i>Phalacrocorax varius</i> (<i>Pied Cormorant</i>)			
296.	24409 <i>Phaps chalcoptera</i> (<i>Common Bronzewing</i>)			
297.	<i>Pholcus phalangioides</i>			
298.	<i>Phryganoporus candidus</i>			
299.	48071 <i>Phylidonyris niger</i> (<i>White-cheeked Honeyeater</i>)			
300.	24596 <i>Phylidonyris novaehollandiae</i> (<i>New Holland Honeyeater</i>)			
301.	<i>Physidae</i> sp.			
302.	<i>Planorbidae</i> sp.			
303.	24841 <i>Platalea flavipes</i> (<i>Yellow-billed Spoonbill</i>)			
304.	25720 <i>Platycercus icterotis</i> (<i>Western Rosella</i>)			
305.	24747 <i>Platycercus spurius</i> (<i>Red-capped Parrot</i>)			
306.	25721 <i>Platycercus zonarius</i> (<i>Australian Ringneck, Ring-necked Parrot</i>)			
307.	24750 <i>Platycercus zonarius</i> subsp. <i>semitorquatus</i> (<i>Twenty-eight Parrot</i>)			
308.	24843 <i>Plegadis falcinellus</i> (<i>Glossy Ibis</i>)		IA	
309.	25007 <i>Pletholax gracilis</i> subsp. <i>gracilis</i> (<i>Keeled Legless Lizard</i>)			
310.	25703 <i>Podargus strigoides</i> (<i>Tawny Frogmouth</i>)			
311.	24679 <i>Podargus strigoides</i> subsp. <i>brachypterus</i> (<i>Tawny Frogmouth</i>)			
312.	25704 <i>Podiceps cristatus</i> (<i>Great Crested Grebe</i>)			
313.	24680 <i>Podiceps cristatus</i> subsp. <i>australis</i> (<i>Great Crested Grebe</i>)			
314.	25510 <i>Pogona minor</i> (<i>Dwarf Bearded Dragon</i>)			
315.	24907 <i>Pogona minor</i> subsp. <i>minor</i> (<i>Dwarf Bearded Dragon</i>)			
316.	24681 <i>Poliocephalus poliocephalus</i> (<i>Hoary-headed Grebe</i>)			
317.	25731 <i>Porphyrio porphyrio</i> (<i>Purple Swamphen</i>)			
318.	24767 <i>Porphyrio porphyrio</i> subsp. <i>bellus</i> (<i>Purple Swamphen</i>)			
319.	24771 <i>Porzana tabuensis</i> (<i>Spotless Crake</i>)			
320.	25261 <i>Pseudechis australis</i> (<i>Mulga Snake</i>)			
321.	25345 <i>Pseudemydura umbrina</i> (<i>Western Swamp Tortoise, Western Swamp Turtle</i>)		T	
322.	24166 <i>Pseudocheirus occidentalis</i> (<i>Western Ringtail Possum, ngwayir</i>)		T	
323.	25511 <i>Pseudonaja affinis</i> (<i>Dugite</i>)			
324.	25259 <i>Pseudonaja affinis</i> subsp. <i>affinis</i> (<i>Dugite</i>)			
325.	42416 <i>Pseudonaja mengdeni</i> (<i>Western Brown Snake</i>)			
326.	25264 <i>Pseudonaja nuchalis</i> (<i>Gwardar, Northern Brown Snake</i>)			
327.	25433 <i>Pseudophryne guentheri</i> (<i>Crawling Toadlet</i>)			
328.	<i>Purpureicephalus spurius</i>			

Name ID	Species Name	Naturalised	Conservation Code	¹Endemic To Query Area
329.	<i>Pygopus lepidopodus</i> (Common Scaly Foot)			
330.	<i>Rattus rattus</i> (Black Rat)			Y
331.	<i>Recurvirostra novaehollandiae</i> (Red-necked Avocet)			
332.	<i>Rhabdosargus sarba</i>			
333.	<i>Rhipidura albiscapa</i> (Grey Fantail)			
334.	<i>Rhipidura leucophrys</i> (Willie Wagtail)			
335.	<i>Rhipidura leucophrys</i> subsp. <i>leucophrys</i> (Willie Wagtail)			
336.	<i>Richardsonianidae</i> sp.			
337.	<i>Sandalodes joannae</i>			
338.	<i>Sandalodes superbus</i>			
339.	<i>Scolopendra laeta</i>			
340.	<i>Sericornis frontalis</i> (White-browed Scrubwren)			
341.	<i>Servaea melanota</i>			
342.	<i>Servaea spinibarbis</i>			
343.	<i>Simoselaps bertholdi</i> (Jan's Banded Snake)			
344.	<i>Smicromys brevirostris</i> (Weebill)			
345.	<i>Stagonopleura oculata</i> (Red-eared Firetail)			
346.	<i>Stictonetta naevosa</i> (Freckled Duck)			
347.	<i>Storena formosa</i>			
348.	<i>Storena sinuosa</i>			
349.	<i>Streptopelia chinensis</i> (Spotted Turtle-Dove)			Y
350.	<i>Streptopelia chinensis</i> subsp. <i>tigrina</i> (Spotted Turtle-Dove)			Y
351.	<i>Streptopelia senegalensis</i> (Laughing Turtle-Dove)			Y
352.	<i>Strophurus spinigerus</i> subsp. <i>inornatus</i>			
353.	<i>Strophurus spinigerus</i> subsp. <i>spinigerus</i>			
354.	<i>Synothele dukoppin</i>			
355.	<i>Tachybaptus novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
356.	<i>Tachybaptus novaehollandiae</i> subsp. <i>novaehollandiae</i> (Australasian Grebe, Black-throated Grebe)			
357.	<i>Tachyglossus aculeatus</i> (Short-beaked Echidna)			
358.	<i>Tadorna tadornoides</i> (Australian Shelduck, Mountain Duck)			
359.	<i>Talitridae</i> sp.			
360.	<i>Tamopsis darlingtoniana</i>			
361.	<i>Tamopsis perthensis</i>			
362.	<i>Tanyopodinae</i> sp.			
363.	<i>Tarsipes rostratus</i> (Honey Possum, Noolbenger)			
364.	<i>Tasmanicosa leuckartii</i>			
365.	<i>Tetragnatha demissa</i>			
366.	<i>Tetragnatha luteocincta</i>			Y
367.	<i>Thalasseus bergii</i> (Crested Tern)			IA
368.	<i>Threskiornis spinicollis</i> (Straw-necked Ibis)			
369.	<i>Tiliqua occipitalis</i> (Western Bluetongue)			
370.	<i>Tiliqua rugosa</i>			
371.	<i>Tiliqua rugosa</i> subsp. <i>aspera</i>			
372.	<i>Todiramphus sanctus</i> (Sacred Kingfisher)			
373.	<i>Todiramphus sanctus</i> subsp. <i>santus</i> (Sacred Kingfisher)			
374.	<i>Trachycosmus sculptilis</i>			
375.	<i>Trachyspina mundaring</i>			
376.	<i>Tribonyx ventralis</i> (Black-tailed Native-hen)			
377.	<i>Trichoglossus haematodus</i> (Rainbow Lorikeet)			
378.	<i>Trichoglossus haematodus</i> subsp. <i>ruberlorquus</i> (Red-collared Lorikeet)			
379.	<i>Trichosurus vulpecula</i> subsp. <i>vulpecula</i> (Common Brushtail Possum)			
380.	<i>Tringa glareola</i> (Wood Sandpiper)			IA
381.	<i>Tringa nebularia</i> (Common Greenshank, greenshank)			IA
382.	<i>Turnix varius</i> (Painted Button-quail)			
383.	<i>Turnix velox</i> (Little Button-quail)			
384.	<i>Tyto alba</i> (Barn Owl)			
385.	<i>Underwoodisaurus milii</i> (Barking Gecko)			
386.	<i>Urodacus armatus</i>			
387.	<i>Urodacus novaehollandiae</i>			
388.	<i>Urodacus planimanus</i>			
389.	<i>Vanellus miles</i> (Masked Lapwing)			
390.	<i>Varanus gouldii</i> (Bungarra or Sand Monitor)			
391.	<i>Varanus</i> sp.			
392.	<i>Varanus tristis</i> (Racehorse Monitor)			
393.	<i>Venator immansueta</i>			
394.	<i>Venatrix pullastra</i>			
395.	<i>Vespadelus regulus</i> (Southern Forest Bat)			
396.	<i>Vulpes vulpes</i> (Red Fox)			Y
397.	<i>Westrailunio carteri</i> (Carter's Freshwater Mussel)			T

Appendix 3

Fauna Desktop Species List



Table1: Mammals returned from the Fauna Desktop Review.

Family		Conservation Status			Search Directory			DBCA Threatened Fauna Database (5km)
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR		
Tachyglossidae								
<i>Tachyglossus aculeatus</i>	Short-beaked Echidna			•	•			
Dasyuridae								
<i>Dasyurus geoffroii</i>	Western Quoll, Chuditch	VU	VU	•	•	•		•
<i>Phascogale tapoatafa</i>	Brush-tailed Phascogale, Wambenger	CD			•	•		•
Peramelidae								
<i>Isoodon fusciventer</i>	Quenda, Southern Brown Bandicoot	P4		•	•	•		•
Burramyidae								
<i>Cercartetus concinnus</i>	Western Pygmy-possum, Mundarda			•	•			
Pseudocheiridae								
<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum, Ngwayir	CR	VU	•		•		•
Tarsipedidae								
<i>Tarsipes rostratus</i>	Honey Possum, Noolbenger			•	•			
Phalangeridae								
<i>Trichosurus vulpecula</i>	Common Brushtail Possum			•	•			
Potoroidae								
<i>Bettongia penicillata</i>	Woylie; Brush-tailed Bettong	CR	EN			•		
Macropodidae								
<i>Macropus fuliginosus</i>	Western Grey Kangaroo			•	•			
<i>Oosphranter robustus</i>	Euro			•	•			
<i>Setonix brachyurus</i>	Quokka	VU	VU			•		
Muridae								
<i>Hydromys chrysogaster</i>	Rakali, Water-rat	P4		•	•	•		•
<i>Mus musculus</i>	House Mouse			•	•			
<i>Rattus rattus</i>	Black Rat			•	•			
Vespertilionidae								
<i>Chalinolobus gouldii</i>	Gould's Wattled Bat			•	•			
<i>Chalinolobus morio</i>	Chocolate Wattled Bat			•	•			
<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat			•	•			
<i>Vespadelus regulus</i>	Southern Forest-bat			•	•			
Canidae								
<i>Canis familiaris</i>	Dog				•			
<i>Vulpes vulpes</i>	Red Fox			•	•			
Felidae								
<i>Felis catus</i>	Cat			•	•			
Leporidae								
<i>Oryctolagus cuniculus</i>	Rabbit			•	•			
Equidae								
<i>Equus caballus</i>	Horse			•	•			

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
Bovidae							
<i>Ovis aries</i>	Sheep			•	•		

P4 = Priority 4, VU = Vulnerable, EN = Endangered, CR = Critically Endangered, CD = Conservation Dependent

Table 2: Birds returned from the Fauna Desktop Review.

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
Casuariidae							
<i>Dromaius novaehollandiae</i>	Emu			•	•		
Megapodiidae							
<i>Leipoa ocellata</i>	Malleefowl	VU	VU			•	
Anatidae							
<i>Anas castanea</i>	Chestnut Teal			•	•		
<i>Anas gracilis</i>	Grey Teal			•	•		
<i>Anas platyrhynchos</i>	Mallard				•		
<i>Anas rhynchos</i>	Australasian Shoveler			•	•		
<i>Anas superciliosa</i>	Pacific Black Duck			•	•		
<i>Aythya australis</i>	Hardhead			•	•		
<i>Biziura lobata</i>	Musk Duck			•	•		
<i>Chenonetta jubata</i>	Australian Wood Duck			•	•		
<i>Cygnus atratus</i>	Black Swan			•	•		
<i>Dendrocygna eytoni</i>	Plumed Whistling-Duck			•	•		
<i>Malacorhynchus membranaceus</i>	Pink-eared Duck			•	•		
<i>Oxyura australis</i>	Blue-billed Duck	P4		•	•		•
<i>Tadorna tadornoides</i>	Australian Shelduck			•	•		
<i>Stictonetta naevosa</i>	Freckled Duck			•	•		
Podicipedidae							
<i>Podiceps cristatus</i>	Great Crested Grebe			•	•		
<i>Poliocephalus poliocephalus</i>	Hoary-headed Grebe			•			
<i>Tachybaptus novaehollandiae</i>	Australasian Grebe			•	•		
Procellariidae							
<i>Pachyptila turtur subantarctica</i>	Fairy Prion (southern)		EN / MA			•	
Anhingidae							
<i>Anhinga novaehollandiae</i>	Australasian Darter			•			
Phalacrocoracidae							
<i>Microcarbo melanoleucus</i>	Little Pied Cormorant			•			
<i>Phalacrocorax carbo</i>	Great Cormorant			•			

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant			•			
<i>Phalacrocorax varius</i>	Pied Cormorant			•			
Pelecanidae							
<i>Pelecanus conspicillatus</i>	Australian Pelican		MA	•			
Ardeidae							
<i>Ardea alba</i>	Great Egret				•	•	
<i>Ardea ibis</i>	Cattle Egret			•	•	•	•
<i>Ardea intermedia</i>	Intermediate Egret			•			
<i>Ardea modesta</i>	Eastern Great Egret		MA	•	•		•
<i>Ardea pacifica</i>	White-necked Heron			•	•		
<i>Botaurus poicloptilus</i>	Australasian Bittern	EN	EN	•	•	•	
<i>Egretta garzetta</i>	Little Egret			•	•		
<i>Egretta novaehollandiae</i>	White-faced Heron			•	•		
<i>Egretta sacra</i>	Eastern Reef Egret				•		
<i>Ixobrychus dubius</i>	Australian Little Bittern	P4			•		
<i>Ixobrychus flavicollis</i>	Black Bittern	P2		•	•		
<i>Nycticorax caledonicus</i>	Nankeen Night-Heron			•	•		
Threskiornithidae							
<i>Platalea flavipes</i>	Yellow-billed Spoonbill			•			
<i>Plegadis falcinellus</i>	Glossy Ibis	MI	MI	•	•		
<i>Threskiornis moluccu</i>	Australian White Ibis				•		
<i>Threskiornis spinicollis</i>	Straw-necked Ibis		MA	•	•		
Accipitridae							
<i>Accipiter cirrocephalus</i>	Collared Sparrowhawk			•	•		
<i>Accipiter fasciatus</i>	Brown Goshawk		MA	•	•		
<i>Aquila audax</i>	Wedge-tailed Eagle			•	•		
<i>Circus approximans</i>	Swamp Harrier			•	•		
<i>Elanus axillaris</i>	Black-shouldered Kite			•	•		
<i>Haliaeetus leucogaster</i>	White-bellied Sea-Eagle		MA	•		•	
<i>Haliastur sphenurus</i>	Whistling Kite		MA	•	•		
<i>Hamirostra isura</i>	Black-breasted Buzzard			•	•		
<i>Hieraetus morphnoides</i>	Little Eagle			•	•		
<i>Lophoictinia isura</i>	Square-tailed Kite			•			
Pandionidae							
<i>Pandion cristatus</i>	Eastern Osprey	MI	MI	•		•	•
Falconidae							
<i>Falco berigora</i>	Brown Falcon			•	•		
<i>Falco cenchroides</i>	Nankeen Kestrel		MA	•	•		
<i>Falco longipennis</i>	Australian Hobby			•	•		

Family		Conservation Status		Search Directory				DBCA Threatened Fauna Database (5km)
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR		
<i>Falco peregrinus</i>	Peregrine Falcon	OS		•	•			•
Rallidae								
<i>Fulica atra</i>	Eurasian Coot			•	•			
<i>Gallinula tenebrosa</i>	Dusky Moorhen			•	•			
<i>Gallirallus philippensis</i>	Buff-Banded Rail			•	•			
<i>Porphyrio porphyrio</i>	Purple Swamphen			•	•			
<i>Porzana fluminea</i>	Australian Spotted Crake				•			
<i>Porzana tabuensis</i>	Spotless Crake		MA	•	•			
<i>Tribonyx ventralis</i>	Black-tailed Native-hen			•	•			
Burhinidae								
<i>Burhinus grallarius</i>	Bush Stone-curlew			•				
Turnicidae								
<i>Turnix varius</i>	Painted Button-quail			•	•			
<i>Turnix velox</i>	Little Button-quail			•				
Scolopacidae								
<i>Actitis hypoleucus</i>	Common Sandpiper	MI	MI / MA	•		•		
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	MI	MI / MA			•		
<i>Calidris ferruginea</i>	Curlew Sandpiper	CR / I MI	CR / MI / MA			•		
<i>Calidris melanotos</i>	Pectoral Sandpiper	MI	MI / MA			•		
<i>Numenius madagascariensis</i>	Eastern Curlew	CR / MI	CR / MI			•		
<i>Tringa glareola</i>	Wood Sandpiper	MI	MI	•				
<i>Tringa nebularia</i>	Common Greenshank	MI	MI	•	•	•		
Recurvirostridae								
<i>Himantopus himantopus</i>	Black-winged Stilt		MA	•				
<i>Recurvirostra novaehollandiae</i>	Red-necked Avocet			•				
Rostratulidae								
<i>Rostratula australis</i>	Australian Painted Snipe	EN	EN / MA			•		
Charadriidae								
<i>Charadrius ruficapillus</i>	Red-capped Plover		MA	•				
<i>Elseornis melanops</i>	Black-fronted Dotterel			•	•			
<i>Erythrogonys cinctus</i>	Red-kneed Dotterel			•				
<i>Thinornis rubricollis</i>	Hooded Plover	P4	MA			•		
<i>Vanellus miles</i>	Masked Lapwing			•				
Laridae								
<i>Chlidonias hybrida</i>	Whiskered Tern				•			
<i>Chroicocephalus novaehollandiae</i>	Silver Gull			•				
<i>Sternula nereis nereis</i>	Australian Fairy Tern	VU	VU			•		
<i>Thalasseus bergii</i>	Crested Tern	MI	MI	•				

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
Columbidae							
<i>Columba livia</i>	Rock Dove			•	•		
<i>Geopelia cuneata</i>	Diamond Dove			•	•		
<i>Ocyphaps lophotes</i>	Crested Pigeon			•	•		
<i>Phaps chalcoptera</i>	Common Bronzewing			•	•		
<i>Streptopelia chinesis</i>	Spotted Dove			•	•		
<i>Streptopelia senegalensis</i>	Laughing Dove			•	•		
Cacatuidae							
<i>Cacatua pastinator pastinator</i>	Muir's Corella	CD		•			•
<i>Cacatua sanguinea</i>	Little Corella			•	•		
<i>Cacatua tenuirostris</i>	Long-billed Corella			•	•		
<i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black-Cockatoo	VU	VU	•	•	•	•
<i>Calyptorhynchus baudinii</i>	Baudins Black-Cockatoo	EN	EN	•	•	•	•
<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	EN	EN	•	•	•	•
<i>Eolophus roseicapillus</i>	Galah			•	•		
<i>Nymphicus hollandicus</i>	Cockatiel				•		
Psittaculidae							
<i>Parvipsitta porphyrocephala</i>	Purple-crowned Lorikeet				•		
<i>Trichoglossus moluccanus</i>	Rainbow Lorikeet			•	•		
Psittacidae							
<i>Barnardius zonarius</i>	Australian Ringneck			•	•		
<i>Melopsittacus undulatus</i>	Budgerigar				•		
<i>Neophema elegans</i>	Elegant Parrot			•	•		
<i>Neophema petrophila</i>	Rock Parrot				•		
<i>Platycercus icterotis</i>	Western Rosella			•	•		
<i>Polytelis anthopeplus</i>	Regent Parrot				•		
<i>Purpureicephalus spurius</i>	Red-capped Parrot			•	•		
Cuculidae							
<i>Cacomantis flabelliformis</i>	Fan-tailed Cuckoo			•	•		
<i>Cacomantis pallidus</i>	Pallid Cuckoo		MA	•	•		
<i>Chrysococcyx basalis</i>	Horsfield's Bronze-Cuckoo			•	•		
<i>Chrysococcyx lucidus</i>	Shining Bronze-Cuckoo			•	•		
Strigidae							
<i>Ninox novaseelandiae</i>	Southern Boobook				•		
Tytonidae							
<i>Tyto alba</i>	Barn Owl			•	•		
<i>Tyto javanica</i>	Eastern Barn Owl				•		
<i>Tyto novaehollandiae</i>	Masked Owl				•		

Family		Conservation Status		Search Directory				DBCA Threatened Fauna Database (5km)
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR		
Podargidae								
<i>Podargus strigoides</i>	Tawny Frogmouth			•	•			
Apodidae								
<i>Apus pacificus</i>	Fork-tailed Swift	MI	MI		•	•		
Halcyonidae								
<i>Dacelo novaeguineae</i>	Laughing Kookaburra			•	•			
<i>Todiramphus pyrrhopygius</i>	Red-backed Kingfisher				•			
<i>Todiramphus sanctus</i>	Sacred Kingfisher		MA	•	•			
Meropidae								
<i>Merops ornatus</i>	Rainbow Bee-eater		MA	•	•	•	•	
Climacteridae								
<i>Climacteris rufa</i>	Rufous Treecreeper				•			
Maluridae								
<i>Malurus assimilis</i>	Purple-backed Fairy-wren				•			
<i>Malurus elegans</i>	Red-winged Fairy-wren			•	•			
<i>Malurus lamberti</i>	Variegated Fairy-wren			•	•			
<i>Malurus leucopterus</i>	White-winged Fairy-wren				•			
<i>Malurus splendens</i>	Splendid Fairy-wren			•	•			
Pardalotidae								
<i>Pardalotus rubricatus</i>	Red-browed Pardalote			•	•			
<i>Pardalotus striatus</i>	Striated Pardalote			•	•			
Dasyornithidae								
<i>Dasyornis longirostris</i>	Western Bristlebird	CR	CR		•			
Acanthizidae								
<i>Acanthiza apicalis</i>	Inland Thornbill			•	•			
<i>Acanthiza chrysorrhoa</i>	Yellow-rumped Thornbill			•	•			
<i>Acanthiza inornata</i>	Western Thornbill			•	•			
<i>Gerygone fusca</i>	Western Gerygone			•	•			
<i>Sericornis frontalis</i>	White-browed Scrubwren			•	•			
<i>Smicrornis brevirostris</i>	Weebill			•	•			
Meliphagidae								
<i>Acanthanthorhynchus superciliosus</i>	Western Spinebill			•	•			
<i>Anthochaera carunculata</i>	Red Wattlebird			•	•			
<i>Anthochaera lunulata</i>	Western Wattlebird			•	•			
<i>Gavicalis virescens</i>	Singing Honeyeater				•			
<i>Glyciphilia melanops</i>	Tawny-crowned Honeyeater			•	•			
<i>Lichmera indistincta</i>	Brown Honeyeater			•	•			
<i>Manorina flavigula</i>	Yellow-throated Miner			•	•			
<i>Melithreptus brevirostris</i>	Brown-headed Honeyeater			•	•			

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
<i>Melithreptus lunatus</i>	White-naped Honeyeater				•		
<i>Nesoptilotis leucotis</i>	White-eared Honeyeater			•	•		
<i>Phylidonyris niger</i>	White-cheeked Honeyeater			•	•		
<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater			•	•		
<i>Ptilotula ornata</i>	Yellow-plumed Honeyeater				•		
Petroicidae							
<i>Eopsaltria griseogularis</i>	Western Yellow Robin				•		
<i>Eopsaltria georgiana</i>	White-breasted Robin			•	•		
<i>Melanodryas cucullata</i>	Hooded Robin				•		
<i>Petroica boodang</i>	Scarlet Robin			•	•		
<i>Petroica goodenovii</i>	Red-capped Robin			•	•		
Neosittidae							
<i>Daphoenositta chrysopera</i>	Varied Sittella			•	•		
Pachycephalidae							
<i>Colluricincla harmonica</i>	Grey Shrike-thrush			•	•		
<i>Falcunculus frontatus</i>	Crested Shrike-tit				•		
<i>Pachycephala rufiventris</i>	Rufous Whistler			•	•		
<i>Pachycephala occidentalis</i>	Western Whistler				•		
Monarchidae							
<i>Grallina cyanoleuca</i>	Magpie-lark		MA	•	•		
Rhipiduridae							
<i>Rhipidura albiscapa</i>	Grey Fantail			•	•		
<i>Rhipidura leucophrys</i>	Willie Wagtail			•	•		
Campephagidae							
<i>Coracina maxima</i>	Ground Cuckoo-shrike			•	•		
<i>Coracina novaehollandiae</i>	Black-faced Cuckoo-shrike		MA	•	•		
<i>Lalage tricolor</i>	White-winged Triller			•	•		
Artamidae							
<i>Artamus cinereus</i>	Black-faced Woodswallow			•	•		
<i>Artamus cyanopterus</i>	Dusky Woodswallow			•	•		
<i>Cracticus nigrogularis</i>	Pied Butcherbird			•	•		
<i>Cracticus tibicen</i>	Australian Magpie			•	•		
<i>Cracticus torquatus</i>	Grey Butcherbird			•	•		
<i>Strepera versicolor</i>	Grey Currawong				•		
Corvidae							
<i>Corvus coronoides</i>	Australian Raven			•	•		
Motacillidae							
<i>Anthus novaeseelandiae</i>	Australasian Pipit			•	•		
<i>Motacilla cinerea</i>	Grey Wagtail				•		

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
Estrildidae							
<i>Neochmia temporalis</i>	Red-browed Finch			•	•		
<i>Stagonopleura oculata</i>	Red-eared Firetail			•	•		
Nectariniidae							
<i>Dicaeum hirundinaceum</i>	Mistletoebird			•	•		
Hirundinidae							
<i>Cheramoeca leucosterna</i>	White-backed Swallow			•	•		
<i>Hirundo neoxena</i>	Welcome Swallow		MA	•	•		
<i>Petrochelidon ariel</i>	Fairy Martin			•	•		
<i>Petrochelidon nigricans</i>	Tree Martin		MA	•	•		
Acrocephalidae							
<i>Acrocephalus australis</i>	Australian Reed-Warbler			•	•		
Locustellidae							
<i>Cincloramphus cruralis</i>	Brown Songlark				•		
<i>Cincloramphus matthewsi</i>	Rufous Songlark				•		
<i>Megalurus gramineus</i>	Little Grassbird			•	•		
Timaliidae							
<i>Zosterops lateralis</i>	Silveryeye		MA	•	•		

P2 = Priority 2, P4 = Priority 4, VU = Vulnerable, EN = Endangered, CR = Critically Endangered, MA = Marine, MI = Migratory, CD = Conservation Dependent, OS = Other Specially Protected

Reptiles returned from the Fauna Desktop Review.

Family		Conservation Status		Search Directory			
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	DBCA Threatened Fauna Database (5km)
Chelidae							
<i>Chelodina colliei</i>	Oblong Turtle			•	•		
<i>Pseudemydura umbrina</i>	Western Swamp Turtle	CR	CR	•	•		•
Carphodactylidae							
<i>Underwoodisaurus milii</i>	Southern Barking Gecko			•	•		
Diplodactylidae							
<i>Crenadactylus ocellatus</i>	South-western Clawless Gecko			•	•		
<i>Diplodactylus granariensis</i>	Wheatbelt Stone Gecko			•	•		
<i>Diplodactylus lateroides</i>	Speckled Stone Gecko				•		
<i>Diplodactylus polyophthalmus</i>	Spotted Sandplain Gecko			•			
<i>Diplodactylus pulcher</i>	Fine-faced Gecko			•	•		
<i>Diplodactylus vittatus</i>	Wood Gecko				•		
<i>Strophurus spinigerus</i>	Western Spiny-tailed Gecko			•	•		

Family		Conservation Status		Search Directory			DBCA Threatened Fauna Database (5km)
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	
Gekkonidae							
<i>Christinus marmoratus</i>	Marbled Gecko			•	•		
<i>Gehyra variegata</i>	Tree Detta			•	•		
Pygopodidae							
<i>Aprasia pulchella</i>	Pretty Worm-Lizard			•	•		
<i>Aprasia repens</i>	Sedgeland's Worm-Lizard			•	•		
<i>Delma fraseri</i>	Fraser's Delma			•	•		
<i>Delma grayii</i>	Side-barred Delma			•	•		
<i>Lialis burtonis</i>	Burton's Legless Lizard			•	•		
<i>Pletholax gracilis</i>	Keeled Legless Lizard			•	•		
<i>Pygopus lepidopodus</i>	Common Scaly-foot			•	•		
Agamidae							
<i>Ctenophorus ornatus</i>	Ornate Crevice Dragon			•	•		
<i>Pogona minor</i>	Dwarf Bearded Dragon			•	•		
Scincidae							
<i>Acritoscincus trilineatus</i>	Western Three-lined Skink			•	•		
<i>Cryptoblepharus buchananii</i>	Buchanan's Snake-eyed Skink			•	•		
<i>Ctenotus australis</i>	Western Limestone Ctenotus			•	•		
<i>Ctenotus delli</i>	Darling Range Heath Ctenotus	P4		•			•
<i>Ctenotus fallens</i>	West-coast Laterite Ctenotus			•			
<i>Ctenotus gemmula</i>	Jewelled Sandplain Ctenotus	P3			•		
<i>Ctenotus impar</i>	Odd-striped Ctenotus			•	•		
<i>Ctenotus inornatus</i>	Bar-shouldered Ctenotus				•		
<i>Ctenotus labillardieri</i>	Common South-west Ctenotus			•	•		
<i>Hemiergis initialis</i>	South-western Earless Skink			•	•		
<i>Hemiergis quadrilineata</i>	Two-toed Earless Skink			•	•		
<i>Lerista distinguenda</i>	South-western Orange-tailed Slider			•	•		
<i>Lerista elegans</i>	Elegant Slider			•	•		
<i>Lerista praepedita</i>	Blue-tailed West-coast Slider			•	•		
<i>Menetia greyii</i>	Common Dwarf Skink			•	•		
<i>Morethia obscura</i>	Shrubland Morethia Skink			•	•		
<i>Tiliqua occipitalis</i>	Western Blue-tongue			•	•		
<i>Tiliqua rugosa</i>	Bobtail, Shingleback			•	•		
Varanidae							
<i>Varanus gouldii</i>	Sand Goanna, Bungarra			•	•		
<i>Varanus rosenbergi</i>	Heath Monitor				•		
<i>Varanus tristis</i>	Black-headed Monitor			•	•		
Typhlopidae							
<i>Anilios australis</i>	Southern Blind Snake				•		

Family		Conservation Status		Search Directory			DBCA Threatened Fauna Database (5km)
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR	
<i>Anilius bituberculatus</i>	Prong-snouted Blind Snake				•		
<i>Anilius pinguis</i>	Rotund Blind Snake				•		
<i>Anilius waitii</i>	Beaked Blind Snake				•		
Pythonidae							
<i>Antaresia stimsoni</i>	Stimson's Python			•	•		
<i>Morelia spilota</i>	Carpet Python				•		
Elapidae							
<i>Brachyurophis semifasciatus</i>	Southern Shovel-nosed Snake			•	•		
<i>Demansia psammophis</i>	Yellow-faced Whip-Snake			•	•		
<i>Elapognathus coronatus</i>	Western Crowned Snake			•	•		
<i>Neelaps bimaculatus</i>	Black-naped Snake			•	•		
<i>Notechis scutatus</i>	Tiger Snake			•	•		
<i>Parasuta gouldii</i>	Gould's Hooded Snake			•	•		
<i>Pseudechis australis</i>	Mulga Snake			•	•		
<i>Pseudonaja affinis</i>	Dugite			•	•		
<i>Pseudonaja mengdeni</i>	Western Brown Snake			•	•		
<i>Pseudonaja nuchalis</i>	Gwardar, Northern Brown Snake			•			
<i>Simoselaps bertholdi</i>	Jan's Banded Snake			•	•		

P3 = Priority 3, P4 = Priority 4, CR = Critically Endangered

Amphibians returned from the Fauna Desktop Review.

Family		Conservation Status		Search Directory		
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR
Hylidae						
<i>Litoria adelaidensis</i>	Slender Tree Frog			•	•	
<i>Litoria moorei</i>	Moore's Frog			•	•	
Limnodynastidae						
<i>Heleioporus albopunctatus</i>	Western Spotted Frog			•	•	
<i>Heleioporus barycragus</i>	Western Marsh Frog			•	•	
<i>Heleioporus eyrei</i>	Moaning Frog			•	•	
<i>Heleioporus inornatus</i>	Whooping Frog				•	
<i>Heleioporus psammophilus</i>	Sand Frog			•	•	
<i>Limnodynastes dorsalis</i>	Western Banjo Frog			•	•	
Myobatrachidae						
<i>Crinia georgiana</i>	Quacking Froglet			•	•	
<i>Crinia glauerti</i>	Clicking Froglet			•	•	
<i>Crinia insignifera</i>	Squelching Froglet			•	•	

Family		Conservation Status		Search Directory		
Species	Common Name	State	Commonwealth	NatureMap	ALA	EPBC PMR
<i>Crinia pseudinsignifera</i>	Bleating Froglet			•	•	
<i>Crinia signifera</i>	South-coast Froglet				•	
<i>Geocrinia leai</i>	Ticking Frog			•	•	
<i>Myobatrachus gouldii</i>	Turtle Frog			•	•	
<i>Pseudophryne guentheri</i>	Crawling Toadlet			•	•	

Appendix 4a

Likelihood of Significant Flora
Occurring in the Survey Area



Taxon	Habit	Habitat	Database Searches				Likelihood of Occurrence Within the Survey Areas			
			NatureMap	Mandrills Database	WA Herbarium	EPBC PMST	Initial Ranking Based on Desktop Review	Final Ranking Including Results of 2019/2020 Field Survey		
								Level 1 Survey Area	Level 2 Survey Area	
Threatened										
<i>Acacia anomala</i>	Slender form, full flower, grasslike shrub to 40 cm.	Slopes,.Brown sandy loam.			✓	✓	May potentially occur; some suitable habitat present.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.	
<i>Acacia aphylla</i>	Divaricately branched, spinescent, glaucous shrub, 0.9-2.5 m high.	Sand, loam, clay loam. Granite outcrops, hills.	✓	✓	✓	✓	Likely to occur; some suitable habitat present and records in close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.	
<i>Andersonia gracilis</i>	Slender erect or open straggly shrub, 0.1-0.5(-1) m high	White/grey sand, sandy clay, gravelly loam. Winter-wet areas, near swamps.				✓	Would not occur, last record from 1901.	Would not occur.	Would not occur.	
<i>Anthocercis gracilis</i>	Slender, inconspicuous, intricately branched, short-lived shrub.	Granitic loam, among granite boulders.	✓	✓	✓	✓	May potentially occur; however no suitable habitat present.	Would not occur.	Unlikely to occur.	
<i>Calectasia cyanea</i>	Rhizomatous, clump forming, woody perennial, herb, 0.1-0.6 m high, to 0.3 m wide.	White, grey or yellow sand, gravel.	✓				Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Calytrix breviseta</i> subsp. <i>breviseta</i>	Flowers purple-blue.	Swampy clay flats.	✓		✓	✓	Unlikely to occur; previous records sit within industrial area	Would not occur.	Unlikely to occur.	
<i>Conospermum undulatum</i>	Straggling, multi-stemmed shrub to 1.4 m.	Sandplains - Bassendean Sand.	✓	✓	✓	✓	Recorded.	Would not occur.	Recorded.	
<i>Darwinia apiculata</i>	Densely branched shrub, 0.4-0.5 m high.	Lateritic soils.			✓	✓	Unlikely to occur; no particularly suitable habitat and most recent and nearest record from 1982.	Would not occur.	Would not occur.	
<i>Diplolaena andrewsii</i>	Erect shrub, 0.5-1 m high, leaves broadly cordate.	Loam, clay. Granite outcrops & hillsides.				✓	Would not occur; no suitable habitat	Would not occur.	Would not occur.	
<i>Diuris drummondii</i>	Tuberous, perennial, herb, 0.5-1.05 m high	Low-lying depressions, swamps.	✓			✓	May potentially occur; suitable habitat present; one record in close proximity.	Would not occur.	Unlikely to occur; this orchid was not recorded during the field survey.	
<i>Diuris micrantha</i>	Tuberous, perennial, herb, 0.3-0.6 m high.	Brown loamy clay. Winter-wet swamps, in shallow water.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Diuris purdiei</i>	Tuberous, perennial, herb, 0.15-0.35 m high.	Grey-black sand, moist. Winter-wet swamps.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Drakaea elastica</i>	Tuberous, perennial, herb, 0.12-0.3 m high.	White or grey sand. Low-lying situations adjoining winter-wet swamps.				✓	Would not occur; no suitable habitat and most recent and nearest record from 1926.	Would not occur.	Would not occur.	
<i>Drakaea micrantha</i>	Tuberous, perennial, herb, 0.15-0.3 m high	White-grey sand.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Eleocharis keigheryi</i>	Rhizomatous, clumped perennial, grass-like or herb (sedge), to 0.4 m high	Clay, sandy loam. Emergent in freshwater creeks, claypans.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Eucalyptus ×balanites</i>	(Mallee), to 5 m high, bark rough, flaky.	Sandy soils with lateritic gravel.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	
<i>Grevillea curviloba</i> subsp. <i>incurva</i>	Prostrate to erect shrub, 0.1-2.5 m high.	Sand, sandy loam. Winter-wet heath.	✓			✓	Would not occur; no suitable habitat.	Would not occur.	Would not occur.	
<i>Lepidosperma rostratum</i>	Rhizomatous, tufted perennial, grass-like or herb (sedge), 0.5 m high.	Peaty sand, clay.				✓	Unlikely to occur; no particularly suitable habitat and no records in close proximity.	Would not occur.	Unlikely to occur.	
<i>Macarthuria keigheryi</i>	Perennial herb or shrub.	Flat, grey sand.	✓	✓	✓	✓	Likely to occur; some suitable habitat present and records in close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.	
<i>Synaphea</i> sp. Fairbridge Farm (D. Papenfus 696)	Dense, clumped shrub, to 0.3 m high, to 0.4 m wide.	Sandy with lateritic pebbles. Near winter-wet flats, in low woodland with weedy grasses.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.	

<i>Synaphea sp. Pinjarra Plain</i> (A.S. George 17182)	Erect, clumped shrub (sub-shrub), to 0.8 m high.	Clays, clay loams. Flats, seasonally wet areas, railroad reserves often with wet depressions or drains.	✓				May potentially occur; suitable habitat present and one record from 2007 in close proximity.	Would not occur.	Unlikely to occur.
<i>Thelymitra dedmaniarum</i>	Tuberous, perennial, herb, to 0.8 m high.	Granite.				✓	Would not occur; no suitable habitat and no records in close proximity.	Would not occur.	Would not occur.
<i>Thelymitra stellata</i>	Tuberous, perennial, herb, 0.15-0.25 m high.	Sand, gravel, lateritic loam.			✓	✓	Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Trithuria occidentalis</i>	Plant red, growing in tiny tufts.	Muddy spots.	✓		✓		Unlikely to occur; no particularly suitable habitat and most recent records are from 1901	Would not occur.	Unlikely to occur.
Priority 1									
<i>Boronia humifusa</i>	Low-growing, wiry perennial, herb, 0.1-0.2 m high.	Gravelly clay loam over laterite. Jarrah-marri open forest.		✓	✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Hydrocotyle striata</i>	Herb	Clay areas, springs.	✓		✓		Unlikely to occur; no particularly suitable habitat and most recent records are from 1901	Would not occur.	Unlikely to occur.
<i>Senecio gilbertii</i>	Erect, slender perennial, herb, to 1.5 m high.	Peaty sand. Swamps, slopes.	✓		✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Thelymitra magnifica</i>	Perennial, herb.	Stony ridges.	✓	✓	✓		May potentially occur; multiple records in close proximity however no particularly suitable habitat.	Would not occur.	Unlikely to occur.
Priority 2									
<i>Johnsonia pubescens</i> subsp. <i>cognorum</i>	Tufted perennial, herb, 0.15-0.25 m high.	Grey-white-yellow sand. Flats, seasonally-wet sites.			✓		Likely to occur; suitable habitat present and multiple records within close proximity.	Would not occur.	Recorded.
<i>Lepyrodia curvescens</i>	Dioecious, shortly creeping, tufted rhizomatous, herb, 0.24-0.4 m.	Sand, laterite. Seasonally inundated swampland.	✓		✓		Recorded.	Would not occur.	Unlikely to occur; this rush was not recorded during the field survey despite targeted searches in the area of the historical record
<i>Melaleuca viminalis</i>	Slender erect weeping shrub to 3 m.	Creeklines. Sandy clay.			✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Phyllangium palustre</i>	Erect, succulent annual, herb, 5 cm.	Winter-wet claypans, low-lying seasonal wetlands.	✓		✓		Unlikely to occur; no particularly suitable habitat and most recent record is from 1901.	Would not occur.	Unlikely to occur.
<i>Thelymitra variegata</i>	Tuberous, perennial, herb, 0.1-0.35 m high.	Sandy clay, sand, laterite.			✓		Unlikely to occur; no particularly suitable habitat and most recent records is from 1903.	Would not occur.	Unlikely to occur.
Priority 3									
<i>Acacia drummondii</i> subsp. <i>affinis</i>	Erect, perennial shrub up to 1 m high. Flowers yellow.	Brown gravelly loam	✓	✓	✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Acacia oncinophylla</i> subsp. <i>oncinophylla</i>	Shrub, 0.9-2.5 m high, 'minni-ritch'i bark.	Granitic soils.	✓	✓	✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Asteridea gracilis</i>	Annual, herb, 0.15-0.35 m high.	Sand, clay, gravelly soils.		✓	✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Banksia pteridifolia</i> subsp. <i>vermalis</i>	Prostrate, lignotuberous shrub, to 0.4 m high.	White/grey sand over laterite.	✓		✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Beaufortia purpurea</i>	Erect or spreading shrub, 0.3-1.5 m high.	Lateritic or granitic soils. Rocky slopes.	✓		✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.

<i>Byblis gigantea</i>	Small, branched perennial herb (or sub-shrub), to 0.45 m high.	Sandy-peat swamps. Seasonally wet areas.	✓	✓	✓		May potentially occur; no particularly suitable habitat however recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Carex tereticaulis</i>	Monoecious, rhizomatous, tufted perennial, grass-like or herb (sedge), 0.7 m high.	Black peaty sand.	✓		✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Eryngium sp. Subdecumbens (G.J. Keighery 5390)</i>	Perennial herb to 8 cm	Winter inundated claypans. Clay areas.	✓		✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Grevillea manglesii subsp. dissectifolia</i>	Spreading, virgate shrub, 1.5-3(-5) m high, up to 3 m wide.	Gravelly loam, moist. Roadsides.	✓	✓	✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Haemodorum litoratum</i>	Bulbaceous, perennial, herb, 0.45-1.2(-2) m high.	Grey or yellow sand, gravel.		✓	✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Halgnania corymbosa</i>	Erect shrub, 0.35-1 m high.	Gravelly soils, soils over granite.	✓		✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Isopogon autumnalis</i>	Perennial multi-stemmed shrub to 1 m.	Grey or white sand.	✓		✓		Recorded.	Would not occur.	Recorded.
<i>Lasiopteratum glutinosum subsp. glutinosum</i>	Perennial multi-stemmed shrub to 1 m. Inflorescence axes strongly viscid.	Sandplains, sandy loam.	✓		✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Meionectes tenuifolia</i>	Prostrate aquatic/semi-aquatic herb, red/green, trifid and linear leaves.	Swamp edges, damp areas.	✓		✓		Unlikely to occur; some suitable habitat however most recent record dates back to 1930	Would not occur.	Unlikely to occur.
<i>Myriophyllum echinatum</i>	Erect annual, herb, 0.02-0.03 m high.	Winter-wet flats. Clay.	✓		✓		Unlikely to occur; some suitable habitat however most recent record dates back to 1902.	Would not occur.	Unlikely to occur.
<i>Phlebocarya pilosissima subsp. pilosissima</i>	Shortly rhizomatous, compactly tufted perennial, grass-like or herb, 0.15-0.4 m high.	White or grey sand, lateritic gravel.					Unlikely to occur; some suitable habitat however no records from close proximity.	Would not occur.	Unlikely to occur; this sedge was not recorded during the field survey.
<i>Pithocarpa corymbulosa</i>	Erect to scrambling perennial, herb, 0.5-1 m high.	Gravelly or sandy loam. Amongst granite outcrops.	✓	✓	✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Platysace ramosissima</i>	Perennial, herb, to 0.3 m high.	Sandy soils.		✓	✓		May potentially occur; some suitable habitat; recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Schoenus pennisetis</i>	Tufted annual, grass-like or herb (sedge), 0.05-0.15 m high.	Swamps, winter-wet depressions. Grey or peaty sand, sandy clay.		✓	✓		May potentially occur; some suitable habitat recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Sporobolus blakei</i>	Tufted perennial, grass-like or herb, 0.45-0.6 m high. Fl. green-purple, Mar or Jun to Jul.	Red sandy clay, loam. Creeks.			✓		May potentially occur; some suitable habitat recorded within close proximity.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Stackhousia sp. Red-blotted corolla (A. Markey 911)</i>	Erect perennial herb 20 cm high	Clayey sand over granite			✓		Unlikely to occur; some suitable habitat however most recent record dates back to 1897.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Thysanotus anceps</i>	Rhizomatous, leafless perennial, herb, to 0.4 m.	White or grey sand, lateritic gravel, laterite.		✓			May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
Priority 4									
<i>Boronia tenuis</i>	Procumbent or erect & slender shrub, 0.1-0.5 m.	Laterite, stony soils, granite.			✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.

<i>Calothamnus accedens</i>	Erect & slender shrub, to 1.8 m high.	Sandy soils over laterite. Road verge.	✓		✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Darwinia pimelioides</i>	Erect shrub, 0.25-0.5(-1) m high.	Loam, sandy loam. Granite outcrops.		✓	✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Hydrocotyle lemnoides</i>	Aquatic, floating annual, herb.	Swamps.	✓		✓		Unlikely to occur; some suitable habitat however most recent record dates back to 1906.	Would not occur.	Unlikely to occur.
<i>Hypolaena robusta</i>	Dioecious rhizomatous, perennial, herb, ca 0.5 m.	White sand. Sandplains.					May potentially occur; suitable habitat present however has not been recorded in proximity of study area to date.	Would not occur.	Recorded.
<i>Jacksonia sericea</i>	Low spreading shrub, to 0.6 m high.	Calcareous & sandy soils.	✓		✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Lasiopetalum bracteatum</i>	Erect, open shrub, 0.4-1.5 m high.	Along drainage lines, creeks, gullies, granite outcrops.	✓		✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey.
<i>Ornduffia submersa</i>	Aquatic, floating herb	Water.	✓		✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Schoenus griffinianus</i>	Small, tufted perennial, grass-like or herb (sedge), to 0.1 m high.	White sand.	✓	✓	✓		Recorded.	Would not occur.	Unlikely to occur; this shrub was not recorded during the field survey, despite targeted searches in the area of the historical record.
<i>Senecio leucoglossus</i>	Erect annual, herb, to 1.3 m high. Fl. white, Aug to Dec.	Gravelly lateritic or granitic soils. Granite outcrops, slopes.			✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Stylium longitubum</i>	Erect annual (ephemeral), herb, 0.05-0.12 m high. Fl. pink, Oct to Dec.	Sandy clay, clay. Seasonal wetlands.	✓	✓	✓		May potentially occur; some suitable habitat; records within 5 km.	Would not occur.	Unlikely to occur; this herb was not recorded during the field survey.
<i>Stylium striatum</i>	Rosetted perennial, herb, 0.15-0.55 m high,	Brown clay loam over laterite. Hillslopes. Jarrah/Marri forest, Wandoor woodland.	✓		✓		Unlikely to occur; no particularly suitable habitat.	Would not occur.	Unlikely to occur.
<i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	Erect shrub, 0.2-0.75 m high.	Sand, sandy clay. Winter-wet depressions.	✓	✓	✓		May potentially occur; records within 5 km.	Would not occur.	Recorded.

Appendix 4b

Likelihood of Significant Fauna
Occurring in the Survey Area



Family	Species Name	Common Name	Conservation Status		Nature Map	ALA	EPBC Act PMS	DBCA TFDS	Preferred Habitat	Habitat Available in Survey Area?	Likelihood of Occurrence (Prior to Survey)	Likelihood of Occurrence (Post-survey)
			State	Federal								
REPTILES												
Chelidae	<i>Pseudemydura umbrina</i>	Western Swamp Turtle	CR	CR	✓	✓		✓	Seasonally-dry wetlands. Now restricted to only two known natural populations, and several translocated sites, none of which occur within the study area.	-	Would not occur	Would not occur
Scincidae	<i>Ctenotus delli</i>	Darling Range Heath Ctenotus	P4		✓			✓	Darling Range in jarrah and marri woodlands over a shrubby understory on lateritic, sandy and clay soils.	-	Unlikely to occur	Unlikely to occur
	<i>Ctenotus gemmula</i>	Jewelled Sandplain Ctenotus	P3			✓			Pale sand-plains supporting heaths in association with Banksia or mallee woodlands.	✓	May potentially occur	May potentially occur
MAMMALS												
Dasyuridae	<i>Dasyurus geoffroii</i>	Western Quoll, Chuditch	VU	VU	✓	✓	✓	✓	Now primarily restricted to jarrah forest and woodland, with smaller numbers in other eucalypt woodland and mallee.	-	Unlikely to occur	Unlikely to occur
	<i>Phascogale tapoatafa wambenger</i>	Brush-tailed Phascogale, Wambenger	CD			✓		✓	Uses a range of habitats from mallee to rainforest, but prefers continuous open forest with sparse groundcover.	✓	Unlikely to occur	Unlikely to occur
Potoroidae	<i>Bettongia penicillata ogilbyi</i>	Woylie	CR	CR			✓		Formerly widespread, the Woylie is now restricted to three natural populations in south-western Australia (Dryandra Woodland, Tutanning Nature Reserve and Perup Forest), and several fenced reintroduced populations. The three natural sites are all characterised by thickets of <i>Gastrolobium</i> . The species is considered locally extinct.	-	Would not occur	Would not occur
Peramelidae	<i>Isoodon fusciventer</i>	Quenda, Southern Brown Bandicoot	P4		✓	✓		✓	Variety of forest, woodland, shrubland and heath communities, but prefer areas of denser vegetation, including wetland fringes and heathland.	✓	Likely to occur	Recorded
Pseudocheiridae	<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum, Ngwayir	CR	CR	✓			✓	Woodlands and forests dominated by peppermint, tuart, jarrah and/or marri. The species is considered locally extinct.	-	Would not occur	Would not occur
Macropodidae	<i>Setonix brachyurus</i>	Quokka	VU	VU			✓		Now primarily restricted to Rottnest Island and riparian vegetation in jarrah forests of the Darling Scarp, south of Serpentine. The species is considered locally extinct.	-	Would not occur	Would not occur
Muridae	<i>Hydromys chrysogaster</i>	Rakali, Water-rat	P4		✓	✓		✓	Variety of permanent fresh water bodies, ranging from subalpine streams to lakes, creeks, and farm dams. Also on sheltered coastal beaches, mangroves and offshore islands.	✓	Unlikely to occur	Unlikely to occur
BIRDS												
Megapodiidae	<i>Leipoa ocellata</i>	Malleefowl	VU	VU	✓	✓			Dense litter-forming scrubs and thickets of mallee <i>Eucalyptus</i> spp. In Western Australia, they are now restricted to, and uncommon within, the semi-arid zone.	-	Would not occur	Would not occur
Anatidae	<i>Oxyura australis</i>	Blue-billed Duck	P4		✓	✓		✓	Large, deep and open freshwater dams and lakes	Marginal	Unlikely to occur	Unlikely to occur
Procellariidae	<i>Pachyptila turtur subantarctica</i>	Fairy Prion (southern)		EN / MA			✓		Oceanic; southern and western seas north to 32°S. Breeds on south temperate and subantarctic islands. Would only occur on Australian mainland during a catastrophic "wreck" event.	-	Would not occur	Would not occur
Ardeidae	<i>Botaurus poicloptilus</i>	Australasian Bittern	EN	EN	✓	✓	✓		Tall reedbeds, sedges, rushes, cumbungi, lignum and rice fields, as well as drains in tussocky paddocks, and occasionally saltmarsh and brackish wetlands.	-	Would not occur	Would not occur
	<i>Ixobrychus dubius</i>	Australian Little Bittern	P4			✓			Dense vegetation along the margins of rivers, wetlands, urban lakes and drainage lines	✓	Unlikely to occur	Unlikely to occur

Family	Species Name	Common Name	Conservation Status		Nature Map	ALA	EPBC Act PMS	DBCA TFDS	Preferred Habitat	Habitat Available in Survey Area?	Likelihood of Occurrence (Prior to Survey)	Likelihood of Occurrence (Post-survey)
			State	Federal								
	<i>Ixobrychus flavicollis</i>	Black Bittern (SW population)	P2		✓	✓			Vegetated rivers and streams. South-west population patchy, restricted and not in the vicinity of the study area.	-	Would not occur	Would not occur
Threskiornithidae	<i>Plegadis falcinellus</i>	Glossy Ibis	MI	MI	✓	✓			Well-vegetated wetlands and floodplains, occasionally dry grasslands	Marginal	May potentially occur	May potentially occur
Pandionidae	<i>Pandion cristatus</i>	Eastern Osprey	MI	MI	✓		✓	✓	Coastline and large wetlands	-	Unlikely to occur	Unlikely to occur
Falconidae	<i>Falco peregrinus</i>	Peregrine Falcon	OS		✓	✓		✓	Cliffs, gorges, timbered watercourses, plains, wetlands, open woodlands, buildings	✓	Likely to occur	Likely to occur
Scolopacidae	<i>Actitis hypoleucos</i>	Common Sandpiper	MI	MI			✓		Coastal and inland wetlands	-	Unlikely to occur	Unlikely to occur
	<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	MI	MI			✓		Coastal and inland wetlands	-	Unlikely to occur	Unlikely to occur
	<i>Calidris ferruginea</i>	Curlew Sandpiper	CR / MI	CR / MI			✓		Mudflats, saltmarshes, coastal and inland wetlands	-	Unlikely to occur	Unlikely to occur
	<i>Calidris melanotos</i>	Pectoral Sandpiper	MI	MI			✓		Shallow fresh waters	-	Unlikely to occur	Unlikely to occur
	<i>Numenius madagascariensis</i>	Eastern Curlew	CR / MI	CR / MI			✓		Estuaries, tidal mudflats, sandspits, saltmarshes, mangroves, bare grassland near water and occasionally fresh or brackish lakes.	Marginal	Unlikely to occur	Unlikely to occur
	<i>Tringa glareola</i>	Wood Sandpiper	MI	MI	✓				Mudflats, muddy margins of wetlands	Marginal	May potentially occur	May potentially occur
	<i>Tringa nebularia</i>	Common Greenshank	MI	MI	✓	✓	✓		Mudflats, margins of fresh and saline wetlands	-	Unlikely to occur	Unlikely to occur
Rostratulidae	<i>Rostratula australis</i>	Australian Painted Snipe	EN	EN			✓		Distribution of the Australian Painted Snipe generally correlates to areas of wetland throughout Western Australia	Marginal	Unlikely to occur	Unlikely to occur
Charadriidae	<i>Thinornis rubicollis</i>	Hooded Plover	P4				✓		Margins of coastline and inland lakes	-	Unlikely to occur	Unlikely to occur
Laridae	<i>Gelochelidon nilotica</i>	Australian Fairy Tern	VU	VU			✓		Coastal waters, bays, inlets, saline or brackish lakes, saltfields and sewage ponds near the coast	-	Would not occur	Would not occur
	<i>Thalasseus bergii</i>	Crested Tern	MI	MI	✓				Coastlines, salt swamps, lakes, larger rivers	-	Would not occur	Would not occur
Cacatuidae	<i>Cacatua pastinator pastinator</i>	Muir's Corella	CD		✓			✓	Eucalypt woodland and surrounding farmland around Tone Bridge, Rock Gully, Frankland River and Lake Muir	-	Would not occur	Would not occur
	<i>Calyptorhynchus banksii</i>	Forest Red-tailed Black-Cockatoo	VU	VU	✓	✓	✓	✓	Occurs primarily in eucalypt forests of the Darling Scarp and far south-west, but in the last 10 years has become more common in suburban Perth.	✓	Likely to occur	Recorded
	<i>Calyptorhynchus baudinii</i>	Baudins Black-Cockatoo	EN	EN	✓	✓	✓	✓	Inhabits mainly eucalypt forests, especially jarrah, marri and karri. It may be found less frequently in woodlands of wandoo, blackbutt, flooded gum, and yate, as well as partially cleared farmlands and urban areas.	✓	Likely to occur	Likely to occur
	<i>Calyptorhynchus latirostris</i>	Carnaby's Black-Cockatoo	EN	EN	✓	✓	✓	✓	Inhabits mainly proteaceous shrubs and heaths, and eucalypt woodlands and forests	✓	Likely to occur	Recorded
Apodidae	<i>Apus pacificus</i>	Fork-tailed Swift	MI	MI		✓	✓		Thought to be exclusively aerial in Australia	✓	May potentially occur	May potentially occur
Dasyornithidae	<i>Dasyornis longirostris</i>	Western Bristlebird	CR	CR		✓			Now restricted to a few disjointed populations in a narrow coastal strip of southern Western Australia, from Two People's Bay to near East Mount Barren in the eastern Fitzgerald River National Park, where they inhabit floristically-diverse low dense coastal heathland.	-	Would not occur	Would not occur

P2 = Priority 2, P3 = Priority 3, P4 = Priority 4, VU = Vulnerable, EN = Endangered, CR = Critically Endangered, MI = Migratory, CD = Conservation Dependant, OS = Other Specially Protected

Appendix 5

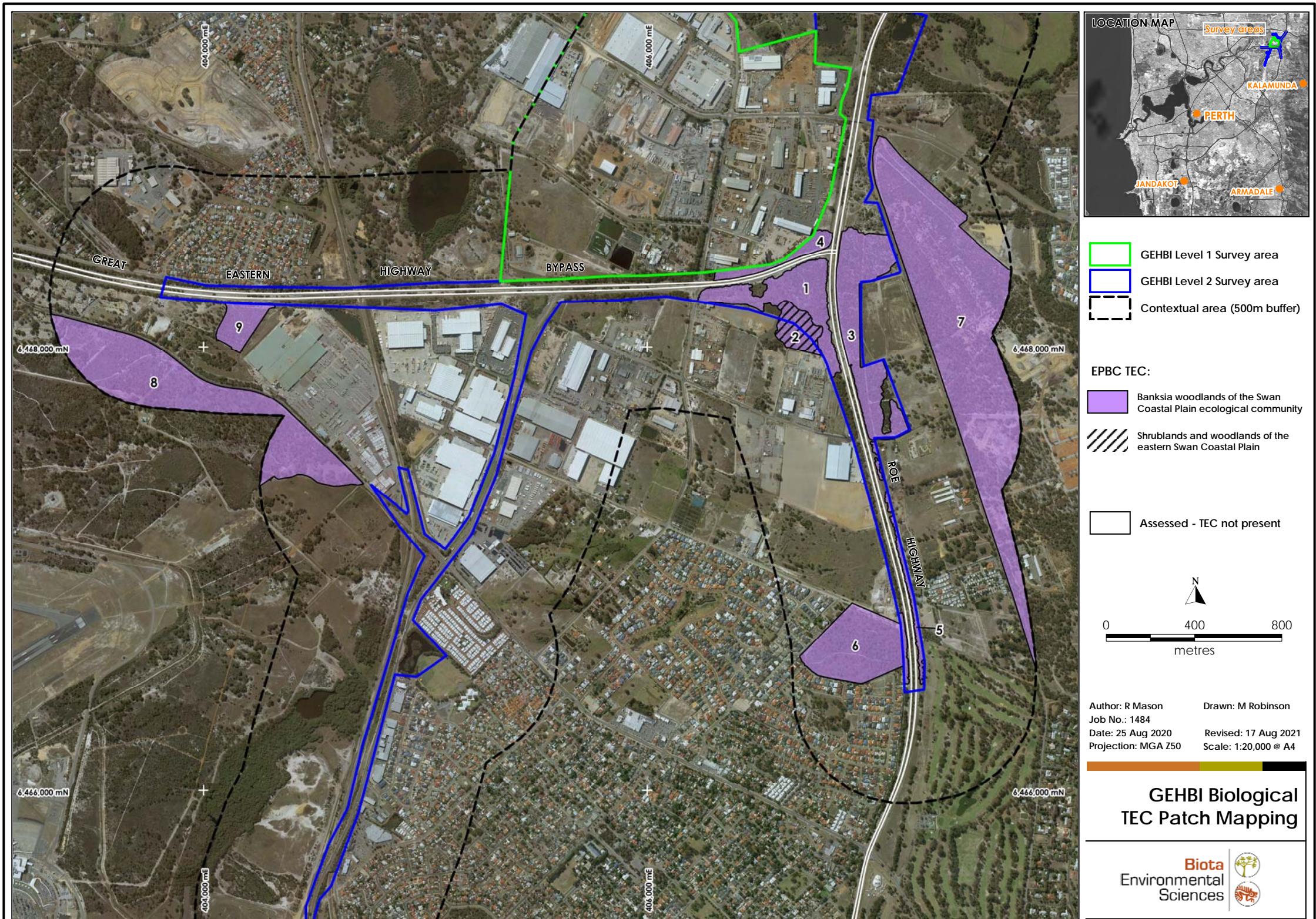
Field TEC Assessment Results and TEC Patch Assessment Locations



*GBQ05: Indicator Banksia species not present in quadrat but present in surrounds

*GBQ07: Indicator Banksia species not present in quadrat but present in surrounds

*GBQ27: Indicator Banksia species not present in quadrat but present in surrounds





Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406693 Long / Easting: 6468253 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 103974		
EFFORT:	Time spent surveying (minutes): 0			No. of minutes spent / 100 m ² : _____		

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent <input checked="" type="checkbox"/> 50%	Good <input type="checkbox"/> ____ %	Completely Degraded <input type="checkbox"/> ____ %
---	--------------------------------------	---

RECOMMENDED MANAGEMENT ACTIONS: e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):

HABITAT INFORMATION: (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:
Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: Fire Intensity: High Medium Low No evidence of fire

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)		METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 406693		No. satellites: Map used:	
WGS84 <input type="checkbox"/>	Long / Easting: 6468253		Boundary polygon captured: <input checked="" type="checkbox"/> Map used:	
Unknown <input type="checkbox"/>	Zone: 50			
LAND TENURE:				
Nature reserve <input type="checkbox"/>		Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>
National park <input type="checkbox"/>		State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>		Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____
				Shire road reserve <input type="checkbox"/>
				Other Crown reserve <input type="checkbox"/>
				Specify other: _____
AREA ASSESSMENT: Edge survey <input type="checkbox"/> Partial survey <input type="checkbox"/> Full survey <input checked="" type="checkbox"/> Area observed (m ²): 103974				
EFFORT: Time spent surveying (minutes): No. of minutes spent / 100 m ² : _____				

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
--	--

			Reserve No: _____
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 440668 Long / Easting: 6468083 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 85820
EFFORT:	Time spent surveying (minutes): _____ No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> _____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> _____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Corymbia calophylla low open woodland;
	2. Kingia australis tall sparse shrubland and Xanthorrhoea preissii sparse shrubland;
	3. Verticordia densiflora, Banksia dallanneyi var. dallanneyi, Stirlingia latifolia low open shrubland;
	4. Caustis dioica, Mesomelaena pseudostygia, M. tetragona, Lyginia imberbis, Patersonia occidentalis var. <i>occidentalis</i> open sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Allocasuarina humilis

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Lambertia multiflora var. darlingensis

Caustis dioica

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Shrublands and Woodlands of the Eastern Swan Coastal Plain	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 440668 Long / Easting: 6468083 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT: Edge survey <input type="checkbox"/> Partial survey <input type="checkbox"/> Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 85820
EFFORT: Time spent surveying (minutes): _____	No. of minutes spent / 100 m ² : _____

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: **N=Nil, L=Low, M=Medium, H=High, E=Extreme**

*Estimate time to potential impact: **S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)**

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> _____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> _____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Corymbia calophylla low open woodland;
	2. Kingia australis tall sparse shrubland and Xanthorrhoea preissii sparse shrubland;
	3. Verticordia densiflora, Banksia dallanneyi var. dallanneyi, Stirlingia latifolia low open shrubland;
	4. Caustis dioica, Mesomelaena pseudostygia, M. tetragona, Lyginia imberbis, Patersonia occidentalis var. <i>occidentalis</i> open sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Allocasuarina humilis

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Lambertia multiflora var. darlingensis

Caustis dioica

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia Woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)		METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 440668		No. satellites: Map used:	
WGS84 <input type="checkbox"/>	Long / Easting: 6468083		Boundary polygon captured: <input checked="" type="checkbox"/> Map used:	
Unknown <input type="checkbox"/>	Zone: 50			
LAND TENURE:				
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____
AREA ASSESSMENT:		Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/> Area observed (m ²): <u>85820</u>
EFFORT:		Time spent surveying (minutes): _____ No. of minutes spent / 100 m ² : _____		

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: **N=Nil, L=Low, M=Medium, H=High, E=Extreme**

*Estimate time to potential impact: **S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)**

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> <u>50%</u>	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Corymbia calophylla low open woodland;
	2. Kingia australis tall sparse shrubland and Xanthorrhoea preissii sparse shrubland;
	3. Verticordia densiflora, Banksia dallanneyi var. dallanneyi, Stirlingia latifolia low open shrubland;
	4. Caustis dioica, Mesomelaena pseudostygia, M. tetragona, Lyginia imberbis, Patersonia occidentalis var. <i>occidentalis</i> open sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Allocasuarina humilis

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Lambertia multiflora var. darlingensis

Caustis dioica

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Eastern Shrublands and Woodlands	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Threatened-Critically Endangered
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	PHONE:	9328 1900
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

Reserve No:																		
DISTRICT:	Swan Coastal	LGA:	City of Swan															
		Land manager present: <input type="checkbox"/>																
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">DecDegrees <input type="checkbox"/></td> <td style="width: 33%;">DegMinSec <input type="checkbox"/></td> <td style="width: 33%;">UTMs <input checked="" type="checkbox"/></td> </tr> <tr> <td>Lat / Northing:</td> <td colspan="2">440668</td> </tr> <tr> <td>WGS84 <input type="checkbox"/></td> <td colspan="2">Long / Easting:</td> </tr> <tr> <td>Unknown <input type="checkbox"/></td> <td colspan="2">6468083</td> </tr> <tr> <td></td> <td colspan="2">Zone: 50</td> </tr> </table>			DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	Lat / Northing:	440668		WGS84 <input type="checkbox"/>	Long / Easting:		Unknown <input type="checkbox"/>	6468083			Zone: 50	
DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>																
Lat / Northing:	440668																	
WGS84 <input type="checkbox"/>	Long / Easting:																	
Unknown <input type="checkbox"/>	6468083																	
	Zone: 50																	
		METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____																
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____																		

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 85820
EFFORT:	Time spent surveying (minutes): _____ No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information:		Cause/Agent:	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		e.g. weed type, grazing species, recreation type				
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> _____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> _____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Corymbia calophylla low open woodland;
	2. Kingia australis tall sparse shrubland and Xanthorrhoea preissii sparse shrubland;
	3. Verticordia densiflora, Banksia dallanneyi var. dallanneyi, Stirlingia latifolia low open shrubland;
	4. Caustis dioica, Mesomelaena pseudostygia, M. tetragona, Lyginia imberbis, Patersonia occidentalis var. <i>occidentalis</i> open sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Allocasuarina humilis

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Lambertia multiflora var. darlingensis

Caustis dioica

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Low lying Banksia attenuata woodlands or shrublands ('FCT 21c')	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Priority 3
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
--	--

Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	METHOD USED: DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 407044 Long / Easting: 6468414 Zone: 50	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT: Edge survey <input type="checkbox"/> Partial survey <input type="checkbox"/> Full survey <input checked="" type="checkbox"/> Area observed (m ²): <u>25480</u>
EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m ² : _____

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> _____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> _____%

Please return form to:
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or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
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or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
--	--

			Reserve No: _____
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406931 Long / Easting: 6468069 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 125000		
EFFORT:	Time spent surveying (minutes): 0		No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:** _____ **Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)		METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 406931		No. satellites: Map used:	
WGS84 <input type="checkbox"/>	Long / Easting: 6468069		Boundary polygon captured: <input checked="" type="checkbox"/> Map used:	
Unknown <input type="checkbox"/>	Zone: 50			
LAND TENURE:				
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____
AREA ASSESSMENT:		Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/> Area observed (m ²): 125000
EFFORT:		Time spent surveying (minutes): _____ No. of minutes spent / 100 m ² : _____		

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: Fire Intensity: High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia attenuata woodlands over species rich dense shrublands ('FCT 20a')	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
--	--

		Reserve No: _____		
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>		
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	METHOD USED: DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406928 Long / Easting: 6468072 Zone: 50		
		No. satellites: _____ Map used: _____		
		Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____		
LAND TENURE:				
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 81320
EFFORT:	Time spent surveying (minutes): 0 No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)		METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 406597		No. satellites: Map used:	
WGS84 <input type="checkbox"/>	Long / Easting: 6468372		Boundary polygon captured: <input checked="" type="checkbox"/> Map used:	
Unknown <input type="checkbox"/>	Zone: 50			
LAND TENURE:				
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): <u>22660</u>	
EFFORT:	Time spent surveying (minutes): _____		No. of minutes spent / 100 m ² : _____		

THREATS - type, and supporting information: <small>e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.</small>		Cause/Agent:	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: **N=Nil, L=Low, M=Medium, H=High, E=Extreme**

*Estimate time to potential impact: **S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)**

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> <u>50%</u>	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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			Reserve No: _____
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406597 Long / Easting: 6468372 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 22660
EFFORT:	Time spent surveying (minutes): 0 No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Allocasuarina fraseriana, Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii, Allocasuarina humilis sparse shrubland
	3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. renens low sparse shrubland
	4. Mesomelaena pseudostygia, Lyginia barbata sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Eucalyptus todtiana

Banksia menziesii

Calytrix fraseri

Amphipogon turbinatus

Eremaea pauciflora var. pauciflora

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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			Reserve No: _____
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 407178 Long / Easting: 6466943 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 16000
EFFORT:	Time spent surveying (minutes): 0 No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		PHONE:	
ROLE: Botanist		ORGANISATION: Biota Environmental Sciences	
EMAIL: bec@biota.net.au			

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>			METHOD USED: DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTMs <input checked="" type="checkbox"/> Lat / Northing: 407178 Long / Easting: 6466943 Zone: 50
				GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: Boundary polygon captured: <input checked="" type="checkbox"/> Map used:
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____				
AREA ASSESSMENT:		Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/> Area observed (m ²): <u>16000</u>
EFFORT:		Time spent surveying (minutes): <u>0</u>	No. of minutes spent / 100 m ² : _____	

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: **N=Nil, L=Low, M=Medium, H=High, E=Extreme**

*Estimate time to potential impact: **S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)**

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> <u>50%</u>	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia attenuata woodlands over species rich dense shrublands ('FCT 20a')	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 407178 </div> <div style="flex: 1;"> GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ </div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> Long / Easting: 6466943 </div> <div style="flex: 1;"> Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____ </div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> Zone: 50 </div> <div style="flex: 1;"></div> </div>		
LAND TENURE:			
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____
Shire road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 16000
EFFORT:	Time spent surveying (minutes): 0 No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: Fire Intensity: High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia Woodlands of the Swan Coastal Plain ecological community	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
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Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM: GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/>	COORDINATES: (If UTM coords provided, Zone is also required) DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406980 Long / Easting: 6466639 Zone: 50	METHOD USED: GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____	
LAND TENURE: Nature reserve <input type="checkbox"/> Timber reserve <input type="checkbox"/> Private property <input type="checkbox"/> Rail reserve <input type="checkbox"/> Shire road reserve <input type="checkbox"/> National park <input type="checkbox"/> State forest <input type="checkbox"/> Pastoral lease <input type="checkbox"/> MRWA road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Conservation park <input type="checkbox"/> Water reserve <input type="checkbox"/> UCL <input type="checkbox"/> SLK/Pole _____ to _____ Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 117840		
EFFORT:	Time spent surveying (minutes): 0			No. of minutes spent / 100 m ² : _____		

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: **N=Nil, L=Low, M=Medium, H=High, E=Extreme**

*Estimate time to potential impact: **S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)**

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> _____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> _____%

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

*Please return form to:***communities.data@dpaw.wa.gov.au**or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 05/05/2021

Please return form to:
communities.data@dpaw.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY:	Banksia woodlands of the Swan Coastal Plain	OBSERVATION DATE:	3/11/2020
New occurrence <input type="checkbox"/>	Site ID:	CONS STATUS:	Priority 3
OBSERVER/S:		Rebecca Mason	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences
EMAIL:	bec@biota.net.au		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):	
Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	

		Reserve No:		
DISTRICT:	Swan Coastal	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)		METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 406980		No. satellites: Map used:	
WGS84 <input type="checkbox"/>	Long / Easting: 6466639		Boundary polygon captured: <input checked="" type="checkbox"/> Map used:	
Unknown <input type="checkbox"/>	Zone: 50			
LAND TENURE:				
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____
AREA ASSESSMENT:		Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/> Area observed (m ²): 117840
EFFORT:		Time spent surveying (minutes): 0	No. of minutes spent / 100 m ² : _____	

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing		Main Roads WA	unsure%	N	H	S-M
• Human movement		Dumped rubbish	5%	L	L	M-L
• Introduced fauna		Goats	100%	L	L	M-L
• Weed invasion		Ehrharta calycina	50%	L	H	M
•			%			
•			%			
•			%			
•			%			
•			%			

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

Please return form to:
communities.data@dpa.wa.gov.au

or Species and Communities Branch, Department of Parks and Wildlife, Locked Bag 104, Bentley Delivery Centre WA 6983



Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

CONDITION OF SOIL:Dry Moist Waterlogged Inundated Cracked Saline Other:

VEGETATION CLASSIFICATION:	1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii low open woodland;
	2. Xanthorrhoea preissii and Allocasuarina humilis sparse shrubland
	3. Dasypogon bromeliifolius, Hibbertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi low sparse shrubland
	4. Mesomelaena pseudostygia, Schoenus efoliatus sparse sedgeland

FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

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Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Actual Occurrence Landuse:**Adjacent Landuse:** Great Eastern Highway Bypass**Associated Flora Species:**

Alexgeorgea nitens

Hemiandra linearis

Schoenus efoliatus

Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

Please return form to:
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Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

COMMUNITY: Banksia attenuata woodlands over species rich dense shrublands ('FCT 20a')	OBSERVATION DATE: 3/11/2020
New occurrence <input type="checkbox"/> Site ID: _____	CONS STATUS: Threatened- Endangered
OBSERVER/S: Rebecca Mason	PHONE: 9328 1900
ROLE: Botanist	ORGANISATION: Biota Environmental Sciences
EMAIL: bec@biota.net.au	

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place): Intersection of Roe Highway and Great Eastern Bypass. Directly south of the Great Eastern Bypass and directly east of Stirling Crescent.	
--	--

Reserve No: _____			
DISTRICT: Swan Coastal	LGA: City of Swan	Land manager present: <input type="checkbox"/>	
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required) GDA94 / MGA94 <input checked="" type="checkbox"/> AGD84 / AMG84 <input type="checkbox"/> WGS84 <input type="checkbox"/> Unknown <input type="checkbox"/> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> DecDegrees <input type="checkbox"/> DegMinSec <input type="checkbox"/> UTM <input checked="" type="checkbox"/> Lat / Northing: 406980 </div> <div style="flex: 1;"> GPS <input checked="" type="checkbox"/> Differential GPS <input type="checkbox"/> Map <input type="checkbox"/> No. satellites: _____ Map used: _____ </div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> Long / Easting: 6466639 </div> <div style="flex: 1;"> Boundary polygon captured: <input checked="" type="checkbox"/> Map used: _____ </div> </div> <div style="display: flex; justify-content: space-between; width: 100%;"> <div style="flex: 1;"> Zone: 50 </div> <div style="flex: 1;"></div> </div>		
LAND TENURE:			
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____
Shire road reserve <input type="checkbox"/> Other Crown reserve <input type="checkbox"/> Specify other: _____			

AREA ASSESSMENT:	Edge survey <input type="checkbox"/>	Partial survey <input type="checkbox"/>	Full survey <input checked="" type="checkbox"/>	Area observed (m ²): 117840
EFFORT:	Time spent surveying (minutes): 0 No. of minutes spent / 100 m ² : _____			

THREATS - type, and supporting information: e.g. clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents.		Cause/Agent: e.g. weed type, grazing species, recreation type	Area affected	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
• Clearing- complete vegetation clearing	Main Roads WA	unsure%	N	H	S-M	
• Human movement	Dumped rubbish	5%	L	L	M-L	
• Introduced fauna	Goats	100%	L	L	M-L	
• Weed invasion	Ehrharta calycina	50%	L	H	M	
•		%				
•		%				
•		%				
•		%				
•		%				

*Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme

*Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)

CONDITION OF OCCURRENCE: (Bush Forever Scale) (estimate % of area in each)		
Pristine <input type="checkbox"/> ____%	Very Good <input checked="" type="checkbox"/> 50%	Degraded <input type="checkbox"/> ____%

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Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

Excellent 50%Good ____ %Completely Degraded ____ %**RECOMMENDED MANAGEMENT ACTIONS:** e.g. roadside markers, weed control, etc.

Weed control

ACTIONS IMPLEMENTED (include date):**HABITAT INFORMATION:** (Check more than one box for combinations or where necessary)

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; e.g. gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input checked="" type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	Specify other:
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element: (Refer to field manual for additional values)

Undulating, sandy plain.

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FIRE HISTORY:

Last Fire: Season/Month: Year: **Fire Intensity:** High Medium Low No evidence of fire

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Threatened and Priority Ecological Community (TEC/PEC) Occurrence Report Form

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Blanco canescens

Caustis dioica

Stirlingia latifolia

Associated Fauna Species:**OTHER COMMENTS:**

Recruitment of Banksia seedling present

ATTACHED: Map Mudmap Photo GIS data Field notes

Other: Excerpts from Report

COPY SENT TO: Regional Office District Office Other:**Submitter of record:** Rebecca Mason**Role:** Botanist**Signature:****Date submitted:** 30/08/2021

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Appendix 6

Vegetation Structural Classification and Condition Ranking



Vegetation Structural Classes*

Stratum	Canopy Cover (%)				
	70-100%	30-70%	10-30%	2-10%	<2%
Trees over 30 m	Tall closed forest	Tall open forest	Tall woodland	Tall open woodland	Scattered tall trees
Trees 10-30 m	Closed forest	Open forest	Woodland	Open woodland	Scattered trees
Trees under 10 m	Low closed forest	Low open forest	Low woodland	Low open woodland	Scattered low trees
Tree Mallee	Closed tree mallee	Tree mallee	Open tree mallee	Very open tree mallee	Scattered tree mallee
Shrub Mallee	Closed shrub mallee	Shrub mallee	Open shrub mallee	Very open shrub mallee	Scattered shrub mallee
Shrubs over 2 m	Tall closed scrub	Tall open scrub	Tall shrubland	Tall open shrubland	Scattered tall shrubs
Shrubs 1-2 m	Closed heath	Open heath	Shrubland	Open shrubland	Scattered shrubs
Shrubs under 1 m	Low closed heath	Low open heath	Low shrubland	Low open shrubland	Scattered low shrubs
Hummock grasses	Closed hummock grassland	Hummock grassland	Open hummock grassland	Very open hummock grassland	Scattered hummock grasses
Grasses, Sedges, Herbs	Closed tussock grassland / bunch grassland / sedgeland / hermland	Tussock grassland / bunch grassland / sedgeland / hermland	Open tussock grassland / bunch grassland / sedgeland / hermland	Very open tussock grassland / bunch grassland / sedgeland / hermland	Scattered tussock grasses / bunch grasses / sedges / herbs

- Based on Keighery (1994), adapted from Muir (1977), and Aplin's (1979) modification of the vegetation classification system of Specht (1970):
 - Keighery B.J. (1994). *Bushland Plant Survey: A Guide for Community Surveys*. Wildflower Society of Western Australia, Perth WA;
 - Aplin T.E.H. (1979). The Flora. Chapter 3 In O'Brien, B.J. (ed.) (1979). *Environment and Science*. University of Western Australia Press;
 - Muir B.G. (1977). Biological Survey of the Western Australian Wheatbelt. Part II: Vegetation and habitat of Brenderup Reserve. *Records of the Western Australian Museum, Suppl.* No. 3;
 - Specht R.L. (1970). Vegetation. In *The Australian Environment*. 4th edn (Ed. G.W. Leeper). Melbourne.

Indicative condition measures/thresholds		
Keighery (1994) Vegetation Condition Scale (WA Planning Commission 2000b)	Typical native vegetation composition	Typical weed cover
Pristine No obvious signs of disturbance.	Native plant species diversity fully retained or almost so ¹	Zero or almost no weed cover/abundance
Excellent Vegetation structure intact. Disturbance only affecting individual species. Weeds are non-aggressive species.	High native plant species diversity ¹	Less than 10%
Very Good Vegetation structure altered. Obvious signs of disturbance; e.g. from repeated fires, dieback, logging, grazing. Aggressive weeds present.	Moderate native plant species diversity ¹	5 – 20%
Good Vegetation structure altered but retains basic vegetation structure or ability to regenerate it. Obvious signs of disturbance, e.g. from partial clearing, dieback, logging, grazing. Presence of very aggressive weeds.	Low native plant species Diversity ¹	5 – 50%
Degraded Basic vegetation structure severely impacted by disturbance. Requires intensive management. Disturbance evident such as partial clearing, dieback, logging and grazing. Presence of very aggressive weeds at high density.	Very low native plant species diversity ¹	20 – 70%
Completely Degraded Vegetation structure is no longer intact and the area is completely or almost completely without native flora. Equivalent to 'Parkland Cleared'.	Very low to no native species diversity ¹	Greater than 70%

¹ Relative to expected natural range of diversity for that vegetation unit (e.g. Floristic Community Type), where comparative data exists.

Appendix 7

Vascular Flora Species Recorded During the Current Survey



Family	Species	Status	Level 1 Survey Area	Level 2 Survey Area
Amaranthaceae	<i>Alternanthera denticulata</i>		Y	Y
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced (weed)	Y	Y
Anarthriaceae	<i>Lyginia barbata</i>			Y
Anarthriaceae	<i>Lyginia imberbis</i>			Y
Apiaceae	<i>Apium annuum</i>			Y
Apiaceae	<i>Xanthosia huegelii</i>			Y
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced (weed)	Y	Y
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)		Y
Araliaceae	* <i>Hydrocotyle ranunculoides</i>	Introduced (Declared)		Y
Araliaceae	<i>Trachymene pilosa</i>			Y
Asparagaceae	* <i>Asparagus asparagoides</i>	Introduced (WoNS, Declared Pest)		Y
Asparagaceae	<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>			Y
Asparagaceae	<i>Laxmannia sessiliflora</i> subsp. <i>australis</i>			Y
Asparagaceae	<i>Lomandra caespitosa</i>			Y
Asparagaceae	<i>Lomandra hermaphrodita</i>			Y
Asparagaceae	<i>Lomandra integra</i>			Y
Asparagaceae	<i>Lomandra micrantha</i> subsp. <i>micrantha</i>		Y	Y
Asparagaceae	<i>Lomandra nigricans</i>			Y
Asparagaceae	<i>Lomandra preissii</i>			Y
Asparagaceae	<i>Lomandra sericea</i>			Y
Asparagaceae	<i>Lomandra</i> sp.			Y
Asparagaceae	<i>Lomandra suaveolens</i>			Y
Asparagaceae	<i>Thysanotus dichotomus</i>			Y
Asparagaceae	<i>Thysanotus manglesianus</i>			Y
Asparagaceae	<i>Thysanotus patersonii</i>			Y
Asparagaceae	<i>Thysanotus</i> sp.			Y

Asparagaceae	<i>Thysanotus sparteus</i>			Y
Asparagaceae	<i>Thysanotus thyrsoides</i>			Y
Asparagaceae	<i>Thysanotus triandrus</i>			Y
Asteraceae	* <i>Conyza bonariensis</i>	Introduced (weed)	Y	Y
Asteraceae	* <i>Cotula turbinata</i>	Introduced (weed)	Y	Y
Asteraceae	* <i>Hypochaeris glabra</i>	Introduced (weed)		Y
Asteraceae	* <i>Hypochaeris radicata</i>	Introduced (weed)		Y
Asteraceae	* <i>Leontodon rhagadioloides</i>	Introduced (weed)	Y	Y
Asteraceae	* <i>Sonchus asper</i>	Introduced (weed)		Y
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced (weed)		Y
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced (weed)		Y
Asteraceae	<i>Hyalosperma cotula</i>			Y
Asteraceae	<i>Millotia tenuifolia</i>			Y
Asteraceae	<i>Podotheca angustifolia</i>			Y
Asteraceae	<i>Podotheca gnaphaloides</i>			Y
Asteraceae	<i>Pseudognaphalium luteoalbum</i>			Y
Asteraceae	<i>Pterochaeta paniculata</i>			Y
Asteraceae	<i>Quinetia urvillei</i>			Y
Asteraceae	<i>Senecio condylus</i>		Y	Y
Asteraceae	<i>Siloxerus humifusus</i>			Y
Bignoniaceae	* <i>Campsis radicans</i>	Introduced (weed)		Y
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared)	Y	Y
Brassicaceae	* <i>Raphanus raphanistrum</i>	Introduced (weed)	Y	Y
Campanulaceae	* <i>Monopsis debilis</i> var. <i>depressa</i>	Introduced (weed)		Y
Campanulaceae	* <i>Wahlenbergia capensis</i>	Introduced (weed)		Y
Campanulaceae	<i>Isotoma hypocrateriformis</i>			Y
Campanulaceae	<i>Lobelia anceps</i>			Y

Campanulaceae	<i>Lobelia tenuior</i>			Y
Campanulaceae	<i>Wahlenbergia preissii</i>			Y
Caryophyllaceae	* <i>Polycarpon tetraphyllum</i>	Introduced (weed)	Y	Y
Caryophyllaceae	* <i>Sagina apetala</i>	Introduced (weed)	Y	Y
Caryophyllaceae	* <i>Silene gallica</i> var. <i>gallica</i>	Introduced (weed)		Y
Caryophyllaceae	* <i>Stellaria pallida</i>	Introduced (weed)	Y	Y
Casuarinaceae	<i>Allocasuarina fraseriana</i>			Y
Casuarinaceae	<i>Allocasuarina humilis</i>			Y
Casuarinaceae	<i>Casuarina ? equisetifolia</i>			Y
Casuarinaceae	<i>Casuarina obesa</i>			Y
Centrolepidaceae	<i>Aphelia cyperoides</i>			Y
Centrolepidaceae	<i>Centrolepis aristata</i>			Y
Centrolepidaceae	<i>Centrolepis drummondiana</i>			Y
Centrolepidaceae	<i>Centrolepis inconspicua</i>			Y
Centrolepidaceae	<i>Centrolepis sp.</i>			Y
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced (weed)		Y
Colchicaceae	<i>Burchardia congesta</i>		Y	Y
Convolvulaceae	* <i>Ipomoea cairica</i>	Introduced (weed)		Y
Crassulaceae	<i>Crassula colorata</i>			Y
Crassulaceae	<i>Crassula colorata</i> var. <i>colorata</i>			Y
Crassulaceae	<i>Crassula decumbens</i> var. <i>decumbens</i>		Y	Y
Cupressaceae	<i>Callitris arenaria</i>			Y
Cupressaceae	<i>Callitris preissii</i>			Y
Cupressaceae	<i>Callitris pyramidalis</i>			Y
Cyperaceae	* <i>Cyperus tenellus</i>	Introduced (weed)		Y
Cyperaceae	* <i>Isolepis prolifera</i>	Introduced (weed)		Y
Cyperaceae	<i>Baumea rubiginosa</i>			Y

Cyperaceae	<i>Bolboschoenus caldwellii</i>		Y	Y
Cyperaceae	<i>Caustis dioica</i>			Y
Cyperaceae	<i>Chaetospora curvifolia</i>		Y	-
Cyperaceae	<i>Chorizandra enodis</i>			Y
Cyperaceae	<i>Cyathochaeta avenacea</i>			Y
Cyperaceae	<i>Cyperus alterniflorus</i>			Y
Cyperaceae	<i>Gahnia decomposita</i>			Y
Cyperaceae	<i>Isolepis cernua</i> var. <i>setiformis</i>		Y	Y
Cyperaceae	<i>Isolepis cyperoides</i>			Y
Cyperaceae	<i>Isolepis marginata</i>			Y
Cyperaceae	<i>Isolepis</i> sp.			Y
Cyperaceae	<i>Lepidosperma</i> ? <i>pubisquamum</i>			Y
Cyperaceae	<i>Lepidosperma apricola</i>			Y
Cyperaceae	<i>Lepidosperma leptostachyum</i>			Y
Cyperaceae	<i>Lepidosperma longitudinale</i>			Y
Cyperaceae	<i>Lepidosperma oldhamii/calcicola</i>			Y
Cyperaceae	<i>Lepidosperma pubisquamum</i>			Y
Cyperaceae	<i>Lepidosperma</i> sp.			Y
Cyperaceae	<i>Lepidosperma striatum</i>			Y
Cyperaceae	<i>Mesomelaena pseudostygia</i>			Y
Cyperaceae	<i>Mesomelaena tetragona</i>			Y
Cyperaceae	<i>Schoenus asperocarpus</i>			Y
Cyperaceae	<i>Schoenus caespititius</i>			Y
Cyperaceae	<i>Schoenus clandestinus</i>			Y
Cyperaceae	<i>Schoenus efoliatus</i>			Y
Cyperaceae	<i>Schoenus pedicellatus</i>			Y
Cyperaceae	<i>Schoenus rigens</i>			Y

Cyperaceae	<i>Schoenus sculptus</i>			Y
Cyperaceae	<i>Tetraria octandra</i>			Y
Dasypogonaceae	<i>Calectasia narragara</i>			Y
Dasypogonaceae	<i>Dasypogon bromeliifolius</i>			Y
Dasypogonaceae	<i>Dasypogon obliquifolius</i>			Y
Dasypogonaceae	<i>Kingia australis</i>			Y
Dennstaedtiaceae	<i>Pteridium esculentum</i>			Y
Dilleniaceae	<i>Hibbertia huegelii</i>			Y
Dilleniaceae	<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>			Y
Dilleniaceae	<i>Hibbertia hypericoides</i> subsp. <i>septentrionalis</i>			Y
Dilleniaceae	<i>Hibbertia striata</i>			Y
Dioscoreaceae	<i>Dioscorea hastifolia</i>			Y
Droseraceae	<i>Drosera drummondii</i>			Y
Droseraceae	<i>Drosera erythrorhiza</i>			Y
Droseraceae	<i>Drosera gigantea</i>			Y
Droseraceae	<i>Drosera glanduligera</i>			Y
Droseraceae	<i>Drosera macrantha</i>			Y
Droseraceae	<i>Drosera menziesii</i>			Y
Droseraceae	<i>Drosera micrantha</i>			Y
Droseraceae	<i>Drosera porrecta</i>			Y
Ericaceae	<i>Conostephium pendulum</i>			Y
Ericaceae	<i>Lysinema pentapetalum</i>			Y
Ericaceae	<i>Styphelia conostephioides</i>			Y
Ericaceae	<i>Styphelia xerophylla</i>			Y
Euphorbiaceae	* <i>Euphorbia peplus</i>	Introduced (weed)	Y	Y
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced (weed)	Y	Y
Euphorbiaceae	* <i>Ricinus communis</i>	Introduced (weed)	Y	Y

Euphorbiaceae	<i>Amperea ericoides</i>			Y
Euphorbiaceae	<i>Euphorbia drummondii</i>		Y	Y
Euphorbiaceae	<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>			Y
Euphorbiaceae	<i>Stachystemon vermicularis</i>			Y
Fabaceae	* <i>Acacia iteaphylla</i>	Introduced (weed)		Y
Fabaceae	* <i>Acacia longifolia</i> subsp. <i>longifolia</i>	Introduced (weed)		Y
Fabaceae	* <i>Chamaecytisus palmensis</i>	Introduced (weed)		Y
Fabaceae	* <i>Lotus subbiflorus</i>	Introduced (weed)		Y
Fabaceae	* <i>Lupinus angustifolius</i>	Introduced (weed)	Y	Y
Fabaceae	* <i>Medicago polymorpha</i>	Introduced (weed)		Y
Fabaceae	* <i>Trifolium angustifolium</i> var. <i>angustifolium</i>	Introduced (weed)	Y	Y
Fabaceae	* <i>Trifolium arvense</i> var. <i>arvense</i>	Introduced (weed)	Y	Y
Fabaceae	* <i>Trifolium campestre</i> var. <i>campestre</i>	Introduced (weed)	Y	Y
Fabaceae	<i>Acacia appianata</i>			Y
Fabaceae	<i>Acacia huegelii</i>			Y
Fabaceae	<i>Acacia lasiocarpa</i> var. <i>lasiocarpa</i>			Y
Fabaceae	<i>Acacia pulchella</i> var. <i>glaberrima</i>			Y
Fabaceae	<i>Acacia saligna</i>			Y
Fabaceae	<i>Acacia sessilis</i>			Y
Fabaceae	<i>Acacia willdenowiana</i>			Y
Fabaceae	<i>Aotus cordifolia</i>			Y
Fabaceae	<i>Bossiaea eriocarpa</i>			Y
Fabaceae	<i>Cristonia biloba</i>			Y
Fabaceae	<i>Cristonia biloba</i> subsp. <i>biloba</i>			Y
Fabaceae	<i>Daviesia ? preissii</i>			Y
Fabaceae	<i>Daviesia divaricata</i> subsp. <i>divaricata</i>			Y
Fabaceae	<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>			Y

Fabaceae	<i>Daviesia physodes</i>			Y
Fabaceae	<i>Daviesia podophylla</i>			Y
Fabaceae	<i>Daviesia preissii</i>			Y
Fabaceae	<i>Daviesia</i> sp.			Y
Fabaceae	<i>Daviesia triflora</i>			Y
Fabaceae	<i>Gastrolobium linearifolium</i>			Y
Fabaceae	<i>Gompholobium tomentosum</i>			Y
Fabaceae	<i>Hardenbergia comptoniana</i>			Y
Fabaceae	<i>Hovea trisperma</i> var. <i>trisperma</i>			Y
Fabaceae	<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>			Y
Fabaceae	<i>Jacksonia floribunda</i>		Y	Y
Fabaceae	<i>Jacksonia lehmannii</i>			Y
Fabaceae	<i>Jacksonia sternbergiana</i>		Y	Y
Fabaceae	<i>Kennedia prostrata</i>			Y
Fabaceae	<i>Sphaerolobium medium</i>			Y
Fabaceae	<i>Viminaria juncea</i>			Y
Geraniaceae	* <i>Pelargonium capitatum</i>	Introduced (weed)	Y	Y
Geraniaceae	<i>Geranium retrorsum</i>		Y	Y
Goodeniaceae	<i>Dampiera linearis</i>			Y
Goodeniaceae	<i>Goodenia micrantha</i>			Y
Goodeniaceae	<i>Scaevola canescens</i>			Y
Goodeniaceae	<i>Scaevola glandulifera</i>			Y
Goodeniaceae	<i>Scaevola repens</i> var. <i>repens</i>			Y
Haemodoraceae	<i>Anigozanthos manglesii</i>			Y
Haemodoraceae	<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>			Y
Haemodoraceae	<i>Blancoa canescens</i>			Y
Haemodoraceae	<i>Conostylis aurea</i>			Y

Haemodoraceae	<i>Conostylis candidans</i>			Y
Haemodoraceae	<i>Conostylis juncea</i>			Y
Haemodoraceae	<i>Conostylis setigera</i> subsp. <i>setigera</i>			Y
Haemodoraceae	<i>Conostylis</i> sp.			Y
Haemodoraceae	<i>Haemodorum</i> ? <i>discolor</i>			Y
Haemodoraceae	<i>Haemodorum</i> ? <i>laxum</i>			Y
Haemodoraceae	<i>Haemodorum</i> ? <i>spicatum</i>			Y
Haemodoraceae	<i>Haemodorum</i> ? <i>venosum</i>			Y
Haemodoraceae	<i>Haemodorum</i> <i>discolor</i>			Y
Haemodoraceae	<i>Haemodorum</i> <i>paniculatum</i>			Y
Haemodoraceae	<i>Haemodorum</i> sp.			Y
Haemodoraceae	<i>Haemodorum</i> <i>sparsiflorum</i>			Y
Haemodoraceae	<i>Haemodorum</i> <i>spicatum</i>			Y
Haemodoraceae	<i>Phlebocarya</i> <i>ciliata</i>			Y
Haemodoraceae	<i>Phlebocarya</i> <i>filifolia</i>			Y
Haloragaceae	<i>Gonocarpus</i> <i>nudulosus</i>			Y
Hemerocallidaceae	<i>Arnocrinum</i> <i>preissii</i>			Y
Hemerocallidaceae	<i>Caesia</i> <i>occidentalis</i>			Y
Hemerocallidaceae	<i>Caesia</i> sp.			Y
Hemerocallidaceae	<i>Caesia</i> sp. Wongan (K.F. Kenneally 8820)			Y
Hemerocallidaceae	<i>Corynotheca</i> <i>micrantha</i> var. <i>elongata</i>			Y
Hemerocallidaceae	<i>Corynotheca</i> <i>micrantha</i> var. <i>micrantha</i>			Y
Hemerocallidaceae	<i>Johnsonia</i> <i>pubescens</i> subsp. ? <i>cygnorum</i>			Y
Hemerocallidaceae	<i>Johnsonia</i> <i>pubescens</i> subsp. ? <i>pubescens</i>			Y
Hemerocallidaceae	<i>Johnsonia</i> <i>pubescens</i> subsp. <i>cygnorum</i>	Priority 2		Y
Hemerocallidaceae	<i>Tricoryne</i> <i>elatior</i>			Y
Iridaceae	* <i>Gladiolus cardinalis</i>	Introduced (weed)		Y

Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced (weed)		Y
Iridaceae	* <i>Hesperantha falcata</i>	Introduced (weed)		Y
Iridaceae	* <i>Romulea rosea</i>	Introduced (weed)		Y
Iridaceae	* <i>Watsonia meriana</i>	Introduced (weed)	Y	Y
Iridaceae	<i>Patersonia occidentalis</i> var. <i>occidentalis</i>			Y
Juncaceae	* <i>Juncus articulatus</i>	Introduced (weed)		Y
Juncaceae	* <i>Juncus bufonius</i>	Introduced (weed)	Y	Y
Juncaceae	* <i>Juncus capitatus</i>	Introduced (weed)		Y
Juncaceae	<i>Juncus pallidus</i>			Y
Juncaginaceae	<i>Cycnogeton huegelii</i>			Y
Lamiaceae	<i>Hemiandra glabra</i>			Y
Lamiaceae	<i>Hemiandra linearis</i>			Y
Lamiaceae	<i>Hemiandra pungens</i>			Y
Lamiaceae	<i>Hemiphora bartlingii</i>			Y
Lauraceae	<i>Cassytha aurea</i>			Y
Lauraceae	<i>Cassytha racemosa</i> forma <i>pilosa</i>			Y
Lentibulariaceae	<i>Utricularia multifida</i>			Y
Loganiaceae	<i>Phyllangium divergens</i>			Y
Loganiaceae	<i>Phyllangium paradoxum</i>			Y
Loranthaceae	<i>Nuytsia floribunda</i>			Y
Lythraceae	* <i>Lythrum hyssopifolia</i>	Introduced (weed)		Y
Meliaceae	<i>Melia azedarach</i>			Y
Molluginaceae	<i>Macarthuria australis</i>			Y
Moraceae	* <i>Ficus carica</i>	Introduced (weed)		Y
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced (weed)	Y	Y
Myrtaceae	* <i>Melaleuca armillaris</i>	Introduced (weed)	Y	Y
Myrtaceae	<i>Agonis flexuosa</i>			Y

Myrtaceae	<i>Astartea scoparia</i>			Y
Myrtaceae	<i>Babingtonia camphorosmae</i>			Y
Myrtaceae	<i>Calothamnus quadrifidus</i>			Y
Myrtaceae	<i>Calothamnus sanguineus</i>			Y
Myrtaceae	<i>Calytrix aurea</i>			Y
Myrtaceae	<i>Calytrix flavescens</i>			Y
Myrtaceae	<i>Calytrix fraseri</i>			Y
Myrtaceae	<i>Corymbia calophylla</i>			Y
Myrtaceae	<i>Eremaea fimbriata</i>			Y
Myrtaceae	<i>Eremaea pauciflora</i>			Y
Myrtaceae	<i>Eremaea pauciflora</i> var. <i>pauciflora</i>		Y	Y
Myrtaceae	<i>Eremaea purpurea</i>			Y
Myrtaceae	<i>Eucalyptus camaldulensis</i>		Y	Y
Myrtaceae	<i>Eucalyptus marginata</i>			Y
Myrtaceae	<i>Eucalyptus marginata</i> subsp. <i>marginata</i>			Y
Myrtaceae	<i>Eucalyptus patens</i>			Y
Myrtaceae	<i>Eucalyptus rufa</i> subsp. <i>rufa</i>			Y
Myrtaceae	<i>Eucalyptus todtiana</i>			Y
Myrtaceae	<i>Hypocalymma robustum</i>			Y
Myrtaceae	<i>Kunzea glabrescens</i>			Y
Myrtaceae	<i>Melaleuca brevifolia</i>			Y
Myrtaceae	<i>Melaleuca fulgens</i>			Y
Myrtaceae	<i>Melaleuca hamulosa</i>			Y
Myrtaceae	<i>Melaleuca incana</i> subsp. <i>incana</i>			Y
Myrtaceae	<i>Melaleuca lateritia</i>			Y
Myrtaceae	<i>Melaleuca nesophila</i>	Introduced (Planted)		Y
Myrtaceae	<i>Melaleuca preissiana</i>		Y	Y

Myrtaceae	<i>Melaleuca rhamphophylla</i>			Y
Myrtaceae	<i>Melaleuca seriata</i>			Y
Myrtaceae	<i>Melaleuca sp.</i>			Y
Myrtaceae	<i>Melaleuca systema</i>			Y
Myrtaceae	<i>Melaleuca viminalis</i>	Priority 2		Y
Myrtaceae	<i>Melaleuca viminea</i> subsp. <i>viminea</i>			Y
Myrtaceae	<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>			Y
Myrtaceae	<i>Pericalymma ellipticum</i> var. <i>floridum</i>			Y
Myrtaceae	<i>Scholtzia involucrata</i>			Y
Myrtaceae	<i>Scholtzia parviflora</i>			Y
Myrtaceae	<i>Taxandria linearifolia</i>			Y
Myrtaceae	<i>Verticordia densiflora</i> var. <i>densiflora</i>			Y
Myrtaceae	<i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	Priority 4		Y
Myrtaceae	<i>Verticordia picta</i>			Y
Oleaceae	* <i>Olea europaea</i>	Introduced (weed)		Y
Onagraceae	<i>Epilobium hirtigerum</i>		Y	Y
Orchidaceae	* <i>Disa bracteata</i>	Introduced (weed)		Y
Orchidaceae	<i>Caladenia flava</i>			Y
Orchidaceae	<i>Caladenia flava</i> subsp. <i>flava</i>			Y
Orchidaceae	<i>Caladenia sp.</i>			Y
Orchidaceae	<i>Microtis media</i> subsp. <i>media</i>			Y
Orchidaceae	<i>Pterostylis ? vittata</i>			Y
Orchidaceae	<i>Pterostylis sanguinea</i>			Y
Orchidaceae	<i>Pterostylis sp.</i>			Y
Orchidaceae	<i>Pterostylis vittata</i>			Y
Orchidaceae	<i>Thelymitra sp.</i>			Y
Orobanchaceae	* <i>Orobanche minor</i>	Introduced (weed)	Y	Y

Papaveraceae	* <i>Fumaria capreolata</i>	Introduced (weed)	Y	Y
Phyllanthaceae	<i>Poranthera microphylla</i>			Y
Pittosporaceae	<i>Billardiera fraseri</i>			Y
Plantaginaceae	* <i>Callitriches stagnalis</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Aira caryophyllea</i>	Introduced (weed)		Y
Poaceae	* <i>Aira cupaniana</i>	Introduced (weed)		Y
Poaceae	* <i>Arundo donax</i>	Introduced (weed)		Y
Poaceae	* <i>Avellinia michelii</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Avena fatua</i>	Introduced (weed)		Y
Poaceae	* <i>Brachypodium distachyon</i>	Introduced (weed)		Y
Poaceae	* <i>Briza maxima</i>	Introduced (weed)		Y
Poaceae	* <i>Briza minor</i>	Introduced (weed)		Y
Poaceae	* <i>Bromus diandrus</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Bromus hordeaceus</i>	Introduced (weed)		Y
Poaceae	* <i>Cenchrus clandestinus</i>	Introduced (weed)		Y
Poaceae	* <i>Cenchrus setaceus</i>	Introduced (weed)		Y
Poaceae	* <i>Cortaderia selloana</i>	Introduced (weed)		Y
Poaceae	* <i>Cynodon dactylon</i>	Introduced (weed)		Y
Poaceae	* <i>Ehrharta calycina</i>	Introduced (weed)		Y
Poaceae	* <i>Ehrharta longiflora</i>	Introduced (weed)		Y
Poaceae	* <i>Eragrostis curvula</i>	Introduced (weed)		Y
Poaceae	* <i>Hordeum leporinum</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Hyparrhenia hirta</i>	Introduced (weed)		Y
Poaceae	* <i>Lagurus ovatus</i>	Introduced (weed)		Y
Poaceae	* <i>Lolium multiflorum</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Lolium perenne</i>	Introduced (weed)		Y
Poaceae	* <i>Paspalum dilatatum</i>	Introduced (weed)	Y	Y

Poaceae	* <i>Paspalum urvillei</i>	Introduced (weed)		Y
Poaceae	* <i>Pentameris airoides</i> subsp. <i>airoides</i>	Introduced (weed)		Y
Poaceae	* <i>Pentameris pallida</i>	Introduced (weed)		Y
Poaceae	* <i>Phalaris aquatica</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Poa annua</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Polypogon monspeliensis</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Rostraria cristata</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Setaria parviflora</i>	Introduced (weed)		Y
Poaceae	* <i>Vulpia bromoides</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Vulpia muralis</i>	Introduced (weed)	Y	Y
Poaceae	* <i>Vulpia myuros</i> forma <i>myuros</i>	Introduced (weed)		Y
Poaceae	<i>Amphipogon laguroides</i>			Y
Poaceae	<i>Amphipogon turbinatus</i>			Y
Poaceae	<i>Austrostipa compressa</i>			Y
Poaceae	<i>Austrostipa elegantissima</i>			Y
Poaceae	<i>Austrostipa flavescens</i>			Y
Poaceae	<i>Deyeuxia quadriseta</i>			Y
Poaceae	<i>Neurachne alopecuroidea</i>			Y
Poaceae	<i>Rytidosperma occidentale</i>			Y
Poaceae	<i>Rytidosperma pilosum</i>			Y
Poaceae	<i>Rytidosperma setaceum</i>			Y
Poaceae	<i>Rytidosperma</i> sp.			Y
Polygalaceae	<i>Comesperma calymega</i>			Y
Portulacaceae	<i>Calandrinia granulifera</i>			Y
Primulaceae	* <i>Lysimachia arvensis</i>	Introduced (weed)	Y	Y
Proteaceae	<i>Adenanthes barbiger</i>			Y
Proteaceae	<i>Adenanthes cygnorum</i>			Y

Proteaceae	<i>Adenanthera cygnorum</i> subsp. <i>cygnorum</i>			Y
Proteaceae	<i>Banksia attenuata</i>			Y
Proteaceae	<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>			Y
Proteaceae	<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>			Y
Proteaceae	<i>Banksia ilicifolia</i>			Y
Proteaceae	<i>Banksia menziesii</i>		Y	Y
Proteaceae	<i>Conospermum acerosum</i> subsp. <i>acerosum</i>			Y
Proteaceae	<i>Conospermum undulatum</i>	Threatened		Y
Proteaceae	<i>Hakea prostrata</i>			Y
Proteaceae	<i>Hakea ruscifolia</i>			Y
Proteaceae	<i>Hakea sulcata</i>			Y
Proteaceae	<i>Hakea trifurcata</i>			Y
Proteaceae	<i>Hakea varia</i>			Y
Proteaceae	<i>Isopogon autumnalis</i>	Priority 3		Y
Proteaceae	<i>Lambertia multiflora</i> var. <i>darlingensis</i>			Y
Proteaceae	<i>Persoonia elliptica</i>			Y
Proteaceae	<i>Persoonia saccata</i>			Y
Proteaceae	<i>Petrophile biloba</i>			Y
Proteaceae	<i>Petrophile linearis</i>			Y
Proteaceae	<i>Petrophile rigida</i>			Y
Proteaceae	<i>Stirlingia latifolia</i>		Y	Y
Proteaceae	<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>			Y
Proteaceae	<i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>			Y
Restionaceae	<i>Alexgeorgea nitens</i>			Y
Restionaceae	<i>Chordifex sinuosus</i>			Y
Restionaceae	<i>Desmocladus fasciculatus</i>			Y
Restionaceae	<i>Desmocladus flexuosus</i>			Y

Restionaceae	<i>Hypolaena ? robusta</i>			Y
Restionaceae	<i>Hypolaena exsulca</i>			Y
Restionaceae	<i>Hypolaena robusta</i>	Priority 4		Y
Restionaceae	<i>Leptocarpus coangustatus</i>			Y
Restionaceae	<i>Lepyrodia muirii</i>			Y
Rosaceae	* <i>Rubus ulmifolius</i>	Introduced (WoNS, Declared)		Y
Rubiaceae	<i>Opercularia apiciflora</i>			Y
Rutaceae	<i>Philotheca spicata</i>			Y
Scrophulariaceae	* <i>Dischisma arenarium</i>	Introduced (weed)	Y	Y
Solanaceae	* <i>Solanum linnaeanum</i>	Introduced (Declared)		Y
Solanaceae	* <i>Solanum nigrum</i>	Introduced (weed)		Y
Styliadiaceae	<i>Levenhookia pusilla</i>			Y
Styliadiaceae	<i>Levenhookia stipitata</i>			Y
Styliadiaceae	<i>Styliodium araeophyllum</i>			Y
Styliadiaceae	<i>Styliodium calcaratum</i>			Y
Styliadiaceae	<i>Styliodium dichotomum</i>			Y
Styliadiaceae	<i>Styliodium diuroides</i> subsp. <i>diuroides</i>			Y
Styliadiaceae	<i>Styliodium repens</i>			Y
Styliadiaceae	<i>Styliodium utricularioides</i>			Y
Thymelaeaceae	<i>Pimelea angustifolia</i>			Y
Thymelaeaceae	<i>Pimelea sulphurea</i>			Y
Tropaeolaceae	* <i>Tropaeolum majus</i>	Introduced (weed)		Y
Typhaceae	<i>Typha domingensis</i>			Y
Violaceae	<i>Hybanthus calycinus</i>			Y
Xanthorrhoeaceae	<i>Xanthorrhoea gracilis</i>			Y
Xanthorrhoeaceae	<i>Xanthorrhoea preissii</i>		Y	Y

Appendix 8

Raw Site Data and Photographs



GEH Bypass Interchange Project PH1	Site	GBQ01
Described by	RM/MET	Date 10-Sep-19
MGA Zone	50	406356 mE 6468252 mN
Habitat	Crest of east west trending dune.	
Soil	Creamy grey sand.	
Rock Type	N/A.	
Vegetation	Allocasuarina fraseriana open woodland over Eucalyptus todtiana (Banksia menziesii) low woodland over Jacksonia floribunda scattered tall shrubs over Hibbertia hypericoides subsp. septentrionalis, Eremaea pauciflora var. pauciflora low open shrubland over Mesomelaena pseudostygia open sedgeland over Alexgeorgea nitens open hermland.	
Veg Condition	Excellent.	
Fire Age	No sign of recent fire.	

Species	% Cover	Height (cm)	Specimen	Notes
Acacia sessilis	0.1	25	GBQ01-10	
*Aira caryophyllea	0.1	25	GBQ01-40	
Alexgeorgea nitens	25	20	GBQ01-17	
Allocasuarina fraseriana	0.1	800	GBQ01-56b	
Allocasuarina fraseriana	5	1400	GBQ01-02	
Amphipogon turbinatus	0.1	30	GBQ01-55	
Amphipogon turbinatus	0.1	15	GBQ01-20	
Austrostipa compressa	0.1	20	GBQ01-24	
Banksia dallanneyi var. dallanneyi	0.1	30	GBQ01-56A	
Banksia menziesii	1	600		
*Briza maxima	0.1	30		
Burchardia congesta	0.1	50	GBQ01-28	
Caladenia flava subsp. flava	0.1	15	GBQ01-53	
Caladenia sp.	0.1	5	GBQ01-36	ISM for det.
Calytrix fraseri	0.1	35	GBQ01-46	
Conostephium pendulum	0.1	15	GBQ01-32	
Conostylis aurea	0.1	20	GBQ01-19	
Conostylis setigera subsp. setigera	0.1	20	GBQ01-43	
Dasyglossum bromeliifolius	0.1	45	GBQ01-21	
Desmocladus fasciculatus	0.1	15	GBQ01-34	
Drosera porrecta	0.1	5	GBQ01-11	
*Ehrharta calycina	0.1	70	GBQ01-14	
Eremaea pauciflora var. pauciflora	2	80	GBQ01-30	
Eucalyptus todtiana	12	600	GBQ01-03	
*Gladiolus caryophyllaceus	0.1	50	GBQ01-09	
Gompholobium tomentosum	0.1	50	GBQ01-08	
Haemodorum ? venosum	0.1	40	GBQ01-59	ISM for det.
Haemodorum sp.	0.1	35	GBQ01-33	ISM for det.
Haemodorum sp.	0.1	20	GBQ01-25	ISM for det.
Hibbertia hypericoides subsp. septentrionalis	6	50	GBQ01-05	
Hyalosperma cotula	1	10	GBQ01-41	
*Hypochaeris glabra	0.1	10	GBQ01-27	
Hypolaena exsulca	0.1	40	GBQ01-22	
Isotropis cuneifolia subsp. cuneifolia	0.1	20	GBQ01-38	
Jacksonia floribunda	1	220	GBQ01-04	
Laxmannia ramosa subsp. ramosa	0.1	45	GBQ01-23	
Laxmannia ramosa subsp. ramosa	0.1	20	GBQ01-48	
Levenhookia stipitata	0.1	10	GBQ01-47	
Lomandra caespitosa	0.1	15	GBQ01-18	
Lomandra hermaphrodita	0.1	25	GBQ01-50	
Lomandra suaveolens	0.1	40	GBQ01-42	
Lomandra suaveolens	0.1	20	GBQ01-49	
Mesomelaena pseudostygia	15	60	GBQ01-06	
*Olea europaea	0.1	20	GBQ01-29	N=1
Patersonia occidentalis var. occidentalis	0.1	40	GBQ01-39	
Petrophile linearis	0.1	50	GBQ01-54	
Phlebocarya filifolia	0.1	30	GBQ01-22B	
Pimelea sulphurea	0.1	45	GBQ01-13	
Podotheca angustifolia	0.1	10	GBQ01-15B	

Species	% Cover	Height (cm)	Specimen	Notes
<i>Podotheca gnaphaloides</i>	0.1	10	GBQ01-15A	
<i>Poranthera microphylla</i>	0.1	5	GBQ01-37	
* <i>Romulea rosea</i>	0.1	30		
<i>Scaevola canescens</i>	0.1	50	GBQ01-07	
<i>Schoenus clandestinus</i>	0.1	5	GBQ01-16	
<i>Siloxerus humifusus</i>	0.1	5	GBQ01-44	
<i>Stirlingia latifolia</i>	0.1	50	GBQ01-35	
<i>Stylium calcaratum</i>	0.1	5	GBQ01-01	
<i>Stylium diuroides</i> subsp. <i>diuroides</i>	0.1	10	GBQ01-45	
<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>	0.1	30	GBQ01-57	
<i>Thysanotus manglesianus</i>	0.1	25	GBQ01-51	
<i>Trachymene pilosa</i>	0.1	15	GBQ01-12	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15	GBQ01-26	
<i>Xanthorrhoea preissii</i>	0.1	600	GBQ01-58	



GEH Bypass Interchange Project PH1	Site	GBQ02
Described by	RM/MET	Date
MGA Zone	50	406487 mE
Habitat		6468223 mN
Soil		Gentle to moderate south facing slope of low dune upslope from seasonal dampland.
Rock Type		Creamy grey sand.
Vegetation		None.
		Jacksonia floribunda scattered tall shrubs over Xanthorrhoea preissii, Melaleuca seriata open shrubland over *Ehrharta calycina, *Pentameris pallida scattered grasses over Lyginia barbata (Lyginia imberbis) open sedgeland over Alexgeorgea nitens (Dasypogon bromeliifolius, *Ursinia anthemoides) herland.
Veg Condition		Excellent to Very Good.
Fire Age		No sign of recent fire.

Name	%Cover	Height (cm)	Specimen	Notes
Acacia pulchella var. glaberrima	0.1	90	GBQ02-16	
Alexgeorgea nitens	40	15		
Amphipogon turbinatus	0.1	20	GBQ02-35	
Arnocrinum preissii	0.1	50	GBQ02-21	
Astroloma xerophyllum	0.1	50	GBQ02-07	
Austrostipa compressa	0.1	20	GBQ02-10	
Austrostipa flavescens	0.1	30	GBQ02-22	
Banksia menziesii	0.1	600		
Blancoa canescens	0.1	25	GBQ02-36	
Blancoa canescens	0.1	20	GBQ02-18	
Bossiaea eriocarpa	0.1	25	GBQ02-31	
*Briza maxima	0.1	15		
Burchardia congesta	0.1	30	GBQ02-30	
Conostephium pendulum	0.1	30	GBQ02-25	
Conostylis sp.	0.1	20	GBQ02-19	ISM for det.
Dampiera linearis	0.1	30	GBQ02-02	
Dasypogon bromeliifolius	2	30		
Drosera erythrorhiza	0.1	1	GBQ02-09	
Drosera menziesii	0.1	5	GBQ02-26	
*Ehrharta calycina	1	60		
*Gladiolus caryophyllaceus	0.1	10		
Haemodorum sp.	0.1	25	GBQ02-33	ISM for det.
Haemodorum spicatum	0.1	30	GBQ02-13	
*Hypochaeris glabra	0.1	5		
Hypolaena exsulca	0.1	15	GBQ02-20	
Jacksonia floribunda	1	350		
Lepidosperma oldhamii/calcicola	0.1	20	GBQ02-34	
Leucopogon conostephoides	0.1	30	GBQ02-27	
Levenhookia stipitata	0.1	15	GBQ02-17	
Lomandra hermaphrodita	0.1	20	GBQ02-14	
Lomandra suaveolens	0.1	30	GBQ02-29	
Lomandra suaveolens	0.1	25	GBQ02-24	
Lyginia barbata	10	50	GBQ02-04	
Lyginia imberbis	2	60	GBQ02-06	
Melaleuca seriata	2	140	GBQ02-23	
*Pentameris pallida	1	15	GBQ02-01	
Podotheca angustifolia	0.1	10	GBQ02-05	
*Romulea rosea	0.1	15		
Schoenus curvifolius	0.1	30	GBQ02-32	
Siloxerus humifusus	0.1	10	GBQ02-08	
Stirlingia latifolia	0.1	50		
Stylium dichotomum	0.1	10	GBQ02-15	
Thysanotus patersonii	0.1	30	GBQ02-28	
Thysanotus sp.	0.1	20	GBQ02-37	ISM for det.
Trachymene pilosa	0.1	15	GBQ02-11	
*Ursinia anthemoides subsp. anthemoides	2	20		
Verticordia densiflora var. densiflora	0.1	60	GBQ02-12	
*Wahlenbergia capensis	0.1	15		
Xanthorrhoea preissii	5	160	GBQ02-03	



GEH Bypass Interchange Project PH2 **Site** GBQ02R
Described by RM/ **Date** 4-Nov-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **mE** 406487 **mN** 6468223
Habitat Gentle to moderate south facing slope of low dune upslope from seasonal dampland.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Jacksonia floribunda* scattered tall shrubs over *Xanthorrhoea preissii*, *Melaleuca seriata* open shrubland over **Ehrharta calycina*, **Pentameris pallida* scattered grasses over *Lyginia barbata* (*Lyginia imberbis*) open sedgeland over *Alexgeorgea nitens* (*Dasypogon bromeliifolius*, **Ursinia anthemoides*) herblad.
Veg Condition Excellent to Very Good.
Fire Age No sign of recent fire.

Name	%Cover	Height (cm)	Specimen	Notes
<i>Acacia pulchella</i> var. <i>glaberrima</i>	0.1	90		
<i>Alexgeorgea nitens</i>	40	15		
<i>Amphipogon turbinatus</i>	0.1	20		
<i>Astroloma xerophyllum</i>	0.1	50		
<i>Austrostipa compressa</i>	0.1	20		
<i>Austrostipa flavescens</i>	0.1	30		
<i>Banksia menziesii</i>	0.1	600		
<i>Blancaea canescens</i>	0.1	20		
<i>Bossiaea eriocarpa</i>	0.1	25		
<i>Briza maxima</i>	0.1	15		
<i>Burchardia congesta</i>	0.1	30		
<i>Conostephium pendulum</i>	0.1	30		
<i>Dampiera linearis</i>	0.1	30		
<i>Dasypogon bromeliifolius</i>	4	30		
<i>Ehrharta calycina</i>	1	60		
<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	1.5	60		
<i>Gladiolus caryophyllaceus</i>	0.1	10		
<i>Haemodorum spicatum</i>	0.1	30		
<i>Hypolaena exsulca</i>	0.1	15		
<i>Jacksonia floribunda</i>	1	350		
<i>Lepidosperma oldhamii/calcicola</i>	0.1	20		
<i>Leucopogon conostephoides</i>	0.1	30		
<i>Levenhookia stipitata</i>	0.1	15		
<i>Lomandra hermaphrodita</i>	0.1	20		
<i>Lomandra suaveolens</i>	0.1	30		
<i>Lyginia barbata</i>	10	50		
<i>Lyginia imberbis</i>	2	60		
<i>Melaleuca seriata</i>	2	140		
<i>Pentameris pallida</i>	0.5	15		
<i>Romulea rosea</i>	0.1	15		
<i>Schoenus curvifolius</i>	0.1	30		N=1
<i>Stirlingia latifolia</i>	0.1	50		
<i>Styliodium dichotomum</i>	0.1	10		
<i>Thysanotus patersonii</i>	0.1	30		
<i>Trachymene pilosa</i>	0.1	90		
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	40	15		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	0.1	20		
<i>Wahlenbergia capensis</i>	0.1	50		
<i>Xanthorrhoea preissii</i>	0.1	20		



GEH Bypass Interchange Project PH1 **Site** GBQ03
Described by RM/MET **Date** 10-Sep-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **mE** 406491 **mN** 6468254
Habitat Dune crest and south slope.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Jacksonia floribunda* scattered tall shrubs over *Eremaea pauciflora* open heath over *Astroloma xerophyllum* low open shrubs over *Lyginia imberbis* very open sedgeland over *Alexgeorgea nitens* (*Hypocharis glabra*) herbland.
Veg Condition Excellent to Very Good.
Fire Age No sign of recent fire.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Alexgeorgea nitens</i>	40	20		
<i>Amphipogon turbinatus</i>	0.1	20	GBQ03-15	
<i>Amphipogon turbinatus</i>	0.1	20	GBQ03-19	
<i>Astroloma xerophyllum</i>	4	90	GBQ03-08	
<i>Austrostipa compressa</i>	0.1	25	GBQ03-16	
<i>Bossiaea eriocarpa</i>	0.1	30	GBQ03-14	
* <i>Briza maxima</i>	0.1	20		
<i>Burchardia congesta</i>	0.1	20	GBQ03-07	
<i>Caladenia</i> sp.	0.1	20	GBQ03-21	ISM for det.
<i>Conostylis juncea</i>	0.1	20	GBQ03-06	
<i>Drosera menziesii</i>	0.1	40	GBQ03-01	
<i>Drosera micrantha</i>	0.1	5	GBQ03-20	
* <i>Ehrharta calycina</i>	0.1	60		
<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	50	120		
* <i>Gladiolus cardinalis</i>	0.1	15	GBQ03-24	
* <i>Gladiolus caryophyllaceus</i>	0.1	20		
<i>Hibbertia hypericoides</i>	0.1	30		
<i>Hyalosperma cotula</i>	0.1	5	GBQ03-03	
* <i>Hypocharis glabra</i>	0.5	5		
<i>Jacksonia floribunda</i>	2	250		
<i>Jacksonia floribunda</i>	0.1	5	GBQ03-12	
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	0.1	20	GBQ03-10	
<i>Levenhookia stipitata</i>	0.1	4	GBQ01-47	
<i>Lomandra hermaphrodita</i>	0.1	20	GBQ03-18	
<i>Lomandra suaveolens</i>	0.1	30	GBQ03-22	
<i>Lomandra suaveolens</i>	0.1	20	GBQ03-23	
<i>Lyginia barbata</i>	0.1	30	GBQ02-04=	
<i>Lyginia imberbis</i>	3	90	GBQ04-08=	
<i>Melaleuca systena</i>	0.1	90		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	25	GBQ03-05	
* <i>Pentameris pallida</i>	0.1	20	GBQ03-09	
<i>Podotheca angustifolia</i>	0.1	10	GBQ03-11	
<i>Schoenus curvifolius</i>	0.1	30	GBQ03-04	
<i>Schoenus efoliatus</i>	0.1	20	GBQ03-17	
<i>Scholtzia involucrata</i>	0.1	40	GBQ03-02	
* <i>Sonchus oleraceus</i>	0.1	20		
<i>Stirlingia latifolia</i>	0.1	90		
<i>Stylium repens</i>	0.1	20	GBQ03-25	
<i>Thysanotus patersonii</i>	0.1	40	GBQ03-13	
<i>Trachymene pilosa</i>	0.1	5		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	0.1	60	GBQ03-26	



GEH Bypass Interchange Project PH1**Site** GBQ04**Described by** RM/MET **Date** 10-Sep-19 **Type** Quadrat: 10 x 10 m**MGA Zone** 50 **406552 mE** **6468164 mN****Habitat** Gentle slope to east, midslope, light grey sand with some litter.**Soil** Creamy grey sand.**Rock Type** None.**Vegetation** *Adenanthes cygnorum* scattered tall shrubs over *Pericalymma ellipticum* var. *floridum*, *Verticordia densiflora* var. *densiflora*, *Melaleuca seriata* closed heath over *Lyginia imberbis*, *Hypolaena exsulca* open sedgeland over **Ehrharta calycina*, **Pentameris airoides* subsp. *airoides*, **Vulpia bromoides* very open grassland over **Ursinia anthemoides* scattered herbs.**Veg Condition** Excellent to Very Good.**Fire Age** Very long unburnt.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	0.5	230		
* <i>Briza minor</i>	0.1	10		
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	0.1	40	GBQ04-11	
<i>Crassula colorata</i> var. <i>colorata</i>	0.1	2	GBQ04-10	
<i>Crassula decumbens</i> var. <i>decumbens</i>	0.1	5	GBQ04-12	
* <i>Ehrharta calycina</i>	1.5	60		
* <i>Gladiolus caryophyllaceus</i>	0.1	40		
* <i>Hypochoeris glabra</i>	0.1	5		
<i>Hypolaena exsulca</i>	5	50	GBQ04-07	
<i>Isolepis marginata</i>	0.1	10	GBQ04-17	
<i>Isolepis</i> sp.	0.1	10	GBQ04-04A	ISM for det.
* <i>Lotus subbiflorus</i>	0.1	10	GBQ04-06	
<i>Lyginia imberbis</i>	15	40	GBQ04-08	
<i>Lysimachia arvensis</i>	0.1	30		
<i>Melaleuca seriata</i>	10	160	GBQ04-02	
<i>Nuytsia floribunda</i>	0.1	500		
* <i>Pentameris airoides</i> subsp. <i>airoides</i>	1	10	GBQ04-09	
<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>	0.1	160	GBQ04-16	
<i>Pericalymma ellipticum</i> var. <i>floridum</i>	65	150	GBQ04-01	
* <i>Rostraria cristata</i>	0.1	15	GBQ04-13	
* <i>Silene gallica</i> var. <i>gallica</i>	0.1	15	GBQ04-15	
<i>Siloxerus humifusus</i>	0.1	10	GBQ14-04B	
<i>Stirlingia latifolia</i>	0.1	90		
<i>Trachymene pilosa</i>	0.1	5		
* <i>Trifolium campestre</i> var. <i>campestre</i>	0.1	15	GBQ04-14	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	2	20		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	15	120	GBQ04-03	
* <i>Vulpia bromoides</i>	1	7	GBQ04-05	



GEH Bypass Interchange Project PH2

Site GBQ04R

Described by	RM	Date	4-Nov-20	Type	Quadrat: 10 x 10 m
MGA Zone	50	406552 mE	6468164 mN		
Habitat	Gentle slope to east, midslope, light grey sand with some litter.				
Soil	Creamy grey sand.				
Rock Type	None.				
Vegetation	Adenanthes cygnorum scattered tall shrubs over <i>Pericalymma ellipticum</i> var. <i>floridum</i> , <i>Verticordia densiflora</i> var. <i>densiflora</i> , <i>Melaleuca seriata</i> closed heath over <i>Lyginia imberbis</i> , <i>Hypolaena exsulca</i> open sedgeland over * <i>Ehrharta calycina</i> , * <i>Pentameris airoides</i> subsp. <i>airoides</i> , * <i>Vulpia bromoides</i> very open grassland over * <i>Ursinia anthemoides</i> scattered herbs.				
Veg Condition	Excellent to Very Good.				
Fire Age	Very long unburnt.				

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	0.5	230		
<i>Briza minor</i>	0.1	10		
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	0.1	40		
<i>Crassula colorata</i> var. <i>colorata</i>	0.1	2		
<i>Crassula decumbens</i> var. <i>decumbens</i>	0.1	5		
<i>Ehrharta calycina</i>	1.5	60		
<i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Hypolaena exsulca</i>	5	50		
<i>Isolepis marginata</i>	0.1	10		
<i>Isolepis</i> sp.	0.1	10		
<i>Lyginia imberbis</i>	15	40		
<i>Lysimachia arvensis</i>	0.1	30		
<i>Melaleuca seriata</i>	10	160		
<i>Nuylsia floribunda</i>	0.1	500		
<i>Pentameris airoides</i> subsp. <i>airoides</i>	1	10		
<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>	0.1	160		
<i>Pericalymma ellipticum</i> var. <i>floridum</i>	65	150		
<i>Stirlingia latifolia</i>	0.1	90		
<i>Trachymene pilosa</i>	0.1	5		
<i>Trifolium campestre</i> var. <i>campestre</i>	0.1	15		
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	2	20		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	15	120		
<i>Vulpia bromoides</i>	1	7		



GEH Bypass Interchange Project PH1 **Site** GBQ05
Described by RM/MET **Date** 10-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406588 mE** **6468231 mN**
Habitat Gently sloping dune to east.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Corymbia calophylla*, *Nuytsia floribunda* low open woodland over *Jacksonia floribunda* scattered tall shrubs over *Kingia australis* scattered shrubs over *Banksia dallanneyi* var. *dallanneyi*, *Melaleuca systena*, *Verticordia densiflora* low open shrubland over **Ehrharta calycina* scattered tussock grasses over *Lyginia imberbis* (*Patersonia occidentalis* var. *occidentalis*), *Caustis dioica*, *Phlebocarya ciliata*, *Haemodorum ? laxum*) sedgeland over *Desmocladus fasciculatus*, *Corynotheca micrantha* var. *micrantha*, **Ursinia anthemoides* subsp. *anthemoides*, *Alexgeorgea nitens*, *Stylidium dichotomum* very open hermland.
Veg Condition Excellent.
Fire Age Very long unburnt.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenantheros cygnorum</i> subsp. <i>cygnorum</i>	0.1	5		
<i>Alexgeorgea nitens</i>	1	12		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	3	20	GBQ05-01	
* <i>Briza maxima</i>	0.1	15		N=50
<i>Caustis dioica</i>	5	50	GBQ05-05	
<i>Conostylis aurea</i>	0.1	15	GBQ05-18	
<i>Conostylis juncea</i>	0.1	20	GBQ05-09	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	10	GBQ05-17	
<i>Corymbia calophylla</i>	5	600		
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	2	40	GBQ05-07	
<i>Dampiera linearis</i>	0.1	35		
<i>Dasygordon bromeliifolius</i>	2	40	GBQ01-21=	
<i>Desmocladus fasciculatus</i>	4	15	GBQ05-02	
* <i>Ehrharta calycina</i>	0.5	60		N=20
* <i>Gladiolus caryophyllaceus</i>	0.1	20		
<i>Haemodorum ? laxum</i>	0.5	60	GBQ05-21	ISM for det.
<i>Haemodorum ? laxum</i>	0.1	30	GBQ05-16	ISM for det.
* <i>Hypochaeris glabra</i>	0.1	2		
<i>Hypolaena exsulca</i>	0.1	25	GBQ05-12	
<i>Jacksonia floribunda</i>	1	250		
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	0.1	20	GBQ05-13	
<i>Kingia australis</i>	1	140		
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	35	GBQ05-08	
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	25	GBQ05-11	
<i>Lomandra hermaphrodita</i>	0.1	30	GBQ05-15	
<i>Lyginia barbata</i>	0.1	60	GBQ05-20	
<i>Lyginia imberbis</i>	35	50	GBQ05-03	
<i>Melaleuca systena</i>	2	90		
<i>Mesomelaena tetragona</i>	0.1	60	GBQ05-26	
<i>Nuytsia floribunda</i>	5	500		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	7	70	GBQ05-10	
<i>Petrophile linearis</i>	0.1	20		
<i>Philotheeca spicata</i>	0.1	20	GBQ05-22	
<i>Phlebocarya ciliata</i>	2	50	GBQ05-04	
<i>Phlebocarya filifolia</i>	0.1	35	GBQ05-23	
<i>Schoenus curvifolius</i>	0.1	30		
<i>Siloxerus humifusus</i>	0.1	5	GBQ05-25	
<i>Stirlingia latifolia</i>	0.1	90		
<i>Stylidium brunonianum</i>	0.1	30	GBQ05-06	
<i>Stylidium dichotomum</i>	0.5	20	GBQ05-19	
<i>Thysanotus thyrsoideus</i>	0.1	5		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	2	20		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	1	25	GBQ05-14	
<i>Xanthorrhoea preissii</i>	0.1	250	GBQ05-27	



GEH Bypass Interchange Project PH2 **Site** GBQ05R
Described by RM **Date** 4-Nov-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406588 mE** **6468231 mN**
Habitat Gently sloping dune to east.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Corymbia calophylla*, *Nuytsia floribunda* low open woodland over *Jacksonia floribunda* scattered tall shrubs over *Kingia australis* scattered shrubs over *Banksia dallanneyi* var. *dallanneyi*, *Melaleuca systena*, *Verticordia densiflora* low open shrubland over **Ehrharta calycina* scattered tussock grasses over *Lyginia imberbis* (*Patersonia occidentalis* var. *occidentalis*), *Caustis dioica*, *Phlebocarya ciliata*, *Haemodorum ? laxum*) sedgeland over *Desmocladus fasciculatus*, *Corynotheca micrantha* var. *micrantha*, **Ursinia anthemoides* subsp. *anthemoides*, *Alexgeorgea nitens*, *Stylidium dichotomum* very open hermland.
Veg Condition Excellent.
Fire Age Very long unburnt.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenantheros cygnorum</i> subsp. <i>cygnorum</i>	0.1	5		
<i>Alexgeorgea nitens</i>	1	12		
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>	3	20		
<i>Briza maxima</i>	0.1	15		N=50
<i>Caustis dioica</i>	5	50		
<i>Conostylis aurea</i>	0.1	15		
<i>Conostylis juncea</i>	0.1	20		
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	10		
<i>Corymbia calophylla</i>	5	600		
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	1	40		
<i>Dampiera linearis</i>	0.1	35		
<i>Dasypogon bromeliifolius</i>	2	40		
<i>Desmocladus fasciculatus</i>	4	15		
<i>Ehrharta calycina</i>	1	60		N=20
<i>Eremaea pauciflora</i>	0.1	90		
<i>Gladiolus caryophyllaceus</i>	0.1	20		
<i>Haemodorum ? laxum</i>	0.1	30		
<i>Hypochaeris glabra</i>	0.1	2		
<i>Hypolaena exsulca</i>	0.1	25		
<i>Jacksonia floribunda</i>	2	250		
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	0.1	20		N=1
<i>Kingia australis</i>	1	140		
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	25		
<i>Lomandra hermaphrodita</i>	0.1	30		
<i>Lyginia barbata</i>	0.1	60		
<i>Lyginia imberbis</i>	35	50		
<i>Melaleuca systena</i>	1.5	90		
<i>Mesomelaena tetragona</i>	0.1	60		
<i>Nuytsia floribunda</i>	5	500		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	7	70		
<i>Petrophile linearis</i>	0.1	20		
<i>Philotheaca spicata</i>	0.1	20		
<i>Phlebocarya ciliata</i>	2	50		
<i>Phlebocarya filifolia</i>	0.1	35		
<i>Schoenus curvifolius</i>	0.1	30		
<i>Stirlingia latifolia</i>	0.1	90		
<i>Stylidium dichotomum</i>	0.1	20		
<i>Thysanotus thyrsoideus</i>	0.1	5		
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	1	20		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	1	25		
<i>Xanthorrhoea preissii</i>	0.1	250		



GEH Bypass Interchange Project PH1 **Site** GBQ06
Described by RM/MET **Date** 10-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406763 mE** **6468308 mN**
Habitat Crest of low dune north to south, gently undulating.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Allocasuarina fraseriana* scattered trees over *Eucalyptus todtiana*, *Banksia menziesii* (*Banksia attenuata*) low woodland over *Adenanthes cygnorum* tall shrubland over *Xanthorrhoea preissii* scattered shrubs over *Hibbertia hypericoides* subsp. *hypericoides*, *Bossiaea eriocarpa*, *Stirlingia latifolia*, *Scaevola repens* var. *repens* low open shrubland over **Ehrharta calycina* scattered tussock grasses over *Mesomelaena pseudostygia*, *Lyginia imberbis* very open sedgeland.
Veg Condition Very Good to Good.
Fire Age Very long unburnt.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	20	450		
<i>Alexgeorgea nitens</i>	0.1	15		
<i>Allocasuarina fraseriana</i>	1	1200	GBQ06-01	
<i>Amphipogon turbinatus</i>	0.1	25	GBQ06-38	
<i>Amphipogon turbinatus</i>	0.1	20	GBQ06-15	
<i>Amphipogon turbinatus</i>	0.1	40	GBQ06-03	
<i>Austrostipa compressa</i>	0.1	20	GBQ06-17	
<i>Banksia attenuata</i>	1	700		
<i>Banksia menziesii</i>	25	700		
<i>Billardiera fraseri</i>	0.1	40	GBQ06-40	
<i>Blancoa canescens</i>	0.1	15	GBQ06-10	
<i>Bossiaea eriocarpa</i>	1	25	GBQ06-16	
<i>Bossiaea eriocarpa</i>	0.1	25		
* <i>Briza maxima</i>	0.1	15		
<i>Burchardia congesta</i>	0.1	10	GBQ06-14	
<i>Calytrix fraseri</i>	0.1	40	GBQ06-42	
<i>Conospermum acerosum</i> subsp. <i>acerosum</i>	0.1	45	GBQ06-19	
<i>Conostephium pendulum</i>	0.1	20	GBQ06-29	
<i>Conostylis juncea</i>	0.1	20	GBQ06-27	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15	GBQ06-20	
<i>Dampiera linearis</i>	0.1	10		
<i>Dasyglossum bromelliifolius</i>	0.1	45		
<i>Daviesia podophylla</i>	0.1	50	GBQ06-41	
<i>Daviesia triflora</i>	0.1	45	GBQ06-06	
<i>Drosera menziesii</i>	0.1	30	GBQ06-23	
<i>Drosera menziesii</i>	0.1	15	GBQ06-34	
* <i>Ehrharta calycina</i>	1	60		
<i>Eucalyptus todtiana</i>	2	900		
* <i>Gladiolus caryophyllaceus</i>	0.1	30		
<i>Gompholobium tomentosum</i>	0.1	25	GBQ06-18	
<i>Haemodorum ? spicatum</i>	0.1	25	GBQ06-39	ISM for det.
<i>Haemodorum ? venosum</i>	0.1	25	GBQ06-37	ISM for det.
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	2	45	GBQ06-09	
<i>Hibbertia striata</i>	0.1	30	GBQ06-30	
<i>Hyalosperma cotula</i>	0.1	5	GBQ06-32	
<i>Hypolaena robusta</i>	0.1	30	GBQ06-36	
<i>Jacksonia floribunda</i>	0.1	80		
<i>Jacksonia lehmannii</i>	0.1	30	GBQ06-35	
<i>Lambertia multiflora</i> var. <i>darlingensis</i>	0.1	50	GBQ06-05	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	50	GBQ06-25	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	30	GBQ06-07	
<i>Leucopogon conostephoides</i>	0.1	45	GBQ06-02	
<i>Lomandra caespitosa</i>	0.1	15	GBQ06-13	
<i>Lomandra caespitosa</i>	0.1	15	GBQ06-21	
<i>Lyginia barbata</i>	0.1	60	GBQ06-26	
<i>Lyginia imberbis</i>	1	90	GBQ06-08=	

Species	% Cover	Height (cm)	Specimen	Notes
<i>Mesomelaena pseudostygia</i>	2	60	GBQ06-11	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30	GBQ06-33	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	40	GBQ06-08	
<i>Petrophile linearis</i>	0.1	20		
<i>Philotheeca spicata</i>	0.1	30	GBQ06-31	
<i>Scaevola repens</i> var. <i>repens</i>	1	30	GBQ06-12	
<i>Schoenus efoliatus</i>	0.1	30	GBQ06-04	
<i>Stirlingia latifolia</i>	1	50		
<i>Stylidium brunonianum</i>	0.1	20	GBQ06-24	
<i>Thysanotus manglesianus</i>	0.1	25	GBQ06-28	
<i>Trachymene pilosa</i>	0.1	5		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	20		
<i>Xanthorrhoea preissii</i>	1	120	GBQ06-43	



GEH Bypass Interchange Project PH1		Site	GBQ07
Described by	RM/MET	Date	10-Oct-19
MGA Zone	50	406643 mE	6468148 mN
Habitat	Gently sloping broad dune to east.		
Soil	Creamy grey sand		
Rock Type	None.		
Vegetation	Corymbia calophylla low open woodland over Kingia australis tall open shrubland over <i>Lambertia multiflora</i> var. <i>darlingensis</i> , <i>Xanthorrhoea preissii</i> , <i>Allocasuarina humilis</i> open shrubland over <i>Eremaea pauciflora</i> var. <i>pauciflora</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Babingtonia camphorosmae</i> , <i>Banksia dallanneyi</i> var. <i>dallanneyi</i> , <i>Bossiaea eriocarpa</i> , <i>Scaevola repens</i> var. <i>repens</i> , <i>Verticordia densiflora</i> , <i>Stirlingia latifolia</i> low shrubland over <i>Caustis dioica</i> , <i>Mesomelaena pseudostygia</i> , <i>Mesomelaena tetragona</i> , <i>Lyginia imberbis</i> , <i>Lepidosperma oldhamii/calcicola</i> , <i>Haemodorum</i> ? <i>venosum</i> , <i>Lomandra hermaphrodita</i> open sedgeland over <i>Alexgeorgea nitens</i> , <i>Dasygordon bromeliifolius</i> (<i>Desmocladus fasciculatus</i>) very open herland.		
Veg Condition	Very Good.		
Fire Age	Very long unburnt.		

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenantheros cygnorum</i> subsp. <i>cygnorum</i>	0.1	5		Juvenile
* <i>Aira caryophyllea</i>	0.1	10	GBQ07-44	
<i>Alexgeorgea nitens</i>	5	10		
<i>Allocasuarina humilis</i>	1.5	100	GBQ07-12	
<i>Amphipogon turbinatus</i>	0.1	30	GBQ07-37	
<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	0.1	30	GBQ07-14	
<i>Aphelia cyperoides</i>	0.1	20	GBQ07-45	
<i>Apium annuum</i>	0.1	20	GBQ07-43	
<i>Babingtonia camphorosmae</i>	2	40	GBQ07-07	
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	3	20	GBQ07-11	
<i>Bossiaea eriocarpa</i>	1.5	25		
* <i>Briza maxima</i>	0.1	15		
<i>Calytrix aurea</i>	0.1	30	GBQ07-26B	
<i>Caustis dioica</i>	7	60	GBQ05-05=	
<i>Centrolepis aristata</i>	0.1	5	GBQ07-42	
<i>Centrolepis drummondiana</i>	0.1	3	GBQ07-41	
<i>Comesperma calymega</i>	0.1	25	GBQ07-17	
<i>Conostylis aurea</i>	0.1	20	GBQ07-16	
<i>Conostylis aurea</i>	0.1	15	GBQ07-04	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15	GBQ07-05	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	20	GBQ07-27	
<i>Corymbia calophylla</i>	6	600		
<i>Crassula colorata</i> var. <i>colorata</i>	0.1	5	GBQ07-23	
<i>Dasygordon bromeliifolius</i>	3	35		
<i>Desmocladus fasciculatus</i>	0.5	20	GBQ08-44=	
<i>Drosera macrantha</i>	0.1	50	GBQ07-13	
* <i>Ehrharta calycina</i>	0.1	120		
<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	3	90		
<i>Gastrolobium linearifolium</i>	0.1	20	GBQ07-32	
* <i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Haemodorum</i> ? <i>venosum</i>	1	110	GBQ07-08	ISM for det.
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	2	80		
* <i>Hypochaeris glabra</i>	0.1	5		
<i>Jacksonia lehmannii</i>	0.1	55	GBQ07-25	
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	0.1	20	GBQ07-20	
<i>Kingia australis</i>	2.5	400		
<i>Lambertia multiflora</i> var. <i>darlingensis</i>	2.5	170	GBQ07-30	
<i>Lepidosperma oldhamii/calcicola</i>	1	30	GBQ07-36	
<i>Lomandra hermaphrodita</i>	0.5	25	GBQ07-19	
<i>Lyginia imberbis</i>	1	50	GBQ07-24	
<i>Mesomelaena pseudostygia</i>	4	60	GBQ01-06=	
<i>Mesomelaena tetragona</i>	2	50	GBQ07-31	
<i>Mesomelaena tetragona</i>	0.5	110	GBQ07-34	

Species	% Cover	Height (cm)	Specimen	Notes
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30	GBQ07-22	
<i>Philotheca spicata</i>	0.1	50	GBQ07-09	
<i>Philotheca spicata</i>	0.1	40	GBQ07-26A	
<i>Philotheca spicata</i>	0.1	110	GBQ07-29	
<i>Phyllangium divergens</i>	0.1	5	GBQ07-40	
<i>Pterochaeta paniculata</i>	0.1	10	GBQ07-06	
<i>Pterostylis sanguinea</i>	0.1	30	GBQ07-21	
<i>Rytidosperma occidentale</i>	0.1	20	GBQ07-46	
<i>Rytidosperma setaceum</i>	0.1	25	GBQ07-38	
<i>Scaevola repens</i> var. <i>repens</i>	1	5	GBQ07-03	
<i>Siloxerus humifusus</i>	0.1	2	GBQ07-15	
<i>Stirlingia latifolia</i>	0.5	50		
<i>Stylium calcaratum</i>	0.1	5	GBQ07-18	
<i>Stylium dichotomum</i>	0.1	15	GBQ07-02	
<i>Tetraria octandra</i>	0.1	45	GBQ07-28	
<i>Thelymitra</i> sp.	0.1	15	GBQ07-01	ISM for det.
<i>Thysanotus thyrsoideus</i>	0.1	35	GBQ07-35	
<i>Trachymene pilosa</i>	0.1	5		
<i>Tricoryne elatior</i>	0.1	75	GBQ07-10	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	0.5	25	GBQ07-33	
<i>Wahlenbergia preissii</i>	0.1	8	GBQ07-39	
<i>Xanthorrhoea preissii</i>	5	150		



GEH Bypass Interchange Project PH2 **Site** GBQ07R

Described by	RM	Date	4-Nov-20	Type	Quadrat: 10 x 10 m
MGA Zone	50	406643 mE	6468148 mN		
Habitat	Gently sloping broad dune to east.				
Soil	Creamy grey sand				
Rock Type	None.				
Vegetation	<i>Corymbia calophylla</i> low open woodland over <i>Kingia australis</i> tall open shrubland over <i>Lambertia multiflora</i> var. <i>darlingensis</i> , <i>Xanthorrhoea preissii</i> , <i>Allocasuarina humilis</i> open shrubland over <i>Eremaea pauciflora</i> var. <i>pauciflora</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Babingtonia camphorosmae</i> , <i>Banksia dallanneyi</i> var. <i>dallanneyi</i> , <i>Bossiaea eriocarpa</i> , <i>Scaevola repens</i> var. <i>repens</i> , <i>Verticordia densiflora</i> , <i>Stirlingia latifolia</i> low shrubland over <i>Caustis dioica</i> , <i>Mesomelaena pseudostygia</i> , <i>Mesomelaena tetragona</i> , <i>Lyginia imberbis</i> , <i>Lepidosperma oldhamii/calcicola</i> , <i>Haemodorum ? venosum</i> , <i>Lomandra hermaphrodita</i> open sedgeland over <i>Alexgeorgea nitens</i> , <i>Dasyypogon bromeliifolius</i> (<i>Desmocladus fasciculatus</i>) very open herland.				

Veg Condition Very Good.

Fire Age Very long unburnt.

Species	% Cover	Height (cm)	Specimen	Notes
<i>Adenantheros cygnorum</i> subsp. <i>cygnorum</i>	0.1	5		Juvenile
<i>Aira caryophyllea</i>	0.1	10		
<i>Alexgeorgea nitens</i>	5	10		
<i>Allocasuarina humilis</i>	1.5	100		
<i>Amphipogon turbinatus</i>	0.1	30		
<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	0.1	30		
<i>Babingtonia camphorosmae</i>	2	40		
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>dallanneyi</i>	2	20		
<i>Bossiaea eriocarpa</i>	1.5	25		
<i>Briza maxima</i>	0.1	15		
<i>Calytrix aurea</i>	0.1	30		
<i>Caustis dioica</i>	7	60		
<i>Centrolepis aristata</i>	0.1	5		
<i>Comesperma calymega</i>	0.1	25		
<i>Conostylis aurea</i>	0.1	20		
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15		
<i>Corymbia calophylla</i>	6	600		
<i>Dasyypogon bromeliifolius</i>	3	35		
<i>Desmocladus fasciculatus</i>	0.5	20		
<i>Ehrharta calycina</i>	0.1	120		
<i>Eremaea purpurea</i>	3	90		
<i>Gastrolobium linearifolium</i>	0.1	20		
<i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Haemodorum ? venosum</i>	1	110		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	2	80		
<i>Hypochaeris glabra</i>	0.1	5		
<i>Jacksonia lemannii</i>	0.1	55		
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	0.1	20		N=1
<i>Kingia australis</i>	2.5	400		
<i>Lambertia multiflora</i> var. <i>darlingensis</i>	2.5	170		
<i>Lepidosperma oldhamii/calcicola</i>	1	30		ISM for det.
<i>Lomandra hermaphrodita</i>	0.5	25		
<i>Lyginia imberbis</i>	1	50		
<i>Mesomelaena pseudostygia</i>	4	60		
<i>Mesomelaena tetragona</i>	2.5	50		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30		
<i>Philotrichum spicata</i>	0.1	40		
<i>Rytidosperma occidentale</i>	0.1	20		
<i>Rytidosperma setaceum</i>	0.1	25		
<i>Scaevola repens</i> var. <i>repens</i>	1	5		
<i>Stirlingia latifolia</i>	0.5	50		
<i>Stylium dichotomum</i>	0.5	15		

Species	% Cover	Height (cm)	Specimen	Notes
<i>Tetraria octandra</i>	0.1	45		
<i>Thysanotus thyrsoides</i>	0.1	35		
<i>Trachymene pilosa</i>	0.1	5		
<i>Tricoryne elatior</i>	0.1	75		
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	0.5	25		
<i>Xanthorrhoea preissii</i>	7	150		



GEH Bypass Interchange Project PH1	Site	GBQ08
Described by	RM/MET	Date 10-Oct-19
MGA Zone	50	406771 mE 6468226 mN
Habitat	Gently sloping broad dune to east.	
Soil	Creamy grey sand.	
Rock Type	None.	
Vegetation	Allocasuarina fraseriana woodland over Banksia menziesii, B. attenuata low open woodland over, Adenantheros cygnorum, Jacksonia floribunda tall open shrubland over Xanthorrhoea preissii scattered shrubs over Daviesia preissii, Bossiaea eriocarpa (Scholtzia involucrata, Scaevola repens var. repens, Hibbertia hypericoides subsp. hypericoides, Hibbertia huegelii, Daviesia podophylla, Astroloma xerophyllum, Hemiandra linearis, Stirlingia latifolia, Monotaxis grandiflora var. grandiflora low shrubland over Mesomelaena pseudostygia, Lyginia barbata very open sedgeland over Alexgeorgea nitens open hermland.	
Veg Condition	Very Good, Good.	
Fire Age	Very long unburnt.	

Species	%Cover	Height (cm)	Specimen	Notes
Acacia sessilis	0.1	35	GBQ08-52	
Acacia willdenowiana	0.1	20	GBQ08-26	
Adenantheros cygnorum subsp. cygnorum	5	350		
*Aira caryophyllea	0.1	8	GBQ08-17	
Alexgeorgea nitens	15	20		
Allocasuarina fraseriana	15	1300	GBQ08-53	
Amphipogon turbinatus	0.1	20	GBQ08-21	
Anigozanthos manglesii subsp. manglesii	0.1	10		
Astroloma xerophyllum	1	30	GBQ08-14	
Austrostipa compressa	0.1	25	GBQ08-01	
Banksia attenuata	1	600		
Banksia menziesii	1	900		
Blanca canescens	0.1	20	GBQ08-56	
Bossiaea eriocarpa	0.1	30	GBQ08-23	
Bossiaea eriocarpa	3	15	GBQ08-05	
*Briza maxima	0.1	25		
Burchardia congesta	0.1	50	GBQ08-22	
Caladenia flava subsp. flava	0.1	10	GBQ08-32	
Calandrinia granulifera	0.1	2	GBQ08-48	
Centrolepis drummondiana	0.1	5	GBQ08-46A	
Centrolepis inconspicua	0.1	1	GBQ08-46B	
Conostylis aurea	0.1	20	GBQ08-28	
Conostylis juncea	0.1	20	GBQ08-55	
Conostylis setigera subsp. setigera	0.1	20	GBQ08-45	
Conostylis setigera subsp. setigera	0.1	15	GBQ08-37	
Crassula colorata var. colorata	0.1	2	GBQ08-47	
Dampiera linearis	0.1	15		
Daviesia podophylla	1	90	GBQ08-13	
Daviesia preissii	7	90	GBQ08-06	
Daviesia triflora	0.1	80	GBQ08-57	
Desmocladus fasciculatus	0.1	15	GBQ08-44	
Drosera menziesii	0.1	20	GBQ08-33	
Drosera porrecta	0.1	20	GBQ08-38	
*Ehrharta calycina	0.1	60		
*Gladiolus caryophyllaceus	0.1	60		
Gompholobium tomentosum	0.1	10	GBQ08-50	
Haemodorum paniculatum	0.1	70		
Hemiandra linearis	1	20	GBQ08-12	
Hibbertia huegelii	1.5	15	GBQ08-19	
Hibbertia hypericoides subsp. hypericoides	1.5	50		
Hovea trisperma var. trisperma	0.1	15	GBQ08-30	
Hybanthus calycinus	0.1	25	GBQ08-20	
*Hypochaeris glabra	0.1	5		
Jacksonia floribunda	3	220	GBQ08-07	
Jacksonia lehmannii	0.1	30	GBQ08-34	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	20	GBQ08-40	
<i>Lepidosperma leptostachyum</i>	0.1	45	GBQ08-36	
<i>Levenhookia stipitata</i>	0.1	4	GBQ08-04	
<i>Lomandra hermaphrodita</i>	0.1	25	GBQ08-11	
<i>Lyginia barbata</i>	1.5	40	GBQ08-39	
<i>Lyginia barbata</i>	0.1	90	GBQ08-18	
<i>Mesomelaena pseudostygia</i>	0.1	40	GBQ08-41	
<i>Mesomelaena pseudostygia</i>	1	45	GBQ08-10	
<i>Mesomelaena pseudostygia</i>	0.1	30	GBQ08-43B	
<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>	0.5	10	GBQ08-15	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30	GBQ08-16	
<i>Petrophile biloba</i>	0.1	25		
<i>Quinetia urvillei</i>	0.1	3	GBQ08-02	
<i>Rytidosperma occidentale</i>	0.1	60	GBQ08-51	
<i>Rytidosperma pilosum</i>	0.1	50	GBQ08-42	
<i>Scaevola repens</i> var. <i>repens</i>	0.1	20	GBQ08-43A	
<i>Scaevola repens</i> var. <i>repens</i>	2	12	GBQ08-09	
<i>Schoenus clandestinus</i>	0.1	10	GBQ08-24	
<i>Schoenus efoliatus</i>	0.1	30	GBQ08-49	
<i>Scholtzia involucrata</i>	2	40		
<i>Stirlingia latifolia</i>	0.5	50		
<i>Stylium calcaratum</i>	0.1	15	GBQ08-31	
<i>Stylium diuroides</i> subsp. <i>diuroides</i>	0.1	15	GBQ08-29	
<i>Stylium repens</i>	0.1	15	GBQ08-25	
<i>Thysanotus manglesianus</i>	0.1	30	GBQ08-08	
<i>Thysanotus thyrsoideus</i>	0.1	60	GBQ08-27	
<i>Thysanotus triandrus</i>	0.1	20	GBQ08-54	
<i>Trachymene pilosa</i>	0.1	5	GBQ08-59	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	20		
* <i>Vulpia bromoides</i>	0.1	10	GBQ08-35	
<i>Xanthorrhoea preissii</i>	0.1	120	GBQ08-58	
<i>Xanthorrhoea preissii</i>	1	110		



GEH Bypass Interchange Project PH2

Site GBQ08R

Described by	RM	Date	10-Oct-19	Type	Quadrat 10 x 10 m
MGA Zone	50	406771 mE	6468226 mN		
Habitat		Gently sloping broad dune to east.			
Soil		Creamy grey sand.			
Rock Type		None.			
Vegetation		Allocasuarina fraseriana woodland over Banksia menziesii, B. attenuata low open woodland over, Adenantheros cygnorum, Jacksonia floribunda tall open shrubland over Xanthorrhoea preissii scattered shrubs over Daviesia preissii, Bossiaea eriocarpa (Scholtzia involucrata, Scaevola repens var. repens, Hibbertia hypericoides subsp. hypericoides, Hibbertia huegelii, Daviesia podophylla, Astroloma xerophyllum, Hemiandra linearis, Stirlingia latifolia, Monotaxis grandiflora var. grandiflora low shrubland over Mesomelaena pseudostygia, Lyginia barbata very open sedgeland over Alexgeorgea nitens open hermland.			
Veg Condition		Very Good, Good.			
Fire Age		Very long unburnt.			

Species	%Cover	Height (cm)	Specimen	Notes
Acacia sessilis	0.1	35		
Acacia willdenowiana	0.1	20		
Adenantheros cygnorum subsp. cygnorum	5	350		
Alexgeorgea nitens	15	20		
Allocasuarina fraseriana	15	1300		
Amphipogon turbinatus	0.1	20		
Anigozanthos manglesii subsp. manglesii	0.1	10		
Astroloma xerophyllum	1	30		
Austrostipa compressa	0.1	25		
Banksia attenuata	1	600		
Banksia menziesii	1	900		
Biancoa canescens	0.1	20		
Bossiaea eriocarpa	3	15		
Briza maxima	0.1	25		
Burchardia congesta	0.1	50		
Conostylis aurea	0.1	20		
Conostylis juncea	0.1	20		
Conostylis setigera subsp. setigera	0.1	15		
Dampiera linearis	0.1	15		
Daviesia podophylla	1	90		
Daviesia preissii	7	90		
Daviesia triflora	0.1	80		
Desmocladus fasciculatus	0.1	15		
Ehrharta calycina	0.1	60		
Eucalyptus marginata	0.1	800		
Gladiolus caryophyllaceus	0.1	60		
Gompholobium tomentosum	0.1	10		
Haemodorum paniculatum	0.1	70		
Hemiandra linearis	1	20		
Hibbertia huegelii	1.5	15		
Hibbertia hypericoides subsp. hypericoides	1.5	50		
Hovea trisperma var. trisperma	0.1	15		
Hybanthus calycinus	0.1	25		
Jacksonia floribunda	3	220		
Jacksonia lehmannii	0.1	30		
Laxmannia ramosa subsp. ramosa	0.1	20		
Lepidosperma leptostachyum	0.1	45		
Levenhookia stipitata	0.1	4		
Lomandra hermaphrodita	0.1	25		
Lyginia barbata	1.5	40		
Mesomelaena pseudostygia	1	45		
Monotaxis grandiflora var. grandiflora	0.5	10		
Patersonia occidentalis var. occidentalis	0.1	30		
Petrophile biloba	0.1	25		
Quinetia urvillei	0.1	3		

Species	%Cover	Height (cm)	Specimen	Notes
<i>Rytidosperma occidentale</i>	0.1	60		
<i>Rytidosperma pilosum</i>	0.1	50		
<i>Scaevola repens</i> var. <i>repens</i>	2	12		
<i>Schoenus clandestinus</i>	0.1	10		
<i>Schoenus efoliatus</i>	0.1	30		
<i>Scholtzia involucrata</i>	2	40		
<i>Stirlingia latifolia</i>	0.5	50		
<i>Stylidium calcaratum</i>	0.1	15		
<i>Stylidium repens</i>	0.1	15		
<i>Thysanotus manglesianus</i>	0.1	30		
<i>Thysanotus thyrsoideus</i>	0.1	60		
<i>Trachymene pilosa</i>	0.1	5		
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	20		
<i>Xanthorrhoea preissii</i>	1	110		



GEH Bypass Interchange Project PH1

Site GBQ09

Described by	RM/MET	Date	11-Oct-19	Type	Quadrat: 10 x 10 m
MGA Zone	50	406847 mE	6467890 mN		
Habitat	Grey sand with 50% litter layer. Perched on a dune, sloping to the south.				
Soil	Creamy grey sand.				
Rock Type	None.				
Vegetation	<i>Eucalyptus marginata</i> subsp. <i>marginata</i> woodland over <i>Banksia attenuata</i> scattered low trees over <i>Adenanthes cygnorum</i> tall open shrubland over <i>Xanthorrhoea preissii</i> (<i>Acacia pulchella</i> var. <i>glaberrima</i>) shrubland over <i>Hovea trisperma</i> var. <i>trisperma</i> , <i>Bossiaea eriocarpa</i> , <i>Conostephium pendulum</i> , <i>Petrophile linearis</i> , <i>Hemiandra pungens</i> low open shrubland over <i>Lepidosperma oldhamii/calcicola</i> , <i>Lomandra preissii</i> , <i>Lomandra suaveolens</i> very open sedgeland over <i>Alexgeorgea nitens</i> (<i>Billardiera fraseri</i>) open hermland.				
Veg Condition	Very Good to Good.				
Fire Age	Very long unburnt.				

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia pulchella</i> var. <i>glaberrima</i>	0.5	110	GBQ09-17	
<i>Acacia willdenowiana</i>	0.1	10	GBQ09-26	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	2	250		
* <i>Aira caryophyllea</i>	0.1	10	GBQ09-35	
<i>Alexgeorgea nitens</i>	15	20		
<i>Astroloma xerophyllum</i>	0.1	80	GBQ09-30	
<i>Austrostipa compressa</i>	0.1	40	GBQ09-36	
<i>Banksia attenuata</i>	1	150		Juvenile
<i>Billardiera fraseri</i>	0.5	45	GBQ09-03	
<i>Blancoa canescens</i>	0.1	20	GBQ08-56=	
<i>Bossiaea eriocarpa</i>	0.5	30	GBQ09-05	
* <i>Briza maxima</i>	0.1	20		
<i>Burchardia congesta</i>	0.1	40	GBQ09-16	
<i>Caladenia</i> sp.	0.1	10	GBQ09-29	ISM for det.
<i>Centrolepis drummondiana</i>	0.1	20	GBQ09-34	
<i>Conostephium pendulum</i>	1	25	GBQ09-02	
<i>Conostylis juncea</i>	0.1	20	GBQ09-06	
<i>Dampiera linearis</i>	0.1	15		
<i>Dasypogon bromeliifolius</i>	0.1	40		
<i>Daviesia triflora</i>	0.1	20	GBQ09-20	
<i>Drosera menziesii</i>	0.1	20	GBQ09-27	
* <i>Ehrharta calycina</i>	0.1	80		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	20	600		
* <i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Hemiandra pungens</i>	0.5	15	GBQ09-15	
<i>Hibbertia huegelii</i>	0.1	20	GBQ09-12	
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	40		
<i>Hovea trisperma</i> var. <i>trisperma</i>	1	50	GBQ09-09	
<i>Hyalosperma cotula</i>	0.1	5	GBQ09-33	
<i>Hypolaena exsulca</i>	0.1	45	GBQ09-10	
<i>Jacksonia lemannii</i>	0.1	70	GBQ09-28A	
<i>Kennedia prostrata</i>	0.1	15	GBQ09-23	
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	20	GBQ09-31	
<i>Lepidosperma oldhamii/calcicola</i>	2	45	GBQ09-24	
<i>Lomandra hermaphrodita</i>	0.1	20	GBQ09-18	
<i>Lomandra preissii</i>	0.1	40	GBQ09-28B	
<i>Lomandra preissii</i>	0.5	40	GBQ09-08	
<i>Lomandra preissii</i>	0.1	20	GBQ09-22	
<i>Lomandra suaveolens</i>	0.5	25	GBQ09-14	
<i>Lyginia barbata</i>	0.1	70	GBQ09-19	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	40	GBQ09-37	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30	GBQ09-11	
<i>Petrophile linearis</i>	0.5	20		
<i>Philotheca spicata</i>	0.1	90	GBQ09-32	
<i>Phlebocarya ciliata</i>	0.1	30	GBQ09-13	
<i>Pterostylis vittata</i>	0.1	15	GBQ09-01	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Scaevola repens</i> var. <i>repens</i>	0.1	10		
<i>Stirlingia latifolia</i>	0.1	50		
<i>Stylium brunonianum</i>	0.1	10	GBQ09-07	
<i>Stylium calcaratum</i>	0.1	5	GBQ09-04	
<i>Stylium repens</i>	0.1	5		
<i>Thysanotus patersonii</i>	0.1	30	GBQ09-21	
<i>Trachymene pilosa</i>	0.1	5		
<i>Tricoryne elatior</i>	0.1	60	GBQ09-25	
<i>Xanthorrhoea preissii</i>	45	120		
<i>Xanthorrhoea preissii</i>	0.1	70	GBQ09-38	



GEH Bypass Interchange Project PH2 **Site** GBQ09R
Described by RM **Date** 3-Nov-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406847 mE** **6467890 mN**
Habitat Grey sand with 50% litter layer. Perched on a dune, sloping to the south.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Eucalyptus marginata* subsp. *marginata* woodland over *Banksia attenuata* scattered low trees over *Adenanthes cygnorum* tall open shrubland over *Xanthorrhoea preissii* (*Acacia pulchella* var. *glaberrima*) shrubland over *Hovea trisperma* var. *trisperma*, *Bossiaea eriocarpa*, *Conostephium pendulum*, *Petrophile linearis*, *Hemiandra pungens* low open shrubland over *Lepidosperma oldhamii/calcicola*, *Lomandra preissii*, *Lomandra suaveolens* very open sedgeland over *Alexgeorgea nitens* (*Billardiera fraseri*) open hermland.
Veg Condition Very Good to Good.
Fire Age Very long unburnt.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia pulchella</i> var. <i>glaberrima</i>	0.5	110		
<i>Acacia willdenowiana</i>	0.1	10		
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	2	250		
<i>Aira caryophyllea</i>	0.1	10		
<i>Alexgeorgea nitens</i>	15	20		
<i>Astroloma xerophyllum</i>	0.1	80		
<i>Austrostipa compressa</i>	0.1	40		
<i>Banksia attenuata</i>	1	150		Juvenile
<i>Billardiera fraseri</i>	0.5	45		
<i>Blanca canescens</i>	0.1	20		
<i>Bossiaea eriocarpa</i>	0.5	30		
<i>Briza maxima</i>	0.1	20		
<i>Burchardia congesta</i>	0.1	40		
<i>Centrolepis drummondiana</i>	0.1	20		
<i>Conostephium pendulum</i>	0.5	25		
<i>Conostylis juncea</i>	0.1	20		
<i>Dampiera linearis</i>	0.1	15		
<i>Dasygordon bromeliifolius</i>	0.1	40		
<i>Daviesia triflora</i>	0.1	20		
<i>Drosera menziesii</i>	0.1	20		
<i>Ehrharta calycina</i>	0.1	80		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	20	600		
<i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Hemiandra pungens</i>	0.5	15		
<i>Hibbertia huegelii</i>	0.1	20		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	40		
<i>Hovea trisperma</i> var. <i>trisperma</i>	1	50		
<i>Hypolaena exsulca</i>	0.1	45		
<i>Jacksonia lehmannii</i>	2	180		
<i>Kennedia prostrata</i>	0.1	15		
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	20		
<i>Lepidosperma oldhamii/calcicola</i>	2	45		
<i>Lomandra hermaphrodita</i>	0.1	20		
<i>Lomandra preissii</i>	1	40		
<i>Lomandra suaveolens</i>	0.5	25		
<i>Lyginia barbata</i>	0.1	70		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30		
<i>Petrophile linearis</i>	0.5	20		
<i>Philotheca spicata</i>	0.1	90		
<i>Scaevola repens</i> var. <i>repens</i>	0.1	10		
<i>Stirlingia latifolia</i>	0.1	50		
<i>Stylium repens</i>	0.1	5		
<i>Thysanotus patersonii</i>	0.1	30		
<i>Trachymene pilosa</i>	0.1	5		
<i>Tricoryne elatior</i>	0.1	60		
<i>Xanthorrhoea preissii</i>	45	120		



GEH Bypass Interchange Project PH1 **Site** GBQ10
Described by CEF/RM **Date** 29-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406092 mE** **6470422 mN**
Habitat Floodplain, adjacent to Helena River.
Soil Dark brown sandy clay loam.
Rock Type None.
Vegetation *Eucalyptus rufa* subsp. *rufa* open forest over **Ehrharta longiflora* (**Avena fatua*) closed grassland over **Fumaria capreolata*, **Chenopodium album* very open hermland.
Veg Condition Degraded.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
* <i>Avena fatua</i>	20	150	GBQ10-03	
* <i>Bromus diandrus</i>	0.1	45	GBQ10-07	
* <i>Chenopodium album</i>	2	130	GBQ10-05	
<i>Cyperus alterniflorus</i>	0.1	60	GBQ10-09	
* <i>Ehrharta longiflora</i>	70	30	GBQ10-04	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	50	1400	GBQ10-01	
* <i>Fumaria capreolata</i>	5	70	GBQ10-02	
* <i>Hordeum leporinum</i>	0.1	40	GBQ10-08	
* <i>Hypochaeris radicata</i>	0.1	5	GBQ10-11	
* <i>Sonchus oleraceus</i>	0.1	40	GBQ10-10	



GEH Bypass Interchange Project PH1 **Site** GBQ11
Described by CEF/RM **Date** 29-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406235 mE** **6469803 mN**

Habitat Floodplain, north east facing.
Soil Dark brown sandy clay loam.
Rock Type None.
Vegetation *Eucalyptus rudis* subsp. *rudis* closed forest over **Ehrharta longiflora* tussock grassland over **Fumaria capreolata* herbland.
Veg Condition Degraded.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
* <i>Ehrharta longiflora</i>	45	60	GBQ12-01=	
<i>Eucalyptus rudis</i> subsp. <i>rudis</i>	78	2000	GBQ11-01	
* <i>Fumaria capreolata</i>	50	40	GBQ10-02=	
* <i>Sonchus oleraceus</i>	0.1	20	GBQ10-10=	



GEH Bypass Interchange Project PH1 **Site** GBQ12
Described by CEF/RM **Date** 29-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406270 mE** **6469668 mN**
Habitat Floodplain, slightly sloping towards River.
Soil Dark brown sandy clay loam.
Rock Type None.
Vegetation *Melaleuca rhaphiophylla* low closed forest over **Ehrharta longiflora* (**Bromus diandrus*) open grassland over **Fumaria capreolata*, **Sonchus oleraceus* herland.
Veg Condition Degraded.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
* <i>Bromus diandrus</i>	4	25	GBQ10-07=	
* <i>Ehrharta longiflora</i>	20	50	GBQ12-01	
* <i>Fumaria capreolata</i>	60	70	GBQ10-02=	
<i>Melaleuca rhaphiophylla</i>	90	800	GBQ12-02	
* <i>Sonchus asper</i>	0.1	120		
* <i>Sonchus oleraceus</i>	1	30	GBQ10-10=	



GEH Bypass Interchange Project PH1 Site GBQ13
Described by RM/AL **Date** 30-Oct-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406791 mE** **6469883 mN**
Habitat Floodplain and some tributaries.
Soil Dark brown sandy clay loam
Rock Type None.
Vegetation *Eucalyptus rufa* subsp. *rufa* open forest over **Bromus diandrus*, **Avena fatua*, **Ehrharta longiflora* grassland over **Fumaria capreolata* hermland.
Veg Condition Degraded.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
* <i>Avena fatua</i>	15	70	GBQ10-03=	
* <i>Bromus diandrus</i>	30	60	GBQ10-07=	
* <i>Chenopodium album</i>	0.1	60	GBQ10-05=	
* <i>Ehrharta longiflora</i>	15	70	GBQ12-01=	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	60	2500	GBQ10-01=	
* <i>Fumaria capreolata</i>	40	40	GBQ10-02=	
* <i>Hordeum leporinum</i>	0.1	30	GBQ10-08=	
* <i>Lagurus ovatus</i>	0.1	30	GBQ13-01	



GEH Bypass Interchange Project PH1 **Site** GBQ14
Described by RM/AL **Date** 1-Nov-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407077 mE** **6469293 mN**
Habitat Gentle slope northwest aspect low lying damp depression.
Soil Dark brown silty clay Loam.
Rock Type None.
Vegetation *Melaleuca rhamphophylla* (*Melaleuca preissiana*) low open forest over *Hakea varia*,
Jacksonia sternbergiana (*Viminaria juncea*) tall open shrubland over *Lepidosperma striatum*,
Cyathochaeta aenacea, *Lepidosperma longitudinale*, *Lyginia barbata* (*Lepidosperma oldhamii/calcicola*, *Lepyrodia muirii*, *Patersonia occidentalis*) closed sedgeland over *Caesia* sp. Wongan (K.F. Kenneally 8820), *Thysanotus dichotomus* very open hermland.
Veg Condition Excellent.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Amphipogon laguroides</i>	0.1	40	GBQ14-20	
<i>Caesia</i> sp. Wongan (K.F. Kenneally 8820)	1	80	GBQ14-13	
<i>Cassytha racemosa</i> forma pilosa	0.1	2	GBQ14-06	
<i>Centrolepis aristata</i>	0.1	15	GBQ14-15	
<i>Cyathochaeta aenacea</i>	25	90	GBQ14-04A	
<i>Deyeuxia quadriseta</i>	0.1	100	GBQ14-12	
<i>Haemodorum</i> sp.	0.1	150	GBQ14-24	ISM for det.
<i>Hakea varia</i>	4	600	GBQ14-05	
* <i>Hypochaeris glabra</i>	0.1	1		
<i>Jacksonia sternbergiana</i>	3	550		
<i>Lepidosperma longitudinale</i>	25	90	GBQ14-10	
<i>Lepidosperma oldhamii/calcicola</i>	1	40	GBQ14-18	
<i>Lepidosperma oldhamii/calcicola</i>	5	100	GBQ14-23	
<i>Lepidosperma striatum</i>	25	110	GBQ14-19	
<i>Lepyrodia muirii</i>	2	60	GBQ14-09	
<i>Lobelia anceps</i>	0.1	15	GBQ14-14	
<i>Lyginia barbata</i>	10	1	GBQ08-39=	
<i>Melaleuca preissiana</i>	11	550	GBQ14-02	
<i>Melaleuca rhamphophylla</i>	35	600	GBQ14-01	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	1	50		
<i>Pericalymma ellipticum</i> var. <i>floridum</i>	0.1	50	GBQ04-01=	
<i>Schoenus asperocarpus</i>	1	50	GBQ14-11	
<i>Schoenus sculptus</i>	0.1	5	GBQ14-17	
<i>Sonchus oleraceus</i>	0.1	2		
<i>Sphaerolobium medium</i>	0.1	60	GBQ14-22	
<i>Thysanotus dichotomus</i>	1	80	GBQ14-03	
<i>Viminaria juncea</i>	1	200		



GEH Bypass Interchange Project PH1

Site GBQ15

Described by	RM/AL	Date	1-Nov-19	Type	Quadrat: 10 x 10 m
MGA Zone	50	406886 mE	6468343 mN		
Habitat	Flat sandplain.				
Soil	Dark brown loamy sand.				
Rock Type	None.				
Vegetation	Banksia attenuata, Allocasuarina fraseriana (<i>Corymbia calophylla</i> , <i>Eucalyptus todtiana</i>) woodland over Banksia menziesii low open woodland over Allocasuarina humilis, Xanthorrhoea preissii open shrubland over Stirlingia latifolia (<i>Bossiaea eriocarpa</i> , <i>Xanthorrhoea gracilis</i> , <i>Dasypogon bromeliifolius</i>) low shrubland over Schoenus efoliatus scattered sedges over Alexgeorgea nitens (<i>Blanco canescens</i> , <i>Conostylis juncea</i> , * <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i> , <i>Caustis dioica</i>) open hermland.				
Veg Condition	Excellent.				
Fire Age	No sign of recent fire.				

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia willdenowiana</i>	0.1	30	GBQ15-14	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	0.1	350		
* <i>Aira caryophyllea</i>	0.1	20	GBQ01-40=	
<i>Alexgeorgea nitens</i>	10	20		
<i>Allocasuarina fraseriana</i>	5	1100		
<i>Allocasuarina humilis</i>	1.5	150		
<i>Amphipogon turbinatus</i>	0.1	30	GBQ15-31	
<i>Amphipogon turbinatus</i>	0.1	30	GBQ15-36	
<i>Austrostipa compressa</i>	0.1	45	GBQ15-32	
<i>Banksia attenuata</i>	6	1100		
<i>Banksia menziesii</i>	8	500		
<i>Blancoa canescens</i>	2	20	GBQ15-21	
<i>Bossiaea eriocarpa</i>	3	60	GBQ15-03	
* <i>Briza maxima</i>	0.1	40		
<i>Burchardia congesta</i>	0.1	50		
<i>Caesia</i> sp.	0.1	50	GBQ15-08	ISM for det.
<i>Caladenia flava</i> subsp. <i>flava</i>	0.1	20	GBQ15-30	
<i>Caustis dioica</i>	0.5	60	GBQ05-05=	
<i>Chordifex sinuosus</i>	0.1	20	GBQ15-25	
<i>Conostephium pendulum</i>	0.1	40	GBQ15-22	
<i>Conostylis juncea</i>	1	20	GBQ15-28	
<i>Corymbia calophylla</i>	1	2000		
<i>Dampiera linearis</i>	0.1	20	GBQ15-18	
<i>Dasypogon bromeliifolius</i>	1	70		
<i>Daviesia triflora</i>	0.1	40	GBQ15-37	
* <i>Ehrharta calycina</i>	0.1	80		
<i>Eucalyptus todtiana</i>	1	1200		
* <i>Gladiolus caryophyllaceus</i>	0.1	100		
<i>Gompholobium tomentosum</i>	0.1	25		
<i>Haemodorum ? laxum</i>	0.1	50	GBQ15-12	ISM for det.
<i>Haemodorum spicatum</i>	0.1	50	GBQ15-07	
<i>Hemiandra linearis</i>	0.1	25	GBQ15-35	
<i>Hibbertia huegelii</i>	0.1	30	GBQ15-23	
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	50		
<i>Hyalosperma cotula</i>	0.1	10	GBQ09-33=	
<i>Jacksonia floribunda</i>	0.1	90		
<i>Lomandra caespitosa</i>	0.1	20	GBQ15-13	
<i>Lomandra hermaphrodita</i>	0.1	20	GBQ15-29	
<i>Mesomelaena pseudostygia</i>	3	60	GBQ15-01	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	40		
<i>Phlebocarya filifolia</i>	0.1	30	GBQ15-20	
<i>Scaevola canescens</i>	0.1	15		
<i>Scaevola repens</i> var. <i>repens</i>	0.5	15		
<i>Schoenus efoliatus</i>	2	60	GBQ15-02	
* <i>Sonchus oleraceus</i>	0.1	10		
<i>Stirlingia latifolia</i>	8	60		

Species	%Cover	Height (cm)	Specimen	Notes
<i>Thysanotus manglesianus</i>	0.1	60		
<i>Trachymene pilosa</i>	0.1	7	GBQ15-27	
<i>Tricoryne elatior</i>	0.1	30	GBQ15-04	
<i>Tricoryne elatior</i>	0.1	30	GBQ15-34	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.5	35		
* <i>Vulpia bromoides</i>	0.1	30	GBQ15-17	
<i>Wahlenbergia preissii</i>	0.1	15	GBQ15-26	
<i>Xanthorrhoea gracilis</i>	2	90	GBQ15-33	
<i>Xanthorrhoea preissii</i>	0.1	70	GBQ15-10	
<i>Xanthorrhoea preissii</i>	4	140	GBQ15-24	



GEH Bypass Interchange Project PH1

Site GBQ16

Described by	RM/AL	Date	4-Nov-19	Type	Quadrat: 10 x 10 m
MGA Zone	50	406987 mE	6467422 mN		
Habitat	Roadside plain.				
Soil	Dark brown loamy sand.				
Rock Type	None.				
Vegetation	<i>Eucalyptus marginata</i> subsp. <i>marginata</i> woodland over <i>Xanthorrhoea preissii</i> (* <i>Acacia iteaphylla</i>) shrubland over <i>Daviesia preissii</i> , <i>Daviesia triflora</i> , <i>Conostephium pendulum</i> low open shrubland over * <i>Eragrostis curvula</i> , * <i>Ehrharta calycina</i> and * <i>Briza maxima</i> very open grassland over <i>Mesomelaena pseudostygia</i> , <i>Lyginia barbata</i> and <i>Hypolaena exsulca</i> very open sedgeland.				
Veg Condition	Good; Degraded.				
Fire Age	Very long unburnt.				

Species	Cover	Height (cm)	Specimen	Notes
<i>Acacia appianata</i>	0.1	25	GBQ16-11	
* <i>Acacia iteaphylla</i>	2	170	GBQ16-10	
* <i>Briza maxima</i>	1	30		
* <i>Briza minor</i>	0.1	20		
<i>Conostephium pendulum</i>	1	50	GREL09-08=	
<i>Conostylis juncea</i>	0.1	30	GBQ16-02	
<i>Daviesia preissii</i>	3	80	GBQ16-01	
<i>Daviesia triflora</i>	2	70	GBQ16-09	
* <i>Ehrharta calycina</i>	1	90		
* <i>Ehrharta longiflora</i>	0.1	25	GBQ12-01=	
* <i>Eragrostis curvula</i>	2	120		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	1300		
* <i>Fumaria capreolata</i>	0.1	50	GBQ10-02=	
<i>Gompholobium tomentosum</i>	0.1	60		
<i>Hibbertia huegelii</i>	0.1	30	GBQ16-04	
<i>Hypolaena exsulca</i>	0.1	20	GBQ16-03	
<i>Hypolaena exsulca</i>	0.5	25	GBQ16-12	
<i>Lomandra hermaphrodita</i>	0.1	30	GBQ16-13	
<i>Lomandra sericea</i>	0.1	30	GBQ16-16	
<i>Lyginia barbata</i>	1	60	GBQ16-06	
<i>Lyginia barbata</i>	1	60	GBQ16-05	
<i>Mesomelaena pseudostygia</i>	1	60	GBQ01-06=	
<i>Microtis media</i> subsp. <i>media</i>	0.1	20	GBQ16-08	
* <i>Romulea rosea</i>	0.1	20		
<i>Thysanotus dichotomus</i>	0.1	30	GBQ14-03=	
<i>Tricoryne elatior</i>	0.1	30	GBQ16-14	
<i>Xanthorrhoea preissii</i>	15	120		



GEH Bypass Interchange Project PH1	Site	GBQ17
Described by	RM/AL	Date 4-Nov-19
MGA Zone	50	407161 mE 6466570 mN
Habitat	Roadside plain.	
Soil	Dark brown loamy sand.	
Rock Type	N/A	
Vegetation	Eucalyptus marginata subsp. marginata woodland over Banksia menziesii low woodland over Allocasuarina humilis scattered tall shrubs over Xanthorrhoea preissii (<i>Stachystemon vermicularis</i>) open shrubland over Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi, Dasypogon obliquifolius, Hemiandra linearis, Monotaxis grandiflora var. grandiflora and Scaevola repens var. repens low shrubland over Lepidosperma oldhamii/calcicola and Schoenus efoliatus very open sedgeland.	
Veg Condition	Excellent to Very Good.	
Fire Age	Very long unburnt.	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia appianata</i>	0.1	25	GBQ16-11=	
<i>Alexgeorgea nitens</i>	0.1	20		
<i>Allocasuarina humilis</i>	1	250		
* <i>Avena fatua</i>	0.1	60		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	3	30	GBQ17-08	
<i>Banksia menziesii</i>	10	900		
<i>Billardiera fraseri</i>	0.1	30	GBQ17-26	
<i>Bossiaea eriocarpa</i>	1	50		
* <i>Briza minor</i>	0.1	20	GBQ17-36	
<i>Burchardia congesta</i>	0.1	30		
<i>Caesia occidentalis</i>	1	60	GBQ17-17	
<i>Caesia occidentalis</i>	0.1	30	GBQ17-27	
<i>Conospermum undulatum</i>	0.1	40	GBQ17-30	
<i>Dampiera linearis</i>	0.1	30	GBQ17-14	
<i>Dasypogon bromeliifolius</i>	0.1	30		
<i>Dasypogon obliquifolius</i>	1	50	MN40-02=	
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	0.1	50		
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	0.1	40	GBQ17-33	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	60	GREL09-07=	
<i>Daviesia physodes</i>	0.1	130	GBQ17-11	
<i>Daviesia triflora</i>	0.1	40	GBQ17-32	
<i>Desmocladus fasciculatus</i>	0.1	20	GBQ17-18	
* <i>Disa bracteata</i>	0.1	20	GBQ17-15	
* <i>Eragrostis curvula</i>	1.5	60		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	20	1400	GBQ17-29	
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	5	900	GBQ17-28	
* <i>Gladiolus caryophyllaceus</i>	0.1	60		
<i>Haemodorum</i> ? <i>laxum</i>	0.1	60	GBQ17-09	ISM for det.
<i>Hakea ruscifolia</i>	0.1	90	GBQ17-35	
<i>Hemiandra linearis</i>	3	15	GBQ17-03	
<i>Hemiandra pungens</i>	0.1	40	GBQ17-07	
<i>Hibbertia huegelii</i>	0.1	30	GBQ17-34	
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	3	50		
<i>Hovea trisperma</i> var. <i>trisperma</i>	0.1	40	GBQ17-19	
<i>Hypocalymma robustum</i>	0.1	50	GBQ17-22	
<i>Hypolaena exsulca</i>	0.1	40	GBQ17-20	
<i>Lepidosperma oldhamii/calcicola</i>	1	50	GBQ17-04	
<i>Lepidosperma oldhamii/calcicola</i>	1	50	GBQ17-16	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	40	GBQ17-10	
<i>Lepidosperma</i> sp.	0.1	40	GBQ17-21	ISM for det.
<i>Lomandra sericea</i>	0.1	30	GBQ17-23	
<i>Mesomelaena pseudostygia</i>	0.1	60	GBQ01-06=	
<i>Mesomelaena tetragona</i>	1	60	GBQ17-06	
<i>Microtis media</i> subsp. <i>media</i>	0.1	20	GBQ16-08=	
<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>	4	30	GBQ17-02	
* <i>Olea europaea</i>	0.1	5		

Species	%Cover	Height (cm)	Specimen	Notes
<i>Petrophile linearis</i>	0.1	30		
<i>Pterostylis vittata</i>	0.1	20	GBQ17-31	
<i>Scaevola repens</i> var. <i>repens</i>	0.5	20		
<i>Schoenus australis</i>	1	30	GBQ17-01	
<i>Stachystemon vermicularis</i>	0.5	150	GBQ17-05	
<i>Stirlingia latifolia</i>	0.1	60		
<i>Stirlingia latifolia</i>	0.1	20	GBQ17-24	
<i>Tricoryne elatior</i>	0.1	30	GBQ15-34=	
* <i>Watsonia meriana</i>	0.1	60		N=1
<i>Xanthorrhoea preissii</i>	10	130		
<i>Xanthosia huegelii</i>	0.1	20	GBQ17-13	



GEH Bypass Interchange Project PH1 **Site** GBQ18
Described by RM/AL **Date** 5-Nov-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407008 mE** **6467622 mN**
Habitat Sand dune north south. Grey sand with humus.
Soil Dark brown loamy sand.
Rock Type None.
Vegetation *Eucalyptus marginata* subsp. *marginata*, *Allocasuarina fraseriana*, *Banksia menziesii* woodland over *Banksia attenuata* low open woodland over *Xanthorrhoea preissii* shrubland over *Stirlingia latifolia*, *Daviesia nudiflora* subsp. *nudiflora*, *Daviesia physodes*, *Bossiaea eriocarpa*, *Hibbertia hypericoides* subsp. *hypericoides* low open shrubland over *Mesomelaena pseudostygia*, *Lomandra hermaphrodita*, *Lomandra preissii* very open sedgeland over *Desmocladus flexuosus* very open hermland.
Veg Condition Excellent to Very Good.
Fire Age Very long unburnt.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia willdenowiana</i>	0.1	30	GREL09-09=	
<i>Allocasuarina fraseriana</i>	10	1600		
<i>Allocasuarina humilis</i>	0.1	70		
<i>Banksia attenuata</i>	5	700		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	0.1	30	GREL09-10=	
<i>Banksia menziesii</i>	5	1200		
<i>Billardiera fraseri</i>	0.1	30	GREL09-03=	
<i>Bossiaea eriocarpa</i>	1	40		
* <i>Brachypodium distachyon</i>	0.1	20	GBQ18-16	
<i>Burchardia congesta</i>	0.1	30		
<i>Caesia occidentalis</i>	0.1	40	GBQ17-17=	
<i>Caesia occidentalis</i>	0.1	60	GBQ18-10	
<i>Dasypogon bromeliifolius</i>	0.1	40		
<i>Dasypogon obliquifolius</i>	0.1	40	MN40-02=	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	2	70	GREL09-07=	
<i>Daviesia physodes</i>	2	50	GBQ17-11	
<i>Daviesia triflora</i>	0.1	30	GBQ18-06	
<i>Desmocladus flexuosus</i>	7	30	GREL09-04	
* <i>Disa bracteata</i>	0.1	25	GBQ17-15=	
* <i>Ehrharta calycina</i>	0.1	60		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	10	1800		
* <i>Gladiolus caryophyllaceus</i>	0.1	60		
<i>Gompholobium tomentosum</i>	0.1	30		
<i>Haemodorum</i> ? <i>laxum</i>	0.1	50	GBQ17-09=	ISM for det.
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	3	30		
<i>Hybanthus calycinus</i>	0.1	50	GBQ18-03	
<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>	0.1	20	GBQ18-12	
<i>Lepidosperma leptostachyum</i>	0.1	60	GBQ18-05	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	60	GBQ18-08	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	40	GBQ18-04	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	60	GBQ18-11	
<i>Lepidosperma</i> sp.	1	25	GBQ17-21=	ISM for det.
<i>Lomandra hermaphrodita</i>	0.1	40	GBQ18-13B	
<i>Lomandra preissii</i>	0.1	60	GBQ18-14	
<i>Lomandra preissii</i>	0.5	60	GBQ18-02	
<i>Mesomelaena pseudostygia</i>	2	40	GBQ01-06=	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	40		
<i>Philotheeca spicata</i>	0.1	60	GBQ18-09	
<i>Pimelea angustifolia</i>	0.1	70	GBQ18-01	
<i>Pterostylis vittata</i>	0.1	25	GBQ18-15	
* <i>Romulea rosea</i>	0.1	20		
<i>Scaevola repens</i> var. <i>repens</i>	0.1	20		
<i>Schoenus efoliatus</i>	0.1	30	GBQ18-13A	
<i>Stirlingia latifolia</i>	3	60		
<i>Thysanotus sparteus</i>	0.1	80	GBQ18-07	
<i>Tricoryne elatior</i>	0.1	50	GBQ18-17	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Xanthorrhoea preissii</i>	20	130		



GEH Bypass Interchange Project PH1 **Site** GBQ19
Described by RM/AL **Date** 5-Nov-19 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407183 mE** **6466952 mN**
Habitat Sand dune N-S.
Soil Dark brown loamy sand.
Rock Type None.
Vegetation *Eucalyptus todtiana* (*Corymbia calophylla*) woodland over *Banksia menziesii*, *Banksia attenuata*, *Allocasuarina fraseriana* low woodland over *Xanthorrhoea preissii* open shrubland over **Leptospermum laevigatum*, *Hibbertia hypericoides* subsp. *hypericoides*, *Allocasuarina humilis*, *Stirlingia latifolia*, *Isopogon autumnalis*, *Dasypogon bromeliifolius*, *Gompholobium tomentosum*, *Daviesia podophylla*, *Monotaxis grandiflora* var. *grandiflora* low shrubland over *Mesomelaena pseudostygia*, *Lyginia barbata*, *Lepidosperma leptostachyum* very open sedgeland over *Alexgeorgea nitens* very open herland.
Veg Condition Excellent to Very Good.
Fire Age Very long unburnt.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia sessilis</i>	0.1	80	GBQ19-07	
<i>Acacia willdenowiana</i>	0.1	30	GREL09-09=	
<i>Alexgeorgea nitens</i>	5	20		
<i>Allocasuarina fraseriana</i>	1.5	400		
<i>Allocasuarina humilis</i>	2	90		
<i>Austrostipa elegantissima</i>	0.1	60	GBQ19-03	
<i>Banksia attenuata</i>	5	450		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	0.1	30	GREL09-10=	
<i>Banksia menziesii</i>	8	500		
<i>Bossiaea eriocarpa</i>	0.1	30		
* <i>Briza maxima</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	30		
<i>Cassytha racemosa</i> forma <i>pilosa</i>	0.1	60	GBQ14-06=	
<i>Caustis dioica</i>	5	60	GBQ05-05=	
<i>Corymbia calophylla</i>	10	1800		
<i>Cristonia biloba</i>	0.1	40	GBQ19-15	
<i>Cyathochaeta avenacea</i>	0.1	80	GBQ19-10	
<i>Dampiera linearis</i>	0.1	25	GBQ15-18=	
<i>Dasypogon bromeliifolius</i>	0.5	60		
<i>Dasypogon obliquifolius</i>	0.1	30	MN40-02=	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	60	GREL09-07=	
<i>Daviesia physodes</i>	0.1	90	GBQ17-11=	
<i>Daviesia podophylla</i>	1	40	GBQ19-02	
<i>Daviesia triflora</i>	0.1	40	GBQ18-06=	
<i>Desmocladus fasciculatus</i>	0.1	20	GBQ17-18=	
<i>Desmocladus flexuosus</i>	0.1	30	GREL09-04=	
* <i>Ehrharta calycina</i>	0.1	60		
<i>Eremaea fimbriata</i>	0.1	60	GBQ19-05	
<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	0.1	70	GBQ19-06	
<i>Eucalyptus todtiana</i>	25	1500		
* <i>Gladiolus caryophyllaceus</i>	0.1	30		
<i>Gompholobium tomentosum</i>	0.5	45		
<i>Hibbertia hypericoides</i>	3	50		
<i>Hyalosperma cotula</i>	0.1	10	GBQ01-41=	
<i>Hybanthus calycinus</i>	0.1	25	GBQ19-19	
<i>Hypolaena exsulca</i>	0.1	40	GBQ19-11	
<i>Isopogon autumnalis</i>	0.5	80	GBQ19-01	
<i>Jacksonia floribunda</i>	0.1	120		
<i>Lepidosperma leptostachyum</i>	1	30	GBQ19-16	
<i>Lepidosperma oldhamii/calcicola</i>	0.1	30	GBQ19-22	
<i>Leptospermum laevigatum</i>	5	60	GBQ19-20	
<i>Lomandra nigricans</i>	0.1	60	GBQ19-18	
<i>Lomandra preissii</i>	0.1	40	GBQ19-13	
<i>Lomandra preissii</i>	0.1	30	GBQ19-21	
<i>Lyginia barbata</i>	1	50	GBQ19-08	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Mesomelaena pseudostygia</i>	3	30	GBQ01-06=	
<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>	1	20	GBQ17-02=	
<i>Philotheca spicata</i>	0.1	40	GBQ19-17	
* <i>Romulea rosea</i>	0.1	15		
<i>Schoenus clandestinus</i>	0.1	5	GBQ19-09	
<i>Scholtzia involucrata</i>	0.1	60	GBQ19-12	
* <i>Sonchus oleraceus</i>	0.1	15		
<i>Stirlingia latifolia</i>	1	70		
<i>Tricoryne elatior</i>	0.1	30	GBQ15-34=	
<i>Tricoryne elatior</i>	0.1	60	GBQ19-04	
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	10		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	0.1	70	GBQ19-23	
<i>Xanthorrhoea preissii</i>	7	120		



GEH Bypass Interchange Project PH1 **Site** GBQ20
Described by RM/AL **Date** 7-May-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407026 mE** **6467853 mN**
Habitat Sandy plain.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Allocasuarina fraseriana*, *Banksia menziesii* (*Eucalyptus marginata* subsp. *marginata*) low open woodland over *Xanthorrhoea preissii* open shrubland over *Banksia dallanneyi* var. *dallanneyi* scattered low shrubs over *Mesomelaena pseudostygia* very open sedgeland over *Alexgeorgea nitens* very open herbland.
Veg Condition Excellent.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia sessilis</i>	0.1	40	GBQ20-05	
<i>Acacia willdenowiana</i>	0.1	20		
<i>Alexgeorgea nitens</i>	3	30		
<i>Allocasuarina fraseriana</i>	5	450		
<i>Allocasuarina humilis</i>	0.1	120		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	1	30		
<i>Banksia menziesii</i>	3	500		
<i>Bossiaea eriocarpa</i>	0.1	20		
* <i>Briza maxima</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	30		
<i>Caustis dioica</i>	0.1	30		
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	20	GBQ20-14	
<i>Cristonia biloba</i>	0.1	20	GBQ20-03	
<i>Dampiera linearis</i>	0.1	20	GBQ20-13	
<i>Dasypogon bromeliifolius</i>	0.1	30		
<i>Dasypogon obliquifolius</i>	0.5	20	GBQ20-11	
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	0.1	60	GBQ20-08	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	40		
<i>Daviesia triflora</i>	0.1	70	GBQ20-16	
<i>Desmocladus fasciculatus</i>	0.1	20		
* <i>Ehrharta longiflora</i>	0.1	10	GBQ20-09	
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	1	450		
* <i>Gladiolus caryophyllaceus</i>	0.1	20	Gladioli	
<i>Hibbertia hypericoides</i>	0.1	40		
<i>Hypocalymma robustum</i>	0.1	30		
<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>	0.1	20	GBQ20-10	
<i>Lomandra caespitosa</i>	0.1	30	GBQ20-01	
<i>Lomandra</i> sp.	0.1	30	GBQ20-06	ISM for det.
<i>Lomandra</i> sp.	0.1	20	GBQ20-12	ISM for det.
<i>Lomandra</i> sp.	0.1	20	GBQ20-15	ISM for det.
<i>Lomandra suaveolens</i>	0.1	40	GBQ20-04	
<i>Mesomelaena pseudostygia</i>	3	60	GBQ20-02	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30		
<i>Petrophile linearis</i>	0.1	30		
<i>Pterostylis</i> sp.	0.1	5	GBQ20-07	ISM for det.
<i>Scaevola canescens</i>	0.1	30		
<i>Thysanotus manglesianus</i>	0.1	30		
<i>Trachymene pilosa</i>	0.1	20		
<i>Xanthorrhoea preissii</i>	9	130		



GEH Bypass Interchange Project PH1 **Site** GBQ21
Described by RM/AL **Date** 7-May-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407028 mE** **6467695 mN**
Habitat Sandy plain.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Eucalyptus marginata* subsp. *marginata*, *Banksia attenuata*, *Allocasuarina fraseriana*, *Banksia menziesii* low open woodland over *Xanthorrhoea preissii* (*Allocasuarina humilis*, *Hakea prostrata*) open shrubland over *Banksia dallanneyi* var. *dallanneyi* low open shrubland over *Mesomelaena pseudostygia* scattered sedges over *Alexgeorgea nitens* open hermland.
Veg Condition Excellent.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia willdenowiana</i>	0.1	20		
<i>Alexgeorgea nitens</i>	3	30		
<i>Allocasuarina fraseriana</i>	2	450		
<i>Allocasuarina humilis</i>	0.5	120		
<i>Banksia attenuata</i>	3	500		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	2.5	30		
<i>Banksia menziesii</i>	1	450		
<i>Bossiaea eriocarpa</i>	0.1	20		
* <i>Briza maxima</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	30		
<i>Calectasia narragara</i>	0.1	25	GBQ21-14	
<i>Conostephium pendulum</i>	0.1	20	GBQ21-04	
<i>Conostylis juncea</i>	0.1	30	GBQ21-10	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	20	GBQ20-14=	
<i>Cristonia biloba</i>	0.1	20	GBQ20-03=	
<i>Dampiera linearis</i>	0.1	10	GBQ20-13=	
<i>Dasygogon bromeliifolius</i>	0.1	30		
<i>Dasygogon obliquifolius</i>	0.1	20	GBQ20-11=	
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	0.1	30	GBQ20-08=	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	70		
<i>Daviesia</i> sp.	0.1	20	GBQ21-06	ISM for det.
<i>Desmocladus fasciculatus</i>	0.1	20		
* <i>Ehrharta longiflora</i>	0.1	10	GBQ20-09=	
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	3	700		
* <i>Gladiolus caryophyllaceus</i>	0.1	20	Gladioli	
<i>Hakea prostrata</i>	0.5	130	GBQ21-12	
<i>Hardenbergia comptoniana</i>	0.1	5		
<i>Hibbertia huegelii</i>	0.1	30	GBQ21-03	
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	40		
<i>Hovea trisperma</i> var. <i>trisperma</i>	0.1	30		
<i>Hybanthus calycinus</i>	0.1	20	GBQ21-02	
<i>Hypocalymma robustum</i>	0.1	20		
<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>	0.1	20	GBQ20-10=	
<i>Kennedia prostrata</i>	0.1	5		
<i>Lomandra caespitosa</i>	0.1	20	GBQ21-05	
<i>Lomandra caespitosa</i>	0.1	30	GBQ20-01=	
<i>Lomandra preissii</i>	0.1	35	GBQ21-01	
<i>Lomandra</i> sp.	0.1	20	GBQ20-12=	ISM for det.
<i>Lomandra</i> sp.	0.1	30	GBQ20-06=	ISM for det.
<i>Mesomelaena pseudostygia</i>	1	60	GBQ20-02=	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	50		
<i>Petrophile linearis</i>	0.1	30		
<i>Phlebocarya ciliata</i>	0.1	20	GBQ21-07	
<i>Pimelea angustifolia</i>	0.1	20	GBQ21-11	
<i>Pterostylis</i> sp.	0.1	5	GBQ20-07=	ISM for det.
<i>Schoenus efoliatus</i>	0.1	60	GBQ21-09	
<i>Stachystemon vermicularis</i>	0.1	20	GBQ21-08	
<i>Stirlingia latifolia</i>	0.1	40		

Species	%Cover	Height (cm)	Specimen	Notes
<i>Stylium repens</i>	0.1	15	GBQ21-13	
<i>Tetaria octandra</i>	0.1	50		
<i>Xanthorrhoea preissii</i>	7	130		



GEH Bypass Interchange Project PH1 **Site** GBQ22
Described by RM/AL **Date** 8-May-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407047 mE** **6468411 mN**
Habitat Sandy plain.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Eucalyptus marginata* subsp. *marginata*, *Banksia menziesii*, *Allocasuarina fraseriana* low woodland over *Xanthorrhoea preissii* shrubland over *Mesomelaena pseudostygia* (*Lyginia imberbis*) very open sedgeland over *Alexgeorgea nitens* scattered herbs.
Veg Condition Very Good.
Fire Age No sign of recent fire.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia willdenowiana</i>	0.1	20		
<i>Alexgeorgea nitens</i>	0.5	30		
<i>Allocasuarina fraseriana</i>	2	450		
<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	0.1	10		
<i>Banksia attenuata</i>	0.1	90		
<i>Banksia menziesii</i>	7	400		
<i>Bossiaea eriocarpa</i>	0.1	20		
* <i>Briza maxima</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	30		
<i>Caustis dioica</i>	0.1	20		
<i>Conostephium pendulum</i>	0.1	20	GBQ21-04=	
<i>Conostylis juncea</i>	0.1	20	GBQ21-10=	
<i>Conostylis juncea</i>	0.1	20	GBQ22-05	
<i>Cristonia biloba</i>	0.1	20	GBQ20-03=	
<i>Dasygordon bromeliifolius</i>	0.1	40		
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	0.1	60	GBQ20-08=	
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	70		
<i>Daviesia triflora</i>	0.1	70	GBQ20-16=	
<i>Desmocladus fasciculatus</i>	0.1	20		
<i>Drosera erythrorhiza</i>	0.1	5		
* <i>Ehrharta calycina</i>	0.1	40		
* <i>Ehrharta longiflora</i>	0.1	10	GBQ20-09=	
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	2	700		
* <i>Gladiolus caryophyllaceus</i>	0.1	20		
<i>Gompholobium tomentosum</i>	0.1	5		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	40		
<i>Hypolaena exsulca</i>	0.1	20	GBQ22-04	
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	20	GBQ22-03	
<i>Lomandra</i> sp.	0.1	30	GBQ20-06=	ISM for det.
<i>Lomandra</i> sp.	0.1	20	GBQ20-15=	ISM for det.
<i>Lomandra</i> sp.	0.1	20	GBQ20-12=	ISM; Sterile.
<i>Lyginia imberbis</i>	1	50	GBQ22-01	
<i>Mesomelaena pseudostygia</i>	2	60	GBQ20-02=	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	50		
<i>Pimelea angustifolia</i>	0.1	20	GBQ21-11=	
* <i>Romulea rosea</i>	0.1	20		
<i>Thysanotus manglesianus</i>	0.1	30		
<i>Trachymene pilosa</i>	0.1	20		
<i>Tricoryne elatior</i>	0.1	30	GBQ22-02	
<i>Xanthorrhoea preissii</i>	11	170		



GEH Bypass Interchange Project PH1 **Site** GBQ23
Described by RM/AL **Date** 8-May-20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **407013 mE** **6468565 mN**
Habitat Sandy plain.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Eucalyptus todtiana* (*Banksia ilicifolia*) low woodland over *Adenanthes cygnorum* subsp. *cygnorum* tall open shrubland over *Xanthorrhoea preissii* open shrubland over *Banksia menziesii* scattered low shrubs.
Veg Condition Degraded.
Fire Age No sign of recent fire.

Name	%Cover	Height (cm)	Specimen	Notes
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	12	350		
* <i>Aira caryophyllea</i>	0.1	20		
<i>Banksia ilicifolia</i>	3	600		
<i>Banksia menziesii</i>	0.5	70		
<i>Burchardia congesta</i>	0.1	30		
* <i>Ehrharta calycina</i>	0.1	40		
* <i>Ehrharta longiflora</i>	0.1	50		
<i>Eucalyptus todtiana</i>	20	700		
* <i>Gladiolus caryophyllaceus</i>	0.1	20		
<i>Gompholobium tomentosum</i>	0.1	20		
<i>Jacksonia floribunda</i>	0.1	230		
<i>Lomandra caespitosa</i>	0.1	20	GBQ20-01=	
<i>Lomandra preissii</i>	0.1	20	GBQ23-02	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	50		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30	GBQ23-01	
<i>Pterostylis</i> sp.	0.1	15	GBQ20-07=	ISM for det.
* <i>Romulea rosea</i>	0.1	20		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15		
<i>Xanthorrhoea preissii</i>	11	170		



GEH Bypass Interchange Project PH1	Site	GBQ24
Described by	JTMET	Date 11/05/20
MGA Zone	50	Type Quadrat: 10 x 10 m 406799 mE 6468023 mN
Habitat	Gentle NW facing midslope	
Soil	White/grey sand, thin top layer of humus, 70% litter cover	
Rock Type	Sandy loam	
Vegetation	Allocasuarina fraseriana open woodland, over Eucalyptus todtiana scattered low trees, over Adenanthes cygnorum subsp. cygnorum (<i>Jacksonia floribunda</i>) tall shrubland, over <i>Styphelia xerophylla</i> , <i>Calytrix fraseri</i> , <i>Daviesia ? preissii</i> open shrubland, over <i>Stirlingia latifolia</i> , <i>Hemiandra pungens</i> (<i>Hibbertia hypericoides</i> , <i>Xanthorrhoea preissii</i> , <i>H. huegelii</i>) low shrubland over <i>Alexgeorgea nitens</i> , <i>Schoenus caespititius</i> , <i>Chordifex sinuosus</i> , <i>Hemiandra pungens</i> (<i>Dasypogon bromeliifolius</i> , <i>Mesomelaena pseudostygia</i> , <i>Lyginia imberbis</i>) open segdeland/herbland, over <i>Austrostipa elegantissima</i> scattered tussock grasses.	
Veg Condition	Very Good.	
Fire Age	Very long unburnt.	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia sessilis</i>	0.1	30	GBQ24-40	
<i>Acacia willdenowiana</i>	0.1	35	GBQ24-08	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	10	500		
<i>Aira cupaniana</i>	0.1	8	GBQ24-24	
<i>Alexgeorgea nitens</i>	5	15		
<i>Allocasuarina fraseriana</i>	7	1200		
<i>Allocasuarina humilis</i>	0.1	180	GBQ24-43	
<i>Amphipogon turbinatus</i>	0.1	40	GBQ24-30	
<i>Arnocrinum preissii</i>	0.1	50	GBQ24-39	
<i>Austrostipa compressa</i>	0.1	40	GBQ24-33	
<i>Austrostipa elegantissima</i>	1	90	GBQ24-01	
<i>Bossiaea eriocarpa</i>	0.1	40	GBQ24-34	
<i>Briza maxima</i>	0.1	25		
<i>Burchardia congesta</i>	0.1	45	GBQ24-49	
<i>Calytrix fraseri</i>	2	200		
<i>Caustis dioica</i>	0.1	45		
<i>Chordifex sinuosus</i>	4	45	GBQ24-29	
<i>Conostephium pendulum</i>	0.1	25	GBQ24-28	
<i>Conostylis aurea</i>	0.1	12	GBQ24-09	
<i>Conostylis juncea</i>	0.1	15	GBQ24-38	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15	GBQ24-32	
<i>Crassula colorata</i>	0.1	5	GBQ24-22	
<i>Dampiera linearis</i>	0.1	15		
<i>Dasypogon bromeliifolius</i>	1	75	GBQ24-11	
<i>Daviesia ? preissii</i>	2	130	GBQ24-05	Greg K det.
<i>Daviesia triflora</i>	0.1	50		
<i>Ehrharta calycina</i>	0.1	50		
<i>Eucalyptus todtiana</i>	1	700		Possible hybrid
<i>Gladiolus caryophyllaceus</i>	0.1	30		
<i>Gompholobium tomentosum</i>	0.1	50	GBQ24-35	
<i>Haemodorum discolor</i>	0.1	110	GBQ24-15	
<i>Hemiandra pungens</i>	4	20	GBQ24-25	
<i>Hemiphora bartlingii</i>	0.1	60	GBQ24-12	
<i>Hibbertia huegelii</i>	0.5	15	GBQ24-04	
<i>Hibbertia hypericoides</i>	2	35		
<i>Hyalosperma cotula</i>	0.1	12	GBQ24-17	
<i>Hypolaena ? robusta</i>	0.1	45	GBQ24-47	
<i>Jacksonia floribunda</i>	2	230		
<i>Lepidosperma apricola</i>	0.1	45	GBQ24-27	
<i>Lepidosperma leptostachyum</i>	0.1	45	GBQ24-36	
<i>Levenhookia pusilla</i>	0.1	5	GBQ24-21	
<i>Levenhookia stipitata</i>	0.1	7	GBQ24-23	
<i>Lobelia tenuior</i>	0.1	20	GBQ24-12B	
<i>Lomandra hermaphrodita</i>	0.1	40	GBQ24-37	

<i>Lomandra nigricans</i>	0.1	30	GBQ24-06	
<i>Lomandra suaveolens</i>	0.1	5	GBQ24-42	
<i>Lomandra suaveolens</i>	0.1	10	GBQ24-07	
<i>Lyginia imberbis</i>	1	95	GBQ24-02	
<i>Mesomelaena pseudostygia</i>	1	40	GBQ24-14	
<i>Millotia tenuifolia</i>	0.1	15	GBQ24-19	
<i>Patersonia occidentalis</i>	0.1	50		
<i>Pentameris pallida</i>	0.1	10	GBQ24-48	
<i>Petrophile linearis</i>	0.1	25		
<i>Phlebocarya filifolia</i>	0.1	45	GBQ24-16	
<i>Phyllangium divergens</i>	0.1	15	GBQ24-20	
<i>Podotheca angustifolia</i>	0.1	4	GBQ24-45	
<i>Rytidosperma occidentale</i>	0.1	40	GBQ24-13	
<i>Scaevola repens</i> var. <i>repens</i>	0.1	20		
<i>Schoenus caespititius</i>	4	50	GBQ24-10	
<i>Schoenus curvifolius</i>	0.1	20		
<i>Scholtzia involucrata</i>	0.1	40		
<i>Stirlingia latifolia</i>	6	50		
<i>Stylium araeophyllum</i>	0.1	45	GBQ24-31	
<i>Stylium calcaratum</i>	0.1	8	GBQ24-26	
<i>Stylium repens</i>	0.1	5	GBQ24-46	
<i>Styphelia xerophylla</i>	3	100	GBQ24-03	
<i>Trachymene pilosa</i>	0.1	8		
<i>Ursinia anthemoides</i>	0.1	20		
<i>Vulpia myuros</i> forma <i>myuros</i>	0.1	10	GBQ24-41	
<i>Wahlenbergia preissii</i>	0.1	20	GBQ24-18	
<i>Watsonia meriana</i>	0.1	40		
<i>Xanthorrhoea preissii</i>	1	90		



GEH Bypass Interchange Project PH1	Site	GBQ25
Described by	JTMET	Date 11/03/20
MGA Zone	50	Type Quadrat: 10 x 10 m 406590 mE 6468273 mN
Habitat	Lower part of gently sloping swale between two dunes	
Soil	Gray sand with some humus, 30% litter cover	
Rock Type	Sandy loam	
Vegetation	Corymbia calophylla open woodland, over Adenanthes cygnorum tall shrubland, over Kingia australis, Calytrix fraseri, Xanthorrhoea preissii shrubland, over Gastrolobium linearifolium scattered low shrubs, over Alexgeorgea nitens, Lyginia imberbis, Schoenus pedicellatus (Phlebocarya filifolia, Dasypogon bromeliifolius, Hypolaena exsulca, Conostylis aurea, Corynotheca micrantha var. micrantha) sedgeland/herbland.	
Veg Condition	Excellent.	
Fire Age	Very long unburnt.	

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia sessilis</i>	0.1	40	GBQ25-13	
<i>Adenanthes cygnorum</i>	17	400		
<i>Aira cupaniana</i>	0.1	7	GBQ25-33	
<i>Alexgeorgea nitens</i>	25	20	GBQ25-04	
<i>Austrostipa compressa</i>	0.1	20	GBQ25-02	
<i>Babingtonia camphorosmae</i>	0.1	40		
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i>	5	25	GBQ25-19	
<i>Blancoa canescens</i>	0.1	20	GBQ25-41	
<i>Briza maxima</i>	0.1	10		
<i>Burchardia congesta</i>	0.1	40	GBQ25-05	
<i>Calytrix fraseri</i>	4	120	GBQ25-09	
<i>Caustis dioica</i>	0.1	60		
<i>Centrolepis aristata</i>	0.1	15	GBQ25-16B	
<i>Centrolepis aristata</i>	0.1	6	GBQ25-35	
<i>Centrolepis drummondiana</i>	0.1	5	GBQ25-36	
<i>Conostylis aurea</i>	1	20	GBQ25-03	
<i>Conostylis juncea</i>	0.1	30	GBQ25-47	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	12	GBQ25-26	
<i>Corymbia calophylla</i>	2	1500		
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	1	60	GBQ25-43	
<i>Cyathochaeta avenacea</i>	0.1	50	GBQ25-48	
<i>Dampiera linearis</i>	0.1	20	GBQ25-23	
<i>Dasypogon bromeliifolius</i>	2	40	GBQ25-10	
<i>Desmocladus fasciculatus</i>	0.1	15	GBQ25-31	
<i>Drosera drummondii</i>	0.1	15	GBQ25-34	
<i>Ehrharta calycina</i>	3	100	GBQ25-18	
<i>Gastrolobium linearifolium</i>	1	30	GBQ25-08	
<i>Gladiolus caryophyllaceus</i>	0.1	50		
<i>Haemodorum spicatum</i>	0.1	100	GBQ25-14	
<i>Haemodorum spicatum</i>	0.1	90	GBQ25-50	
<i>Hesperantha falcata</i>	0.1	10	GBQ25-28	
<i>Hyalosperma cotula</i>	0.1	8	GBQ25-24	
<i>Hypochaeris glabra</i>	0.1	5	Dead	
<i>Hypolaena exsulca</i>	1	35	GBQ25-40	
<i>Jacksonia floribunda</i>	0.1	350		Just outside
<i>Johnsonia pubescens</i> subsp. ? <i>pubescens</i>	0.1	15	GBQ25-29	Greg K det. N=1
<i>Kingia australis</i>	5	140		
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	12	GBQ25-06	
<i>Levenhookia stipitata</i>	0.1	3	GBQ25-38	
<i>Lomandra preissii</i>	0.1	50	GBQ25-17	
<i>Lyginia imberbis</i>	15	50	GBQ25-20	
<i>Patersonia occidentalis</i>	0.1	30	GBQ25-21	
<i>Pentameris pallida</i>	0.1	20	GBQ25-44	
<i>Philotheca spicata</i>	0.1	100	GBQ25-49	
<i>Phlebocarya filifolia</i>	3	20	GBQ25-07	
<i>Phyllangium paradoxum</i>	0.1	2	GBQ25-27	

<i>Rytidosperma occidentale</i>	0.1	80	GBQ25-42	
<i>Schoenus caespitius</i>	0.1	30	GBQ25-39	
<i>Schoenus caespitius</i>	0.1	45	GBQ25-16	
<i>Schoenus pedicellatus</i>	10	50	GBQ25-11	
<i>Siloxerus humifusus</i>	0.1	2	GBQ25-25	
<i>Stirlingia latifolia</i>	0.1	70	GBQ25-30	
<i>Stylium ? ciliatum</i>	0.1	35	GBQ25-22	Greg K det.
<i>Stylium dichotomum</i>	0.1	12	GBQ25-46	
<i>Thysanotus thyrsoideus</i>	0.1	45	GBQ25-32	
<i>Trachymene pilosa</i>	0.1	8	GBQ25-15	
<i>Tricoryne elatior</i>	0.1	45	GBQ25-12	
<i>Ursinia anthemoides</i>	0.1	25		
<i>Vulpia myuros forma myuros</i>	0.1	12	GBQ25-45	
<i>Wahlenbergia preissii</i>	0.1	3	GBQ25-37	
<i>Wahlenbergia preissii</i>	0.1	15	GBQ25-01	
<i>Xanthorrhoea preissii</i>	3	150	GBQ25-53	



GEH Bypass Interchange Project PH1		Site	GBQ26
Described by	JTMET	Date	11/04/20
MGA Zone	50	Type	Quadrat: 10 x 10 m
Habitat	Almost at crest/upper slope of north-south trending sand dune		
Soil	Grey sand; some humus; litter cover 75%		
Rock Type	Sandy loam		
Vegetation	Allocasuarina fraseriana scattered trees, over Banksia attenuata, B. menziesii low open forest, over Eucalyptus todtiana scattered low trees, over Adenanthes cygnorum tall open shrubland, over Jacksonia floribunda scattered shrubs, over Bossiaea eriocarpa (Hibbertia hypericoides) scattered low shrubs over Alexgeorgea nitens (Dasypogon bromeliifolius) sedgeland and Amphipogon turbinatus scattered tussock grasses.		
Veg Condition	Good, Degraded.		
Fire Age	Burnt 1-2 years ago, Burnt 3-5 years ago.		
Notes	Banksia illicifolia 11m height, 7m of NE quad corner. Rabbit faeces outside quadrat. Adjacent to small area burnt; Austrostipa abundant but no other fire species recorded; Many individuals of Haemodorum sp. outside quad in burnt area.		

Species	%Cover	Height	Specimen	Notes
<i>Acacia applanata</i>	0.1	35	GBQ26-12	
<i>Adenanthes cygnorum</i>	7	550		
<i>Alexgeorgea nitens</i>	50	15		
<i>Allocasuarina fraseriana</i>	1	1800	GBQ26-01	
<i>Amphipogon turbinatus</i>	0.5	40	GBQ26-14	
<i>Arnocrinum preissii</i>	0.1	35	GBQ26-16	
<i>Austrostipa compressa</i>	0.1	50	GBQ26-26	
<i>Banksia attenuata</i>	15	1200		
<i>Banksia menziesii</i>	15	1200		
<i>Blancoa canescens</i>	0.1	20	GBQ26-19	
<i>Bossiaea eriocarpa</i>	1	40		
<i>Briza maxima</i>	0.1	50		
<i>Chaetospora curvifolia</i>	0.1	45	GBQ26-27	
<i>Conostylis aurea</i>	0.1	25	GBQ26-23	
<i>Conostylis candidans</i>	0.1	12	GBQ26-04	
<i>Conostylis juncea</i>	0.1	10	GBQ26-17	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15	GBQ26-09	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	20	GBQ26-07	
<i>Dampiera linearis</i>	0.1	25		
<i>Dasypogon bromeliifolius</i>	4	50		
<i>Daviesia triflora</i>	0.1	50		
<i>Desmocladus fasciculatus</i>	0.1	15		
<i>Ehrharta calycina</i>	0.1	80		
<i>Eucalyptus todtiana</i>	1	900		
<i>Gladiolus caryophyllaceus</i>	0.1	40		
<i>Gompholobium tomentosum</i>	0.1	10		
<i>Haemodorum ? discolor</i>	0.1	100	GBQ26-25	Greg K det.
<i>Haemodorum spicatum</i>	0.1	150	GBQ26-18	
<i>Hibbertia hypericoides</i>	0.5	35		
<i>Hyalosperma cotula</i>	0.1	10	GBQ28-14=	2m outside SW corner
<i>Hypochaeris glabra</i>	0.1	5		
<i>Jacksonia floribunda</i>	0.5	180		
<i>Lepidosperma ? pubisquamum</i>	0.1	50	GBQ26-10	Greg K det.
<i>Lomandra caespitosa</i>	0.1	50	GBQ26-06	
<i>Lomandra caespitosa</i>	0.1	45	GBQ26-20	
<i>Lomandra nigricans</i>	0.1	45	GBQ26-22	
<i>Lomandra nigricans</i>	0.1	35	GBQ26-03	
<i>Lomandra preissii</i>	0.1	45	GBQ26-11	
<i>Lomandra suaveolens</i>	0.1	25	GBQ26-15	
<i>Lyginia imberbis</i>	0.1	70	GBQ26-13	
<i>Mesomelaena pseudostygia</i>	0.1	60	GBQ26-21	
<i>Patersonia occidentalis</i>	0.1	55	GBQ26-28	
<i>Petrophile linearis</i>	0.1	20		1.5m outside south side
<i>Romulea rosea</i>	0.1	10		
<i>Scaevola repens</i>	0.1	15	GBQ26-02	
<i>Schoenus caespititius</i>	0.1	50	GBQ26-08	

<i>Stirlingia latifolia</i>	0.1	20	GBQ26-05	
<i>Trachymene pilosa</i>	0.1	15		
<i>Tricoryne elatior</i>	0.1	15	GBQ26-29	
<i>Ursinia anthemoides</i>	0.1	20		
<i>Xanthorrhoea preissii</i>	0.1	170	GBQ26-24	



GEH Bypass Interchange Project PH1	Site	GBQ27			
Described by	JTMET	Date	11/05/20	Type	Quadrat: 10 x 10 m
MGA Zone	50	406737 mE	6468098 mN		
Habitat	Very gentle NW facing slope, low position in the landscape				
Soil	Light Grey with patchy white surface, thin layer leaf litter, 20% litter cover				
Rock Type	Sandy loam				
Vegetation	<i>Allocasuarina fraseriana</i> low open woodland, over <i>Xanthorrhoea preissii</i> open shrubland, over <i>Hibbertia hypericoides</i> subsp. <i>Hypericoides</i> (<i>Jacksonia lehmannii</i> , <i>Styphelia xerophylla</i>) low open shrubland, over <i>Caustis dioica</i> , <i>Alexgeorgea nitens</i> (<i>Mesomelaena tetragona</i> , <i>Schoenus caespititius</i> , <i>Dasypogon bromeliifolius</i> , <i>Conostylis aurea</i> , <i>Haemodorum discolor</i> , <i>Lyginia imberbis</i>) sedge/herbland.				
Veg Condition	Very Good.				
Fire Age	Very long unburnt.				
Notes	[Beyond study scope] ~ <i>Xanthorrhoea</i> near NW stipe 2cm diameter, 75cm long; spike 130cm, leaves 1m long, flat diamond TS. Patch of <i>Eremaea pauci</i> just outside quad,				

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia appianata</i>	0.1	30	GBQ27-53	
<i>Acacia sessilis</i>	0.1	12	GBQ27-13	
<i>Aira cupaniana</i>	0.1	10	GBQ27-19	
<i>Alexgeorgea nitens</i>	12	20		
<i>Allocasuarina fraseriana</i>	2	900		
<i>Amperea ericoides</i>	0.1	10	GBQ27-43	
<i>Amphipogon turbinatus</i>	0.1	15	GBQ27-22	
<i>Anigozanthos manglesii</i>	0.1	5	GBQ27-09	Greg K. det.
<i>Austrostipa compressa</i>	0.1	35	GBQ24-33=	
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i>	0.1	15	GBQ27-15	
<i>Briza maxima</i>	0.1	20		
<i>Burchardia congesta</i>	0.1	60	GBQ27-51	
<i>Cassytha aurea</i>	0.1	45	GBQ27-06	
<i>Caustis dioica</i>	20	60		
<i>Centrolepis aristata</i>	0.1	5	GBQ27-46	
<i>Comesperma calymega</i>	0.1	50	GBQ27-25	
<i>Conostylis aurea</i>	0.5	20	GBQ27-29	
<i>Conostylis juncea</i>	0.1	15	GBQ27-11	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	10	GBQ27-28	
<i>Cristonia biloba</i> subsp. <i>biloba</i>	0.1	15	GBQ27-48	
<i>Cyanothamnus ramosus</i> subsp. <i>anethifolius</i>	0.1	40	GBQ27-44	
<i>Dampiera linearis</i>	0.1	15		
<i>Dasypogon bromeliifolius</i>	1	50	GBQ27-26	
<i>Dasypogon bromeliifolius</i>	2	45		
<i>Desmocladus fasciculatus</i>	0.1	12		
<i>Ehrharta calycina</i>	0.1	70		
<i>Eucalyptus todtiana</i>	0.1	700		Possibly hybrid
<i>Gladiolus caryophyllaceus</i>	0.1	75		
<i>Haemodorum discolor</i>	0.5	110	GBQ27-14	
<i>Haemodorum spicatum</i>	0.1	105	GBQ27-24	
<i>Hibbertia hypericoides</i>	0.1	20		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	2	45	GBQ27-39	
<i>Hyalosperma cotula</i>	0.1	12	GBQ24-17=	
<i>Hypochaeris glabra</i>	0.1	5		
<i>Hypolaena exsulca</i>	0.1	55	GBQ27-20	
<i>Isolepis marginata</i>	0.1	1	GBQ27-36	
<i>Jacksonia lehmannii</i>	1	20		
<i>Johnsonia pubescens</i> subsp. ? <i>pubescens</i>	0.1	15	GBQ27-41	Greg K.det.
<i>Laxmannia sessiliflora</i> subsp. <i>australis</i>	0.1	5	GBQ27-18	
<i>Lepidosperma apricola</i>	0.1	30	GBQ27-17	
<i>Levenhookia stipitata</i>	0.1	5	GBQ27-34	
<i>Lomandra hermaphrodita</i>	0.1	50	GBQ27-42	
<i>Lomandra hermaphrodita</i>	0.1	40	GBQ27-52	
<i>Lomandra nigricans</i>	0.1	55	GBQ27-38	

<i>Lyginia imberbis</i>	0.5	55	GBQ27-23	
<i>Mesomelaena pseudostygia</i>	0.1	45	GBQ27-10	
<i>Mesomelaena tetragona</i>	5	70	GBQ27-12	
<i>Patersonia occidentalis</i>	0.1	40	GBQ27-16	
<i>Pentameris pallida</i>	0.1	12	GBQ27-07	
<i>Phyllangium paradoxum</i>	0.1	5	GBQ27-32	
<i>Pimelea angustifolia</i>	0.1	20	GBQ27-03	
<i>Podotheca angustifolia</i>	0.1	2	GBQ27-31	
<i>Poranthera microphylla</i>	0.1	5	GBQ27-45	
<i>Pterochaeta paniculata</i>	0.1	8	GBQ27-40	
<i>Rytidosperma sp.</i>	0.1	55	GBQ27-50	
<i>Scaevola glandulifera</i>	0.1	40	GBQ27-01	
<i>Scaevola repens</i> var. <i>repens</i>	0.1	10		
<i>Schoenus caespititius</i>	0.1	55	GBQ27-02	
<i>Schoenus caespititius</i>	0.1	4	GBQ27-04	
<i>Schoenus caespititius</i>	5	55	GBQ27-21	
<i>Scholtzia involucrata</i>	0.1	45		
<i>Siloxerus humifusus</i>	0.1	1	GBQ27-35	
<i>Stylium ? ciliatum</i>	0.1	3	GBQ27-27	Greg K. det.
<i>Stylium calcaratum</i>	0.1	7	GBQ27-37	
<i>Stylium dichotomum</i>	0.1	8	GBQ27-05	
<i>Stylium diurooides</i> subsp. <i>diurooides</i>	0.1	20	GBQ27-33	
<i>Stylium diurooides</i> subsp. <i>diurooides</i>	0.1	15	GBQ27-47	
<i>Stylium repens</i>	0.1	8		
<i>Styphelia xerophylla</i>	1	80	GBQ24-03=	
<i>Thysanotus patersonii</i>	0.1	20	GBQ27-49	
<i>Trachymene pilosa</i>	0.1	6		
<i>Ursinia anthemoides</i>	0.1	25		
<i>Vulpia myuros</i> forma <i>myuros</i>	0.1	25	GBQ27-30	
<i>Xanthorrhoea preissii</i>	2	130		
<i>Xanthosia huegelii</i>	0.1	10	GBQ27-08	



GEH Bypass Interchange Project PH1	Site	GBQ28	
Described by	JTMET	Date	11/03/20
MGA Zone	50	Type	406657 mE 6468310 mN Quadrat: 10 x 10 m
Soil	Gray sand with humus mat in places; 20% litter cover		
Rock Type	Sandy loam		
Vegetation	Eucalyptus todtiana scattered trees, over Banksia menziesii, B. attenuata low woodland, over Adenanthes cygnorum tall shrubland, over Jacksonia floribunda tall open shrubland, over Eremaea pauciflora var. pauciflora (Hibbertia hypericoides subsp. hypericoides, Daviesia triflora, Bossiaea eriocarpa, Stirlingia latifolia) low shrubland, over Alexgeorgea nitens (Lyginia imberbis, Schoenus caespititius, Blancoa canescens) open sedgeland/herbland and *Ehrharta calycina scattered tussock grasses.		
Veg Condition	Very Good, Good.		
Fire Age	Very long unburnt.		
Notes	Allocasuarina ? fraseriana 20m from quad		

Species	%Cover	Height (cm)	Specimen	Notes
Acacia pulchella var. glaberrima	0.1	7	GBQ28-56	
Adenanthes cygnorum	20	450		
Aira cupaniana	0.1	5	GBQ28-32	
Alexgeorgea nitens	23	15	GBQ28-07	
Amphipogon turbinatus	0.1	20	GBQ28-28	
Austrostipa compressa	0.1	60	GBQ28-01	
Banksia attenuata	5	1000	Not in quad	
Banksia menziesii	10	700		
Blancoa canescens	0.5	15		
Bossiaea eriocarpa	1	25	GBQ28-09	
Briza maxima	0.1	10		
Burchardia congesta	0.1	15	GBQ28-30	
Caladenia flava	0.1	10	GBQ28-31	
Calectasia narragara	0.1	25	GBQ28-52	
Centrolepis drummondiana	0.1	1	GBQ28-55	
Chaetospora curvifolia	0.1	35	GBQ28-23	
Conospermum acerosum subsp. acerosum	0.1	40	GBQ28-08	
Conostylis aurea	0.1	25	GBQ28-58	90cm outside quad
Conostylis juncea	0.1	22	GBQ28-20	
Conostylis setigera subsp. setigera	0.1	10	GBQ28-35	
Crassula colorata	0.1	4	GBQ28-54	
Cyanothamnus ramosus subsp. anethifolius	0.1	25	GBQ28-36	
Dampiera linearis	0.1	12	GBQ28-13	
Dasypogon bromeliifolius	0.1	50	GBQ28-46	
Daviesia triflora	1	45	GBQ28-24	
Drosera drummondii	0.1	30	GBQ28-29	
Drosera erythrorhiza	0.1	1	GBQ28-04	
Drosera menziesii	0.1	20	GBQ28-51	
Ehrharta calycina	1	80		
Eremaea pauciflora var. pauciflora	18	50	GBQ28-41	
Eucalyptus todtiana	1	1200		Less than 1m outside quad
Gladiolus caryophyllaceus	0.1	20		
Gompholobium tomentosum	0.1	20	GBQ28-37	
Haemodorum discolor	0.1	30	GBQ28-10	
Haemodorum spicatum	0.1	70	GBQ28-11	
Hibbertia hypericoides subsp. hypericoides	2	25	GBQ28-05	
Hovea trisperma	0.1	20	GBQ28-38	
Hyalosperma cotula	0.1	8	GBQ28-14	
Hypochaeris glabra	0.1	5		
Isolepis marginata	0.1	5 cm	GBQ28-33	
Jacksonia floribunda	2	270	GBQ28-22	
Lepidosperma pubisquamum	0.1	50	GBQ28-40	
Lepidosperma pubisquamum	0.1	40	GBQ28-50	

<i>Leucopogon conostephoides</i>	0.1	25	GBQ28-12	
<i>Leucopogon conostephoides</i>	0.1	25	GBQ28-06	
<i>Levenhookia stipitata</i>	0.1	5	GBQ28-53	
<i>Lobelia tenuior</i>	0.1	12	GBQ28-18	
<i>Lomandra caespitosa</i>	0.1	40	GBQ28-27	
<i>Lomandra caespitosa</i>	0.1	15	GBQ28-26	
<i>Lomandra hermaphrodita</i>	0.1	20	GBQ28-17	
<i>Lomandra integra</i>	0.1	30	GBQ28-45	
<i>Lomandra nigricans</i>	0.1	45	GBQ28-49	
<i>Lyginia barbata</i>	0.1	55	GBQ28-39	
<i>Lyginia imberbis</i>	1	90	GBQ28-43	
<i>Patersonia occidentalis</i>	0.1	60	GBQ28-02	
<i>Petrophile linearis</i>	0.1	15	GBQ28-47	
<i>Philotheeca spicata</i>	0.1	100	GBQ28-44	
<i>Phyllangium divergens</i>	0.1	4	GBQ28-15	
<i>Schoenus caespititius</i>	1	50	GBQ28-34	
<i>Scholtzia involucrata</i>	0.1	50	GBQ28-57	90cm outside quad
<i>Stirlingia latifolia</i>	1	60	GBQ28-03	
<i>Stylium repens</i>	0.1	5	GBQ28-48	
<i>Thysanotus sparteus</i>	0.1	20	GBQ28-19	
<i>Trachymene pilosa</i>	0.1	12	GBQ28-21	
<i>Tricoryne elatior</i>	0.1	40	GBQ28-25	
<i>Ursinia anthemoides</i>	0.1	10		
<i>Wahlenbergia capensis</i>	0.1	15		
<i>Wahlenbergia preissii</i>	0.1	15	GBQ28-16	
<i>Wahlenbergia preissii</i>	0.1	8	GBQ28-42	



GEH Bypass Interchange Project PH1 **Site** GBQ29
Described by JTMET **Date** 11/06/20 **Type** Quadrat: 10 x 10 m
MGA Zone 50 **406435 mE** **6468236 mN**
Habitat South facing gentle slope, midslope of sand dune
Soil Grey/ white sand, very thin layer leaf litter, 30% litter cover
Rock Type Sandy loam
Vegetation Banksia menziesii low open woodland, over Jacksonia floribunda scattered tall shrubs, over Styphelia xerophylla (Verticordia densiflora var. densiflora, Stirlingia latifolia, Xanthorrhoea preissii) low open shrubland, over Lyginia barbata, Dasypogon bromeliifolius (Corynotheca micrantha var. micrantha, Mesomelaena pseudostygia) open sedgeland and *Pentameris pallida, *Ehrharta calycina (Amphipogon turbinatus) very open tussock grassland.
Veg Condition Degraded.
Fire Age Very long unburnt.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia pulchella</i> var. <i>glaberrima</i>	0.1	170	GBQ29-15	
<i>Acacia sessilis</i>	0.1	50	GBQ29-01	
<i>Amphipogon turbinatus</i>	0.5	45	GBQ29-07	
<i>Banksia menziesii</i>	3	600		
<i>Bossiaea eriocarpa</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	10	Grazed	
<i>Centrolepis aristata</i>	0.1	4	GBQ29-25	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	15	GBQ29-11	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	20	GBQ29-20	
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	2	50	GBQ29-09	
<i>Dampiera linearis</i>	0.1	20		
<i>Dasypogon bromeliifolius</i>	4	50	GBQ29-02	
<i>Ehrharta calycina</i>	2	100		
<i>Eremaea pauciflora</i>	0.1	100		1m outside North side
<i>Gladiolus caryophyllaceus</i>	0.1	30		
<i>Haemodorum spicatum</i>	0.1	45	GBQ29-22	
<i>Hakea trifurcata</i>	0.1	330		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	30	GBQ29-14	
<i>Jacksonia floribunda</i>	1	350		
<i>Lepidosperma leptostachyum</i>	0.1	50	GBQ29-18	
<i>Lomandra caespitosa</i>	0.1	10	GBQ29-21	
<i>Lomandra caespitosa</i>	0.1	30	GBQ29-16	
<i>Lomandra hermaphrodita</i>	0.1	15	GBQ29-26	
<i>Lyginia barbata</i>	5	60	GBQ29-10	
<i>Mesomelaena pseudostygia</i>	1	80	GBQ29-12	
<i>Pentameris pallida</i>	4	25	GBQ29-03	
<i>Petrophile linearis</i>	0.1	25		
<i>Philotheca spicata</i>	0.1	50	GBQ29-05	
<i>Phlebocarya filifolia</i>	0.1	50	GBQ29-17	
<i>Podotheca angustifolia</i>	0.1	5	GBQ29-23	
<i>Rytidosperma occidentale</i>	0.1	35	GBQ29-06	
<i>Scholtzia involucrata</i>	0.1	50		
<i>Siloxerus humifusus</i>	0.1	2	GBQ29-24	
<i>Stirlingia latifolia</i>	1	30		
<i>Styphelia xerophylla</i>	2	50	GBQ29-04	
<i>Trachymene pilosa</i>	0.1	10		
<i>Verticordia densiflora</i> var. <i>densiflora</i>	1	100	GBQ29-13	
<i>Xanthorrhoea preissii</i>	0.5	100	GBQ29-19	



GEH Bypass Interchange Project PH1		Site	GBQ30		
Described by	JTMET	Date	11/04/20	Type	Quadrat: 10 x 10 m
MGA Zone	50	406711 mE	6468154 mN		
Habitat	Gently undulating, slight NW slope				
Soil	Grey/brown at surface, pale grey clay/silt at depth (ants); some humus; thin leaf litter layer				
Rock Type	Loam				
Vegetation	<i>Allocasuarina fraseriana</i> (<i>Eucalyptus todtiana</i>) low woodland, over <i>Xanthorrhoea preissii</i> , <i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i> (<i>Jacksonia floribunda</i> , <i>Lambertia multiflora</i> var. <i>darlingensis</i>) tall shrubland, over <i>Hibbertia hypericoides</i> (<i>Stirlingia latifolia</i>) low open shrubland, over <i>Caustis dioica</i> , <i>Alexgeorgea nitens</i> (<i>Mesomelaena tetragona</i> , <i>Leptospermum laevigatum</i> , <i>Conostylis aurea</i> , <i>Dasygordon bromeliifolius</i>) sedgeland/herbland.				
Veg Condition	Excellent, Very Good.				
Fire Age	Very long unburnt.				
Notes	Site was positioned away from highly disturbed land.				

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia applanata</i>	0.1	45	GBQ30-47	
<i>Acacia sessilis</i>	0.1	35	GBQ30-06	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	4	300		
<i>Aira caryophyllea</i>	0.1	5	GBQ30-37	
<i>Alexgeorgea nitens</i>	12	15		
<i>Allocasuarina fraseriana</i>	9	500	GBQ30-53	
<i>Aphelia cyperoides</i>	0.1	2	GBQ30-45	
<i>Austrostipa compressa</i>	0.1	30	GBQ30-11	
<i>Babingtonia camphorosmae</i>	0.1	35		
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i>	0.1	40	GBQ30-8	
<i>Blancaea canescens</i>	0.1	15	GBQ30-23	
<i>Briza maxima</i>	0.1	5		
<i>Calytrix aurea</i>	0.1	65	GBQ30-26	
<i>Caustis dioica</i>	20	40		
<i>Centrolepis aristata</i>	0.1	5	GBQ30-19	
<i>Centrolepis drummondiana</i>	0.1	4	GBQ30-38	
<i>Comesperma calymega</i>	0.1	55	GBQ30-17	
<i>Conostylis aurea</i>	1	20	GBQ30-04	
<i>Conostylis setigera</i> subsp. <i>setigera</i>	0.1	12	GBQ30-22	
<i>Cristonia biloba</i> subsp. <i>biloba</i>	0.1	40	GBQ30-48	
<i>Dampiera linearis</i>	0.1	15		
<i>Dasygordon bromeliifolius</i>	0.5	45		
<i>Dasygordon bromeliifolius</i>	0.1	35	GBQ30-02	
<i>Desmocladus fasciculatus</i>	0.1	10		
<i>Drosera glanduligera</i>	0.1	3	GBQ30-40	
<i>Ehrharta calycina</i>	0.1	100		1m outside quadrat
<i>Eucalyptus todtiana</i>	4	500	GBQ30-28	Possibly hybrid
<i>Gladiolus caryophyllaceus</i>	0.1	50		
<i>Gompholobium tomentosum</i>	0.1	25	GBQ30-36	
<i>Haemodorum discolor</i>	0.1	60	GBQ30-25	
<i>Hemiandra pungens</i>	0.1	25	GBQ30-16	
<i>Hibbertia huegelii</i>	0.1	25	GBQ30-55	
<i>Hibbertia hypericoides</i>	5	70		
<i>Hyalosperma cotula</i>	0.1	12	GBQ30-13	
<i>Hypochaeris glabra</i>	0.1	5		
<i>Isotoma hypocrateriformis</i>	0.1	15	GBQ30-52	
<i>Jacksonia floribunda</i>	1	180		
<i>Jacksonia lehmannii</i>	0.1	30	GBQ30-01	
<i>Johnsonia pubescens</i> subsp. ? <i>cygnorum</i>	0.1	20	GBQ30-12	Greg K. det.
<i>Lambertia multiflora</i> var. <i>darlingensis</i>	1	200		
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	0.1	20	GBQ30-20	
<i>Leptospermum laevigatum</i>	2	400		
<i>Levenhookia stipitata</i>	0.1	10	GBQ30-41	
<i>Lomandra hermaphrodita</i>	0.1	35	GBQ30-46	
<i>Lyginia imberbis</i>	0.1	55	GBQ30-29	

<i>Lysinema pentapetalum</i>	0.1	65	GBQ30-30	
<i>Mesomelaena tetragona</i>	3	50	GBQ30-49	
<i>Neurachne alopecuroidae</i>	0.1	40	GBQ30-31	
<i>Patersonia occidentalis</i>	0.1	40	GBQ30-34	
<i>Pentameris pallida</i>	0.1	15	GBQ30-35	
<i>Petrophile biloba</i>	0.1	20		
<i>Philotheca spicata</i>	0.1	40	GBQ30-10	
<i>Phlebocarya ciliata</i>	0.1	60	GBQ31-08=	
<i>Phyllangium paradoxum</i>	0.1	4	GBQ30-39	
<i>Pimelea angustifolia</i>	0.1	55	GBQ30-27	
<i>Pterochaeta paniculata</i>	0.1	15	GBQ30-18	
<i>Quinetia urvillei</i>	0.1	4	GBQ30-42	
<i>Rytidosperma occidentale</i>	0.1	1	GBQ30-33	
<i>Scaevola glandulifera</i>	0.1	30	GBQ30-51	
<i>Scaevola repens</i> var. <i>repens</i>	0.1	20	GBQ31-19=	
<i>Schoenus curvifolius</i>	0.1	20		
<i>Siloxerus humifusus</i>	0.1	2	GBQ30-21	
<i>Stirlingia latifolia</i>	2	30		
<i>Stylium calcaratum</i>	0.1	15	GBQ30-43	
<i>Stylium dichotomum</i>	0.1	17	GBQ30-9	
<i>Stylium repens</i>	1	15	GBQ30-7	
<i>Styphelia xerophylla</i>	0.1	50	GBQ30-03	
<i>Tetraria octandra</i>	0.1	30	GBQ30-24	
<i>Thysanotus thyrsoides</i>	0.1	30	GBQ30-14	
<i>Trachymene pilosa</i>	0.1	8		
<i>Tricoryne elatior</i>	0.1	60	GBQ30-32	
<i>Ursinia anthemoides</i>	0.1	20		
<i>Wahlenbergia preissii</i>	0.1	5	GBQ30-44	
<i>Xanthorrhoea preissii</i>	5	150		
<i>Xanthosia huegelii</i>	0.1	15	GBQ30-05	



GEH Bypass Interchange Project PH1

Site GBQ31

Described by JTMET

Date 11/04/20

Type Quadrat 10 x 10 m

MGA Zone 50 406783 mE

6468147 mN

Habitat

Low lying, very gentle slope (possibly south facing); soil is more damp than 30m up the slope

Soil

Grey sand, humus rich near surface, thin leaf litter layer <90% litter cover

Rock Type

Sandy loam

Vegetation*Eucalyptus marginata* subsp. *marginata* low woodland, over *Adenanthes cygnorum* subsp. *cygnorum* (*Melaleuca brevifolia*) tall open shrubland, over *Xanthorrhoea preissii* open shrubland, over *Banksia dallanneyi* subsp. *dallanneyi* (*Bossiaea eriocarpa*) scattered low shrubs, over *Dasygordon bromeliifolius* (*Phlebocarya ciliata*) very open sedgeland/herbland.**Veg Condition** Degraded.**Fire Age** Very long unburnt.

Species	%Cover	Height (cm)	Specimen	Notes
<i>Acacia appianata/willdenowiana</i>	0.1	40	GBQ31-12	
<i>Acacia huegelii</i>	0.1	80	GBQ31-01	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	2	350		
<i>Alexgeorgea nitens</i>	0.1	15		
<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i>	1	25	GBQ31-22	
<i>Bossiaea eriocarpa</i>	0.5	35		
<i>Burchardia congesta</i>	0.1	30	GBQ31-18	
<i>Conostylis juncea</i>	0.1	35	GBQ31-06	
<i>Dampiera linearis</i>	0.1	12		
<i>Dasygordon bromeliifolius</i>	5	70	GBQ31-05	
<i>Desmocladus fasciculatus</i>	0.1	12		
<i>Ehrharta calycina</i>	0.1	60		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	27	800		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	1	650	GBQ31-25	Jarra x Prickly bark hybrid
<i>Gompholobium tomentosum</i>	0.1	50	GBQ31-10	
<i>Hibbertia huegelii</i>	0.1	15	GBQ31-14	
<i>Hovea trisperma</i> var. <i>trisperma</i>	0.1	20	GBQ31-13	
<i>Hypolaena exsulca</i>	0.1	50	GBQ31-07	
<i>Jacksonia floribunda</i>	0.1	25		
<i>Lepidosperma leptostachyum</i>	0.1	30	GBQ31-21	
<i>Lomandra caespitosa</i>	0.1	25	GBQ31-16	
<i>Lomandra hermaphrodita</i>	0.1	40	GBQ31-17	
<i>Lomandra preissii</i>	0.1	45	GBQ31-09	
<i>Lyginia imberbis</i>	0.1	50	GBQ31-15	
<i>Melaleuca brevifolia</i>	0.5	200	GBQ31-20	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	40	GBQ31-02	
<i>Phlebocarya ciliata</i>	2	60	GBQ31-08	
<i>Pterostylis ? vittata</i>	0.1	20	GBQ31-23	
<i>Scaevola repens</i> var. <i>repens</i>	0.1	10	GBQ31-19	
<i>Schoenus caespitosus</i>	0.1	45	GBQ31-03	
<i>Stirlingia latifolia</i>	0.1	35		
<i>Stylium araeophyllum</i>	0.1	30	GBQ31-11	
<i>Tricoryne elatior</i>	0.1	30	GBQ31-04	
<i>Xanthorrhoea preissii</i>	0.1	150		
<i>Xanthorrhoea preissii</i>	4	150	GBQ31-24	



GEH Bypass Interchange Project PH1 **Site** GEHREL01
Described by CEF/RM **Date** 29-Oct-19 **Type** Relevé: 50 x 50 m
MGA Zone 50 **406357 mE** **6469657 mN**
Habitat Wetland area perched above river.
Soil Dark brown sandy clay loam.
Rock Type None.
Vegetation *Bolboschoenus caldwellii*, **Juncus bufonius*, *Typha domingensis* tall sedgeland over **Isolepis prolifera*, *Cyperus alterniflorus* very open sedgeland over **Bromus hordeaceus* very open grassland over **Lotus subbiflorus* very open hermland.
Veg Condition Degraded.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Bolboschoenus caldwellii</i>	20	100	GREL01-05	
* <i>Bromus diandrus</i>	0.1	40	GBQ10-07=	
* <i>Bromus hordeaceus</i>	1	60	GREL01-01	
* <i>Conyzia bonariensis</i>	0.1	80		
* <i>Cynodon dactylon</i>	5	20		
<i>Cyperus alterniflorus</i>	2	60	GBQ10-09=	
* <i>Echium plantagineum</i>	0.1	30		N=10
* <i>Isolepis prolifera</i>	1	60	GREL01-03	
* <i>Juncus bufonius</i>	10	120	GREL01-06	
* <i>Lolium perenne</i>	0.1	50	GREL01-02	
* <i>Lotus subbiflorus</i>	1	80	GREL01-07	
* <i>Lupinus angustifolius</i>	0.1	30		
* <i>Lythrum hyssopifolia</i>	0.1	20	GREL01-10	
* <i>Medicago polymorpha</i>	0.1	20		
* <i>Paspalum urvillei</i>	0.1	130	GREL01-09	
<i>Pseudognaphalium luteoalbum</i>	0.1	20	GREL01-11	
* <i>Ricinus communis</i>	0.1	80		
* <i>Rostraria cristata</i>	0.1	25	GREL01-12	
* <i>Sonchus asper</i>	0.1	50		
* <i>Sonchus oleraceus</i>	0.1	30		
<i>Typha domingensis</i>	1	120	GREL01-13	



GEH Bypass Interchange Project PH1 **Site** GEHREL02
Described by RM/AL **Date** 30-Oct-19 **Type** Relevé: 20 x 20 m
MGA Zone 50 **407125 mE** **6469352 mN**
Habitat Floodbank of lake.
Soil Dark brown silty clay Loam.
Rock Type None.
Vegetation *Corymbia calophylla* open woodland over *Melaleuca rhaphiophylla* low open forest over **Bromus diandrus*, **Briza maxima*, **Briza minor*, **Ehrharta calycina*, **Avena fatua* very open tussock grassland over *Schoenus clandestinus*, *Juncus articulatus*, **Juncus capitatus*, *Isolepis cernua* var. *setiformis* sedgeland over *Cynogeton huegelii* scattered herbs.
Veg Condition Good.
Fire Age No sign of recent fire.

Species	%Cover	Height	Specimen	Notes
* <i>Arundo donax</i>	0.1	500		
* <i>Asparagus asparagooides</i>	0.1	100		N=4
* <i>Avena fatua</i>	0.5	70	GBQ10-03=	
* <i>Briza maxima</i>	2	40		
* <i>Briza minor</i>	1	30		
* <i>Bromus diandrus</i>	5	30	GBQ10-07=	
<i>Corymbia calophylla</i>	5	1400		
<i>Cynogeton huegelii</i>	2	50	CF02-03=	
* <i>Ehrharta calycina</i>	0.5	70		
<i>Isolepis cernua</i> var. <i>setiformis</i>	1	10	GREL02-11	
<i>Isolepis cyperoides</i>	0.1	15	GREL02-10	
<i>Juncus articulatus</i>	10	40	GREL02-07	
* <i>Juncus capitatus</i>	5	20	GREL02-08	
<i>Juncus pallidus</i>	0.1	30	GREL02-02	
<i>Lobelia anceps</i>	0.1	30	GREL02-03	
<i>Melaleuca lateritia</i>	0.1	140	GREL02-09	
<i>Melaleuca rhaphiophylla</i>	40	900	GREL02-01	
<i>Pericalymma ellipticum</i> var. <i>floridum</i>	0.1	200	GBQ04-01=	
* <i>Schinus terebinthifolius</i>	0.1	400		
<i>Schoenus clandestinus</i>	30	10	GREL02-04	
* <i>Sonchus oleraceus</i>	0.1	30		
* <i>Trifolium campestre</i> var. <i>campestre</i>	0.1	20	GREL02-12	



GEH Bypass Interchange Project PH1

Site GEHREL03

Described by	RM/AL	Date	30-Oct-19	Type	Relevé: 20 x 20 m
MGA Zone	50	405830	mE	6468233	mN
Habitat	Roadside, flat, plain.				
Soil	Dark brown sandy loam.				
Rock Type	None				
Vegetation	<i>Eucalyptus rufa</i> subsp. <i>rufa</i> , <i>Casuarina obesa</i> , <i>Eucalyptus camaldulensis</i> open forest over <i>Melaleuca rhamphophylla</i> , * <i>Melaleuca nesophila</i> tall open shrubland over * <i>Cenchrus clandestinus</i> , * <i>Ehrharta calycina</i> , * <i>Ehrharta longiflora</i> , * <i>Bromus diandrus</i> closed tussock grassland.				
Veg Condition	Degraded.				
Fire Age	No sign of recent fire.				

Species	%Cover	Height	Specimen	Notes
<i>Acacia saligna</i>	0.1	450		
<i>Agonis flexuosa</i>	1	7		
* <i>Avena fatua</i>	0.5	80	GBQ10-03=	
* <i>Bromus diandrus</i>	5	30	GBQ10-07=	
<i>Casuarina obesa</i>	10	2000	GREL03-03	
* <i>Cenchrus clandestinus</i>	75	80	GREL03-05	
* <i>Ehrharta calycina</i>	5	70		
* <i>Ehrharta longiflora</i>	5	60	GREL03-04	
* <i>Ehrharta longiflora</i>	0.1	60	GBQ12-01=	
<i>Eucalyptus camaldulensis</i>	5	3000	GREL03-01	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	50	2500		
* <i>Fumaria capreolata</i>	0.1	30	GBQ10-02=	
* <i>Hypochaeris radicata</i>	0.1	70	GREL03-07	
* <i>Lolium multiflorum</i>	1	30	GREL03-08	
* <i>Melaleuca hamulosa</i>	0.1	300	GREL03-09	Planted
* <i>Melaleuca nesophila</i>	2	400	GREL03-06	Planted
<i>Melaleuca rhamphophylla</i>	3	400	GREL03-02	
* <i>Schinus terebinthifolius</i>	0.1	5		
* <i>Solanum nigrum</i>	0.1	70		
* <i>Zantedeschia aethiopica</i>	0.1	100		N=3



GEH Bypass Interchange Project PH1 **Site** GEHREL04
Described by RM **Date** 30-Oct-19 **Type** Relevé: 5 x 50 m
MGA Zone 50 **404907 mE** **6466608 mN**
Habitat Fringing vegetation around a man-made lake.
Soil Dark brown loamy sand.
Rock Type None.
Vegetation **Melaleuca armillaris*, **Casuarina ?equisetifolia* low open forest over **Cynodon dactylon* scattered grasses.
Veg Condition Very Good, Good.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	0.1	40		
* <i>Briza maxima</i>	0.1	30		
* <i>Casuarina ?equisetifolia</i>	15	1200	GREL04-02	ISM for det.
* <i>Cynodon dactylon</i>	1	20		
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	0.1	400	GREL04-04	
* <i>Gladiolus caryophyllaceus</i>	0.1	30		
* <i>Hydrocotyle ranunculoides</i>	0.1	5	GREL04-05	
* <i>Melaleuca armillaris</i>	45	1200	GREL04-01	
<i>Melaleuca viminalis</i>	0.1	280	GREL04-03	N=1. Planted.
* <i>Pelargonium capitatum</i>	0.1	60		
* <i>Schinus terebinthifolius</i>	0.1	300		



GEH Bypass Interchange Project PH1 **Site** GEHREL05
Described by RM **Date** 29-Oct-19 **Type** Relevé: 10 x 30 m
MGA Zone 50 **mE** 406039 **mN** 6470377
Habitat Channel and bank of Helena River flowing west.
Soil Dark brown silty clay Loam.
Rock Type None.
Vegetation *Eucalyptus rufa* subsp. *rufa* open forest over **Ficus carica* low woodland over **Gomphocarpus fruticosus* (**Chenopodium album*) open shrubland over **Rubus ulmifolius* low shrubland over **Avena fatua*, **Bromus diandrus* very open tussock grassland over *Cyperus alterniflorus* scattered sedges over *Cynogeton huegelii*, **Fumaria capreolata* very open herland.
Veg Condition Degraded.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	5	150	GBQ10-03=	
* <i>Bromus diandrus</i>	1	45	GBQ10-07=	
* <i>Chenopodium album</i>	2	130	GBQ10-05=	
* <i>Chenopodium album</i>	0.1	50	GBQ10-05=	
<i>Cynogeton huegelii</i>	1	50	CF02-03=	
<i>Cyperus alterniflorus</i>	1	60	GBQ10-09=	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	50	1400	GBQ10-01=	
* <i>Ficus carica</i>	30	900		
* <i>Fumaria capreolata</i>	5	70	GBQ10-02=	
* <i>Gomphocarpus fruticosus</i>	1	120		N=200
* <i>Hordeum leporinum</i>	0.1	40	GBQ10-08=	
* <i>Hypochaeris radicata</i>	0.1	5	GBQ10-11=	
* <i>Rubus ulmifolius</i>	5	90		N=20
* <i>Setaria parviflora</i>	0.1	60	CF02-01=	
* <i>Sonchus asper</i>	0.1	110		
* <i>Sonchus oleraceus</i>	0.1	40	GBQ10-10=	
* <i>Zantedeschia aethiopica</i>	0.1	60		N=1



GEH Bypass Interchange Project PH1 **Site** GEHREL06

Described by CEF/RM **Date** 29-Oct-19 **Type** Relevé 20 x 20 m

MGA Zone 50 **406064 mE** **6470400 mN**

Habitat Floodplain and bank of Helena River.

Soil Dark brown silty clay Loam.

Rock Type None.

Vegetation *Eucalyptus rufis* subsp. *rufis* open forest over **Ficus carica* low woodland over **Ehrharta longiflora* (**Avena fatua*) very open grassland over **Fumaria capreolata* open hermland.

Veg Condition Degraded.

Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	1	150	GBQ10-03=	
* <i>Bromus diandrus</i>	0.1	45	GBQ10-07=	
* <i>Chenopodium album</i>	0.1	130	GBQ10-05=	
<i>Cyperus alterniflorus</i>	0.1	60	GBQ10-09=	
* <i>Ehrharta longiflora</i>	5	30	GBQ10-04=	
<i>Eucalyptus rufis</i> subsp. <i>rufis</i>	45	1400	GBQ10-01=	
* <i>Ficus carica</i>	40	800		
* <i>Fumaria capreolata</i>	20	70	GBQ10-02=	
* <i>Hordeum leporinum</i>	0.1	40	GBQ10-08=	
* <i>Hypochaeris radicata</i>	0.1	5	GBQ10-11=	
* <i>Sonchus oleraceus</i>	0.1	40	GBQ10-10=	



GEH Bypass Interchange Project PH1

Site GEHREL07

Described by	RM	Date	10-Oct-19	Type	Relevé: 20 x 20 m
MGA Zone	50	406535	mE	6468275	mN
Habitat	Dune crest and south slope.				
Soil	Creamy grey sand.				
Rock Type	None.				
Vegetation	Jacksonia floribunda scattered tall shrubs over Eremaea pauciflora subsp. pauciflora open heath over Astroloma xerophyllum low open shrubs over Lyginia imberbis very open sedgeland.				
Veg Condition	Excellent, Very Good.				
Fire Age	No sign of recent fire.				

Species	%Cover	Height	Specimen	Notes
<i>Alexgeorgea nitens</i>	35	20		
<i>Amphipogon turbinatus</i>	0.1	20	GBQ03-19=	
<i>Amphipogon turbinatus</i>	0.1	20	GBQ03-15=	
<i>Astroloma xerophyllum</i>	3	90	GBQ03-08=	
<i>Austrostipa compressa</i>	0.1	25	GBQ03-16=	
<i>Bossiaea eriocarpa</i>	0.1	1	GBQ03-14=	
* <i>Briza maxima</i>	0.1	20		
<i>Burchardia congesta</i>	0.1	20	GBQ03-07=	
<i>Conostylis juncea</i>	0.1	20	GBQ03-06=	
* <i>Ehrharta calycina</i>	0.1	60		
<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	40	120		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.1	30		
<i>Hyalosperma cotula</i>	0.1	5	GBQ03-03=	
* <i>Hypochaeris glabra</i>	0.5	5		
<i>Jacksonia floribunda</i>	1.5	250		
<i>Jacksonia floribunda</i>	0.1	20	GBQ03-12=	juvenile
<i>Levenhookia stipitata</i>	0.1	4	GBQ01-47=	
<i>Lomandra hermaphrodita</i>	0.1	20	GBQ03-18=	
<i>Lomandra suaveolens</i>	0.1	30	GBQ03-22=	
<i>Lyginia barbata</i>	0.1	30	GBQ02-04=	
<i>Lyginia imberbis</i>	2	90	GBQ04-08=	
<i>Melaleuca systena</i>	0.1	90		
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	25	GBQ03-05=	
* <i>Pentameris pallida</i>	0.1	20	GBQ03-09=	
<i>Podotheca angustifolia</i>	0.1	10	GBQ03-11=	
<i>Schoenus efoliatus</i>	0.1	20	GBQ03-17=	
<i>Scholtzia involucrata</i>	0.1	40	GBQ03-02=	
* <i>Sonchus oleraceus</i>	0.1	20		
<i>Stirlingia latifolia</i>	0.1	90		
<i>Stylidium repens</i>	0.1	20	GBQ03-25=	
<i>Thysanotus patersonii</i>	0.1	40	GBQ03-13=	
<i>Trachymene pilosa</i>	0.1	7		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	15		



GEH Bypass Interchange Project PH1 **Site** GEHREL08

Described by CEF/RM **Date** 29-Oct-19 **Type** Relevé: 20 x 20 m

MGA Zone 50 **406202 mE** **6470390 mN**

Habitat Floodplain, adjacent to Helena River.

Soil Dark brown sandy clay loam.

Rock Type None.

Vegetation *Eucalyptus rufa* subsp. *rufa* open forest over **Ehrharta longiflora* (**Avena fatua*) closed grassland over **Fumaria capreolata*, **Chenopodium album*, **Echium plantagineum* very open hermland.

Veg Condition Degraded.

Fire Age No sign of recent fire.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	18	150	GBQ10-03=	
* <i>Bromus diandrus</i>	0.1	45	GBQ10-07=	
* <i>Chenopodium album</i>	1	130	GBQ10-05=	
<i>Cyperus alterniflorus</i>	0.1	60	GBQ10-09=	
* <i>Echium plantagineum</i>	1	40		N=30
* <i>Ehrharta calycina</i>	0.1	70		
* <i>Ehrharta longiflora</i>	60	30	GBQ10-04=	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	55	1400	GBQ10-01=	
* <i>Euphorbia terracina</i>	0.1	30		
* <i>Fumaria capreolata</i>	7	70	GBQ10-02=	
* <i>Gomphocarpus fruticosus</i>	0.1	90		N=3
* <i>Hordeum leporinum</i>	0.1	40	GBQ10-08=	
* <i>Lupinus angustifolius</i>	0.1	30		
* <i>Sonchus oleraceus</i>	0.1	40	GBQ10-10=	



GEH Bypass Interchange Project PH1 **Site** GEHREL09
Described by RM/AL **Date** 4-Nov-19 **Type** Relevé: 20 x 20 m
MGA Zone 50 **406953 mE** **6467549 mN**
Habitat Roadside plain.
Soil Dark brown Loamy sand.
Rock Type None.
Vegetation *Eucalyptus marginata* subsp. *marginata* open forest over *Adenanthes cygnorum*,
Calothamnus sanguineus, *Xanthorrhoea preissii* tall open shrubland over *Hibbertia*
hypericoides subsp. *hypericoides*, *Gompholobium tomentosum* scattered low shrubs over
Eragrostis curvula* (Ehrharta calycina*, **Briza maxima*) open grassland over *Lyginia barbata*,
Lomandra preissii, *Lepidosperma* sp. scattered sedges over *Alexgeorgea nitens*,
Desmocladus flexuosus, *Corynotheca micrantha* var. *elongata* open hermland.
Veg Condition Good, Degraded.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
<i>Acacia willdenowiana</i>	0.1	25	GREL09-09	
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	2	220		
<i>Alexgeorgea nitens</i>	5	15		
<i>Banksia dallanneyi</i> var. <i>dallanneyi</i>	0.1	35	GREL09-10	
<i>Billardiera fraseri</i>	0.1	80	GREL09-03	
<i>Bossiaea eriocarpa</i>	0.1	35	GBQ06-16=	
<i>*Briza maxima</i>	1	30		
<i>*Briza minor</i>	0.1	30		
<i>Burchardia congesta</i>	0.1	30		
<i>Calothamnus sanguineus</i>	1	220		
<i>Conostephium pendulum</i>	0.1	40	GREL09-08	
<i>Conostylis juncea</i>	0.1	30	GREL09-14	
<i>Corynotheca micrantha</i> var. <i>elongata</i>	1	20		
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	0.1	60	GREL09-07	
<i>Desmocladus flexuosus</i>	10	20	GREL09-04	
<i>*Ehrharta calycina</i>	1	110		
<i>*Eragrostis curvula</i>	10	120		
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	40	1800		
<i>*Euphorbia terracina</i>	0.1	30		
<i>*Gladiolus caryophyllaceus</i>	0.1	50		
<i>Gompholobium tomentosum</i>	0.5	15		
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.5	40		
<i>Kennedia prostrata</i>	0.1	20		
<i>Kunzea glabrescens</i>	0.1	450	GREL09-02	
<i>Lepidosperma</i> sp.	0.5	30	GREL09-11	
<i>Lomandra preissii</i>	0.5	40	GREL09-06	
<i>Lomandra preissii</i>	0.1	40	GREL09-12	
<i>Lyginia barbata</i>	1	50	GREL09-05	
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	0.1	30		
<i>*Romulea rosea</i>	0.1	20		
<i>*Sonchus oleraceus</i>	0.1	15		
<i>Xanthorrhoea preissii</i>	5	200		



GEH Bypass Interchange Project PH1 **Site** GEHREL10
Described by CEF/RM **Date** 29-Oct-19 **Type** Relevé: 20 x 20 m
MGA Zone 50 **mE** 406261 **mN** 6469667
Habitat Floodplain, slightly sloping towards river.
Soil Dark brown sandy clay loam.
Rock Type None.
Vegetation *Melaleuca rhamphophylla*, (*Melaleuca preissiana*, *Eucalyptus rufa* subsp. *rufa*) low open forest over **Ehrharta longiflora*, **Bromus diandrus* very open grassland over **Sonchus oleraceus*, **Fumaria capreolata* herbland.
Veg Condition Degraded.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	0.1	30	GBQ10-03=	
* <i>Bromus diandrus</i>	4	25	GBQ10-07=	
* <i>Ehrharta longiflora</i>	20	50	GBQ12-01=	
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	0.5	900	CF08-01=	
* <i>Euphorbia terracina</i>	0.1	30		
* <i>Fumaria capreolata</i>	60	70	GBQ10-02=	
<i>Melaleuca preissiana</i>	2	600		
<i>Melaleuca rhamphophylla</i>	80	800	GBQ12-02=	
* <i>Sonchus oleraceus</i>	1	30	GBQ10-10=	



GEH Bypass Interchange Project PH1

Site GEHREL11

Described by	RM/AL	Date	5-Nov-19	Type	Relevé: 20 x 20 m
MGA Zone	50	406954 mE	6467881 mN		
Habitat	Crest of Grey sand dune.				
Soil	Creamy grey sand.				
Rock Type	None.				
Vegetation	Eucalyptus marginata subsp. marginata open woodland over Banksia menziesii, (Banksia attenuata) low open woodland over Adenanthes cygnorum subsp. cygnorum tall open shrubland over Xanthorrhoea preissii, Allocasuarina humilis open shrubland over Dasypogon bromeliifolius, Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Scaevola repens var. repens low open shrubland over Mesomelaena pseudostygia, Schoenus efoliatus very open sedgeland over Alexgeorgea nitens scattered herbs.				
Veg Condition	Excellent, Very Good.				
Fire Age	Very long unburnt.				

Species	%Cover	Height	Specimen	Notes
Acacia sessilis	0.1	30	GREL11-07	
Acacia willdenowiana	0.1	30	GREL09-09=	
Adenanthes cygnorum subsp. cygnorum	5	450		
Alexgeorgea nitens	2	30		
Allocasuarina humilis	2	120		
Amphipogon turbinatus	0.1	30	GREL11-13	
Anigozanthos manglesii subsp. manglesii	0.1	30		
Banksia attenuata	0.5	210		
Banksia dallanneyi var. dallanneyi	0.1	20	GREL09-10=	
Banksia menziesii	5	400		
Blancoa canescens	0.1	25	GBQ15-21=	
Bossiaea eriocarpa	1	30		
*Briza maxima	0.1	30		
Burchardia congesta	0.1	30		
Caustis dioica	0.1	20	GBQ05-05=	
Conostylis setigera subsp. setigera	0.1	25	GREL11-06	
Dampiera linearis	0.1	25	GBQ15-18=	
Dasypogon bromeliifolius	2	60		
Daviesia nudiflora subsp. nudiflora	0.1	50	GREL09-07=	
Desmocladus fasciculatus	0.1	20	GBQ17-18=	
*Ehrharta calycina	0.1	50		
Eucalyptus marginata subsp. marginata	8	1800		
*Gladiolus caryophyllaceus	0.1	25		
Haemodorum sp.	0.1	40		ISM for det.
Hemiandra linearis	0.1	25	GBQ17-03=	
Hibbertia huegelii	0.1	30	GBQ17-34=	
Hibbertia hypericoides subsp. hypericoides	2	30		
Hovea trisperma var. trisperma	0.1	35	GBQ17-19=	
Hybanthus calycinus	0.1	20	GREL11-02	
Hybanthus calycinus	0.1	10	GREL11-08	
Lepidosperma leptostachyum	0.1	60	GREL11-04	
Lomandra hermaphrodita	0.1	30	GBQ16-13=	
Lyginia barbata	0.1	60	GBQ16-05=	
Mesomelaena pseudostygia	2	60	GBQ01-06=	
Patersonia occidentalis var. occidentalis	0.1	30		
Petrophile linearis	0.1	30	GEHREL11	
Phlebocarya ciliata	0.1	30	GREL11-09	
Pimelea angustifolia	0.1	25	GREL11-10	
Rytidosperma occidentale	0.1	50	GREL11-14	
Rytidosperma pilosum	0.1	30	GREL11-11	
Scaevola canescens	0.1	30	GREL11-03	
Scaevola repens var. repens	0.5	20		
Schoenus efoliatus	1	30	GREL11-05	
Stylium repens	0.1	5	GREL11-01	
Synaphea spinulosa subsp. spinulosa	0.1	70	GREL11-15	
Tetraria octandra	0.1	30	GREL11-12	

Species	%Cover	Height	Specimen	Notes
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	10		
<i>Xanthorrhoea preissii</i>	5	120		
<i>Xanthosia huegelii</i>	0.1	20	GBQ17-13=	



GEH Bypass Interchange Project PH1**Site** GEHREL12

Described by	RM/AL	Date	6-Nov-19	Type	Relevé: 20 x 20 m
MGA Zone	50	406718 mE	6468450 mN		
Habitat	Sand dune east west.				
Soil	Creamy grey sand.				
Rock Type	None.				
Vegetation	Eucalyptus <i>todtiana</i> , Allocasuarina <i>fraseriana</i> woodland over Banksia <i>menziesii</i> (Banksia <i>attenuata</i>) low open forest over Adenanthos <i>cygnorum</i> subsp. <i>cygnorum</i> tall open shrubland over Xanthorrhoea <i>preissii</i> , Jacksonia <i>floribunda</i> , Allocasuarina <i>humilis</i> scattered shrubs over Stirlingia <i>latifolia</i> , Dasypogon <i>bromeliifolius</i> , Hibbertia <i>hypericoides</i> subsp. <i>hypericoides</i> , Bossiaea <i>eriocarpa</i> low open shrubland over Mesomelaena <i>pseudostygia</i> , Lyginia <i>barbata</i> very open sedgeland over Alexgeorgea <i>nitens</i> very open hermland.				
Veg Condition	Very Good to Good.				
Fire Age	Very long unburnt.				

Species	%Cover	Height	Specimen	Notes
Adenanthos <i>cygnorum</i> subsp. <i>cygnorum</i>	5	280		
Alexgeorgea <i>nitens</i>	4	20		
Allocasuarina <i>fraseriana</i>	7	1100		
Allocasuarina <i>humilis</i>	2	130		
Banksia <i>attenuata</i>	2	800		
Banksia <i>menziesii</i>	35	900		
Blanca canescens	0.1	20	GBQ15-21=	
Bossiaea <i>eriocarpa</i>	1	40	GBQ06-16=	
Briza <i>maxima</i>	0.1	30		
Burchardia <i>congesta</i>	0.1	50		
Conospermum <i>acerosum</i> subsp. <i>acerosum</i>	0.1	120	GREL12-01	
Dasypogon <i>bromeliifolius</i>	4	40	GBQ01-21=	
Daviesia <i>triflora</i>	0.1	60	GBQ18-06=	
Ehrharta <i>calycina</i>	0.1	50		
Eucalyptus <i>todtiana</i>	10	1500		
Hibbertia <i>hypericoides</i> subsp. <i>hypericoides</i>	2	40		
Jacksonia <i>floribunda</i>	1	170		
Lyginia <i>barbata</i>	1	50	GBQ16-05=	
Lyginia <i>barbata</i>	1	45	GBQ08-39=	
Mesomelaena <i>pseudostygia</i>	3	60	GBQ01-06=	
Microtis <i>media</i> subsp. <i>media</i>	0.1	25	GBQ16-08=	
Patersonia <i>occidentalis</i> var. <i>occidentalis</i>	0.1	50		
Petrophile <i>linearis</i>	0.1	25		
Stirlingia <i>latifolia</i>	3	90		
Stylidium <i>calcaratum</i>	0.1	5	GBQ01-01=	
Xanthorrhoea <i>preissii</i>	2	130		



GEH Bypass Interchange Project PH1**Site** GEHREL13

Described by	RM/AL	Date	30-Oct-19	Type	Relevé: 10 x 30 m
MGA Zone	50	406880	mE	6469693	mN
Habitat	Floodplain and bank of Helena River.				
Soil	Dark brown silty clay Loam.				
Rock Type	None.				
Vegetation	Eucalyptus rufa subsp. rufa open forest over Melaleuca rhaphiophylla low open woodland over *Ehrharta longiflora, *Bromus diandrus open grassland over *Fumaria capreolata, Cycnogeton huegelii open hermland.				
Veg Condition	Degraded, Good.				
Fire Age	Very long unburnt.				

Species	%Cover	Height	Specimen	Notes
*Bromus diandrus	10	25	GBQ10-07=	
*Chenopodium album	0.1	40	GBQ10-05=	
Cycnogeton huegelii	2	50	CF02-03=	
Cyperus alterniflorus	0.1	60	GBQ10-09=	
*Ehrharta longiflora	20	50	GBQ12-01=	
Eucalyptus rufa subsp. rufa	50	1500	GBQ10-01=	
*Euphorbia terracina	0.1	30		
*Fumaria capreolata	15	70	GBQ10-02=	
*Hordeum leporinum	0.1	30	GBQ10-08=	
*Hypocharaeris radicata	0.1	5	GBQ10-11=	
Melaleuca rhaphiophylla	5	600		
*Sonchus oleraceus	0.1	30	GBQ10-10=	



GEH Bypass Interchange Project PH1 **Site** GEHREL14
Described by RM/AL **Date** 30-Oct-19 **Type** Relevé: 10 x 30 m
MGA Zone 50 **406984 mE** **6469703 mN**
Habitat Roadside bank sloping to east.
Soil Dark brown loamy sand.
Rock Type None.
Vegetation *Corymbia calophylla* low woodland over *Pteridium esculentum* low closed heath over **Avena fatua*, **Bromus diandrus* scattered grasses over **Fumaria capreolata* (**Sonchus asper*) open hermland.
Veg Condition Good.
Fire Age Very long unburnt.

Species	%Cover	Height	Specimen	Notes
* <i>Avena fatua</i>	2	80	GBQ10-03=	
* <i>Bromus diandrus</i>	1	30	GBQ10-07=	
<i>Corymbia calophylla</i>	25	1500		
* <i>Euphorbia terracina</i>	0.1	30		
* <i>Fumaria capreolata</i>	25	40	GBQ10-02=	
* <i>Hordeum leporinum</i>	0.1	30	GBQ10-08=	
<i>Pteridium esculentum</i>	65	90	GREL14-01	
* <i>Raphanus raphanistrum</i>	0.1	70		
* <i>Sonchus asper</i>	1	50		
* <i>Sonchus oleraceus</i>	0.1	30		



GEH Bypass Interchange Project PH1 **Site** GEHREL15
Described by RM/AL **Date** 4-Nov-19 **Type** Relevé: 20 x 20 m
MGA Zone 50 **404120 mE** **6468197 mN**
Habitat Sandy plain, roadside.
Soil Creamy grey sand.
Rock Type None.
Vegetation *Eucalyptus todtiana*, *Corymbia calophylla* low woodland over *Banksia menziesii*, *Banksia attenuata* low open woodland over *Adenanthos barbiger* (*Acacia saligna*, *Calothamnus quadrifidus*) tall open shrubland over **Eragrostis curvula* open tussock grassland.
Veg Condition Good.
Fire Age No sign of recent fire.

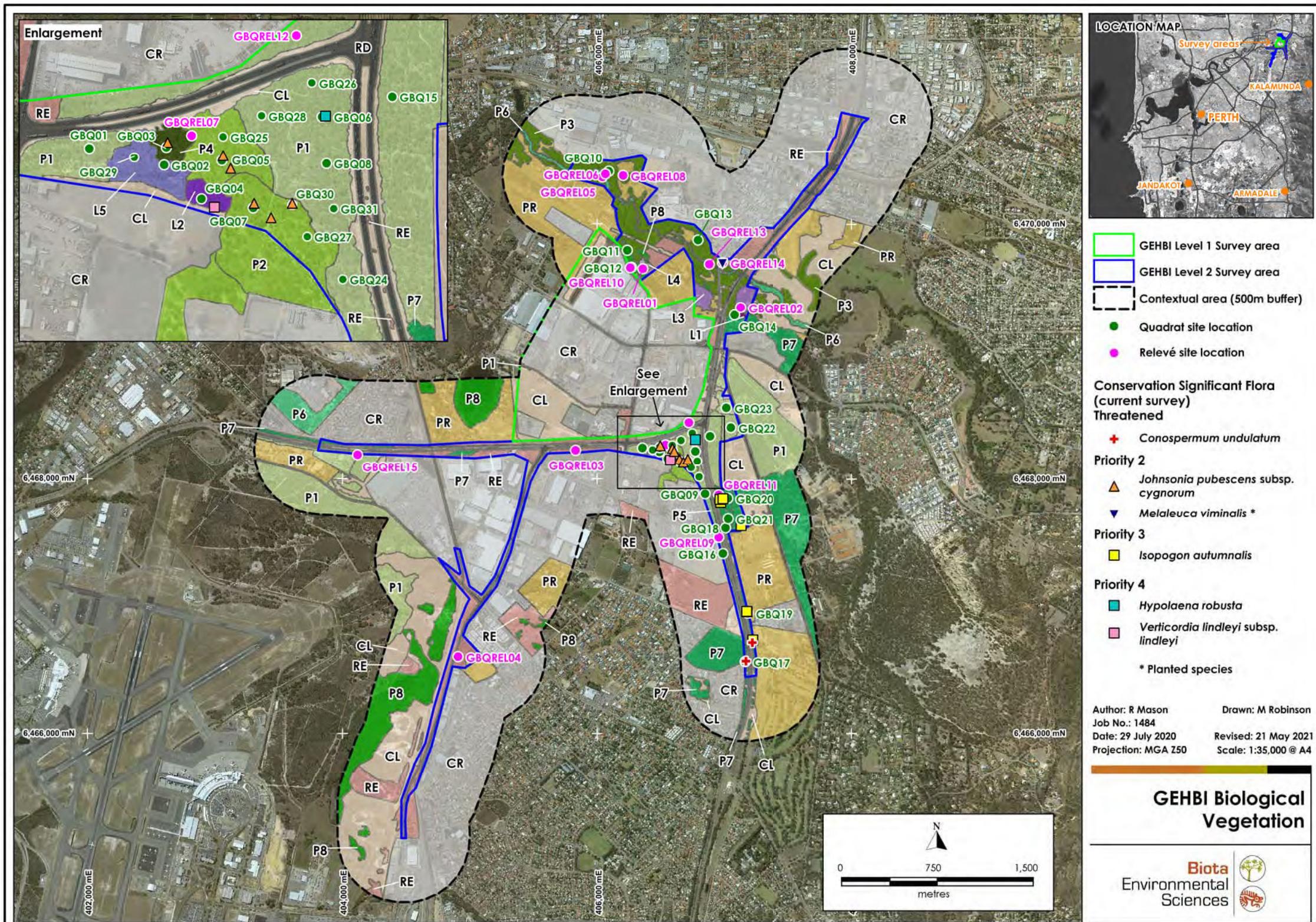
Species	%Cover	Height	Specimen	Notes
<i>Acacia saligna</i>	2	180		
<i>Adenanthos barbiger</i>	4	230		
<i>Banksia attenuata</i>	2	450		
<i>Banksia menziesii</i>	5	300		
* <i>Briza maxima</i>	0.1	30		
<i>Calothamnus quadrifidus</i>	1	250		
<i>Corymbia calophylla</i>	5	600		
* <i>Ehrharta calycina</i>	0.1	40		
* <i>Eragrostis curvula</i>	20	40		
<i>Eucalyptus todtiana</i>	7	500		
* <i>Gladiolus caryophyllaceus</i>	0.1	30		N=5
<i>Gompholobium tomentosum</i>	0.1	30		
* <i>Leptospermum laevigatum</i>	2	250		
* <i>Pelargonium capitatum</i>	0.1	50		
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	0.1	10		



Appendix 9

Vegetation Type Mapping and Sampling Site Locations





Great Eastern Highway Bypass Interchanges Vegetation Mapping Descriptions

Vegetation Types

-  L1 *Melaleuca* over sedges
-  L2 Swamp Teatree over sedges
-  L3 Marri over *Melaleuca* low open woodland on claypits
-  L4 Mixed sedge dampland
-  L5 *Jacksonia* over *Xanthorrhoea* with sedges
-  P1 *Allocasuarina* and *Banksia* over *Xanthorrhoea* with sedges
-  P2 Marri over *Kingia australis* with sedges
-  P3 Flooded Gum over weedy grasses on floodplain
-  P4 *Eremaea* open heath
-  P5 Jarrah over *Xanthorrhoea* with mixed shrubs and herbs
-  P6 Flooded Gum over weedy understorey on riverbank
-  P7 Jarrah and *Banksia* over *Xanthorrhoea* with sedges
-  P8 *Melaleuca* low open forest over weedy understorey

Modified Areas

-  CR Commercial/residential mixed use
-  PR Private property/mixed use
-  RE Planted/revegetated

Cleared Areas

-  CL Cleared
-  RD Bitumen roads

Vegetation Descriptions for Great Eastern Highway Bypass Interchanges Vegetation Maps



PROJ	SITE	PEG_ID	EAST	NORTH
1484	GBQ01	1	406356	6468252
1484	GBQ01	2	406344	6468252
1484	GBQ01	3	406347	6468241
1484	GBQ01	4	406357	6468242
1484	GBQ02	1	406487	6468223
1484	GBQ02	2	406477	6468220
1484	GBQ02	3	406475	6468229
1484	GBQ02	4	406485	6468232
1484	GBQ03	1	406491	6468254
1484	GBQ03	2	406499	6468259
1484	GBQ03	3	406495	6468268
1484	GBQ03	4	406486	6468263
1484	GBQ04	1	406552	6468164
1484	GBQ04	2	406562	6468166
1484	GBQ04	3	406559	6468176
1484	GBQ04	4	406550	6468173
1484	GBQ05	1	406588	6468231
1484	GBQ05	2	406582	6468241
1484	GBQ05	3	406594	6468244
1484	GBQ05	4	406597	6468234
1484	GBQ06	1	406763	6468308
1484	GBQ06	2	406772	6468314
1484	GBQ06	3	406776	6468307
1484	GBQ06	4	406767	6468300
1484	GBQ07	1	406643	6468148
1484	GBQ07	2	406650	6468153
1484	GBQ07	3	406645	6468160
1484	GBQ07	4	406637	6468155
1484	GBQ08	1	406771	6468226
1484	GBQ08	2	406766	6468234
1484	GBQ08	3	406758	6468227
1484	GBQ08	4	406763	6468220
1484	GBQ09	1	406847	6467890
1484	GBQ09	2	406858	6467883
1484	GBQ09	3	406848	6467881
1484	GBQ09	4	406857	6467894
1484	GBQ10	1	406092	6470422
1484	GBQ10	2	406087	6470409
1484	GBQ10	3	406081	6470418
1484	GBQ10	4	406096	6470413
1484	GBQ11	1	406235	6469803
1484	GBQ11	2	406234	6469795
1484	GBQ11	3	406225	6469791
1484	GBQ11	4	406220	6469800
1484	GBQ12	1	406270	6469668
1484	GBQ12	2	406267	6469676
1484	GBQ12	3	406277	6469682
1484	GBQ12	4	406279	6469673

PROJ	SITE	PEG_ID	EAST	NORTH
1484	GBQ13	1	406791	6469883
1484	GBQ13	2	406792	6469877
1484	GBQ13	3	406800	6469879
1484	GBQ13	4	406798	6469886
1484	GBQ14	1	407077	6469293
1484	GBQ14	2	407083	6469287
1484	GBQ14	3	407090	6469293
1484	GBQ14	4	407085	6469299
1484	GBQ15	1	406886	6468343
1484	GBQ15	2	406895	6468348
1484	GBQ15	3	406892	6468357
1484	GBQ15	4	406883	6468353
1484	GBQ16	1	406987	6467422
1484	GBQ16	2	406975	6467430
1484	GBQ16	3	406977	6467422
1484	GBQ16	4	406985	6467431
1484	GBQ17	1	407161	6466570
1484	GBQ17	2	407162	6466580
1484	GBQ17	3	407169	6466580
1484	GBQ17	4	407170	6466569
1484	GBQ18	1	407008	6467622
1484	GBQ18	2	407008	6467632
1484	GBQ18	3	406999	6467633
1484	GBQ18	4	406997	6467624
1484	GBQ19	1	407183	6466952
1484	GBQ19	2	407181	6466961
1484	GBQ19	3	407171	6466958
1484	GBQ19	4	407173	6466948
1484	GBQ20	1	407026	6467853
1484	GBQ20	2	407017	6467854
1484	GBQ20	3	407014	6467845
1484	GBQ20	4	407023	6467845
1484	GBQ21	1	407028	6467695
1484	GBQ21	2	407022	6467687
1484	GBQ21	3	407028	6467683
1484	GBQ21	4	407036	6467690
1484	GBQ22	1	407047	6468411
1484	GBQ22	2	407056	6468415
1484	GBQ22	3	407058	6468406
1484	GBQ22	4	407048	6468402
1484	GBQ23	1	407013	6468565
1484	GBQ23	2	407004	6468560
1484	GBQ23	3	407007	6468549
1484	GBQ23	4	407015	6468553
1484	GBQ24	1	406799	6468023
1484	GBQ24	2	406799	6468013
1484	GBQ24	3	406790	6468013
1484	GBQ24	4	406789	6468023

PROJ	SITE	PEG_ID	EAST	NORTH
1484	GBQ25	1	406590	6468273
1484	GBQ25	2	406581	6468272
1484	GBQ25	3	406582	6468263
1484	GBQ25	4	406592	6468265
1484	GBQ26	1	406745	6468367
1484	GBQ26	2	406754	6468367
1484	GBQ26	3	406745	6468376
1484	GBQ26	4	406753	6468376
1484	GBQ27	1	406737	6468098
1484	GBQ27	2	406734	6468088
1484	GBQ27	3	406725	6468092
1484	GBQ27	4	406728	6468101
1484	GBQ28	1	406657	6468310
1484	GBQ28	2	406660	6468301
1484	GBQ28	3	406652	6468298
1484	GBQ28	4	406648	6468306
1484	GBQ29	1	406435	6468236
1484	GBQ29	2	406445	6468235
1484	GBQ29	3	406444	6468224
1484	GBQ29	4	406433	6468225
1484	GBQ30	1	406711	6468154
1484	GBQ30	2	406718	6468148
1484	GBQ30	3	406714	6468141
1484	GBQ30	4	406706	6468146
1484	GBQ31	1	406783	6468147
1484	GBQ31	2	406785	6468157
1484	GBQ31	3	406775	6468158
1484	GBQ31	4	406775	6468149
1484	GEHREL01	1	406357	6469657
1484	GEHREL02	1	407125	6469352
1484	GEHREL03	1	405830	6468233
1484	GEHREL03	2	405884	6468236
1484	GEHREL04	1	404907	6466608
1484	GEHREL05	1	406039	6470377
1484	GEHREL06	1	406064	6470400
1484	GEHREL07	1	406535	6468275
1484	GEHREL08	1	406202	6470390
1484	GEHREL09	1	406953	6467549
1484	GEHREL10	1	406261	6469667
1484	GEHREL11	1	406954	6467881
1484	GEHREL12	1	406718	6468450
1484	GEHREL13	1	406880	6469693
1484	GEHREL14	1	406984	6469703
1484	GEHREL15	1	404120	6468197

Appendix 10

Locations of Significant Flora



Family	Species	Status	Site	Location	Easting	Northing	Date	Field No.	Number of Individuals / Cover	Notes
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	P2			406590	6468238	10/10/19	GBQ05-13	1	
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	P2			406644	6468154	10/10/19	GBQ07-20	1	
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	P2			406493	6468261	09/10/19	GBQ03-10	1	
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	P2			406603	6468215	03/11/20	RM01	1	
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	P2			406674	6468129	03/11/20	RM01=	5	
Hemerocallidaceae	<i>Johnsonia pubescens</i> subsp. ? <i>cygnorum</i>	P2			406711	6468154	04/11/20	GBQ30-12	1	
Myrtaceae	<i>Melaleuca viriminalis</i>	P2			406984	6469703	10/30/19	GRE04-03	1	Planted
Myrtaceae	<i>Vericordia lindleyi</i> subsp. <i>lindleyi</i>	P4	Opp.		406575	6468147	04/11/19	MROEOP55	1	
Proteaceae	<i>Conospermum undulatum</i>	T	Opp.		407218	6466718	04/11/19	MROEOP27	1	
Proteaceae	<i>Conospermum undulatum</i>	T			407166	6466574	04/11/19		2	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		407127	6467633	07/05/20	BA01	11	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		406968	6467812	05/11/19	AB04	70	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		406963	6467836	05/11/19		15	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		407219	6466729	04/11/19		15	
Proteaceae	<i>Isopogon autumnalis</i>	P3			407177	6466955	05/11/19	GBQ19-01	4	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		406986	6467841	07/05/20		2	
Proteaceae	<i>Isopogon autumnalis</i>	P3	Opp.		407174	6466958	11/04/19	MROEOP22	11	
Restionaceae	<i>Hypolaena robusta</i>	P4			406769	6468307	10/10/19	GBQ06-36	1	



Threatened and Priority Flora Report Form

Version 1.3 August 2017

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at <http://dpaw.wa.gov.au> under Standard Report Forms

TAXON:	Conospermum undulatum	TPFL Pop. No:			
OBSERVATION DATE:	04/11/2019	CONSERVATION STATUS:	T	New population	<input checked="" type="checkbox"/>
OBSERVER/S:	Rebecca Mason, Ayesha Lapinski	PHONE:		9328 1900	
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

880 m N of the intersection of Roe Highway and Kalamunda Road along Roe HWY in the Bushland on the western side of the road adjacent to Hawksvale Reserve

Approximately 20 m W into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present:	<input type="checkbox"/>								
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:									
GDA94 / MGA94	<input checked="" type="checkbox"/>	DecDegrees	<input type="checkbox"/>	DegMinSec	<input type="checkbox"/>	UTMs	<input checked="" type="checkbox"/>	GPS	<input type="checkbox"/>	Differential GPS	<input checked="" type="checkbox"/>	Map	<input type="checkbox"/>
AGD84 / AMG84	<input type="checkbox"/>	Lat / Northing:	6466574			No. satellites:		Map used:					
WGS84	<input type="checkbox"/>	Long / Easting:	407166			Boundary polygon captured:	<input type="checkbox"/>	Map scale:					
Unknown	<input type="checkbox"/>	ZONE:	50										

LAND TENURE:

Nature reserve	<input type="checkbox"/>	Timber reserve	<input type="checkbox"/>	Private property	<input type="checkbox"/>	Rail reserve	<input type="checkbox"/>	Shire road reserve	<input type="checkbox"/>
National park	<input type="checkbox"/>	State forest	<input type="checkbox"/>	Pastoral lease	<input type="checkbox"/>	MRWA road reserve	<input type="checkbox"/>	Other Crown reserve	<input type="checkbox"/>
Conservation park	<input type="checkbox"/>	Water reserve	<input type="checkbox"/>	UCL	<input type="checkbox"/>	SLK/Pole	to	Specify other:	

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature:	Juveniles:	Seedlings:	Totals:
Alive	2			
Dead				
QUADRATS PRESENT:	No. _____	Size _____	Data attached <input type="checkbox"/>	Total area of quadrats (m ²): 100
Summary Quad. Totals: Alive				

Area of pop (m²): _____

Note: Pls record count as numbers (not percentages) for database.

REPRODUCTIVE STATE: Clonal Vegetative Flowerbud Flower
Immature fruit Fruit Dehisced fruit Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
• Weeds (Occurs within 20 m of road, edge effects and dispersal of weeds into bushland)	L	H	L
•			

Please return completed form to **Species And Communities Branch DBCA**,

Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____

Sheet No.: _____

Record Entered in Database



Threatened and Priority Flora Report Form

HABITAT INFORMATION:

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; eg gravel, quartz fields)	Sand <input type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input checked="" type="checkbox"/>	Brown <input checked="" type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	
Drainage line <input type="checkbox"/>				Dark Brown	
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

CONDITION OF SOIL:Dry Moist Waterlogged Inundated **VEGETATION CLASSIFICATION*:**

Eg: 1. Banksia woodland (B. attenuata, B. ilicifolia);
2. Open shrubland (Hibbertia sp., Acacia spp.);
3. Isolated clumps of sedges (Mesomelaena tetragona)

1. *Eucalyptus marginata* subsp. *marginata* Woodland over
2. *Banksia menziesii* Low woodland over *Allocasuarina humilis* scattered tall shrubs over *Xanthorrhoea preissii* Sparse shrubland
3. *Hibbertia hypericoides*, *Bossiaea eriocarpa*, *Banksia dallanneyi* var. *dallanneyi*, *Dasygordon obliquifolius* Low open shrubland
4. *Lepidosperma oldamii/calcicola* and *Schoenus efoliatus* Sparse sedgeland

ASSOCIATED SPECIES:

Other (non-dominant) spp

Stachystemon vermicularis, *Hemiandra linearis*, *Monotaxis grandiflora* var. *grandiflora*, *Scaevola repens* var. *repens*

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 Australian Soil and Land Survey Field Handbook guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine Excellent Very good Good Degraded Completely degraded **COMMENT:****FIRE HISTORY:** Last Fire: Season/Month: _____ Year: _____ **Fire Intensity:** High Medium Low No signs of fire **FENCING:** Not required Present Replace / repair Required Length req'd: _____**ROADSIDE MARKERS:** Not required Present Replace / reposition Required Quantity req'd: _____**OTHER COMMENTS:** (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)
Occurs along the roadside**DRF PERMIT/ LICENCE No:** FB62000035 Note if only observing plants (i.e. no specimens or plant material is taken) then no permit/licence is required. For further information on permit and licensing requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.**SPECIMEN:** Collectors No: _____ WA Herb. Regional Herb. District Herb. Other: _____**ATTACHED:** Map Mudmap Photo GIS data Field notes Other: _____**COPY SENT TO:** Regional Office District Office Other: _____

Submitter of Record: Rebecca Mason Role: Senior Botanist Signed: _____ Date: 06/05/2020

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Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.Record entered by: _____ Sheet No.: _____ Record Entered in Database



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Version 1.3 August 2017

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TAXON:	Conospermum undulatum	TPFL Pop. No:	
OBSERVATION DATE:	04/11/2020	CONSERVATION STATUS:	T
OBSERVER/S:	Rebecca Mason, Malcolm Trudgen	PHONE:	9328 1900
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

Approximately 1 km N of the intersection of Roe Highway and Kalamunda Road along Roe HWY in the bushland on the eastern side of the road

Approximately 15 m E into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present:	<input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:	
GDA94 / MGA94	<input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input type="checkbox"/> Differential GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84	<input type="checkbox"/>	Lat / Northing: 6466718			No. satellites: _____ Map used: _____
WGS84	<input type="checkbox"/>	Long / Easting: 407218			Boundary polygon captured: <input type="checkbox"/> Map scale: _____
Unknown	<input type="checkbox"/>	ZONE: 50			Map scale: _____

LAND TENURE:

Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature: <input type="checkbox"/>	Juveniles: <input type="checkbox"/>	Seedlings: <input type="checkbox"/>	Totals: _____
Alive	1			Area of pop (m ²): _____
Dead				Note: Pls record count as numbers (not percentages) for database.
QUADRATS PRESENT:	No. -	Size -	Data attached <input type="checkbox"/>	Total area of quadrats (m ²): -
Summary Quad. Totals: Alive				

REPRODUCTIVE STATE: Clonal Vegetative Flowerbud Flower
Immature fruit Fruit Dehisced fruit Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
• Weeds (Occurs within 20 m of road, edge effects and dispersal of weeds into bushland)	L	H	L
•			

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RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____ Sheet No.: _____ Record Entered in Database



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TAXON:	Hypolaena robusta	TPFL Pop. No:	
OBSERVATION DATE:	10/10/2019	CONSERVATION STATUS:	P4
OBSERVER/S:	Rebecca Mason, Malcolm Trudgen	PHONE:	9328 1900
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

Approximately 290 m W of the intersection of Roe Highway and Great Eastern Highway Bypass in the bushland on the southern side of the road, Approximately 180 m S into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present:	<input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input type="checkbox"/>	Differential GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 6468308			No. satellites:	Map used:
WGS84 <input type="checkbox"/>	Long / Easting: 406763			Boundary polygon captured: <input type="checkbox"/>	Map scale:
Unknown <input type="checkbox"/>	ZONE: 50				
LAND TENURE:					
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>	
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>	
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____	

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature:	Juveniles:	Seedlings:	Totals:
Alive	1			Area of pop (m ²): _____
Dead				Note: Pls record count as numbers (not percentages) for database.
QUADRATS PRESENT:	No. 1	Size 10m x10m	Data attached <input checked="" type="checkbox"/>	Total area of quadrats (m ²): 100
Summary Quad. Totals: Alive				
REPRODUCTIVE STATE:	Clonal <input type="checkbox"/>	Vegetative <input checked="" type="checkbox"/>	Flowerbud <input type="checkbox"/>	Flower <input type="checkbox"/>
	Immature fruit <input type="checkbox"/>	Fruit <input type="checkbox"/>	Dehisced fruit <input type="checkbox"/>	Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
•			
•			

Please return completed form to **Species And Communities Branch DBCA**,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____ Sheet No.: _____ Record Entered in Database



Threatened and Priority Flora Report Form

HABITAT INFORMATION:

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; eg gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input checked="" type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	Tidal <input type="checkbox"/>
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element:

(Refer to field manual for additional values)

Dry Moist Waterlogged Inundated

CONDITION OF SOIL:

VEGETATION CLASSIFICATION*:

Eg: 1. Banksia woodland (B. attenuata, B. ilicifolia);
2. Open shrubland (Hibbertia sp., Acacia spp.);
3. Isolated clumps of sedges (Mesomelaena tetragona)

1. Allocasuarina fraseriana scattered trees over Eucalyptus todtiana, Banksia menziesii (Banksia attenuata) Low open Woodland

2. Xanthorrhoea preissii Sparse shrubland

3. Hibbertia hypericoides subsp. hypericoides, Bossiaea eriocarpa, Stirlingia latifolia, Scaevola repens var. repens Low sparse shrubland

4. Mesomelaena pseudostygia, Lyginia imberbis Sparse sedgeland

ASSOCIATED SPECIES:

Alexgeorgea nitens

Other (non-dominant) spp

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 Australian Soil and Land Survey Field Handbook guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine Excellent Very good Good Degraded Completely degraded

COMMENT:

FIRE HISTORY: Last Fire: Season/Month: _____ Year: _____ **Fire Intensity:** High Medium Low No signs of fire

FENCING: Not required Present Replace / repair Required Length req'd: _____

ROADSIDE MARKERS: Not required Present Replace / reposition Required Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

DRF PERMIT/ LICENCE No: FB62000035 Note if only observing plants (i.e. no specimens or plant material is taken) then no permit/licence is required. For further information on permit and licensing requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: _____ WA Herb. Regional Herb. District Herb. Other: _____

ATTACHED: Map Mudmap Photo GIS data Field notes Other: _____

COPY SENT TO: Regional Office District Office Other: _____

Submitter of Record: Rebecca Mason Role: Senior Botanist Signed: _____ Date: 06/05/2021

Please return completed form to **Species And Communities Branch DBCA**,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____ Sheet No.: _____ Record Entered in Database



Threatened and Priority Flora Report Form

Version 1.3 August 2017

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at <http://dpaw.wa.gov.au> under Standard Report Forms

TAXON:	Isopogon autumnalis			TPFL Pop. No:	
OBSERVATION DATE:	05/11/2019	CONSERVATION STATUS:	P3	New population	<input checked="" type="checkbox"/>
OBSERVER/S:	Rebecca Mason, Malcolm Trudgen			PHONE :	9328 1900
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences		

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

Approximately 290 m W of the intersection of Roe Highway and Great Eastern Highway Bypass in the bushland on the southern side of the road, Approximately 180 m S into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present:	<input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input type="checkbox"/>	Differential GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 6467812			No. satellites:	Map used:
WGS84 <input type="checkbox"/>	Long / Easting: 406968			Boundary polygon captured: <input type="checkbox"/>	Map scale:
Unknown <input type="checkbox"/>	ZONE: 50				
LAND TENURE:					
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>	
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>	
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____	

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature:	Juveniles:	Seedlings:	Totals:
Alive	70			Area of pop (m ²): _____
Dead				Note: Pls record count as numbers (not percentages) for database.
QUADRATS PRESENT:	No. 1	Size _____	Data attached <input checked="" type="checkbox"/>	Total area of quadrats (m ²): 100 _____
Summary Quad. Totals: Alive				
REPRODUCTIVE STATE:	Clonal <input type="checkbox"/>	Vegetative <input checked="" type="checkbox"/>	Flowerbud <input type="checkbox"/>	Flower <input type="checkbox"/>
	Immature fruit <input type="checkbox"/>	Fruit <input type="checkbox"/>	Dehisced fruit <input type="checkbox"/>	Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
•			
•			

Please return completed form to **Species And Communities Branch DBCA**,
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RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____

Sheet No.: _____

Record Entered in Database



Threatened and Priority Flora Report Form

HABITAT INFORMATION:

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; eg gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input checked="" type="checkbox"/>	Brown <input checked="" type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

CONDITION OF SOIL:Dry Moist Waterlogged Inundated **Specific Landform Element:**

(Refer to field manual for additional values)

VEGETATION CLASSIFICATION*:

Eg: 1. Banksia woodland (B. attenuata, B. ilicifolia);
2. Open shrubland (Hibertia sp., Acacia spp.);
3. Isolated clumps of sedges (Mesomelaena tetragona)

1. Eucalyptus marginata subsp. marginata, Banksia attenuata, Allocasuarina fraseriana and Banksia menziesii Low open Woodland
2. Xanthorrhoea preissii, Allocasuarina humilis Sparse shrubland
3. Dasypogon bromeliifolius, Hibertia hypericoides, Bossiaea eriocarpa, Banksia dallanneyi var. dallanneyi Low sparse shrubland
4. Mesomelaena pseudostygia, Schoenus efoliatus Sparse sedgeland over Alexgeorgea nitens scattered herbs

ASSOCIATED SPECIES:

Other (non-dominant) spp

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 Australian Soil and Land Survey Field Handbook guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine Excellent Very good Good Degraded Completely degraded **COMMENT:****FIRE HISTORY:** Last Fire: Season/Month: _____ Year: _____ **Fire Intensity:** High Medium Low No signs of fire **FENCING:** Not required Present Replace / repair Required Length req'd: _____**ROADSIDE MARKERS:** Not required Present Replace / reposition Required Quantity req'd: _____**OTHER COMMENTS:** (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

_____**DRF PERMIT/ LICENCE No:** FB62000035 Note if only observing plants (i.e. no specimens or plant material is taken) then no permit/licence is required. For further information on permit and licensing requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.**SPECIMEN:** Collectors No: _____ WA Herb. Regional Herb. District Herb. Other: _____**ATTACHED:** Map Mudmap Photo GIS data Field notes Other: _____**COPY SENT TO:** Regional Office District Office Other: _____

Submitter of Record: Rebecca Mason Role: Senior Botanist Signed: _____ Date: 06/05/2021

Please return completed form to **Species And Communities Branch DBCA**,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.Record entered by: _____ Sheet No.: _____ Record Entered in Database



Threatened and Priority Flora Report Form

Version 1.3 August 2017

Please complete as much of the form as possible, with emphasis on those sections bordered in black. For information on how to complete the form please refer to the Threatened & Priority Flora Report Form (TPRF) manual on the DBCA website at <http://dpaw.wa.gov.au> under Standard Report Forms

TAXON:	Johnsonia pubescens subsp. cygnorum	TPFL Pop. No:	
OBSERVATION DATE:	10/10/2019	CONSERVATION STATUS:	P2
OBSERVER/S:	Rebecca Mason, Malcolm Trudgen	PHONE:	New population <input checked="" type="checkbox"/> 9328 1900
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

Approximately 200 m west of the intersection of Roe Highway and Great Eastern Highway Bypass in the bushland on the southern side of the road

Approximately is 70 m S into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present: <input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input type="checkbox"/> Differential GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 6468238			No. satellites: _____ Map used: _____
WGS84 <input type="checkbox"/>	Long / Easting: 406590			Boundary polygon captured: <input type="checkbox"/> Map scale: _____
Unknown <input type="checkbox"/>	ZONE: 50			Map scale: _____

LAND TENURE:

Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature: <input type="checkbox"/>	Juveniles: <input type="checkbox"/>	Seedlings: <input type="checkbox"/>	Totals: _____
Alive	2			Area of pop (m ²): _____
Dead				Note: Pls record count as numbers (not percentages) for database.
QUADRATS PRESENT:	No. 4	Size 10 x 10 m	Data attached <input checked="" type="checkbox"/>	Total area of quadrats (m ²): 400
Summary Quad. Totals: Alive				
REPRODUCTIVE STATE:	Clonal <input type="checkbox"/>	Vegetative <input type="checkbox"/>	Flowerbud <input type="checkbox"/>	Flower <input type="checkbox"/>
	Immature fruit <input type="checkbox"/>	Fruit <input type="checkbox"/>	Dehisced fruit <input type="checkbox"/>	Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
• Weeds (Occurs within 70 m of road, edge effects and dispersal of weeds into bushland)	L	H	L
•			

Please return completed form to **Species And Communities Branch DBCA**,

Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____

Sheet No.: _____

Record Entered in Database



Threatened and Priority Flora Report Form

HABITAT INFORMATION:

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; eg gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Slope <input checked="" type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	Tidal <input type="checkbox"/>
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	
Drainage line <input type="checkbox"/>				Creamy Grey	
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

Specific Landform Element:
(Refer to field manual for additional values)

Mid-slope

CONDITION OF SOIL:

Dry Moist Waterlogged Inundated

VEGETATION CLASSIFICATION*:

Eg: 1. Banksia woodland (B. attenuata, B. ilicifolia);
2. Open shrubland (Hibbertia sp., Acacia spp.);
3. Isolated clumps of sedges (Mesomelaena tetragona)

1. Corymbia calophylla, Nuytsia floribunda Low open woodland over Jacksonia floribunda scattered tall shrubs over Kingia australis
2. Banksia dallanneyi, Melaleuca systena, Verticordia densiflora Low sparse shrubland over
3. *Ehrharta calycina scattered tussock grasses over lyginia imberbis Sedgeland
4. Desmocladus fasciculatus, Corynotheca micrantha var. micrantha, Ursinia anthemoides, Alexgeorgia nitens Sparse formland

ASSOCIATED SPECIES:

Other (non-dominant) spp

Patersonia occidentalis var. occidentalis, Caustis dioica, Phlebocarya ciliata, Haemodorum ? laxum
Stylidium dichotomum, Xanthorrhoea preissii, Lomandra hermaphrodita, Dasypogon Bromeliifolius, Mesomelaena spp., Stirlingia latifolia, Bossiaea eriocarpa, Lepidosperma spp.

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 Australian Soil and Land Survey Field Handbook guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine Excellent Very good Good Degraded Completely degraded

COMMENT:

FIRE HISTORY: Last Fire: Season/Month: _____ Year: _____ **Fire Intensity:** High Medium Low No signs of fire

FENCING: Not required Present Replace / repair Required Length req'd: _____

ROADSIDE MARKERS: Not required Present Replace / reposition Required Quantity req'd: _____

OTHER COMMENTS: (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

DRF PERMIT/ LICENCE No: FB62000035 Note if only observing plants (i.e. no specimens or plant material is taken) then no permit/licence is required. For further information on permit and licensing requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.

SPECIMEN: Collectors No: _____ WA Herb. Regional Herb. District Herb. Other: _____

ATTACHED: Map Mudmap Photo GIS data Field notes Other: _____

COPY SENT TO: Regional Office District Office Other: _____

Submitter of Record: Rebecca Mason Role: Senior Botanist Signed: _____ Date: 06/05/2021

Please return completed form to **Species And Communities Branch DBCA**,

Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

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Threatened and Priority Flora Report Form

Version 1.3 August 2017

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TAXON:	Verticordia lindleyi subsp. lindleyi	TPFL Pop. No:	
OBSERVATION DATE:	04/11/2019	CONSERVATION STATUS:	P4
OBSERVER/S:	Rebecca Mason, Malcolm Trudgen	PHONE:	9328 1900
ROLE:	Botanist	ORGANISATION:	Biota Environmental Sciences

DESCRIPTION OF LOCATION (Provide at least nearest town/named locality, and the distance and direction to that place):

Approximately 15 km ENE of Perth Central Business District

Approximately 290 m W of the intersection of Roe Highway and Great Eastern Highway Bypass in the bushland on the southern side of the road, Approximately 180 m S into the bushland

Reserve No:

DBCA DISTRICT:	Swan	LGA:	City of Swan	Land manager present:	<input type="checkbox"/>
DATUM:	COORDINATES: (If UTM coords provided, Zone is also required)			METHOD USED:	
GDA94 / MGA94 <input checked="" type="checkbox"/>	DecDegrees <input type="checkbox"/>	DegMinSec <input type="checkbox"/>	UTMs <input checked="" type="checkbox"/>	GPS <input type="checkbox"/>	Differential GPS <input checked="" type="checkbox"/> Map <input type="checkbox"/>
AGD84 / AMG84 <input type="checkbox"/>	Lat / Northing: 6468147			No. satellites:	Map used:
WGS84 <input type="checkbox"/>	Long / Easting: 406575			Boundary polygon captured: <input type="checkbox"/>	Map scale:
Unknown <input type="checkbox"/>	ZONE: 50				
LAND TENURE:					
Nature reserve <input type="checkbox"/>	Timber reserve <input type="checkbox"/>	Private property <input type="checkbox"/>	Rail reserve <input type="checkbox"/>	Shire road reserve <input type="checkbox"/>	
National park <input type="checkbox"/>	State forest <input type="checkbox"/>	Pastoral lease <input type="checkbox"/>	MRWA road reserve <input type="checkbox"/>	Other Crown reserve <input type="checkbox"/>	
Conservation park <input type="checkbox"/>	Water reserve <input type="checkbox"/>	UCL <input type="checkbox"/>	SLK/Pole _____ to _____	Specify other: _____	

AREA ASSESSMENT: Edge survey Partial survey Full survey Area observed (m²): _____

EFFORT: Time spent surveying (minutes): _____ No. of minutes spent / 100 m²: _____

POP'N COUNT ACCURACY: Actual Extrapolation Estimate Count method: _____
(Refer to field manual for list)

WHAT COUNTED:	Plants <input checked="" type="checkbox"/>	Clumps <input type="checkbox"/>	Clonal stems <input type="checkbox"/>	
TOTAL POP'N STRUCTURE:	Mature:	Juveniles:	Seedlings:	Totals:
Alive	1			Area of pop (m ²): _____
Dead				Note: Pls record count as numbers (not percentages) for database.
QUADRATS PRESENT:	No. _____	Size _____	Data attached <input type="checkbox"/>	Total area of quadrats (m ²): _____
Summary Quad. Totals: Alive				
REPRODUCTIVE STATE:	Clonal <input type="checkbox"/>	Vegetative <input checked="" type="checkbox"/>	Flowerbud <input type="checkbox"/>	Flower <input type="checkbox"/>
	Immature fruit <input type="checkbox"/>	Fruit <input type="checkbox"/>	Dehisced fruit <input type="checkbox"/>	Percentage in flower: _____ %

CONDITION OF PLANTS: Healthy Moderate Poor Senescent

COMMENT: _____

THREATS - type, agent and supporting information:	Current impact (N-E)	Potential Impact (L-E)	Potential Threat Onset (S-L)
Eg clearing, too frequent fire, weed, disease. Refer to field manual for list of threats & agents. Specify agent where relevant. Rate current and potential threat impact: N=Nil, L=Low, M=Medium, H=High, E=Extreme Estimate time to potential impact: S=Short (<12mths), M=Medium (<5yrs), L=Long (5yrs+)			
• Clearing (complete vegetation clearing for road widening/installation purposes)	E	E	S
•			
•			

Please return completed form to **Species And Communities Branch DBCA**,
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RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____

Sheet No.: _____

Record Entered in Database



Threatened and Priority Flora Report Form

HABITAT INFORMATION:

LANDFORM:	ROCK TYPE:	LOOSE ROCK:	SOIL TYPE:	SOIL COLOUR:	DRAINAGE:
Crest <input type="checkbox"/>	Granite <input type="checkbox"/>	(on soil surface; eg gravel, quartz fields)	Sand <input checked="" type="checkbox"/>	Red <input type="checkbox"/>	Well drained <input checked="" type="checkbox"/>
Hill <input type="checkbox"/>	Dolerite <input type="checkbox"/>		Sandy loam <input checked="" type="checkbox"/>	Brown <input type="checkbox"/>	Seasonally inundated <input type="checkbox"/>
Ridge <input type="checkbox"/>	Laterite <input type="checkbox"/>		Loam <input type="checkbox"/>	Yellow <input type="checkbox"/>	Permanently inundated <input type="checkbox"/>
Outcrop <input type="checkbox"/>	Ironstone <input type="checkbox"/>	0-10% <input type="checkbox"/>	Clay loam <input type="checkbox"/>	White <input type="checkbox"/>	Tidal <input type="checkbox"/>
Slope <input type="checkbox"/>	Limestone <input type="checkbox"/>	10-30% <input type="checkbox"/>	Light clay <input type="checkbox"/>	Grey <input checked="" type="checkbox"/>	
Flat <input checked="" type="checkbox"/>	Quartz <input type="checkbox"/>	30-50% <input type="checkbox"/>	Peat <input type="checkbox"/>	Black <input type="checkbox"/>	
Open depression <input type="checkbox"/>	Specify other:	50-100% <input type="checkbox"/>	Specify other:	Specify other:	
Drainage line <input type="checkbox"/>					
Closed depression <input type="checkbox"/>					
Wetland <input type="checkbox"/>					

CONDITION OF SOIL:Dry Moist Waterlogged Inundated **VEGETATION CLASSIFICATION*:**

Eg: 1. Banksia woodland (B. attenuata, B. ilicifolia);
2. Open shrubland (Hibbertia sp., Acacia spp.);
3. Isolated clumps of sedges (Mesomelaena tetragona)

1. Adenanthes cygnorum scattered tall shrub over Pericalymma ellipticum var. floridum, Verticordia densiflora, Melaleuca seriata Closed shrubland

2. Lynginia imberbis, Hypolaena exsulca Open sedgeland

3. Ehrharta calycina, Pentameris airoides subsp. airoides Sparse grassland

4.

Ursinia anthemoides

Other (non-dominant) spp _____

* Please record up to four of the most representative vegetation layers (with up to three dominant species in each layer). Structural Formations should follow 2009 Australian Soil and Land Survey Field Handbook guidelines – refer to field manual for further information and structural formation table.

CONDITION OF HABITAT: Pristine Excellent Very good Good Degraded Completely degraded **COMMENT:****FIRE HISTORY:** Last Fire: Season/Month: _____ Year: _____ **Fire Intensity:** High Medium Low No signs of fire **FENCING:** Not required Present Replace / repair Required Length req'd: _____**ROADSIDE MARKERS:** Not required Present Replace / reposition Required Quantity req'd: _____**OTHER COMMENTS:** (Please include recommended management actions and/or implemented actions - include date. Also include details of additional data available, and how to locate it.)

_____**DRF PERMIT/ LICENCE No:** FB62000035 Note if only observing plants (i.e. no specimens or plant material is taken) then no permit/licence is required. For further information on permit and licensing requirements see the Threatened Flora and Wildlife Licensing pages on DBCA's website. Any actions carried out under licence/permit should be recorded above in the OTHER COMMENTS section.**SPECIMEN:** Collectors No: _____ WA Herb. Regional Herb. District Herb. Other: _____**ATTACHED:** Map Mudmap Photo GIS data Field notes Other: _____**COPY SENT TO:** Regional Office District Office Other: _____

Submitter of Record: Rebecca Mason Role: Senior Botanist Signed: _____ Date: 06/05/2021

Please return completed form to **Species And Communities Branch DBCA**,
Locked Bag 104, BENTLEY DELIVERY CENTRE WA 6983 OR email to: flora.data@dbca.wa.gov.au

RECORDS: Please forward to **Flora Administrative Officer**, Species and Communities Branch.

Record entered by: _____ Sheet No.: _____ Record Entered in Database

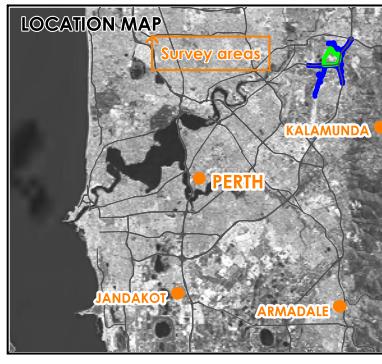
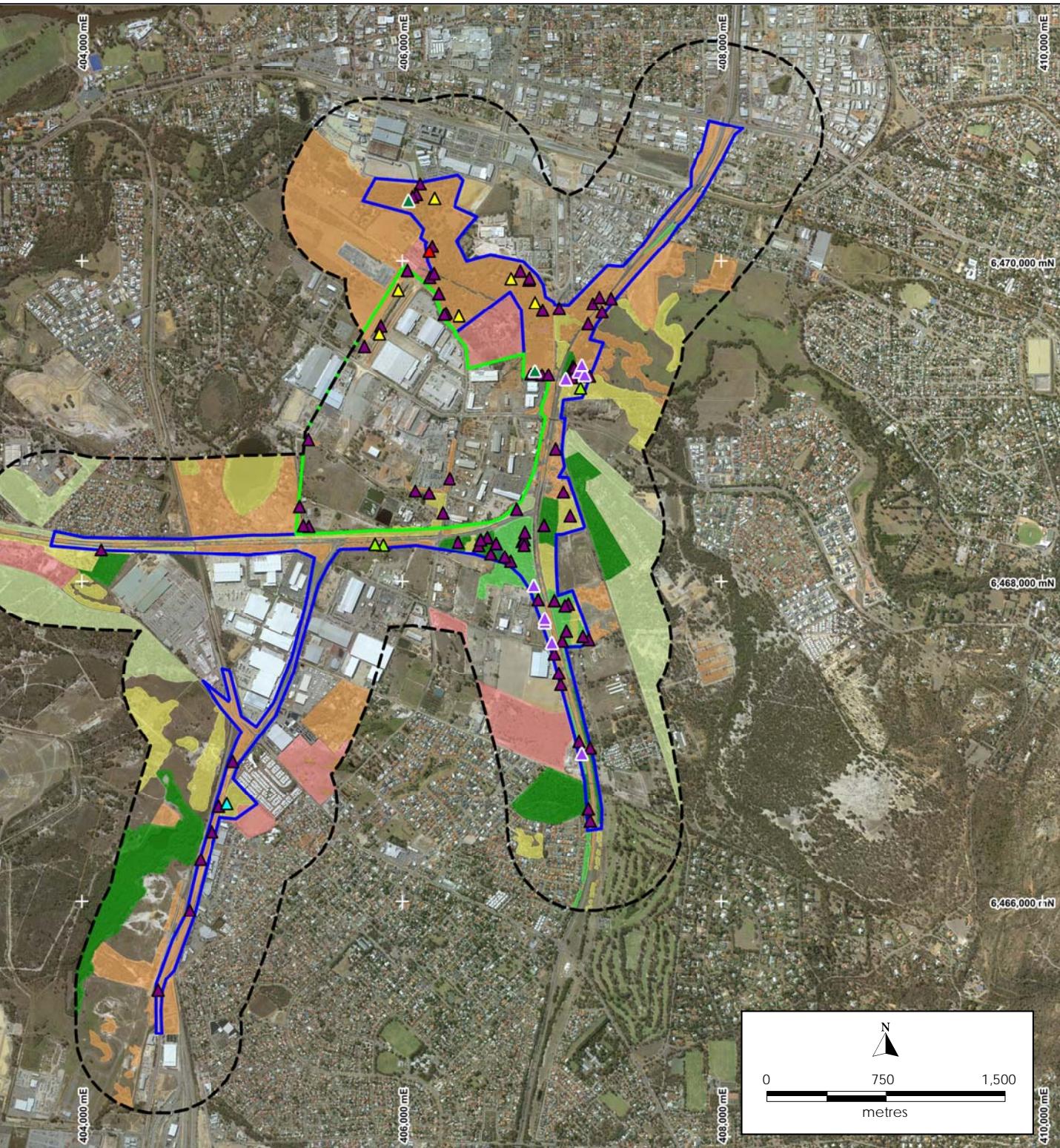
Appendix 11

Vegetation Condition Mapping and Introduced Flora Locations



Vegetation Condition

- Excellent
- Excellent to Very Good
- Very Good
- Very Good to Good
- Good
- Degraded
- Completely Degraded
- Cleared



- GEHBI Level 1 Survey area
- GEHBI Level 2 Survey area
- Contextual area (500m buffer)

Introduced Flora (Declared Pest)

- ▲ *Asparagus asparagoides*
- ▲ *Rubus ulmifolius*

Introduced Flora (WoNS; Declared Pest)

- ▲ *Echium plantagineum*
- ▲ *Hydrocotyle ranunculoides*
- ▲ *Solanum linnaeanum*
- ▲ *Zantedeschia aethiopica*

- ▲ Other introduced flora record

Author: R Mason
 Drawn: M Robinson
 Job No.: 1484
 Date: 29 July 2020
 Revised: 18 Aug 2021
 Projection: MGA Z50
 Scale: 1:35,000 @ A4

GEHBI Biological Vegetation Condition



Summary of rankings for the weeds recorded within the survey area.

Ecological Impact rankings from Department of Parks and Wildlife (2016): U = Unknown; H = High; M = Medium; L = Low; – = Not listed.

Invasiveness rankings from Department of Parks and Wildlife (2014): U = Unknown; R = Rapid; M = Moderate; S = Slow; – = Not listed.

Family	Species (Common Name)	Ecological Impact	Invasiveness	Weed Status
Anacardiaceae	* <i>Schinus terebinthifolius</i> (Brazilian Pepper)	H	M	
Apocynaceae	* <i>Gomphocarpus fruticosus</i> Narrowleaf Cottonbush	H	R	
Araceae	* <i>Zantedeschia aethiopica</i> (Arum Lily)	H	R	Declared Pest (Exempt)
Araliaceae	* <i>Hydrocotyle ranunculoides</i> (Robust Pennywort)	H	R	Declared Pest (C3 Management)
Asparagaceae	* <i>Asparagus asparagoides</i> (Bridal Creeper)	H	R	WoNS; Declared Pest (Exempt)
Asteraceae	* <i>Conyza bonariensis</i> (Flaxleaf Fleabane)	L	M	
	* <i>Cotula turbinata</i> (Funnel Weed)	L	M	
	* <i>Hedypnois rhagadioloides</i> (Cretan Weed)	U	U	
	* <i>Hypochoeris glabra</i> (Smooth Catsear)	H	R	
	* <i>Hypochoeris radicata</i> (Flat Weed)	H	R	
	* <i>Sonchus asper</i> (Rough Sowthistle)	U	R	
	* <i>Sonchus oleraceus</i> (Common Sowthistle)	U	R	
	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i> (Ursinia)	U	R	
Bignoniaceae	* <i>Campsis radicans</i>	-	-	
Boraginaceae	* <i>Echium plantagineum</i> (Paterson's Curse)	H	M	Declared Pest (Exempt)
Brassicaceae	* <i>Raphanus raphanistrum</i> (Wild Radish)	U	M	
Campanulaceae	* <i>Monopsis debilis</i> var. <i>depressa</i> (Monopsis)	M	R	
	* <i>Wahlenbergia capensis</i> (Cape Bluebell)	U	R	
Caryophyllaceae	* <i>Polycarpon tetraphyllum</i> (Fourleaf Allseed)	M	R	
	* <i>Sagina apetala</i> (Annual Pearlwort)	L	R	
	* <i>Silene gallica</i> var. <i>gallica</i> (French Catchfly)	L	M	
	* <i>Stellaria pallida</i>	L	R	
Chenopodiaceae	* <i>Chenopodium album</i> (Fat Hen)	U	S	
Convolvulaceae	* <i>Ipomoea cairica</i> (Coast Morning Glory)	H	M	
Cyperaceae	* <i>Cyperus tenellus</i> (Tiny Flatsedge)	L	U	
	* <i>Isolepis prolifera</i> (Budding Clubrush)	U	R	
Euphorbiaceae	* <i>Euphorbia peplus</i> (Petty Spurge)	U	M	
	* <i>Euphorbia terracina</i> (Geraldton Carnation Weed)	H	R	
	* <i>Ricinus communis</i> (Castor Oil Plant)	M	R	
Fabaceae	* <i>Acacia iteaphylla</i> (Flinders Range Wattle)	H	R	
	* <i>Acacia longifolia</i> subsp. <i>Longifolia</i>	H	R	
	* <i>Chamaecytisus palmensis</i> (Tagasaste)	M	M	
	* <i>Lotus subbiflorus</i> (Hairy Birdfoot Trefoil)	H	R	
	* <i>Lupinus angustifolius</i> (Narrowleaf Lupin)	H	M	
	* <i>Medicago polymorpha</i> (Burr Medic)	U	R	

Family	Species (Common Name)	Ecological Impact	Invasiveness	Weed Status
	* <i>Trifolium angustifolium</i> var. <i>angustifolium</i> (Narrowleaf Clover)	U	U	
	* <i>Trifolium arvense</i> var. <i>arvense</i>	U	U	
	* <i>Trifolium campestre</i> var. <i>campestre</i> (Hop Clover)	U	U	
Geraniaceae	* <i>Pelargonium capitatum</i> (Rose Pelargonium)	H	R	
Iridaceae	* <i>Gladiolus cardinalis</i>	-	-	
	* <i>Gladiolus caryophyllaceus</i> (Wild Gladiolus)	H	R	
	* <i>Hesperantha falcata</i>	H	R	
	* <i>Romulea rosea</i> (Guildford Grass)	U	R	
	* <i>Watsonia meriana</i> var. <i>meriana</i>	H	R	
Juncaceae	* <i>Juncus articulatus</i> (Jointed Rush)	U	S	
	* <i>Juncus bufonius</i> (Toadrush)	U	R	
	* <i>Juncus capitatus</i> (Capitate Rush)	U	R	
Lythraceae	* <i>Lythrum hyssopifolia</i> (Lesser Loosetrife)	U	S	
Meliaceae	* <i>Melia azedarach</i> (Cape Lilac, White Cedar)	L	M	
Moraceae	* <i>Ficus carica</i> (Common Fig)	H	M	
Myrtaceae	* <i>Leptospermum laevigatum</i> (Victorian Teatree)	H	R	
	* <i>Melaleuca armillaris</i>	U	U	
	* <i>Melaleuca hamulosa</i>			
Oleaceae	* <i>Olea europaea</i> subsp. <i>europaea</i> (Olive)	H	R	
Orchidaceae	* <i>Disa bracteata</i> (South African Orchid)	U	R	
Orobanchaceae	* <i>Orobanche minor</i> (Broom Rape)	U	R	
Papaveraceae	* <i>Fumaria capreolata</i> (Whitelover Fumitory)	H	R	
Plantaginaceae	* <i>Callitrichia stagnalis</i> (Common Starwort)	U	S	
Poaceae	* <i>Aira caryophyllea</i> (Silvery Hairgrass)	U	U	
	* <i>Arundo donax</i> (Giant Reed)	H	S	
	* <i>Avellinia michelii</i> (Avellinia)	U	U	
	* <i>Avena fatua</i> (Wild Oat)	H	M	
	* <i>Brachypodium distachyon</i> (False Broome)	U	S	
	* <i>Briza maxima</i> (Blowfly Grass)	U	R	
	* <i>Briza minor</i> (Shivery Grass)	U	R	
	* <i>Bromus diandrus</i> (Great Brome)	H	R	
	* <i>Bromus hordeaceus</i> (Soft Brome)	U	U	
	* <i>Cenchrus clandestinus</i> (Kikuyu Grass)	H	S	
	* <i>Cenchrus setaceus</i> (Fountain Grass)	H	R	
	* <i>Cortaderia selloana</i> (Pampas Grass)	H	R	
	* <i>Cynodon dactylon</i> (Couch Grass)	H	R	
	* <i>Ehrharta calycina</i> (Perennial Veldt Grass)	H	R	
	* <i>Ehrharta longiflora</i> (Annual Veldt Grass)	M	R	

Family	Species (Common Name)	Ecological Impact	Invasiveness	Weed Status
Gramineae	* <i>Eragrostis curvula</i> (African Lovegrass)	H	R	
	* <i>Hordeum leporinum</i> (Barley Grass)	H	U	
	* <i>Hyparrhenia hirta</i> (Tambookie Grass)	H	R	
	* <i>Lagurus ovatus</i> (Hare's Tail Grass)	H	R	
	* <i>Lolium multiflorum</i> (Stiff Ryegrass)	H	R	
	* <i>Lolium perenne</i> (Stiff Ryegrass)	H	R	
	* <i>Paspalum dilatatum</i> (Paspalum)	H	M	
	* <i>Paspalum urvillei</i> (Vasey Grass)	H	M	
	* <i>Pentameris airoides</i> subsp. <i>airoides</i> (False Hairgrass)	U	R	
	* <i>Pentameris pallida</i> (Perennial False Hairgrass)	H	U	
	* <i>Phalaris aquatica</i> (Canary Grass)	M	U	
	* <i>Poa annua</i> (Winter Grass)	L	R	
	* <i>Polypogon monspeliensis</i> (Annual Barbgrass)	M	R	
	* <i>Rostraria cristata</i> (Annual Cat's Tail)	U	U	
	* <i>Setaria parviflora</i> (Slender Pigeon Grass)	L	U	
	* <i>Vulpia bromoides</i> (Squirrel's Tail Fescue)	H	R	
	* <i>Vulpia muralis</i>	H	R	
Primulaceae	* <i>Lysimachia arvensis</i> (Pimpernel)	U	R	
Rosaceae	* <i>Rubus ulmifolius</i> (Blackberry)	H	M	WonS; Declared Pest (C3 Management, Exempt)
Scrophulariaceae	* <i>Dischisma arenarium</i> (Dischisma)	U	R	
Solanaceae	* <i>Solanum linnaeanum</i> (Apple of Sodom)	H	R	Declared Pest (Exempt)
	* <i>Solanum nigrum</i> (Black Berry Nightshade)	M	R	
Tropaeolaceae	* <i>Tropaeolum majus</i> (Garden Nasturtium)	L	M	

Family	Species	Status	Site:	Date:	Field No:	Easting	Northing	Number of Individuals / Cover
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHREL02	01-Nov-19		407125	6449352	10.0%
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHREL03	01-Nov-19		405830	6448233	10.0%
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHREL04	01-Nov-19		404907	6446608	10.0%
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407164	6449609	1
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407169	6447636	1
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407169	6447636	1
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407152	6449285	1
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPMET	01-Nov-19		407107	6446695	2
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		404812	6446433	5
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407070	6449344	5
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	LVL1RMOP	01-Nov-19		405415	6448884	5
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		404907	6446608	7
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407308	6449767	100
Anacardiaceae	* <i>Schinus terebinthifolius</i>	Introduced	GEHB-OPRM	01-Nov-19		407251	6449683	100
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	01-Nov-19		406039	6470377	200
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	LVL1RMOP	04-Nov-19		405867	6469594	1
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	LVL1RMOP	04-Nov-19		405867	6469594	1
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406202	6470390	3
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHREL08	04-Nov-19		406202	6470390	3
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	LVL1RMOP	04-Nov-19		405418	6468344	10
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406741	6469937	25
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		407193	6449733	50
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406917	6469290	100
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHREL05	04-Nov-19		406039	6470377	200
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406832	6449315	500
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406808	6469295	1000
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	04-Nov-19		406876	6469289	2000
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	01-Nov-19		406187	6470092	1
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	01-Nov-19		406198	6449922	1
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	01-Nov-19		404856	6446591	10
Apocynaceae	* <i>Gomphocarpus fruticosus</i>	Introduced	GEHB-OPRM	01-Nov-19		406171	6449898	10
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)	GEHB-OPMET	04-Nov-19		407117	6449207	1
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)	GEHB-OPRM	04-Nov-19		405882	6448229	1
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)	GEHREL05	04-Nov-19		406039	6470377	1
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)	GEHREL03	04-Nov-19		405830	6448233	3
Araceae	* <i>Zantedeschia aethiopica</i>	Introduced (Declared Pest)	GEHB-OPRM	04-Nov-19		406825	6447978	4
Araliaceae	* <i>Hydrocotyle ranunculoides</i>	Introduced (Declared Pest)	GEHREL04	04-Nov-19	GREL04-05	404907	6446608	1

Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPMET	04-Nov-19			406894	6467745	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPMET	04-Nov-19			407125	6466920	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			406825	6467976	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			406894	6467769	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			406938	6467618	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			407025	6469264	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			407107	6469310	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	04-Nov-19			407143	6469289	1
Asparagaceae	* <i>Asparagus asparagooides</i>	Introduced (WoNS; Declared Pest)	GEHREL02	04-Nov-19			407125	6469352	4
Asteraceae	* <i>Conyza bonariensis</i>	Introduced	GEHREL01	04-Nov-19			406357	6469657	0.1%
Asteraceae	* <i>Cotula turbinata</i>	Introduced	LVL1RMOP	04-Nov-19	L1MN11-07		405415	6468884	1
Asteraceae	* <i>Hedypnois rhagadioloides</i>	Introduced	LVL1RMOP	04-Nov-19	L1MN01-05		406168	6468550	1
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ02	04-Nov-19			406481	6468226	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ04	05-Nov-19			406556	6468170	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ05	05-Nov-19			406590	6468238	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ07	05-Nov-19			406644	6468154	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ08	05-Nov-19			406765	6468227	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ14	05-Nov-19			407084	6469293	0.1%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GBQ03	05-Nov-19			406493	6468261	0.5%
Asteraceae	* <i>Hypochoeris glabra</i>	Introduced	GEHREL07	05-Nov-19			406535	6468275	0.5%
Asteraceae	* <i>Hypochoeris radicata</i>	Introduced	GBQ10	05-Nov-19	GBQ10-11		406088	6470415	0.1%
Asteraceae	* <i>Hypochoeris radicata</i>	Introduced	GEHREL05	05-Nov-19	GBQ10-11=		406039	6470377	0.1%
Asteraceae	* <i>Hypochoeris radicata</i>	Introduced	GEHREL06	05-Nov-19	GBQ10-11=		406064	6470400	0.1%
Asteraceae	* <i>Hypochoeris radicata</i>	Introduced	GEHREL13	05-Nov-19	GBQ10-11=		406880	6469693	0.1%
Asteraceae	* <i>Sonchus asper</i>	Introduced	GBQ12	05-Nov-19			406273	6469675	0.1%
Asteraceae	* <i>Sonchus asper</i>	Introduced	GEHREL01	05-Nov-19			406357	6469657	0.1%
Asteraceae	* <i>Sonchus asper</i>	Introduced	GEHREL05	05-Nov-19			406039	6470377	0.1%
Asteraceae	* <i>Sonchus asper</i>	Introduced	GEHREL14	05-Nov-19			406984	6469703	1.0%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ10	05-Nov-19	GBQ10-10		406088	6470415	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ11	06-Nov-19	GBQ10-10=		406228	6469797	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL05	06-Nov-19	GBQ10-10=		406039	6470377	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL06	06-Nov-19	GBQ10-10=		406064	6470400	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL08	06-Nov-19	GBQ10-10=		406202	6470390	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL13	06-Nov-19	GBQ10-10=		406880	6469693	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ03	06-Nov-19			406493	6468261	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ14	06-Nov-19			407084	6469293	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ15	06-Nov-19			406889	6468350	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ12	06-Nov-19	GBQ10-10=		406273	6469675	1.0%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL10	06-Nov-19	GBQ10-10=		406261	6469667	1.0%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GBQ19	08-Oct-19			407177	6466955	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL01	08-Oct-19			406357	6469657	0.1%

Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL02	08-Oct-19			407125	6469352	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL07	08-Oct-19			406535	6468275	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL09	08-Oct-19			406953	6467549	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL13	08-Oct-19			406880	6469693	0.1%
Asteraceae	* <i>Sonchus oleraceus</i>	Introduced	GEHREL14	08-Oct-19			406984	6469703	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ01	08-Oct-19	GBQ01-26		406351	6468246	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ03	08-Oct-19			406493	6468261	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ06	08-Oct-19			406769	6468307	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ07	08-Oct-19			406644	6468154	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ08	08-Oct-19			406765	6468227	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ19	08-Oct-19			407177	6466955	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ23	08-Oct-19			407010	6468557	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GEHREL07	08-Oct-19			406535	6468275	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GEHREL11	08-Oct-19			406954	6467881	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GEHREL15	08-Oct-19			404120	6468197	0.1%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ15	08-Oct-19			406889	6468350	0.5%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ02	08-Oct-19			406481	6468226	2.0%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ04	08-Oct-19			406556	6468170	2.0%
Asteraceae	* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	Introduced	GBQ05	08-Oct-19			406590	6468238	2.0%
Bignoniaceae	* <i>Campsis radicans</i>	Introduced	GEHB-OPMET	08-Oct-19	MetOp05		406763	6468264	1
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	GEHREL01	08-Oct-19			406357	6469657	10.0%
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	GEHREL08	08-Oct-19			406202	6470390	10.0%
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	LVL1RMOP	08-Oct-19			405858	6469546	20
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	LVL1RMOP	08-Oct-19			405858	6469546	20
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	GEHB-OPRM	08-Oct-19			406202	6470390	30
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	LVL1RMOP	08-Oct-19			405975	6469819	30
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	LVL1RMOP	08-Oct-19			405975	6469819	30
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	GEHB-OPRM	08-Oct-19			406833	6469741	100
Boraginaceae	* <i>Echium plantagineum</i>	Introduced (Declared Pest)	GEHB-OPRM	08-Oct-19			406683	6469890	1000
Brassicaceae	* <i>Raphanus raphanistrum</i>	Introduced	GEHREL14	08-Oct-19			406984	6469703	0.1%
Brassicaceae	* <i>Raphanus raphanistrum</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN17-02		406032	6469940	1
Campanulaceae	* <i>Monopsis debilis</i> var. <i>depressa</i>	Introduced	GEHB-OPMET	08-Oct-19	MRoeOp89		407063	6469271	2
Campanulaceae	* <i>Wahlenbergia capensis</i>	Introduced	GBQ02	08-Oct-19			406481	6468226	0.1%
Caryophyllaceae	* <i>Polycarpon tetraphyllum</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN18-02		405764	6469468	1
Caryophyllaceae	* <i>Sagina apetala</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN01-10		406168	6468550	1
Caryophyllaceae	* <i>Silene gallica</i> var. <i>gallica</i>	Introduced	GBQ04	08-Oct-19	GBQ04-15		406556	6468170	0.1%
Caryophyllaceae	* <i>Stellaria pallida</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN18-03		405764	6469468	100
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GEHREL13	08-Oct-19	GBQ10-05		406880	6469693	0.1%
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GBQ13	08-Oct-19	GBQ10-05=		406795	6469882	0.1%
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GEHREL05	08-Oct-19	GBQ10-05=		406039	6470377	0.1%
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GEHREL06	08-Oct-19	GBQ10-05=		406064	6470400	0.1%

Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GEHREL08	08-Oct-19	GBQ10-05=	406202	6470390	1.0%
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GBQ10	08-Oct-19	GBQ10-05=	406088	6470415	2.0%
Chenopodiaceae	* <i>Chenopodium album</i>	Introduced	GEHREL05	08-Oct-19	GBQ10-05=	406039	6470377	2.0%
Convolvulaceae	* <i>Ipomoea cairica</i>	Introduced	GEHB-OPRM	08-Oct-19		407235	6469774	1
Cyperaceae	* <i>Cyperus tenellus</i>	Introduced	GEHB-OPMET	08-Oct-19	MTRM01	407173	6469280	1
Cyperaceae	* <i>Isolepis prolifera</i>	Introduced	GEHREL01	08-Oct-19	GREL01-03	406357	6469657	1.0%
Euphorbiaceae	* <i>Euphorbia peplus</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN01-03	406168	6468550	1
Euphorbiaceae	* <i>Euphorbia peplus</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN20-01	406254	6468427	1
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	LVL1RMOP	08-Oct-19	L1MN11-08	405415	6468884	1
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	GEHREL08	09-Oct-19		406202	6470390	0.1%
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	GEHREL09	09-Oct-19		406953	6467549	0.1%
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	GEHREL10	09-Oct-19		406261	6469667	0.1%
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	GEHREL13	09-Oct-19		406880	6469693	0.1%
Euphorbiaceae	* <i>Euphorbia terracina</i>	Introduced	GEHREL14	09-Oct-19		406984	6469703	0.1%
Euphorbiaceae	* <i>Ricinus communis</i>	Introduced	GEHREL01	09-Oct-19		406357	6469657	0.1%
Euphorbiaceae	* <i>Ricinus communis</i>	Introduced	GEHB-OPRM	09-Oct-19		407164	6469609	1
Euphorbiaceae	* <i>Ricinus communis</i>	Introduced	LVL1RMOP	09-Oct-19		406296	6468643	2
Euphorbiaceae	* <i>Ricinus communis</i>	Introduced	GEHB-OPRM	09-Oct-19		406039	6470377	10
Fabaceae	* <i>Acacia iteaphylla</i>	Introduced	GBQ16	09-Oct-19	GBQ16-10	406981	6467427	2.0%
Fabaceae	* <i>Acacia longifolia</i> subsp. <i>longifolia</i>	Introduced	GEHB-OPRM	09-Oct-19		406832	6469315	2
Fabaceae	* <i>Chamaecytisus palmensis</i>	Introduced	GEHB-OPRM	09-Oct-19		406994	6467356	1
Fabaceae	* <i>Lotus subbiflorus</i>	Introduced	GBQ04	09-Oct-19	GBQ04-06	406556	6468170	0.1%
Fabaceae	* <i>Lotus subbiflorus</i>	Introduced	GEHREL01	09-Oct-19	GREL01-07	406357	6469657	1.0%
Fabaceae	* <i>Lupinus angustifolius</i>	Introduced	GEHREL01	09-Oct-19		406357	6469657	0.1%
Fabaceae	* <i>Lupinus angustifolius</i>	Introduced	GEHREL08	09-Oct-19		406202	6470390	0.1%
Fabaceae	* <i>Lupinus angustifolius</i>	Introduced	LVL1RMOP	09-Oct-19	L1MN12-04	405360	6468467	1
Fabaceae	* <i>Medicago polymorpha</i>	Introduced	GEHREL01	09-Oct-19		406357	6469657	0.1%
Fabaceae	* <i>Trifolium angustifolium</i> var. <i>angustifoliu</i>	Introduced	LVL1RMOP	09-Oct-19	L1MN11-06	405415	6468884	1
Fabaceae	* <i>Trifolium arvense</i> var. <i>arvense</i>	Introduced	LVL1RMOP	09-Oct-19	L1MN01-04	406168	6468550	1
Fabaceae	* <i>Trifolium campestre</i> var. <i>campestre</i>	Introduced	GBQ04	09-Oct-19	GBQ04-14	406556	6468170	0.1%
Fabaceae	* <i>Trifolium campestre</i> var. <i>campestre</i>	Introduced	GEHREL02	09-Oct-19	GREL02-12	407125	6469352	0.1%
Fabaceae	* <i>Trifolium campestre</i> var. <i>campestre</i>	Introduced	LVL1RMOP	09-Oct-19	L1MN11-05	405415	6468884	1
Geraniaceae	* <i>Pelargonium capitatum</i>	Introduced	GEHREL04	09-Oct-19		404907	6466608	0.1%
Geraniaceae	* <i>Pelargonium capitatum</i>	Introduced	GEHREL15	09-Oct-19		404120	6468197	0.1%
Geraniaceae	* <i>Pelargonium capitatum</i>	Introduced	LVL1RMOP	09-Oct-19	L1MN12-05	405360	6468467	1
Geraniaceae	* <i>Pelargonium capitatum</i>	Introduced	GEHB-OPRM	09-Oct-19		404907	6466608	5
Iridaceae	* <i>Gladiolus cardinalis</i>	Introduced	GBQ03	09-Oct-19	GBQ03-24	406493	6468261	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ01	09-Oct-19	GBQ01-09	406351	6468246	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ02	09-Oct-19		406481	6468226	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ03	09-Oct-19		406493	6468261	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ04	09-Oct-19		406556	6468170	0.1%

Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ05	09-Oct-19			406590	6468238	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ06	09-Oct-19			406769	6468307	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ07	09-Oct-19			406644	6468154	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ08	10-Oct-19			406765	6468227	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ09	10-Oct-19			406852	6467888	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ15	10-Oct-19			406889	6468350	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ17	10-Oct-19			407166	6466574	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ18	10-Oct-19			407003	6467628	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ19	10-Oct-19			407177	6466955	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ20	10-Oct-19			407020	6467849	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ21	10-Oct-19			407029	6467689	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ22	10-Oct-19			407052	6468409	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GBQ23	10-Oct-19			407010	6468557	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GEHREL04	10-Oct-19			404907	6466608	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GEHREL09	10-Oct-19			406953	6467549	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GEHREL11	10-Oct-19			406954	6467881	0.1%
Iridaceae	* <i>Gladiolus caryophyllaceus</i>	Introduced	GEHREL15	10-Oct-19			404120	6468197	5
Iridaceae	* <i>Hesperantha falcata</i>	Introduced	GBQ25	03-Nov-20			406590	6468273	1
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ01	10-Oct-19			406351	6468246	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ02	10-Oct-19			406481	6468226	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ16	10-Oct-19			406981	6467427	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ18	10-Oct-19			407003	6467628	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ19	10-Oct-19			407177	6466955	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ22	10-Oct-19			407052	6468409	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GBQ23	10-Oct-19			407010	6468557	0.1%
Iridaceae	* <i>Romulea rosea</i>	Introduced	GEHREL09	10-Oct-19			406953	6467549	0.1%
Iridaceae	* <i>Watsonia meriana</i>	Introduced	GBQ17	10-Oct-19			407166	6466574	1
Iridaceae	* <i>Watsonia meriana</i>	Introduced	LVL1RMOP	10-Oct-19			406296	6468643	4
Iridaceae	* <i>Watsonia meriana</i>	Introduced	GEHB-OPRM	10-Oct-19			404856	6466591	30
Iridaceae	* <i>Watsonia meriana</i>	Introduced	GEHB-OPRM	10-Oct-19			404740	6466259	1000
Juncaceae	* <i>Juncus articulatus</i>	Introduced	GEHREL02	10-Oct-19	GREL02-07		407125	6469352	10.0%
Juncaceae	* <i>Juncus bufonius</i>	Introduced	GEHREL01	10-Oct-19	GREL01-06		406357	6469657	10.0%
Juncaceae	* <i>Juncus bufonius</i>	Introduced	LVL1RMOP	10-Oct-19	L1MN01-11		406168	6468550	1
Juncaceae	* <i>Juncus bufonius</i>	Introduced	LVL1RMOP	10-Oct-19	L1MN20-03		406254	6468427	1
Juncaceae	* <i>Juncus capitatus</i>	Introduced	GEHREL02	10-Oct-19	GREL02-08		407125	6469352	5.0%
Juncaceae	* <i>Juncus capitatus</i>	Introduced	GEHB-OPMET	10-Oct-19	MTRM04		407173	6469280	1
Lythraceae	* <i>Lythrum hyssopifolia</i>	Introduced	GEHREL01	10-Oct-19	GREL01-10		406357	6469657	0.1%
Moraceae	* <i>Ficus carica</i>	Introduced	GEHREL05	10-Oct-19			406039	6470377	30.0%
Moraceae	* <i>Ficus carica</i>	Introduced	GEHREL06	10-Oct-19			406064	6470400	40.0%
Myrtaceae	* <i>Melaleuca hamulosa</i>	Introduced (Planted)	GEHREL03	30-Oct-19	GREL03-09		405830	6468233	0.1%
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GBQ19	04-Nov-19	GBQ19-20		407177	6466955	5.0%

Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			407132	6467657	1
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			404812	6466433	20
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			404856	6466591	20
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			404944	6466872	25
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			404475	6465443	30
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	04-Nov-19			404673	6465941	45
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	10-Nov-19			406681	6468125	10
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	10-Nov-19			406752	6468252	10
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	10-Nov-19			406765	6468263	100
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHREL15	07-May-20			404120	6468197	2.0%
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	07-May-20			407041	6467860	5
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	LVL1RMOP	07-May-20			405383	6468348	5
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	07-May-20			406961	6468826	20
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	07-May-20			406832	6469315	30
Myrtaceae	* <i>Leptospermum laevigatum</i>	Introduced	GEHB-OPRM	07-May-20			406765	6468263	100
Myrtaceae	* <i>Melaleuca armillaris</i>	Introduced	GEHREL04	07-May-20	L1MN02-01		404907	6466608	45.0%
Myrtaceae	* <i>Melaleuca armillaris</i>	Introduced	GEHREL04	07-May-20	GREL04-01		404907	6466608	1
Oleaceae	* <i>Olea europaea</i>	Introduced	GBQ01	07-May-20	GBQ01-29		406351	6468246	1
Oleaceae	* <i>Olea europaea</i>	Introduced	GBQ17	07-May-20			407166	6466574	1
Oleaceae	* <i>Olea europaea</i>	Introduced	GEHB-OPRM	08-May-20			406111	6470481	1
Orchidaceae	* <i>Disa bracteata</i>	Introduced	GBQ17	08-May-20	GBQ17-15		407166	6466574	0.1%
Orchidaceae	* <i>Disa bracteata</i>	Introduced	GBQ18	08-May-20	GBQ17-15=		407003	6467628	0.1%
Orobanchaceae	* <i>Orobanche minor</i>	Introduced	LVL1RMOP	08-May-20	L1MN11-09		405415	6468884	1
Orobanchaceae	* <i>Orobanche minor</i>	Introduced	LVL1RMOP	08-May-20	L1MN12-09		405360	6468467	1
Orobanchaceae	* <i>Orobanche minor</i>	Introduced	LVL1RMOP	08-May-20	L1MN14-03		405858	6469546	1
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL13	29-Oct-19	GBQ10-02=		406880	6469693	15.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL14	29-Oct-19	GBQ10-02=		406984	6469703	25.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL10	29-Oct-19	GBQ10-02=		406261	6469667	60.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	LVL1RMOP	29-Oct-19	L1MN17-01		406032	6469940	1
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GBQ16	08-May-20	GBQ10-02=		406981	6467427	0.1%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL03	08-May-20	GBQ10-02=		405830	6468233	0.1%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GBQ10	08-May-20	GBQ10-02		406088	6470415	5.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL05	08-May-20	GBQ10-02=		406039	6470377	5.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL08	08-May-20	GBQ10-02=		406202	6470390	7.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GEHREL06	08-May-20	GBQ10-02=		406064	6470400	20.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GBQ13	08-May-20	GBQ10-02=		406795	6469882	40.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GBQ11	08-May-20	GBQ10-02=		406228	6469797	50.0%
Papaveraceae	* <i>Fumaria capreolata</i>	Introduced	GBQ12	08-May-20	GBQ10-02=		406273	6469675	60.0%
Plantaginaceae	* <i>Callitricha stagnalis</i>	Introduced	LVL1RMOP	29-Oct-19	L1MN12-08		405360	6468467	1
Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ01	29-Oct-19	GBQ01-40		406351	6468246	0.1%
Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ15	29-Oct-19	GBQ01-40=		406889	6468350	0.1%

Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ07	29-Oct-19	GBQ07-44	406644	6468154	0.1%
Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ08	29-Oct-19	GBQ08-17	406765	6468227	0.1%
Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ09	29-Oct-19	GBQ09-35	406852	6467888	0.1%
Poaceae	* <i>Aira caryophyllea</i>	Introduced	GBQ23	29-Oct-19		407010	6468557	0.1%
Poaceae	* <i>Arundo donax</i>	Introduced	GEHREL02	29-Oct-19		407125	6469352	0.1%
Poaceae	* <i>Arundo donax</i>	Introduced	GEHB-OPRM	29-Oct-19		406202	6470390	1
Poaceae	* <i>Avellinia michelii</i>	Introduced	LVL1RMOP	29-Oct-19	L1MN17-03	406032	6469940	1
Poaceae	* <i>Avena fatua</i>	Introduced	GBQ17	29-Oct-19	GBQ10-03	407166	6466574	0.1%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL04	29-Oct-19	GBQ10-03=	404907	6466608	0.1%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL10	29-Oct-19	GBQ10-03=	406261	6469667	0.1%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL02	29-Oct-19		407125	6469352	0.5%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL03	29-Oct-19		405830	6468233	0.5%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL06	29-Oct-19	GBQ10-03=	406064	6470400	1.0%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL14	29-Oct-19	GBQ10-03=	406984	6469703	2.0%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL05	29-Oct-19	GBQ10-03=	406039	6470377	5.0%
Poaceae	* <i>Avena fatua</i>	Introduced	GBQ13	29-Oct-19	GBQ10-03=	406795	6469882	15.0%
Poaceae	* <i>Avena fatua</i>	Introduced	GEHREL08	29-Oct-19	GBQ10-03=	406202	6470390	18.0%
Poaceae	* <i>Avena fatua</i>	Introduced	GBQ10	29-Oct-19	GBQ10-03=	406088	6470415	20.0%
Poaceae	* <i>Brachypodium distachyon</i>	Introduced	GBQ18	29-Oct-19	GBQ18-16	407003	6467628	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ01	29-Oct-19		406351	6468246	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ02	29-Oct-19		406481	6468226	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ03	29-Oct-19		406493	6468261	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ06	29-Oct-19		406769	6468307	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ07	29-Oct-19		406644	6468154	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ08	29-Oct-19		406765	6468227	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ09	29-Oct-19		406852	6467888	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ15	29-Oct-19		406889	6468350	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ19	29-Oct-19		407177	6466955	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ20	29-Oct-19		407020	6467849	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ21	29-Oct-19		407029	6467689	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ22	29-Oct-19		407052	6468409	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL04	29-Oct-19		404907	6466608	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL07	29-Oct-19		406535	6468275	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL11	29-Oct-19		406954	6467881	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL12	29-Oct-19		406718	6468450	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL15	29-Oct-19		404120	6468197	0.1%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ16	29-Oct-19		406981	6467427	1.0%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL09	29-Oct-19		406953	6467549	1.0%
Poaceae	* <i>Briza maxima</i>	Introduced	GEHREL02	29-Oct-19		407125	6469352	2.0%
Poaceae	* <i>Briza maxima</i>	Introduced	GBQ05	29-Oct-19		406590	6468238	50
Poaceae	* <i>Briza minor</i>	Introduced	GBQ17	29-Oct-19	GBQ17-36	407166	6466574	0.1%

Poaceae	*Briza minor	Introduced	GBQ04	29-Oct-19			406556	6468170	0.1%
Poaceae	*Briza minor	Introduced	GBQ16	29-Oct-19			406981	6467427	0.1%
Poaceae	*Briza minor	Introduced	GEHREL09	29-Oct-19			406953	6467549	0.1%
Poaceae	*Briza minor	Introduced	GEHREL02	29-Oct-19			407125	6469352	1.0%
Poaceae	*Bromus diandrus	Introduced	GBQ10	29-Oct-19	GBQ10-07=		406088	6470415	0.1%
Poaceae	*Bromus diandrus	Introduced	GEHREL01	29-Oct-19	GBQ10-07=		406357	6469657	0.1%
Poaceae	*Bromus diandrus	Introduced	GEHREL08	29-Oct-19	GBQ10-07=		406202	6470390	0.1%
Poaceae	*Bromus diandrus	Introduced	GEHREL06	29-Oct-19	L1MN01-01=		406064	6470400	0.1%
Poaceae	*Bromus diandrus	Introduced	GEHREL05	29-Oct-19	GBQ10-07=		406039	6470377	1.0%
Poaceae	*Bromus diandrus	Introduced	GEHREL14	29-Oct-19	GBQ10-07=		406984	6469703	1.0%
Poaceae	*Bromus diandrus	Introduced	GBQ12	29-Oct-19	GBQ10-07		406273	6469675	4.0%
Poaceae	*Bromus diandrus	Introduced	GEHREL10	29-Oct-19	GBQ10-07=		406261	6469667	4.0%
Poaceae	*Bromus diandrus	Introduced	GEHREL02	29-Oct-19	GBQ10-07=		407125	6469352	5.0%
Poaceae	*Bromus diandrus	Introduced	GEHREL03	29-Oct-19	GBQ10-07=		405830	6468233	5.0%
Poaceae	*Bromus diandrus	Introduced	GEHREL13	29-Oct-19	GBQ10-07=		406880	6469693	10.0%
Poaceae	*Bromus diandrus	Introduced	GBQ13	29-Oct-19	GBQ10-07=		406795	6469882	30.0%
Poaceae	*Bromus diandrus	Introduced	LVL1RMOP	29-Oct-19	L1MN01-01		406168	6468550	1
Poaceae	*Bromus hordeaceus	Introduced	GEHREL01	29-Oct-19	GREL01-01		406357	6469657	1.0%
Poaceae	*Cenchrus clandestinus	Introduced	GEHREL03	29-Oct-19	GREL03-05		405830	6468233	75.0%
Poaceae	*Cenchrus setaceus	Introduced	GEHB-OPRM	29-Oct-19			407164	6469609	1
Poaceae	*Cortaderia selloana	Introduced	GEHB-OPMET	29-Oct-19			407078	6469334	1
Poaceae	*Cynodon dactylon	Introduced	GEHREL04	29-Oct-19			404907	6466608	1.0%
Poaceae	*Cynodon dactylon	Introduced	GEHREL01	29-Oct-19			406357	6469657	5.0%
Poaceae	*Ehrharta calycina	Introduced	GBQ01	29-Oct-19	GBQ01-14		406351	6468246	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ03	29-Oct-19			406493	6468261	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ07	29-Oct-19			406644	6468154	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ08	29-Oct-19			406765	6468227	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ09	29-Oct-19			406852	6467888	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ15	29-Oct-19			406889	6468350	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ05	29-Oct-19			406590	6468238	0.5%
Poaceae	*Ehrharta calycina	Introduced	GBQ02	29-Oct-19			406481	6468226	1.0%
Poaceae	*Ehrharta calycina	Introduced	GBQ06	29-Oct-19			406769	6468307	1.0%
Poaceae	*Ehrharta calycina	Introduced	GBQ16	29-Oct-19			406981	6467427	1.0%
Poaceae	*Ehrharta calycina	Introduced	GBQ04	29-Oct-19			406556	6468170	1.5%
Poaceae	*Ehrharta calycina	Introduced	GBQ18	30-Oct-19			407003	6467628	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ19	30-Oct-19			407177	6466955	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ22	30-Oct-19			407052	6468409	0.1%
Poaceae	*Ehrharta calycina	Introduced	GBQ23	30-Oct-19			407010	6468557	0.1%
Poaceae	*Ehrharta calycina	Introduced	GEHREL07	30-Oct-19			406535	6468275	0.1%
Poaceae	*Ehrharta calycina	Introduced	GEHREL08	30-Oct-19			406202	6470390	0.1%
Poaceae	*Ehrharta calycina	Introduced	GEHREL11	30-Oct-19			406954	6467881	0.1%

Poaceae	* <i>Ehrharta calycina</i>	Introduced	GEHREL12	30-Oct-19			406718	6468450	0.1%
Poaceae	* <i>Ehrharta calycina</i>	Introduced	GEHREL15	30-Oct-19			404120	6468197	0.1%
Poaceae	* <i>Ehrharta calycina</i>	Introduced	GEHREL02	30-Oct-19			407125	6469352	0.5%
Poaceae	* <i>Ehrharta calycina</i>	Introduced	GEHREL09	30-Oct-19			406953	6467549	1.0%
Poaceae	* <i>Ehrharta calycina</i>	Introduced	GEHREL03	30-Oct-19			405830	6468233	5.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ16	30-Oct-19	GBQ12-01=		406981	6467427	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ20	30-Oct-19	GBQ20-09		407020	6467849	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ21	30-Oct-19	GBQ20-09=		407029	6467689	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ22	30-Oct-19	GBQ20-09=		407052	6468409	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL03	30-Oct-19	GREL03-04		405830	6468233	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ23	30-Oct-19			407010	6468557	0.1%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL06	30-Oct-19	GBQ10-04=		406064	6470400	5.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL03	30-Oct-19	GBQ12-01=		405830	6468233	5.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ13	30-Oct-19	GBQ12-01=		406795	6469882	15.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ12	30-Oct-19	GBQ12-01		406273	6469675	20.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL10	30-Oct-19	GBQ12-01=		406261	6469667	20.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL13	30-Oct-19	GBQ12-01=		406880	6469693	20.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ11	30-Oct-19	GBQ12-01=		406228	6469797	45.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GEHREL08	30-Oct-19	GBQ10-04=		406202	6470390	60.0%
Poaceae	* <i>Ehrharta longiflora</i>	Introduced	GBQ10	30-Oct-19	GBQ10-04		406088	6470415	70.0%
Poaceae	* <i>Eragrostis curvula</i>	Introduced	GBQ17	30-Oct-19			407166	6466574	1.5%
Poaceae	* <i>Eragrostis curvula</i>	Introduced	GBQ16	30-Oct-19			406981	6467427	2.0%
Poaceae	* <i>Eragrostis curvula</i>	Introduced	GEHREL09	30-Oct-19			406953	6467549	10.0%
Poaceae	* <i>Eragrostis curvula</i>	Introduced	GEHREL15	30-Oct-19			404120	6468197	20.0%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GBQ10	30-Oct-19	GBQ10-08		406088	6470415	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GBQ13	30-Oct-19	GBQ10-08=		406795	6469882	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GEHREL05	30-Oct-19	GBQ10-08=		406039	6470377	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GEHREL06	30-Oct-19	GBQ10-08=		406064	6470400	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GEHREL08	30-Oct-19	GBQ10-08=		406202	6470390	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GEHREL13	30-Oct-19	GBQ10-08=		406880	6469693	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	GEHREL14	30-Oct-19	GBQ10-08=		406984	6469703	0.1%
Poaceae	* <i>Hordeum leporinum</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-09		406032	6469940	1
Poaceae	* <i>Hordeum leporinum</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN20-07		406254	6468427	1
Poaceae	* <i>Hyparrhenia hirta</i>	Introduced	GEHB-OPMET	30-Oct-19	MROEOP01		407178	6466500	20
Poaceae	* <i>Lagurus ovatus</i>	Introduced	GBQ13	30-Oct-19	GBQ13-01		406795	6469882	0.1%
Poaceae	* <i>Lolium multiflorum</i>	Introduced	GEHREL03	30-Oct-19	GREL03-08		405830	6468233	1.0%
Poaceae	* <i>Lolium multiflorum</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN04-02		406081	6468565	50.0%
Poaceae	* <i>Lolium perenne</i>	Introduced	GEHREL01	30-Oct-19	GREL01-02		406357	6469657	0.1%
Poaceae	* <i>Paspalum dilatatum</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN04-02B		406081	6468565	1
Poaceae	* <i>Paspalum urvillei</i>	Introduced	GEHREL01	30-Oct-19	GREL01-09		406357	6469657	0.1%
Poaceae	* <i>Pentameris airoides</i> subsp. <i>airoides</i>	Introduced	GBQ04	30-Oct-19	GBQ04-09		406556	6468170	1.0%

Poaceae	* <i>Pentameris pallida</i>	Introduced	GBQ03	30-Oct-19	GBQ03-09	406493	6468261	0.1%
Poaceae	* <i>Pentameris pallida</i>	Introduced	GEHREL07	30-Oct-19	GBQ03-09=	406535	6468275	0.1%
Poaceae	* <i>Pentameris pallida</i>	Introduced	GBQ02	30-Oct-19	GBQ02-01	406481	6468226	1.0%
Poaceae	* <i>Phalaris aquatica</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN14-01	405858	6469546	1
Poaceae	* <i>Poa annua</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN01-12	406168	6468550	1
Poaceae	* <i>Poa annua</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-04	406032	6469940	1
Poaceae	* <i>Poa annua</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN20-02	406254	6468427	1
Poaceae	* <i>Polypogon monspeliensis</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-08	406032	6469940	1
Poaceae	* <i>Rostraria cristata</i>	Introduced	GBQ04	30-Oct-19	GBQ04-13	406556	6468170	0.1%
Poaceae	* <i>Rostraria cristata</i>	Introduced	GEHREL01	30-Oct-19	GREL01-12	406357	6469657	0.1%
Poaceae	* <i>Rostraria cristata</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN04-04	406081	6468565	1
Poaceae	* <i>Rostraria cristata</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN04-05	406081	6468565	1
Poaceae	* <i>Rostraria cristata</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-07	406032	6469940	1
Poaceae	* <i>Rostraria cristata</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN20-06	406254	6468427	1
Poaceae	* <i>Setaria parviflora</i>	Introduced	GEHREL05	30-Oct-19	CF02-01=	406039	6470377	0.1%
Poaceae	* <i>Vulpia bromoides</i>	Introduced	GBQ08	30-Oct-19	GBQ08-35	406765	6468227	0.1%
Poaceae	* <i>Vulpia bromoides</i>	Introduced	GBQ15	30-Oct-19	GBQ15-17	406889	6468350	0.1%
Poaceae	* <i>Vulpia bromoides</i>	Introduced	GBQ04	30-Oct-19	GBQ04-05	406556	6468170	1.0%
Poaceae	* <i>Vulpia bromoides</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-10	406032	6469940	1
Poaceae	* <i>Vulpia muralis</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN13-01	405383	6468348	1
Primulaceae	* <i>Lysimachia arvensis</i>	Introduced	GBQ04	30-Oct-19		406556	6468170	0.1%
Primulaceae	* <i>Lysimachia arvensis</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN17-06	406032	6469940	1
Rosaceae	* <i>Rubus ulmifolius</i>	Introduced (WoNS; Declared Pest)	GEHREL05	30-Oct-19		406039	6470377	5.0%
Rosaceae	* <i>Rubus ulmifolius</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	30-Oct-19		406039	6470377	20
Rosaceae	* <i>Rubus ulmifolius</i>	Introduced (WoNS; Declared Pest)	GEHB-OPRM	30-Oct-19		406832	6469315	50
Scrophulariaceae	* <i>Dischisma arenarium</i>	Introduced	LVL1RMOP	30-Oct-19	L1MN13-02	405383	6468348	1
Solanaceae	* <i>Solanum linnaeanum</i>	Introduced (Declared Pest)	GEHB-OPRM	30-Oct-19		406168	6470061	1
Solanaceae	* <i>Solanum nigrum</i>	Introduced	GEHREL03	30-Oct-19		405830	6468233	0.1%
Tropaeolaceae	* <i>Tropaeolum majus</i>	Introduced	GEHB-OPRM	30-Oct-19		406798	6469893	50

Appendix 12

Selection PATN Inputs and Outputs



Table 1: List of taxa that were omitted or treated as other taxa for the purposes of the floristic analysis.

Taxon	Name Referred to for Analysis
<i>Acacia applanata</i>	<i>Acacia willdenowiana</i>
<i>Acacia applanata/ willdenowiana</i>	<i>Acacia willdenowiana</i>
<i>Acacia iteaphylla</i>	omitted
<i>Acacia pulchella</i> var. <i>glaberrima</i>	<i>Acacia pulchella</i>
<i>Adenanthes barbiger</i>	omitted
<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>	<i>Adenanthes cygnorum</i>
<i>Anigozanthos manglesii</i> subsp. <i>manglesii</i>	<i>Anigozanthos manglesii</i>
<i>Arundo donax</i>	omitted
<i>Asparagus asparagooides</i>	<i>Myrsiphyllum asparagooides</i>
<i>Austrostipa compressa</i>	<i>Stipa compressa</i>
<i>Austrostipa elegantissima</i>	<i>Stipa elegantissima</i>
<i>Austrostipa flavescens</i>	<i>Stipa flavescens</i>
<i>Babingtonia camphorosmae</i>	<i>Baeckea camphorosmae</i>
<i>Banksia dallanneyi</i> susp. <i>dallanneyi</i>	<i>Dryandra nivea</i>
<i>Billardiera fraseri</i>	<i>Pronaya fraseri</i>
<i>Blancoa canescens</i>	omitted
<i>Bolboschoenus caldwellii</i>	omitted
<i>Brachypodium distachyon</i>	omitted
<i>Bromus hordeaceus</i>	omitted
<i>Burchardia congesta</i>	<i>Burchardia umbellata</i>
<i>Caesia</i> sp.	omitted
<i>Caesia</i> sp. Wongan (K.F. Kenneally 8820)	<i>Caesia micrantha</i> large swamp form scps (BJK&NG 094)
<i>Caladenia flava</i> subsp. <i>flava</i>	<i>Caladenia flava</i>
<i>Caladenia</i> sp.	omitted
<i>Calectasia narragara</i>	<i>Calectasia cyanea</i>
<i>Cassytha aurea</i>	<i>Cassytha aurea</i> var. <i>hirta</i>
<i>Cassytha racemosa</i> forma <i>pilosa</i>	<i>Cassytha racemosa</i>
<i>Casuarina</i> ? <i>equisetifolia</i>	omitted
<i>Cenchrus clandestinus</i>	omitted
<i>Centrolepis inconspicua</i>	<i>Centrolepis aristata</i>
<i>Centrolepis</i> sp.	omitted
<i>Chaetospora curvifolia</i>	<i>Schoenus curvifolius</i>
<i>Chenopodium album</i>	<i>Chenopodium macrospermum</i>
<i>Chordifex sinuosus</i>	<i>Restio sinosus</i> scps ms
<i>Conospermum acerosum</i> subsp. <i>acerosum</i>	<i>Conospermum acerosum</i>
<i>Conospermum undulatum</i>	omitted
<i>Conostylis setigera</i> subsp. <i>setigera</i>	<i>Conostylis setigera</i>
<i>Conostylis</i> sp.	omitted
<i>Corymbia calophylla</i>	<i>Eucalyptus calophylla</i>
<i>Corynotheca micrantha</i> var. <i>elongata</i>	<i>Corynotheca micrantha</i>
<i>Corynotheca micrantha</i> var. <i>micrantha</i>	<i>Corynotheca micrantha</i>
<i>Crassula colorata</i> var. <i>colorata</i>	<i>Crassula colorata</i>
<i>Crassula decumbens</i> var. <i>decumbens</i>	<i>Crassula decumbens</i>
<i>Cristonia biloba</i>	<i>Templetonia biloba</i>
<i>Cyanothamnus ramosus</i> subsp. <i>anethifolius</i>	<i>Boronia ramosa</i>
<i>Cynogeton huegelii</i>	<i>Triglochin procerum</i>
<i>Cyperus alterniflorus</i>	omitted
<i>Daviesia divaricata</i> subsp. <i>divaricata</i>	<i>Daviesia divaricata</i>
<i>Daviesia nudiflora</i> subsp. <i>nudiflora</i>	<i>Daviesia nudiflora</i>
<i>Daviesia</i> ? <i>preissii</i>	<i>Daviesia preissii</i>
<i>Daviesia</i> sp.	omitted
<i>Desmocladus fasciculatus</i>	<i>Loxocarya fasciculata</i>
<i>Desmocladus flexuosus</i>	<i>Loxocarya flexuosa</i>
<i>Disa bracteata</i>	<i>Monadenia bracteata</i>
<i>Drosera menziesii</i>	<i>Drosera menziesii</i> subsp. <i>menziesii</i>
<i>Drosera drummondii</i>	<i>Drosera menziesii</i> subsp. <i>penicillaris</i>
<i>Drosera micrantha</i>	omitted
<i>Drosera porrecta</i>	<i>Drosera stolonifera</i>
<i>Echium plantagineum</i>	omitted

<i>Eremaea pauciflora</i> var. <i>pauciflora</i>	<i>Eremaea pauciflora</i>
<i>Eucalyptus camaldulensis</i>	omitted
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	<i>Eucalyptus marginata</i>
<i>Eucalyptus rufa</i> subsp. <i>rufa</i>	<i>Eucalyptus rufa</i>
<i>Ficus carica</i>	omitted
<i>Gastrolobium linearifolium</i>	<i>Oxylobium lineare</i>
<i>Gladiolus cardinalis</i>	omitted
<i>Gomphocarpus fruticosus</i>	omitted
<i>Haemodorum</i> ? <i>discolor</i>	<i>Haemodorum paniculatum</i>
<i>Haemodorum</i> ? <i>laxum</i>	<i>Haemodorum laxum</i>
<i>Haemodorum</i> ? <i>spicatum</i>	<i>Haemodorum spicatum</i>
<i>Haemodorum</i> ? <i>venosum</i>	omitted
<i>Haemodorum</i> sp.	omitted
<i>Hemiandra linearis</i>	<i>Hemiandra pungens</i>
<i>Hemiandra pungens</i>	<i>Hemiandra pungens</i>
<i>Hemiphora bartlingii</i>	omitted
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	<i>Hibbertia hypericoides</i>
<i>Hibbertia hypericoides</i> subsp. <i>septentrionalis</i>	<i>Hibbertia hypericoides</i>
<i>Hibbertia striata</i>	<i>Hibbertia huegelii</i>
<i>Hovea trisperma</i> var. <i>trisperma</i>	<i>Hovea trisperma</i>
<i>Hydrocotyle ranunculoides</i>	omitted
<i>Hypochaeris radicata</i>	<i>Hypochaeris glabra</i>
<i>Hypolaena</i> ? <i>robusta</i>	omitted
<i>Hypolaena robusta</i>	omitted
<i>Isolepis cernua</i> var. <i>setiformis</i>	<i>Isolepis setiformis</i>
<i>Isolepis prolifera</i>	omitted
<i>Isolepis</i> sp.	omitted
<i>Isopogon autumnalis</i>	<i>Isopogon drumondii</i>
<i>Isotropis cuneifolia</i> subsp. <i>cuneifolia</i>	<i>Isotropis cuneifolia</i>
<i>Jacksonia floribunda</i>	<i>Jacksonia densiflora</i> / <i>floribunda</i> complex scps
<i>Johnsonia pubescens</i> subsp. <i>cygnorum</i>	<i>Johnsonia pubescens</i>
<i>Johnsonia pubescens</i> subsp. ? <i>cygnorum</i>	<i>Johnsonia pubescens</i>
<i>Johnsonia pubescens</i> subsp. ? <i>pubescens</i>	<i>Johnsonia pubescens</i>
<i>Juncus articulatus</i>	omitted
<i>Kunzea glabrescens</i>	<i>Kunzea ericifolia</i>
<i>Lambertia multiflora</i> var. <i>darlingensis</i>	<i>Lambertia multiflora</i>
<i>Laxmannia ramosa</i> subsp. <i>ramosa</i>	<i>Laxmannia ramosa</i>
<i>Laxmannia sessiliflora</i> subsp. <i>australis</i>	<i>Laxmannia sessiliflora</i>
<i>Lepidosperma apricola</i>	omitted
<i>Lepidosperma leptostachyum</i>	omitted - 08, 18, 19, 24, 29, 31, rel11
<i>Lepidosperma oldhamii/calcicola</i>	<i>Lepidosperma angustatum</i>
<i>Lepidosperma</i> sp.	omitted
<i>Lepidosperma pubisquamum</i>	<i>Lepidosperma squamatum</i>
<i>Lepidosperma</i> ? <i>pubisquamum</i>	<i>Lepidosperma squamatum</i>
<i>Lepidosperma striatum</i>	<i>Lepidosperma eastern terete</i> scps (BJK&NG 232)
<i>Leptospermum laevigatum</i>	omitted
<i>Lobelia anceps</i>	<i>Lobelia alata</i>
<i>Lomandra integra</i>	<i>Lomandra nigricans</i>
<i>Lomandra</i> sp.	omitted
<i>Lotus subbiflorus</i>	<i>Lotus suaveolens</i>
<i>Lupinus angustifolius</i>	omitted
<i>Lyginia imberbis</i>	<i>Lyginia barbata</i>
<i>Lysimachia arvensis</i>	<i>Anagallis arvensis</i>
<i>Lysinema pentapetalum</i>	<i>Lysinema ciliatum</i>
<i>Lythrum hyssopifolia</i>	omitted
<i>Medicago polymorpha</i>	omitted
<i>Melaleuca armillaris</i>	omitted
<i>Melaleuca brevifolia</i>	omitted
<i>Melaleuca nesophila</i>	omitted
<i>Melaleuca</i> sp.	omitted
<i>Melaleuca systena</i>	<i>Melaleuca acerosa</i>

<i>Melaleuca viminalis</i>	omitted
<i>Microtis media</i> subsp. <i>media</i>	<i>Microtis media</i>
<i>Monotaxis grandiflora</i> var. <i>grandiflora</i>	<i>Monotaxis grandiflora</i>
<i>Olea europaea</i>	omitted
<i>Paspalum urvillei</i>	omitted
<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	<i>Patersonia occidentalis</i>
<i>Pentameris airoides</i> subsp. <i>airoides</i>	<i>Pentaschistis airoides</i>
<i>Pentameris pallida</i>	<i>Pentaschistis thunbergii</i>
<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>	<i>Pericalymma ellipticum</i>
<i>Pericalymma ellipticum</i> var. <i>floridum</i>	<i>Pericalymma ellipticum</i>
<i>Petrophile biloba</i>	omitted
<i>Philotheeca spicata</i>	<i>Eriostemon spicatus</i>
<i>Phlebocarya filifolia</i>	<i>Phlebocarya ciliata</i>
<i>Phyllangium divergens</i>	<i>Mitrasacme paradoxa</i>
<i>Phyllangium paradoxum</i>	<i>Mitrasacme paradoxa</i>
<i>Pimelea angustifolia</i>	omitted - 18,21,22, 27, 30, rel11
<i>Pseudognaphalium luteoalbum</i>	<i>Pseudognaphalium luteo-album</i>
<i>Pterostylis</i> sp.	omitted
<i>Pterostylis</i> ? <i>vittata</i>	<i>Pterostylis vittata</i>
<i>Raphanus raphanistrum</i>	omitted
<i>Ricinus communis</i>	omitted
<i>Rostraria cristata</i>	omitted
<i>Rubus ulmifolius</i>	omitted
<i>Rytidosperma occidentale</i>	<i>Danthonia occidentalis</i>
<i>Rytidosperma pilosum</i>	<i>Danthonia pilosa</i>
<i>Rytidosperma setaceum</i>	<i>Danthonia setacea</i>
<i>Rytidosperma</i> sp.	omitted
<i>Schinus terebinthifolius</i>	omitted
<i>Schoenus caespititius</i>	omitted
<i>Schoenus efoliatus</i>	<i>Schoenus rodwayanus</i>
<i>Setaria parviflora</i>	omitted
<i>Silene gallica</i> var. <i>gallica</i>	<i>Silene gallica</i>
<i>Styphelia xerophylla</i>	<i>Astrolooma xerophyllum</i>
<i>Stylium ciliatum</i>	omitted
<i>Stylium diuroides</i> subsp. <i>diuroides</i>	<i>Stylium diuroides</i>
<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>	<i>Synaphea petiolaris</i>
<i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>	<i>Synaphea spinulosa</i>
<i>Thelymitra</i> sp.	omitted
<i>Thysanotus manglesianus</i>	<i>Thysanotus</i> sp. <i>manglesianus/patersonii</i> scps
<i>Thysanotus patersonii</i>	<i>Thysanotus</i> sp. <i>manglesianus/patersonii</i> scps
<i>Thysanotus</i> sp.	omitted
<i>Trifolium campestre</i> var. <i>campestre</i>	<i>Trifolium campestre</i>
<i>Typha domingensis</i>	omitted
<i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	<i>Ursinia anthemoides</i>
<i>Verticordia densiflora</i> var. <i>densiflora</i>	<i>Verticordia densiflora</i>
<i>Vulpia myuros</i> forma <i>myuros</i>	<i>Vulpia myuros</i>

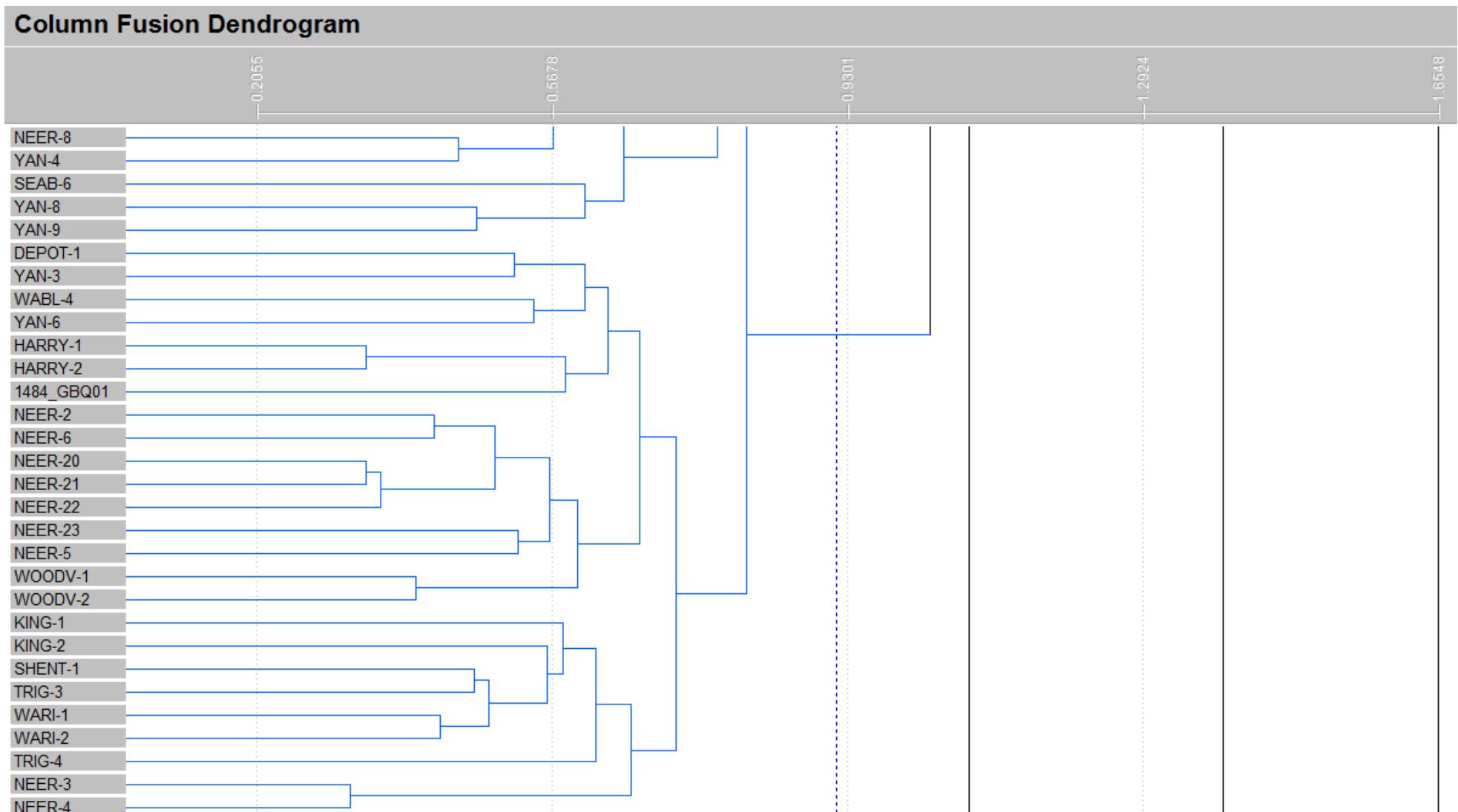


Figure 1: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ01

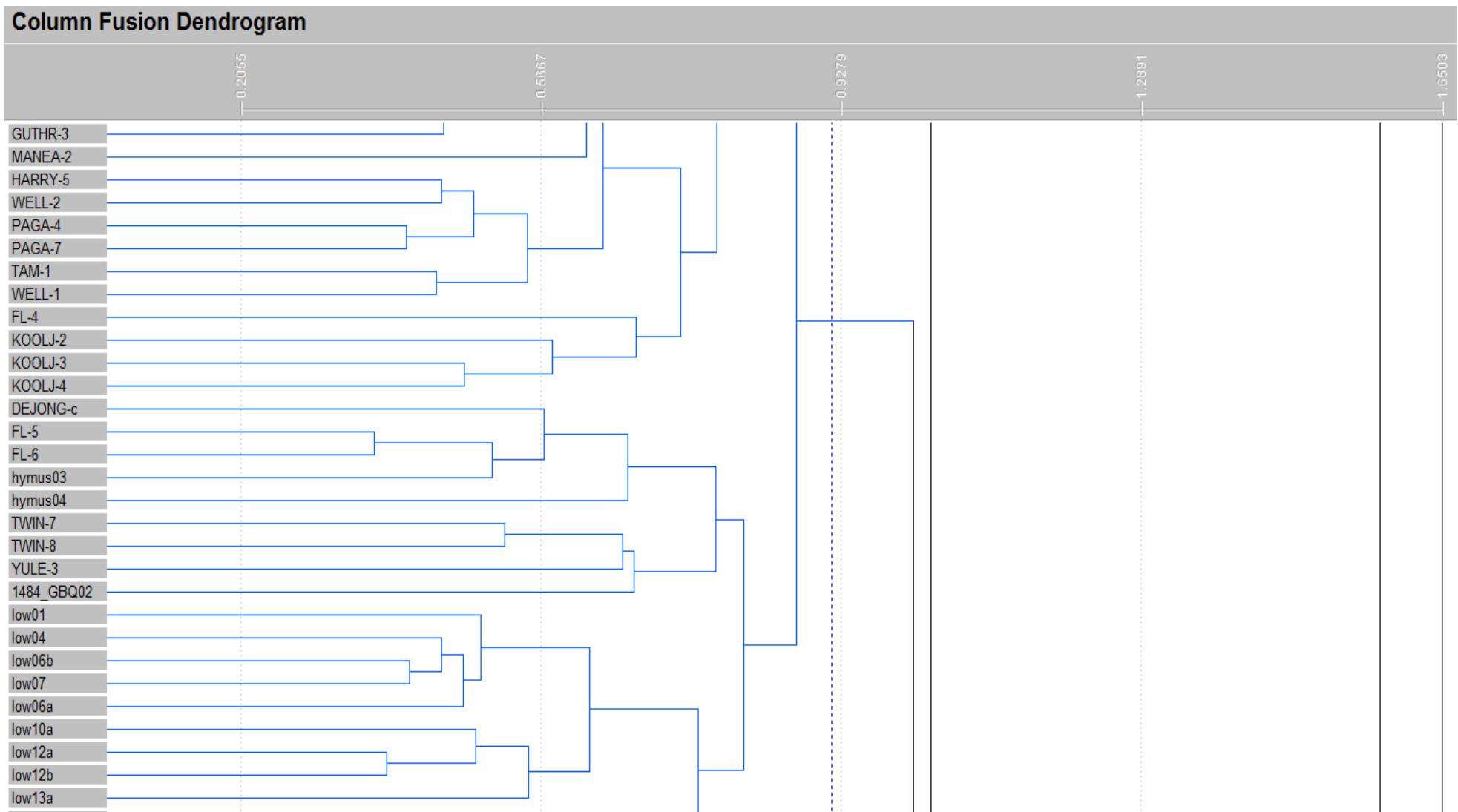


Figure 2: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ02

Column Fusion Dendrogram

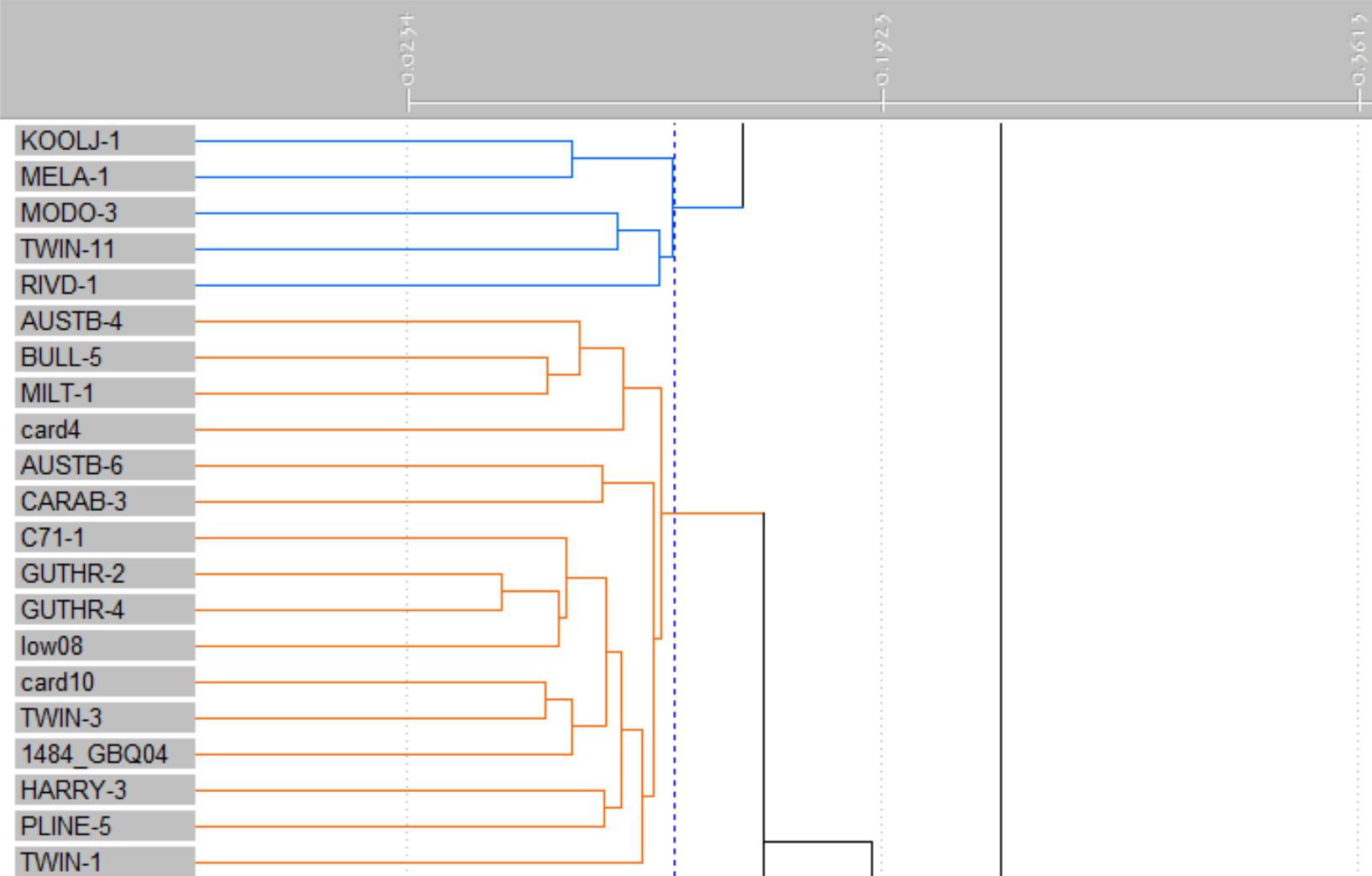


Figure 3: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ04

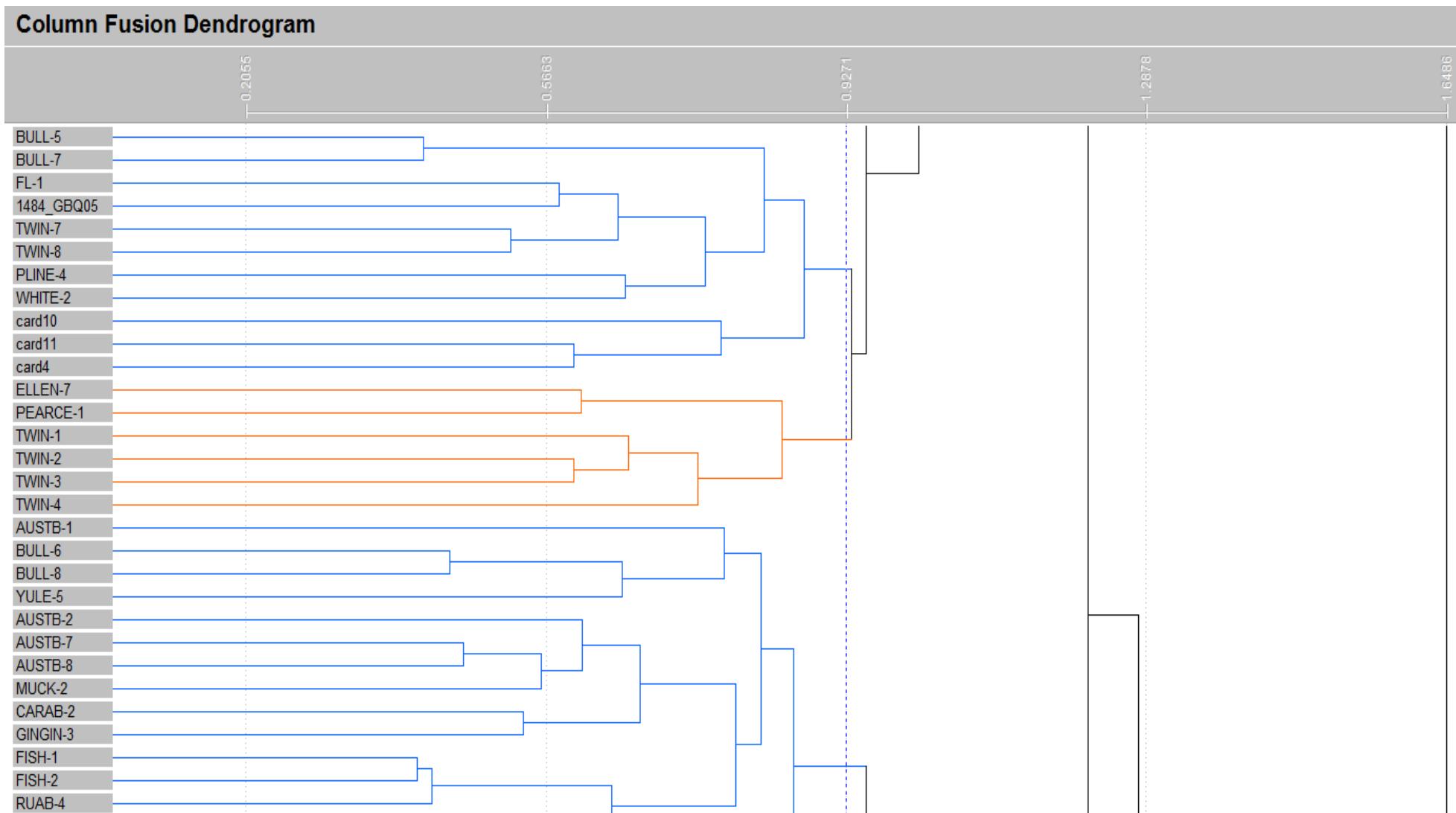


Figure 4: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ05

Column Fusion Dendrogram

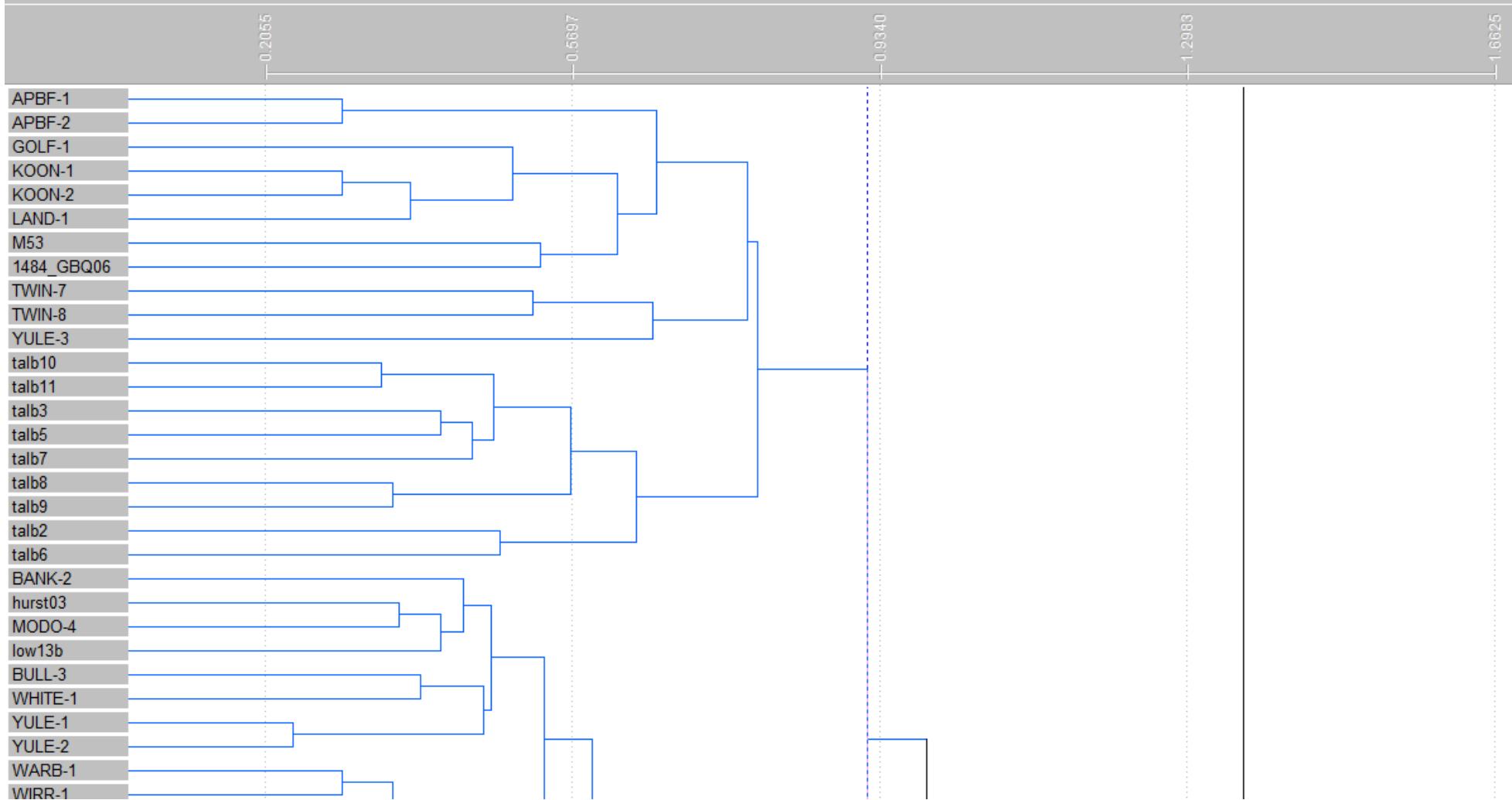


Figure 5: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ06

Column Fusion Dendrogram

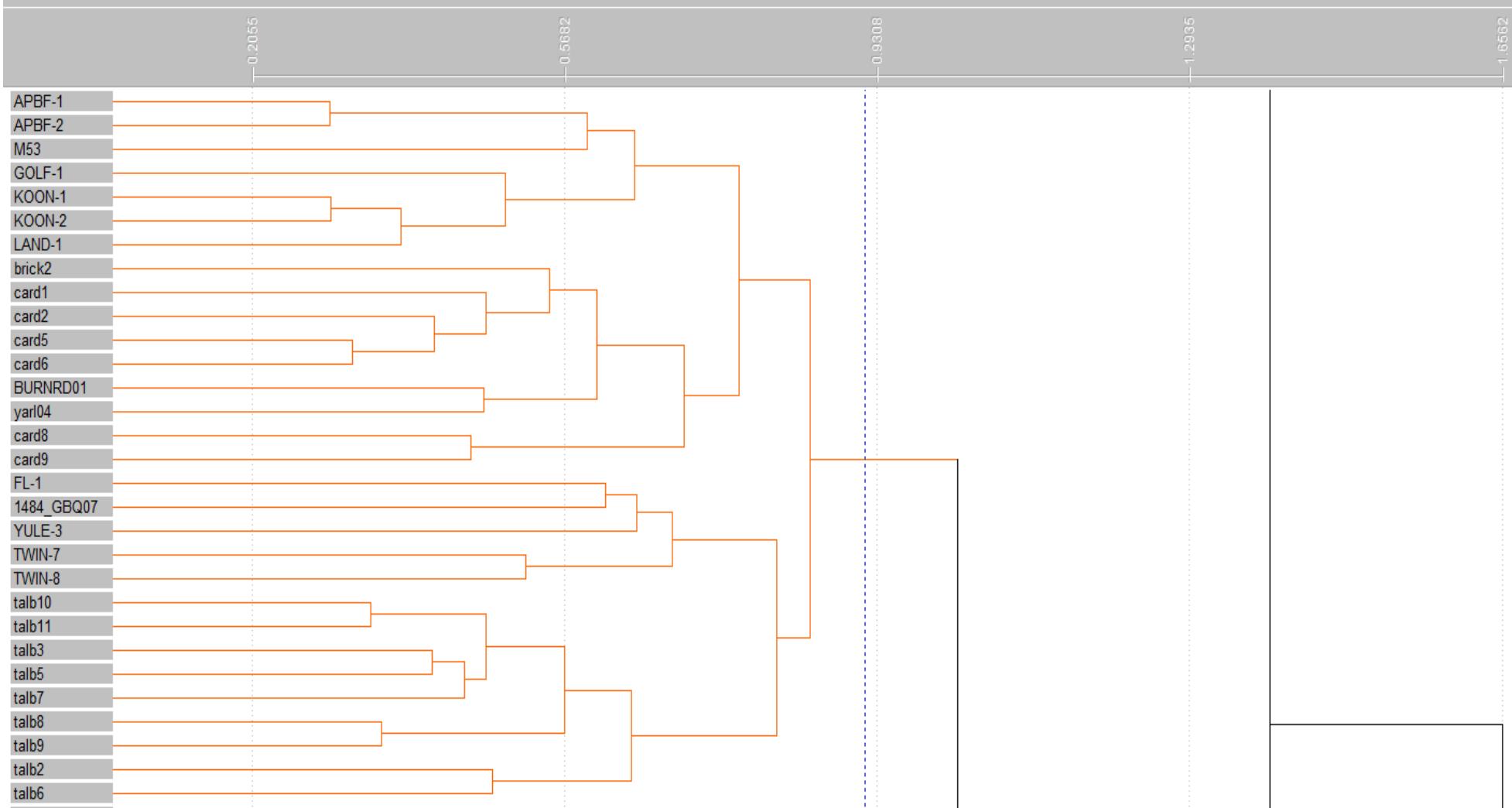


Figure 6: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ07

Column Fusion Dendrogram

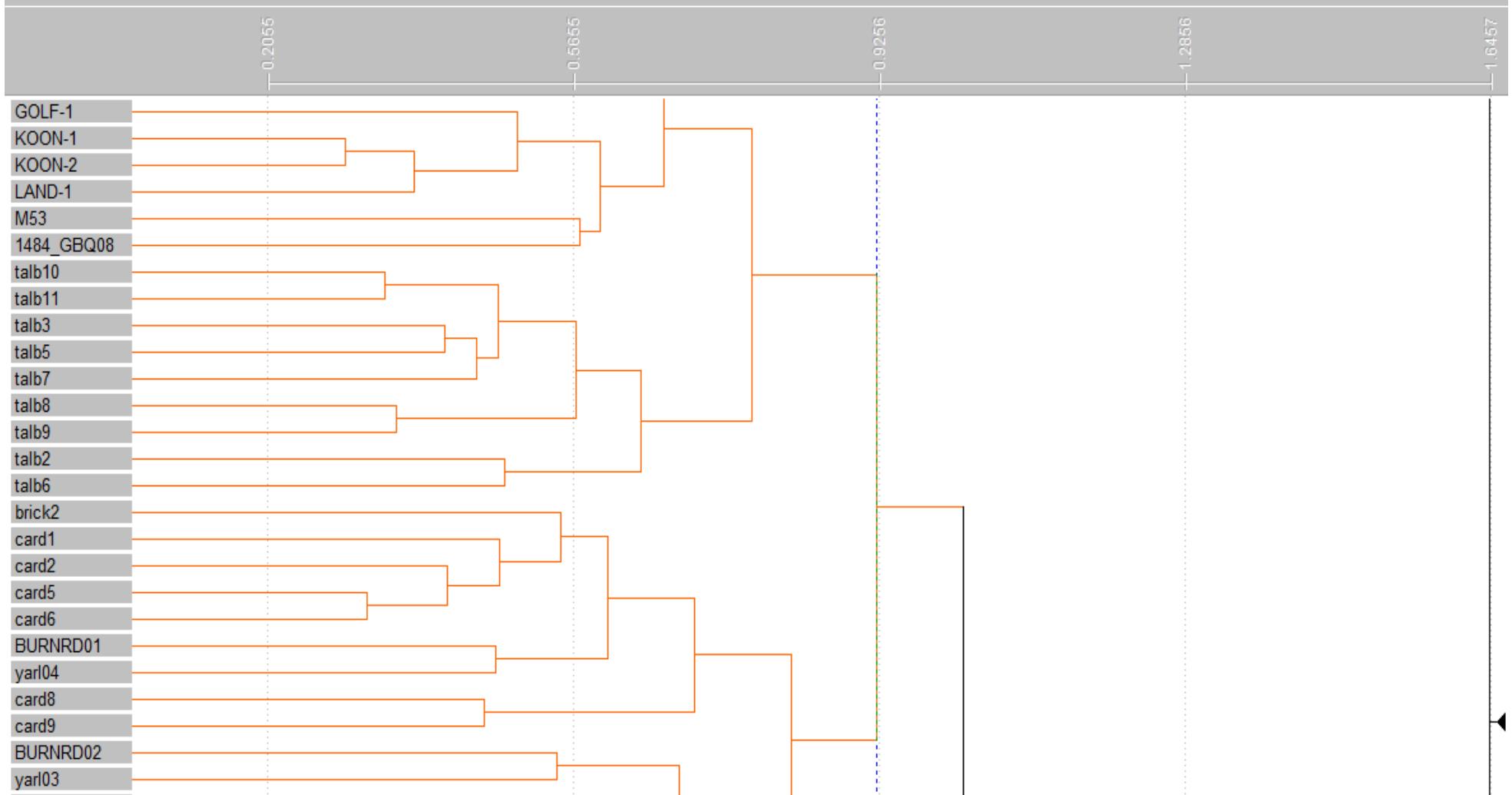


Figure 7: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ08

Column Fusion Dendrogram

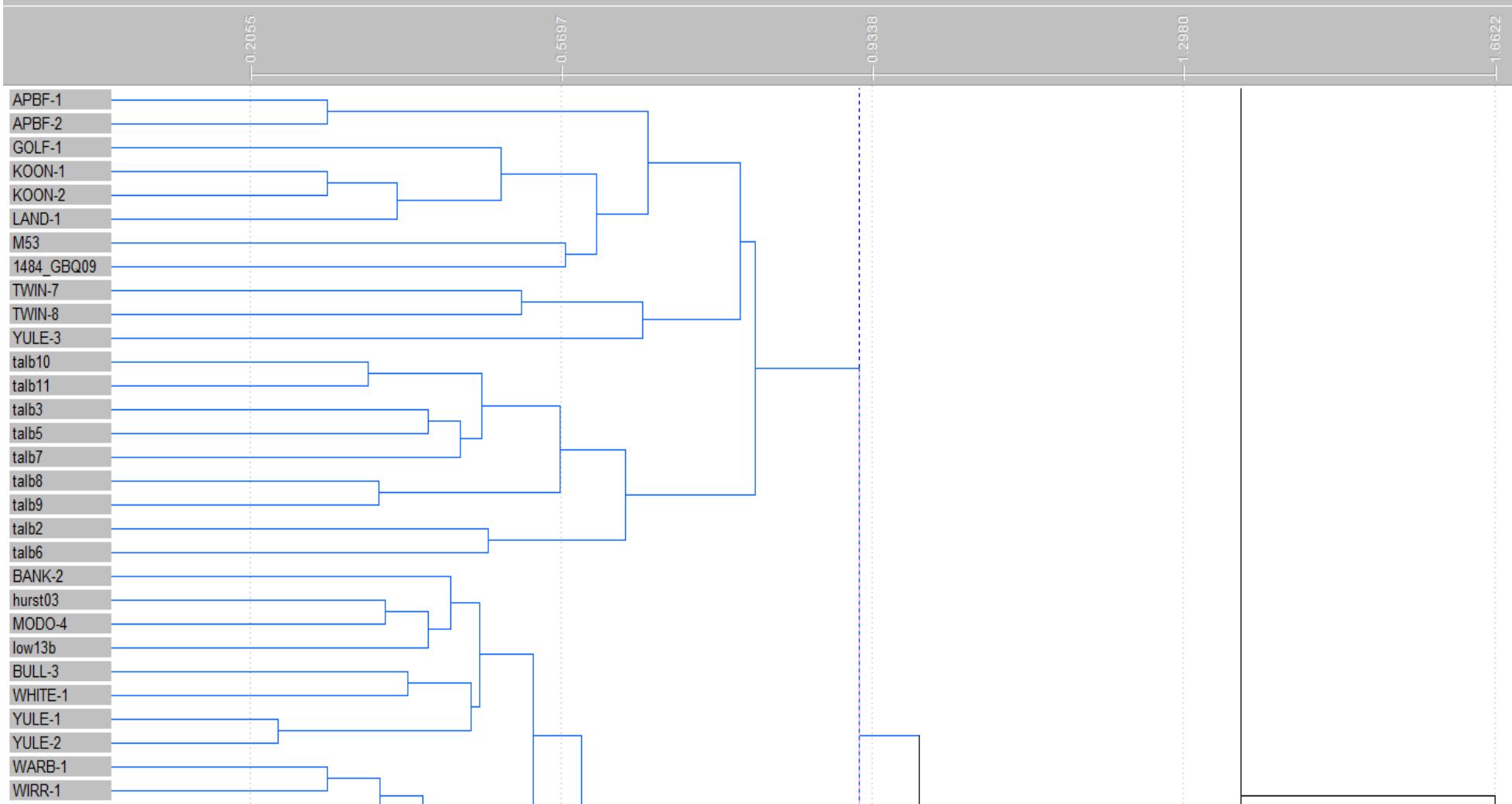


Figure 8: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ09

Column Fusion Dendrogram

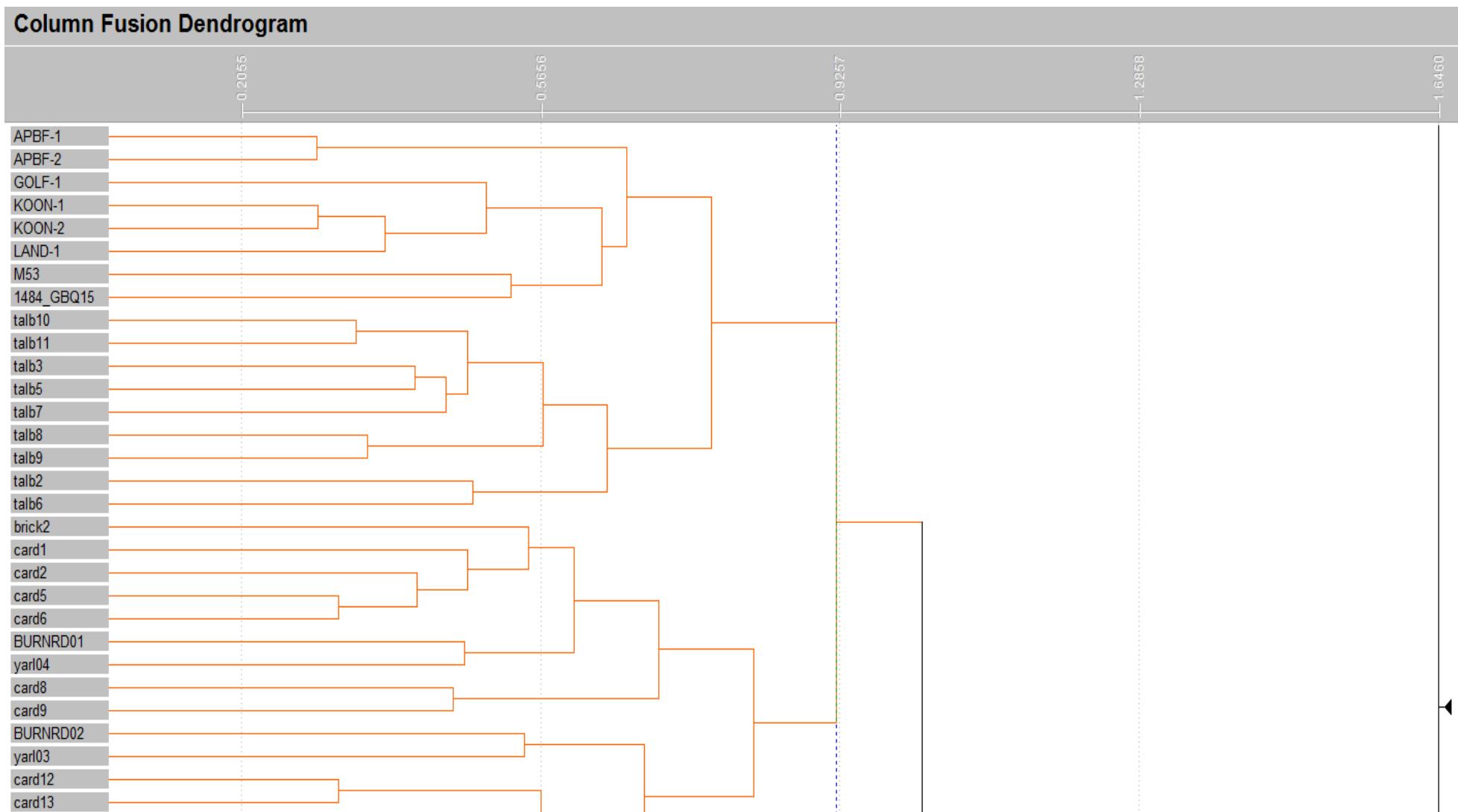


Figure 9: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ15

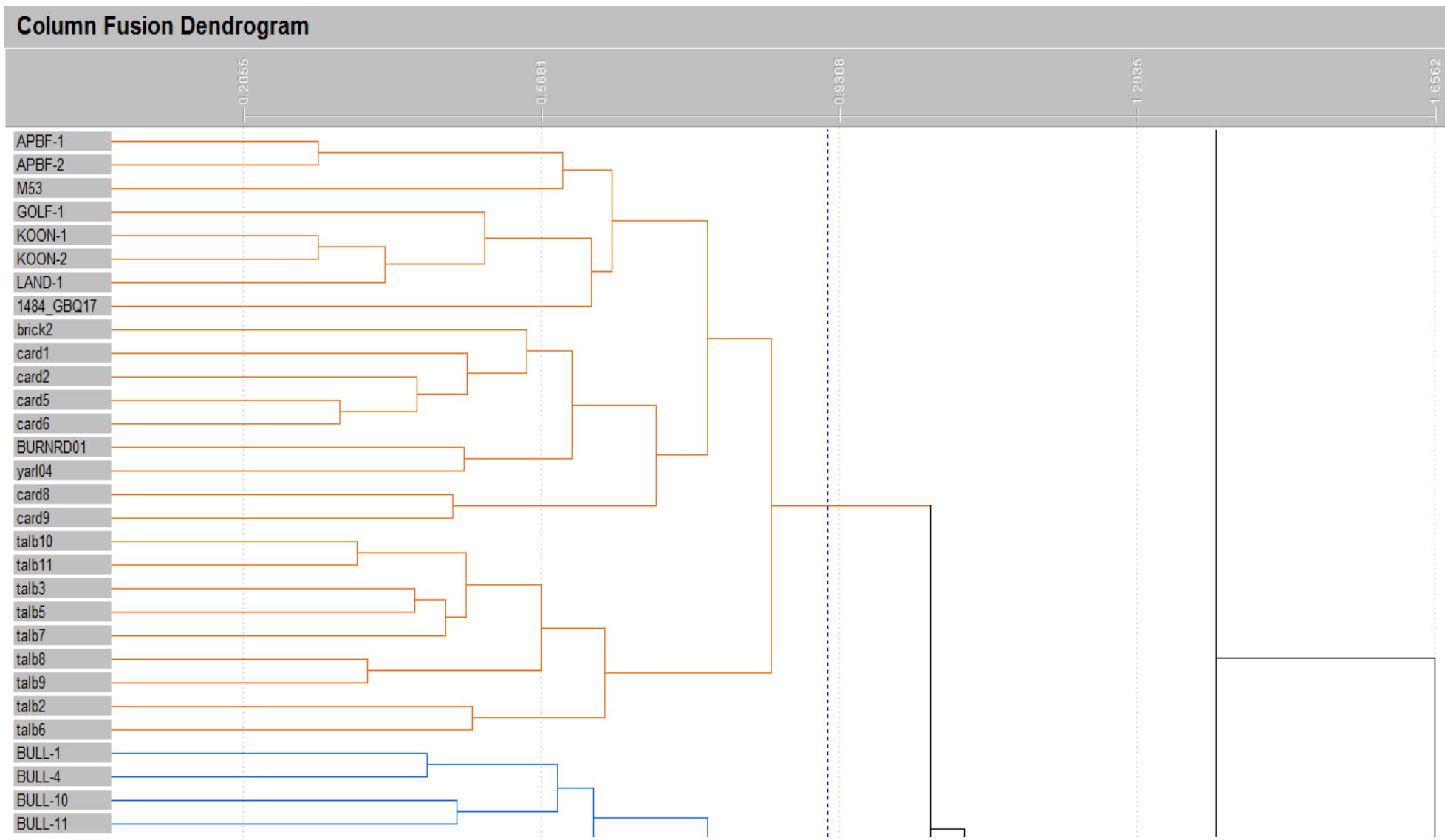


Figure 10: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ17

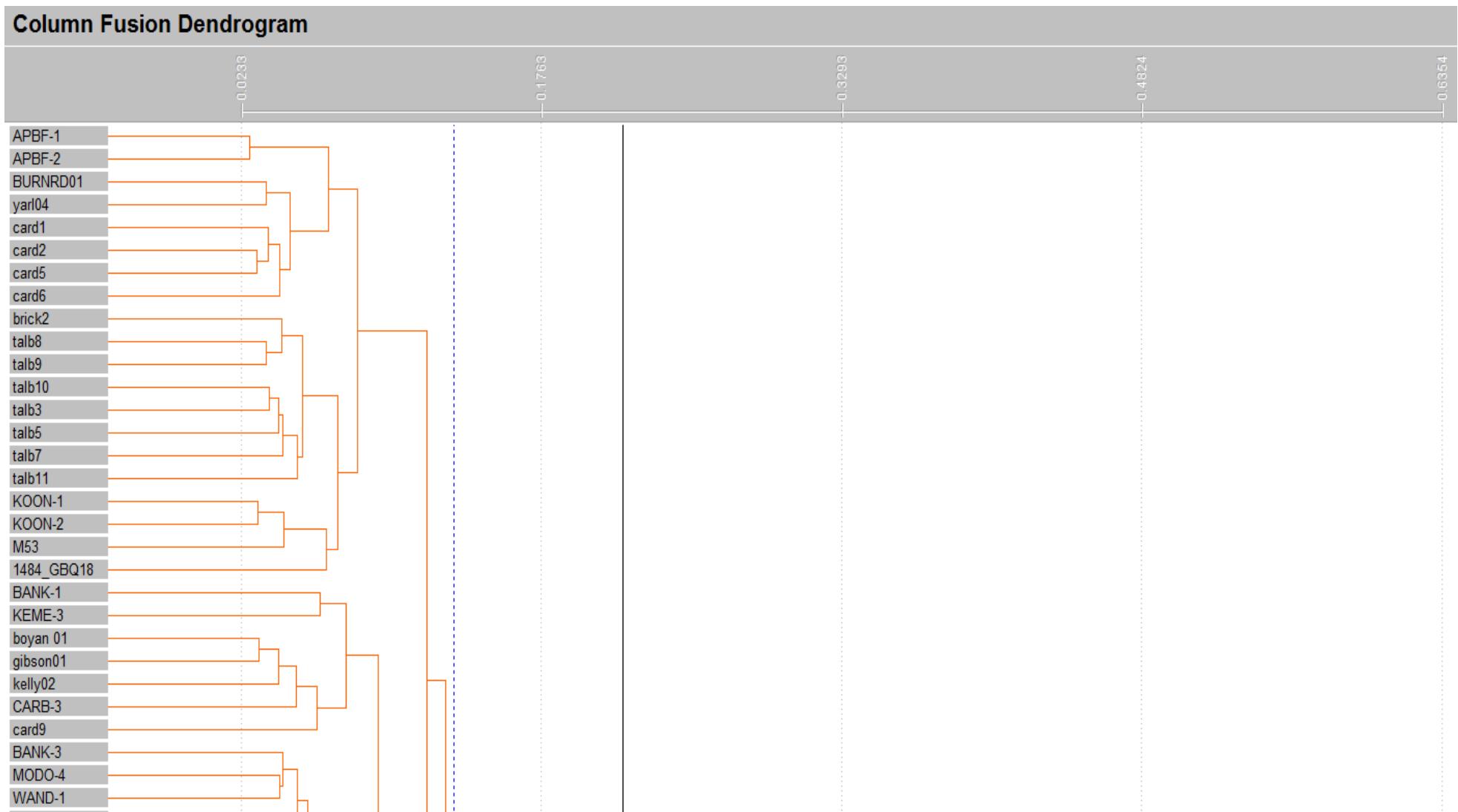


Figure 11: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ18

Column Fusion Dendrogram

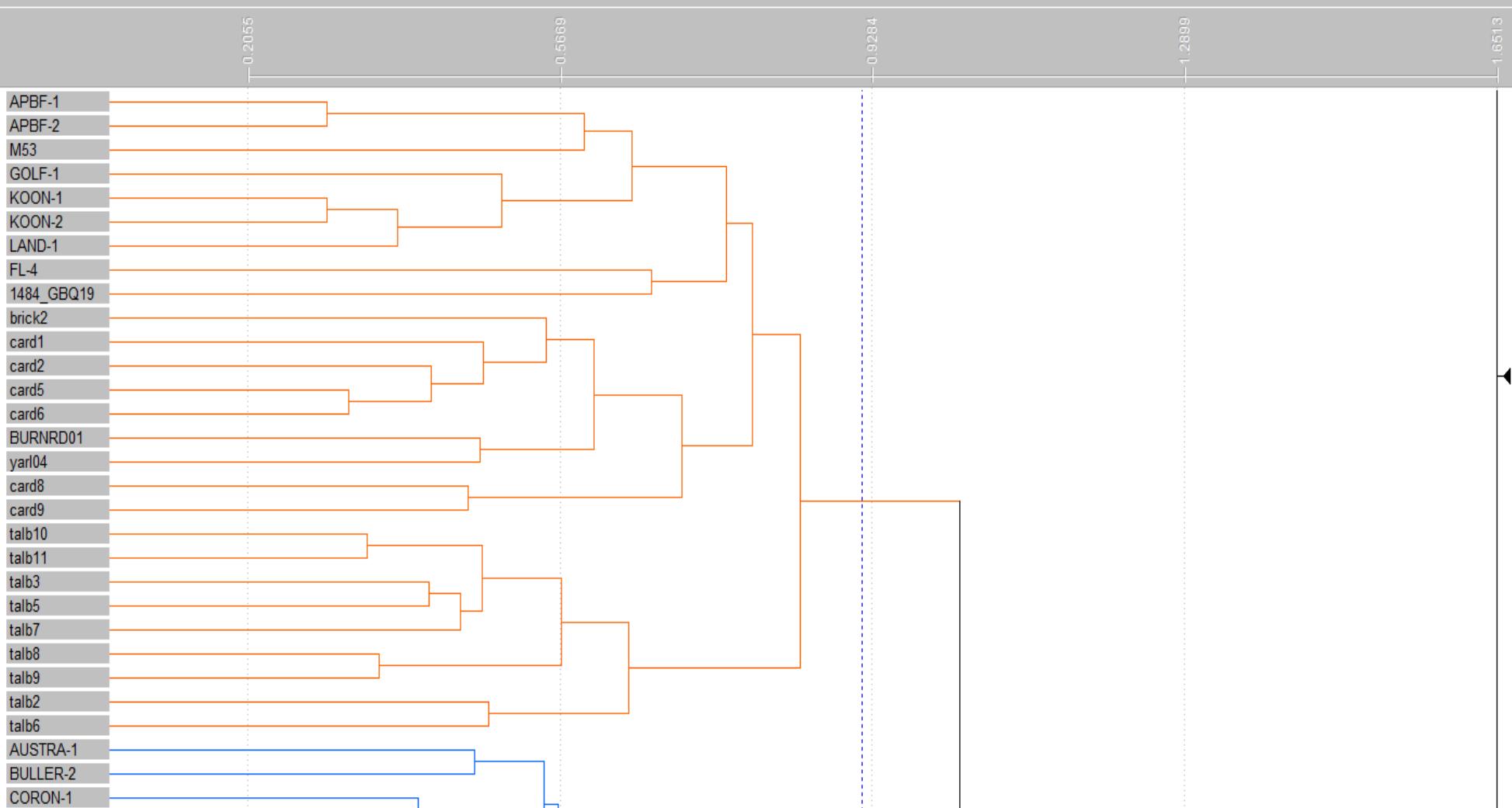


Figure 12: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ19

Column Fusion Dendrogram

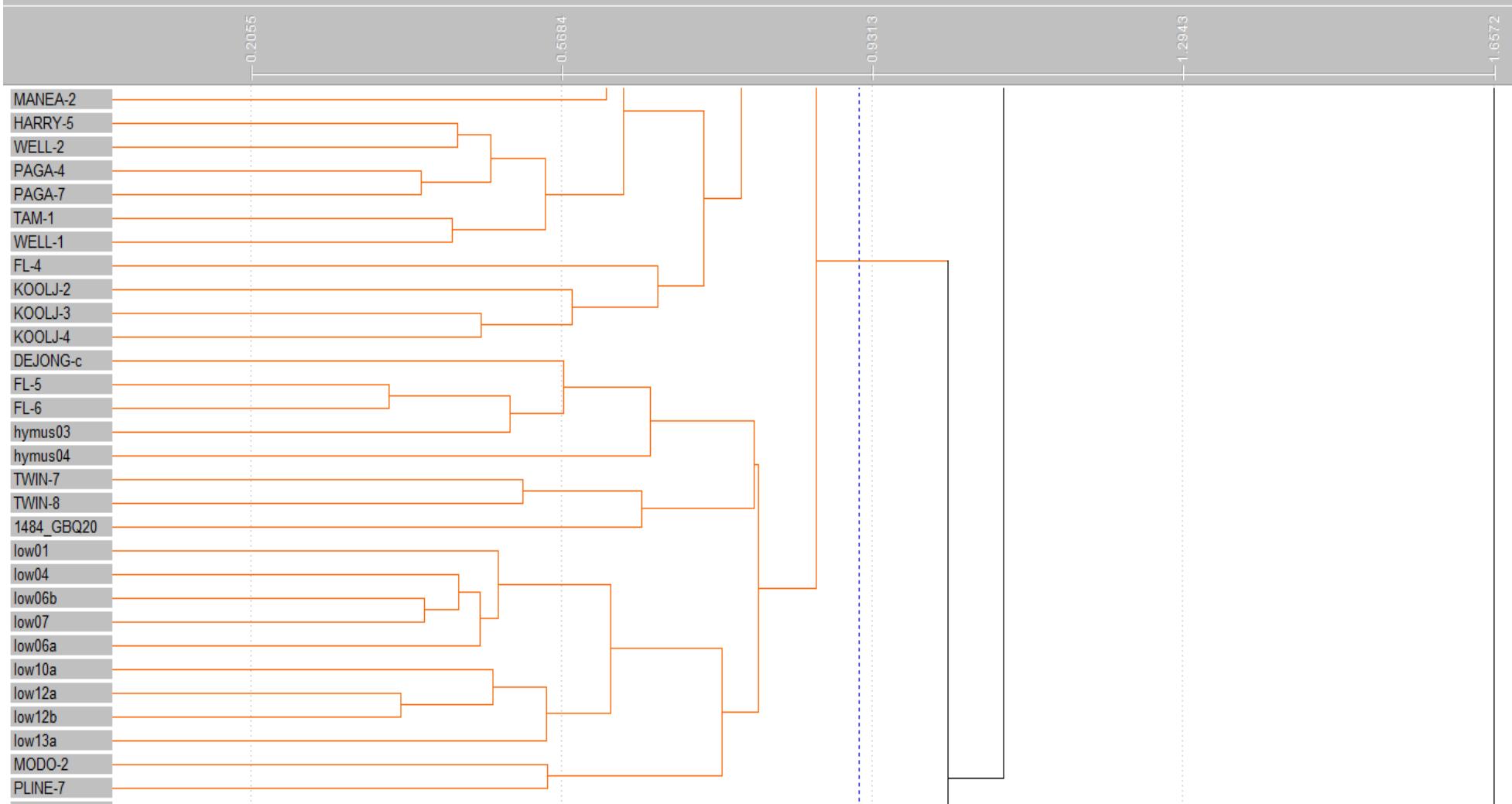


Figure 13: Dendrogram section from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ20

Column Fusion Dendrogram

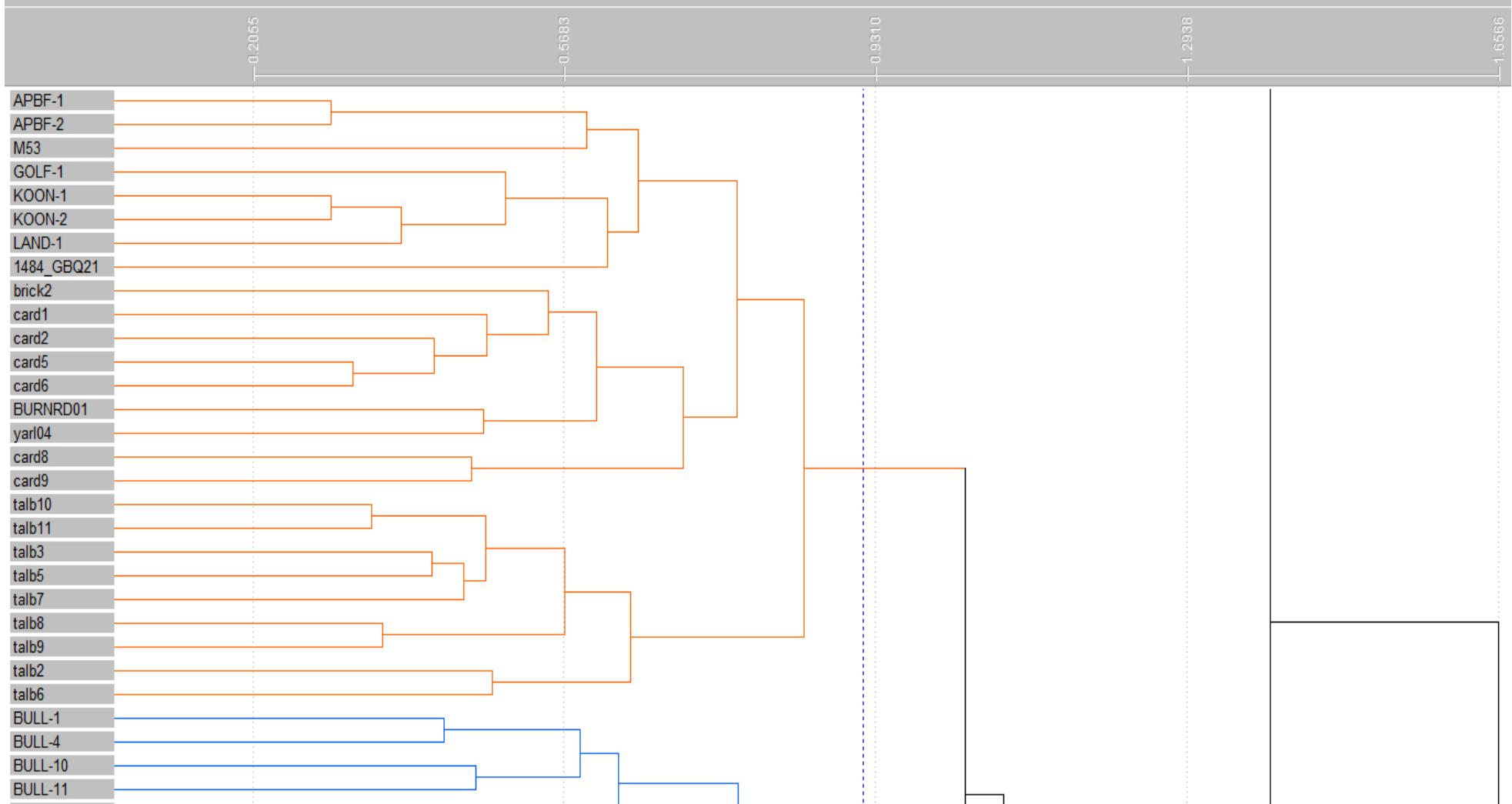


Figure 14: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ21

Column Fusion Dendrogram

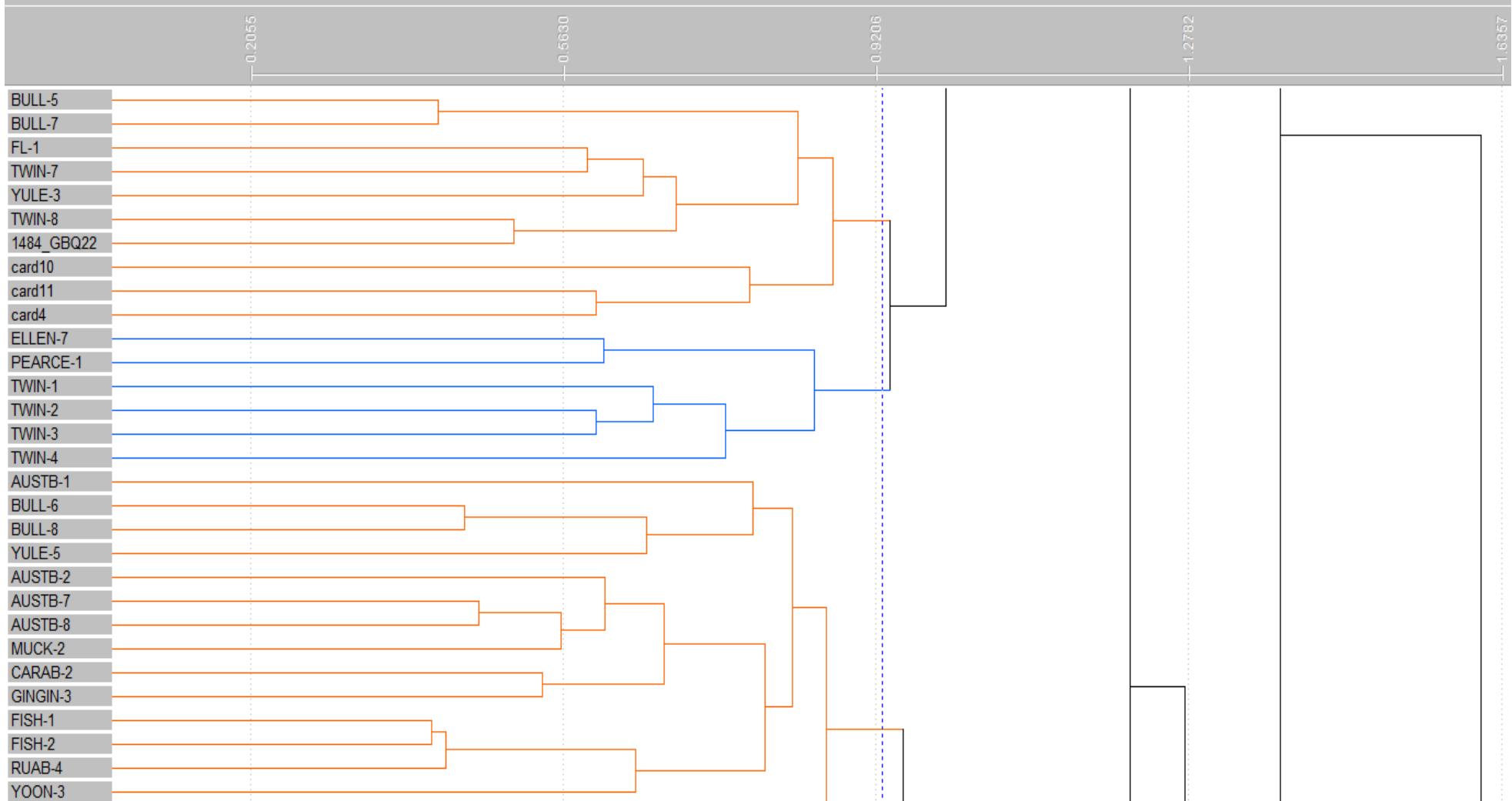


Figure 15: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ22

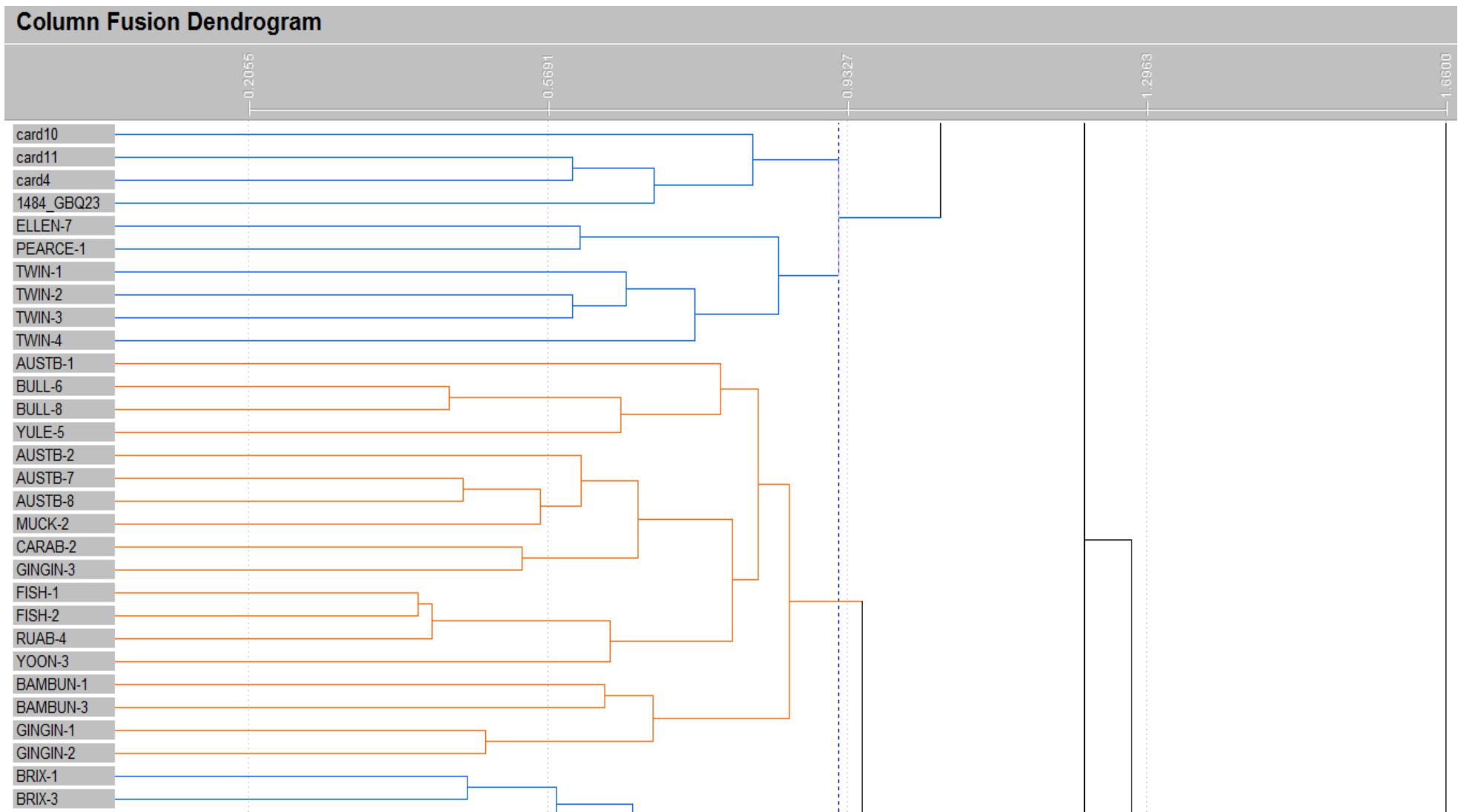


Figure 16: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ23

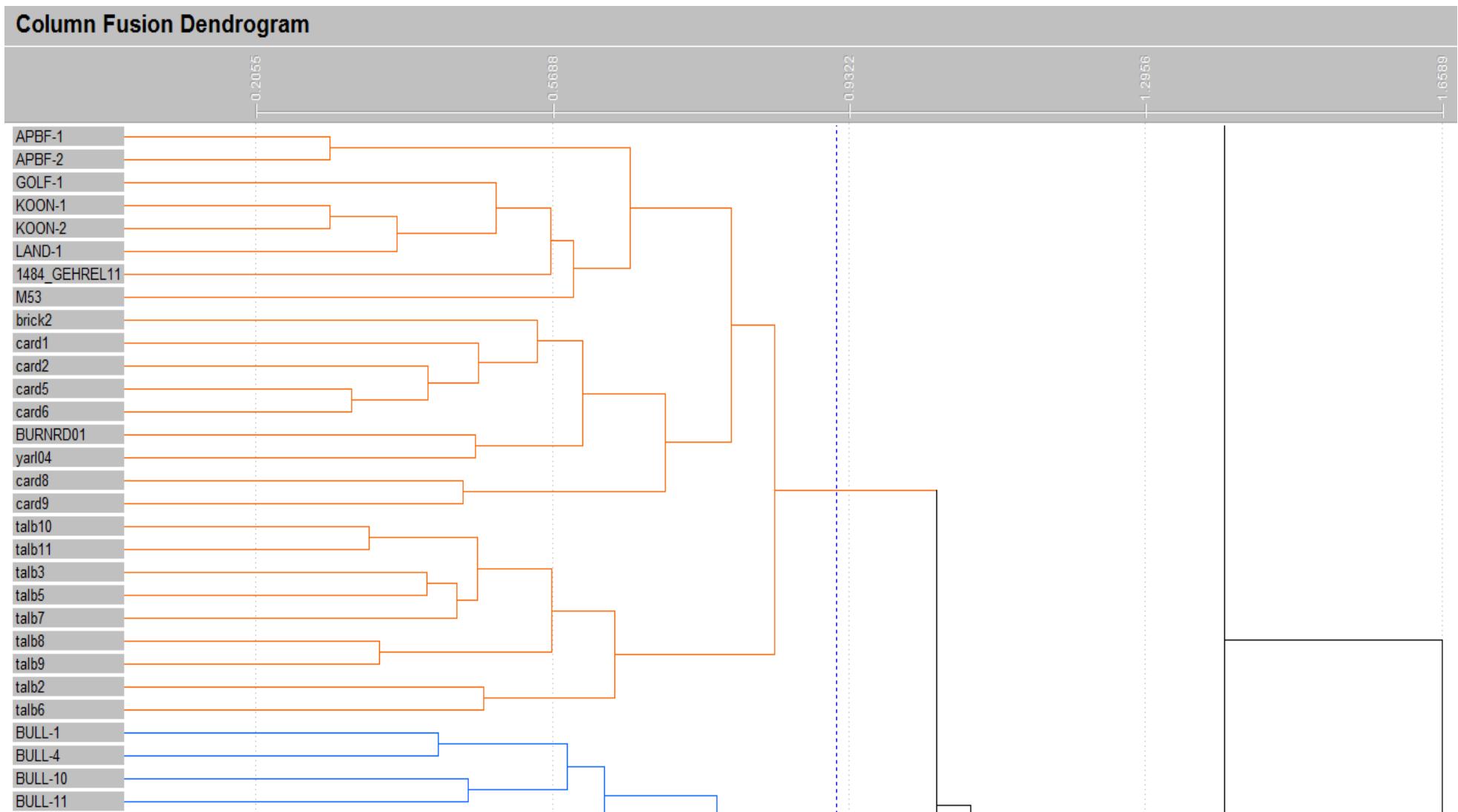


Figure 17: Dendrogram from floristic clustering analysis against the Gibson SCP data set – relevé GEHREL11

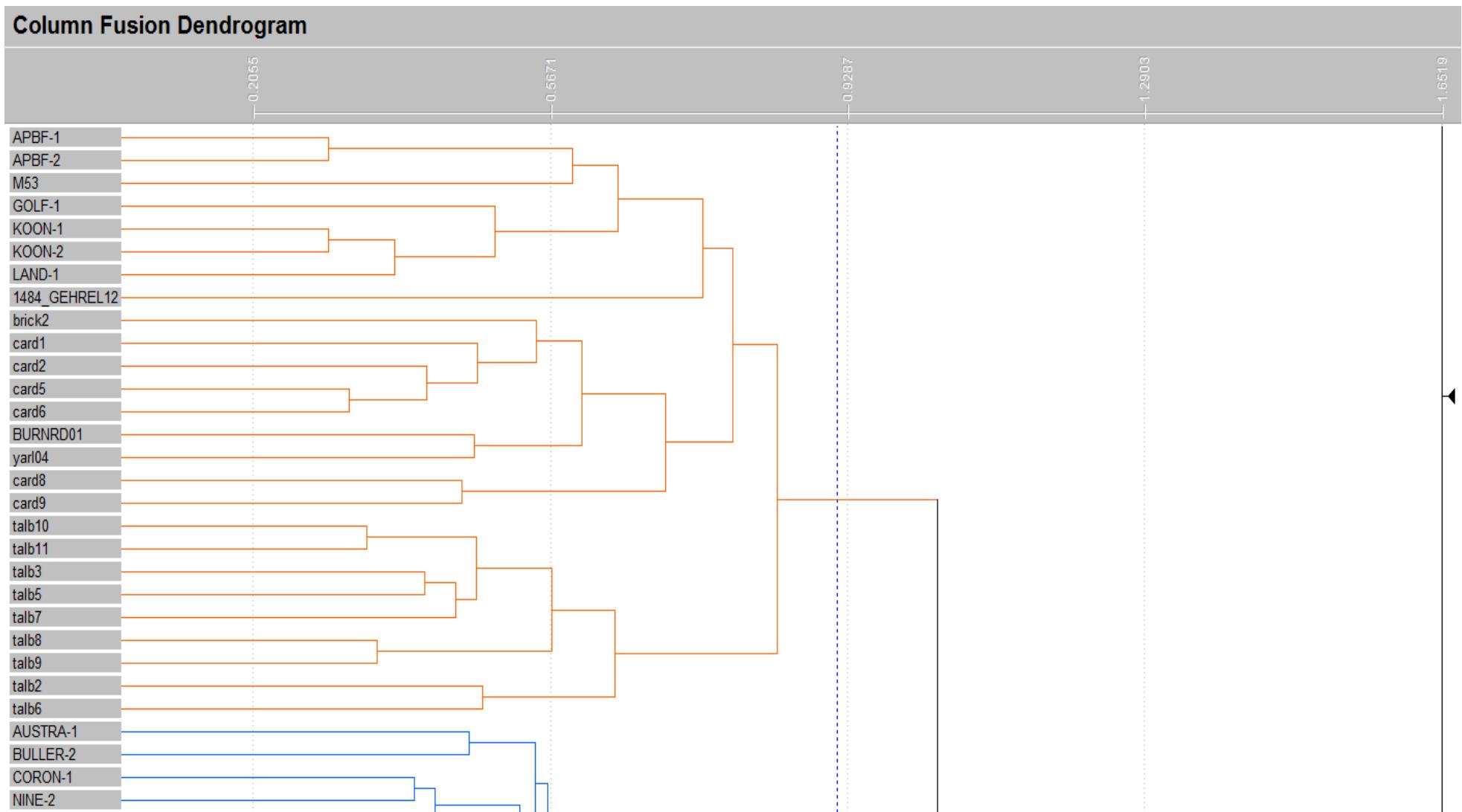


Figure 18: Dendrogram from floristic clustering analysis against the Gibson SCP data set – relevé GEHREL12

Column Fusion Dendrogram

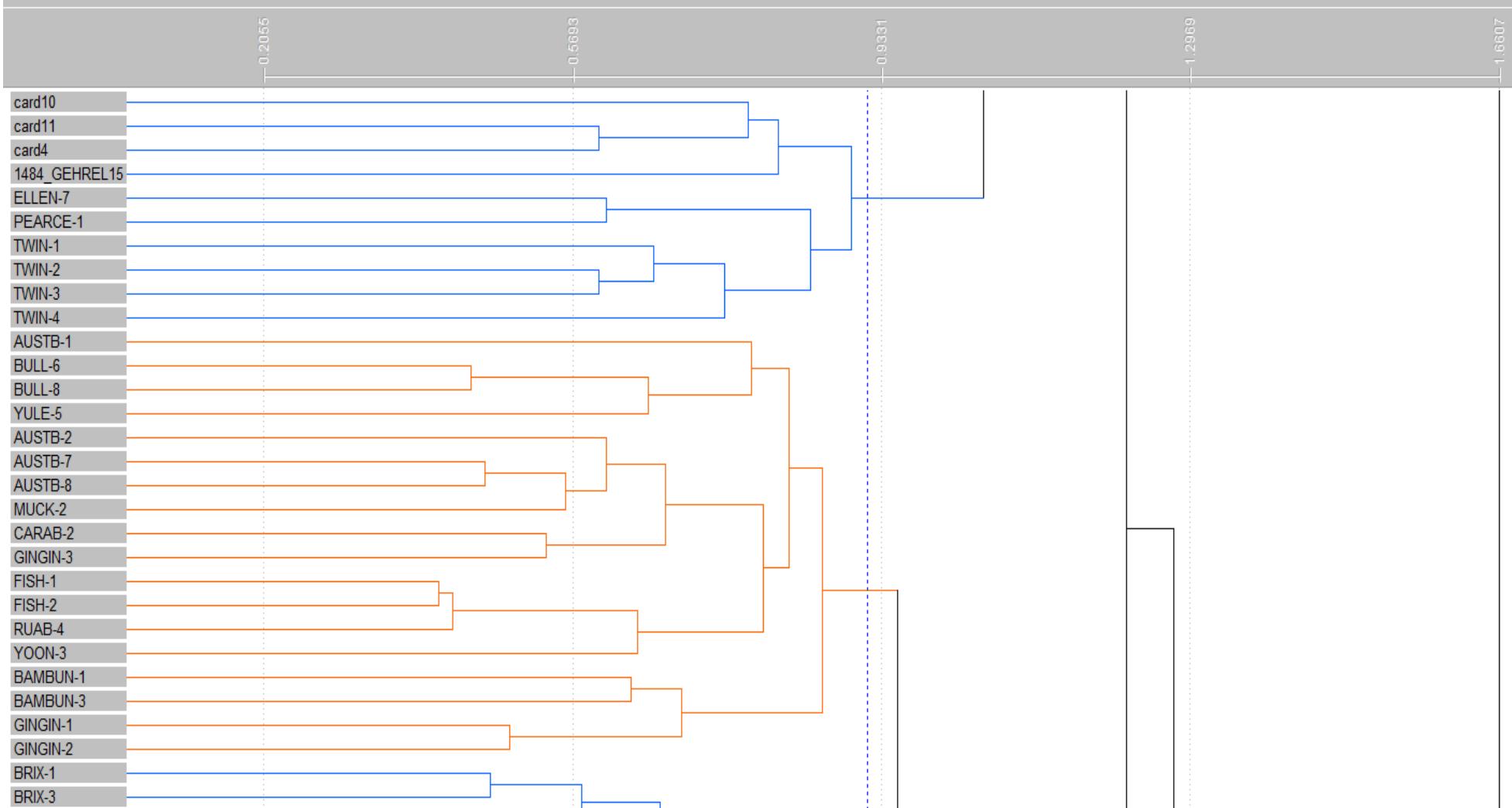


Figure 19: Dendrogram from floristic clustering analysis against the Gibson SCP data set – relevé GEHREL15

Column Fusion Dendrogram

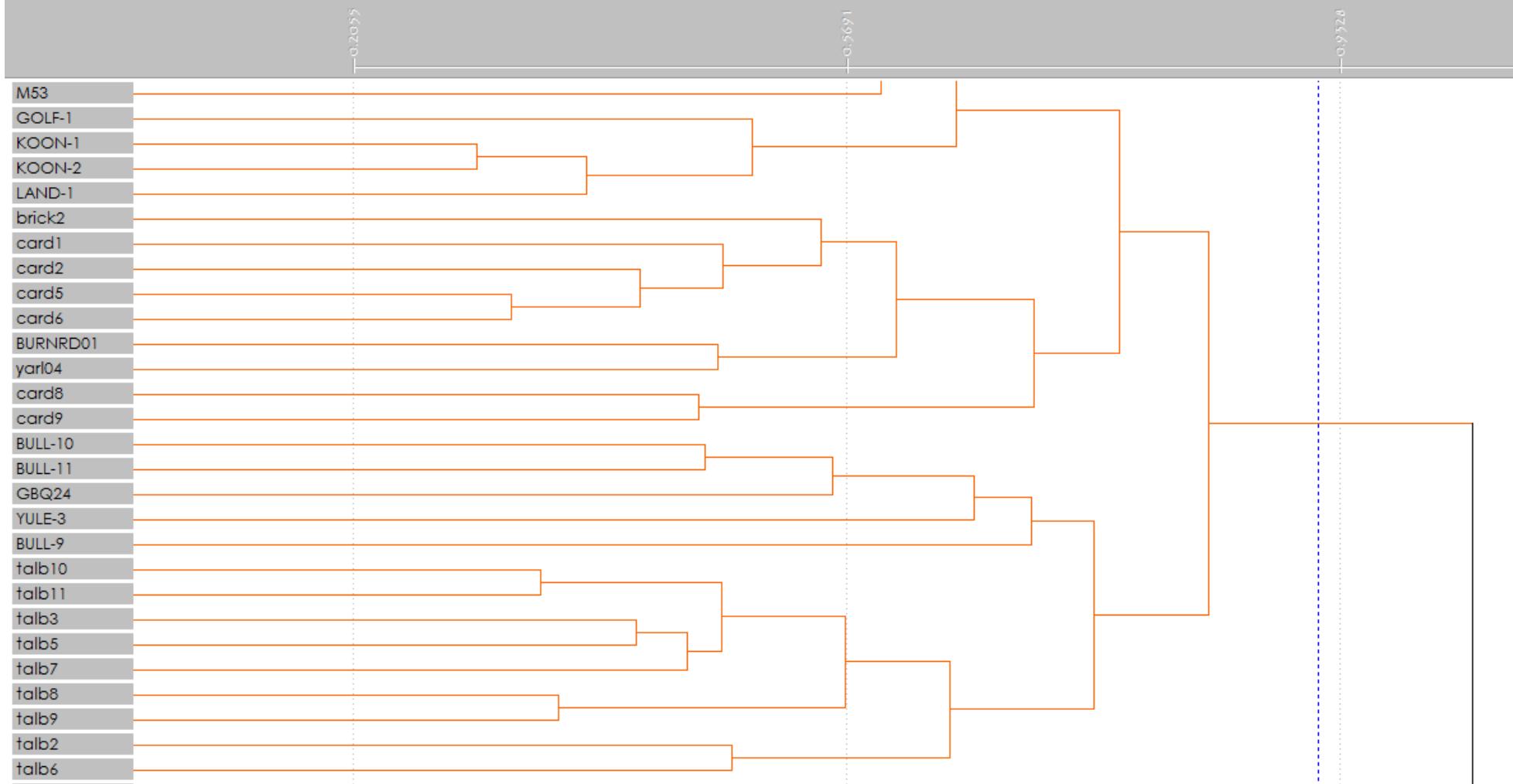


Figure 20: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ24

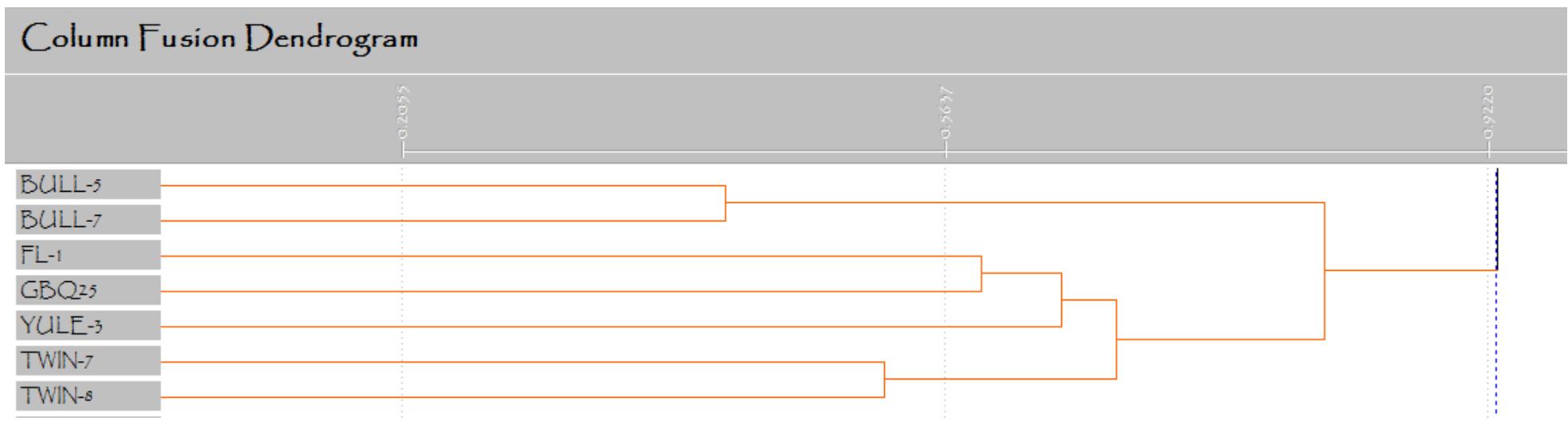


Figure 21: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ25

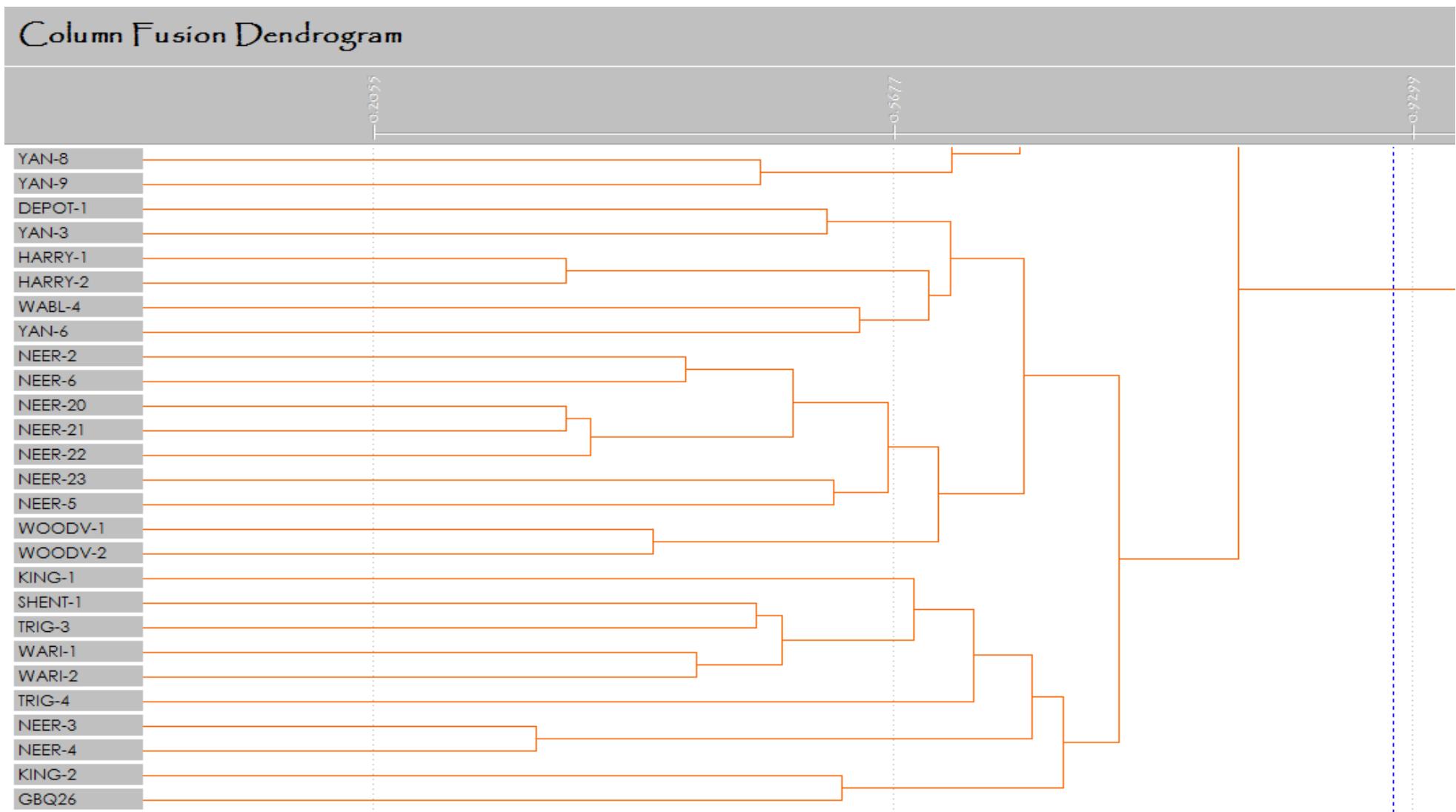


Figure 22: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ26

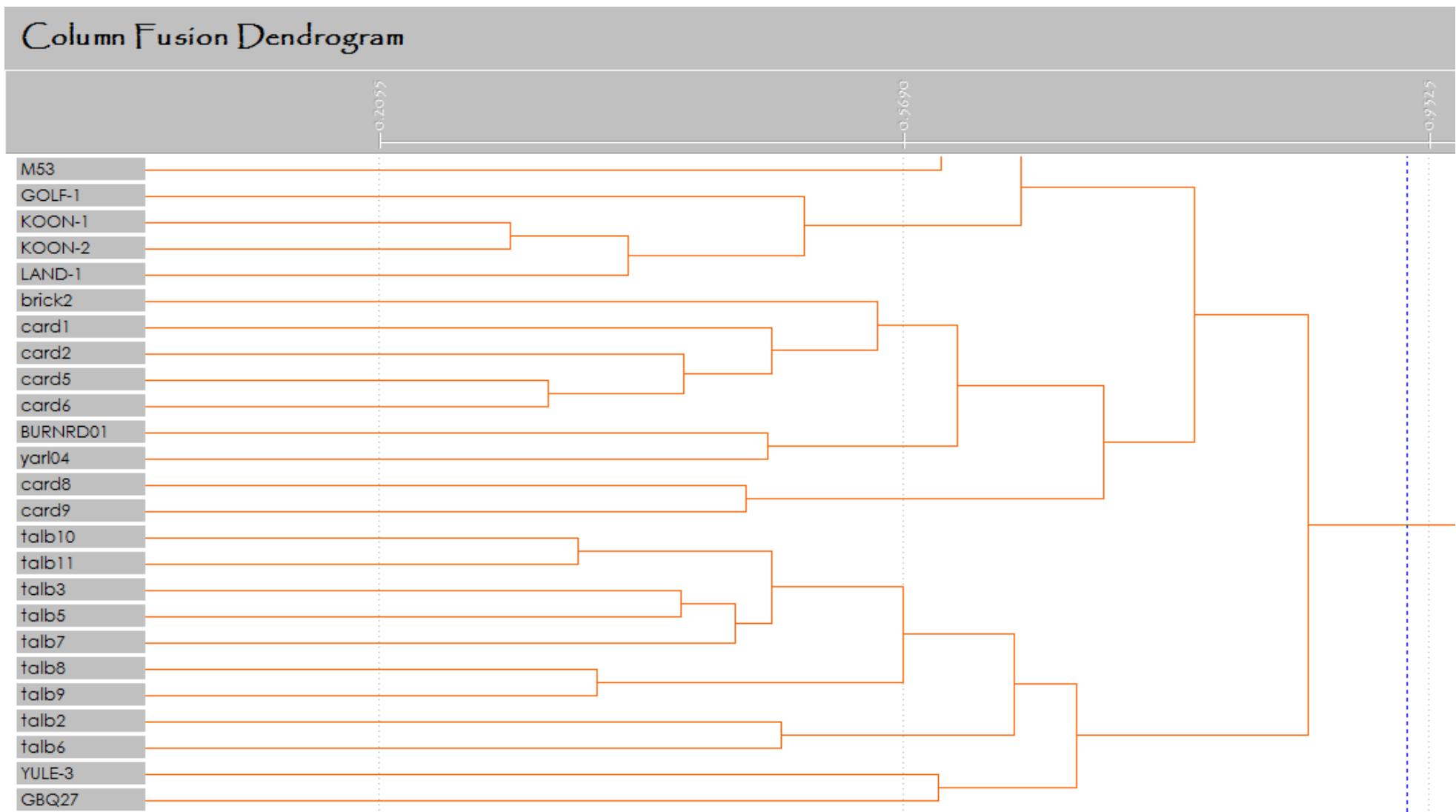


Figure 23: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ27

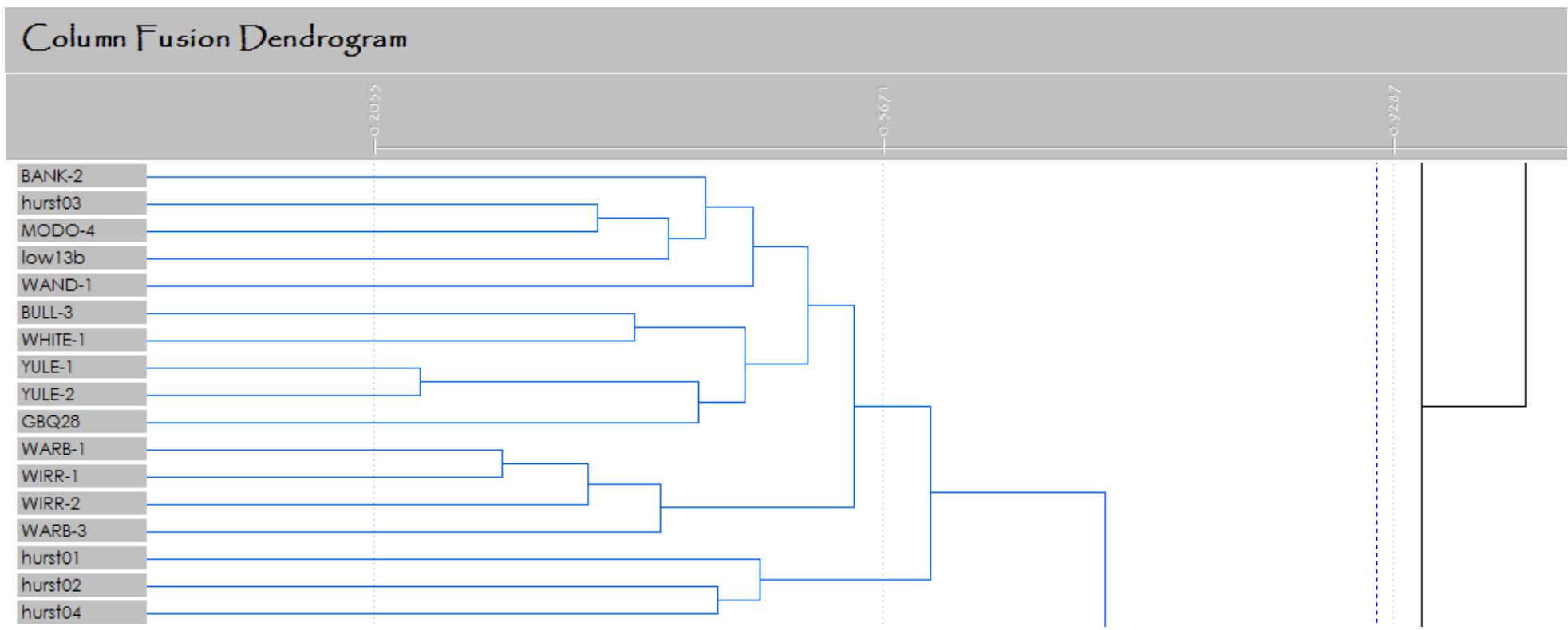


Figure 24: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ28

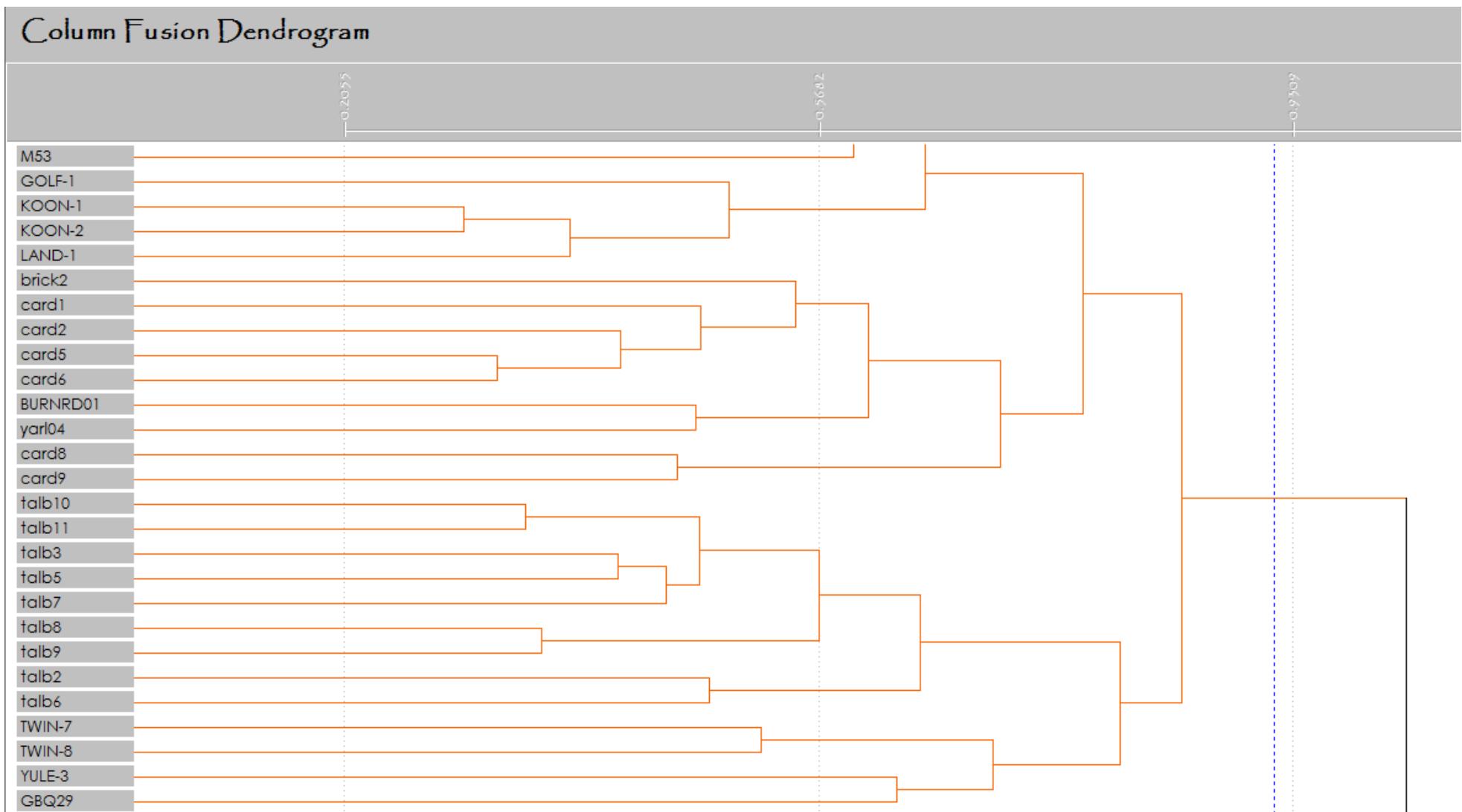


Figure 25: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ29

Column Fusion Dendrogram

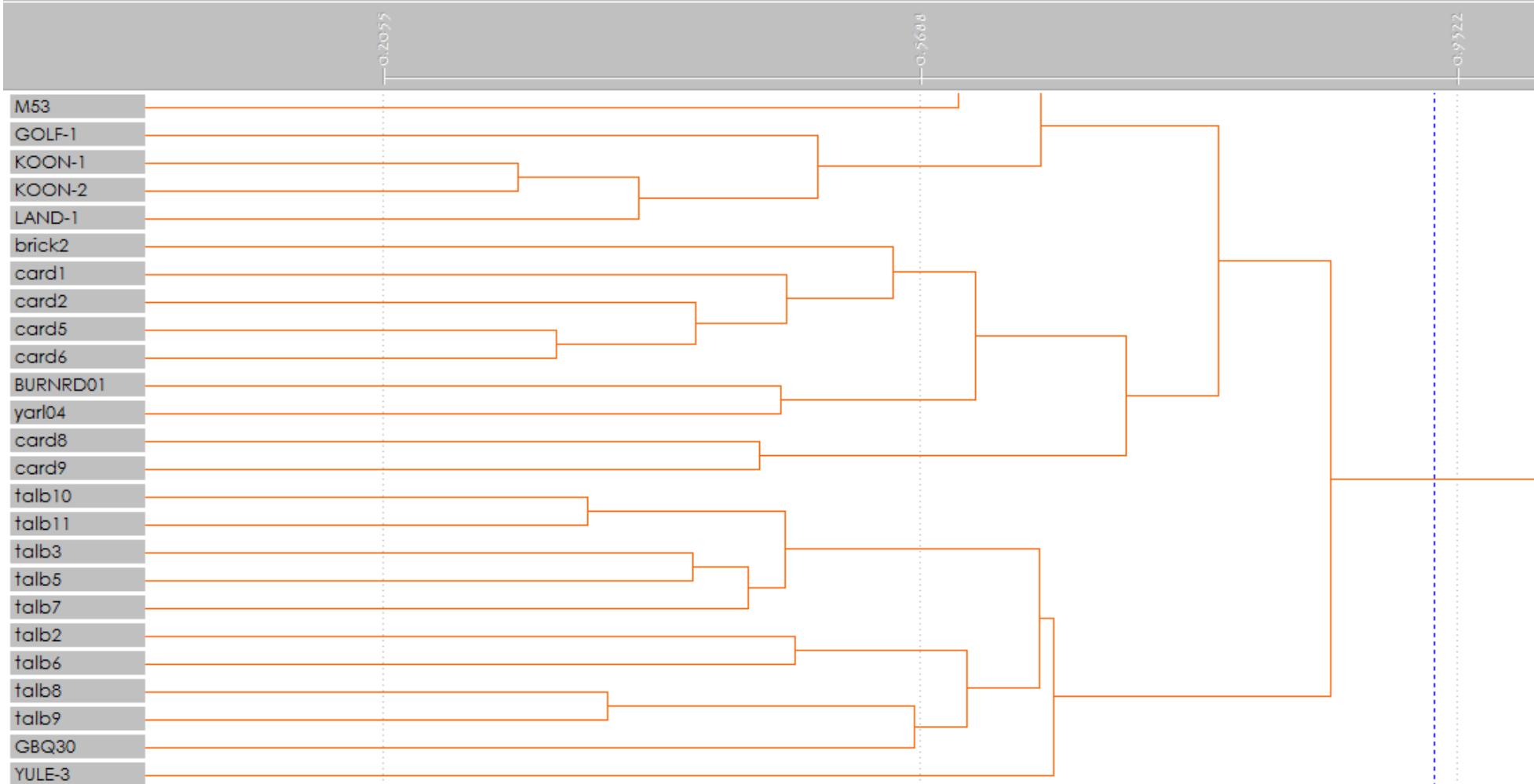


Figure 26: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ30

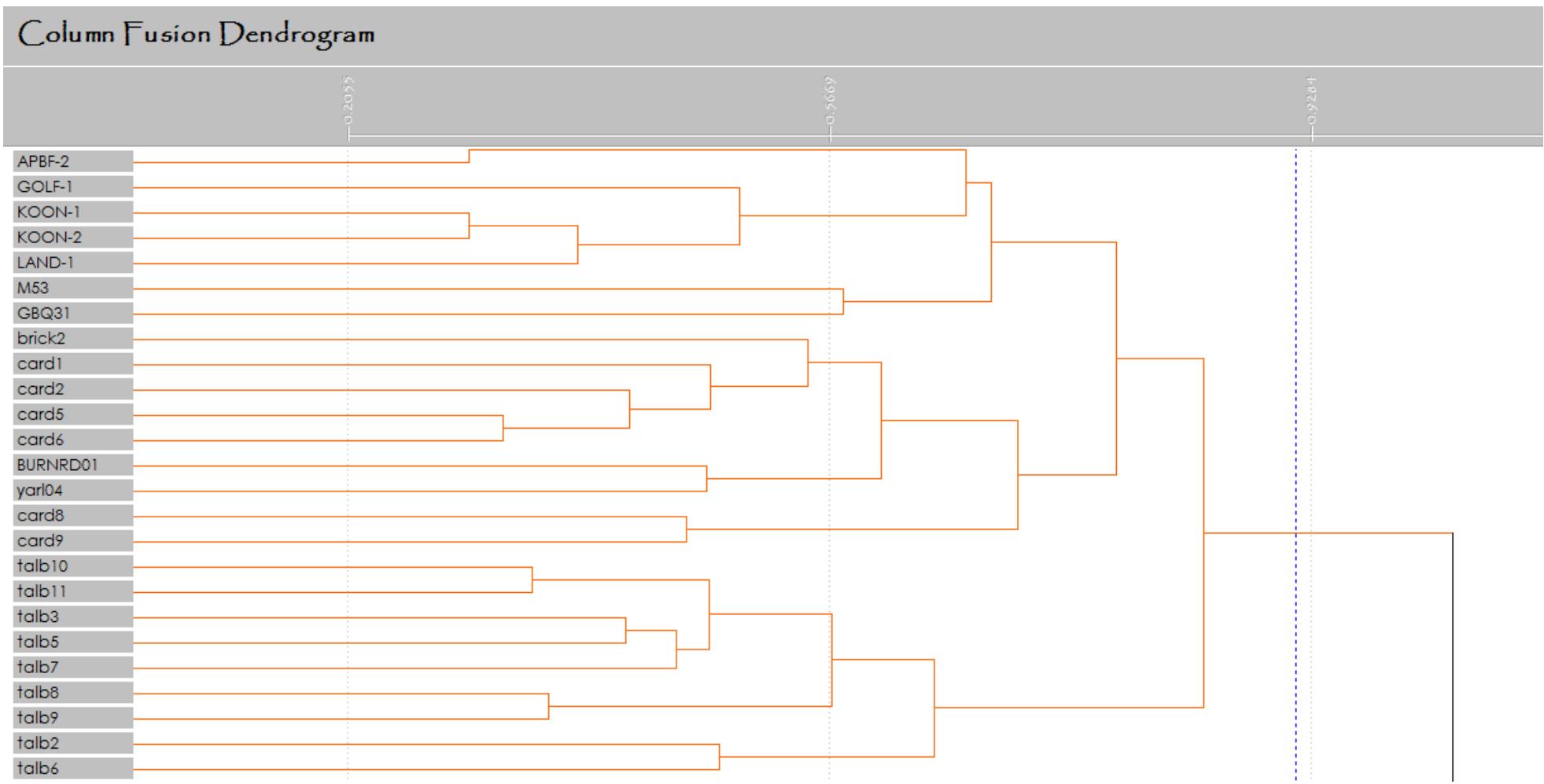


Figure 27: Dendrogram from floristic clustering analysis against the Gibson SCP data set – quadrat GBQ31

Table 2: Most similar sites to each of the quadrats subject to NNB analysis for the current study (where >0.5 is less similar)

Site	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
GBQ01 Similarity FCT	HARRY-2 0.5043 28	YULE-1 0.5455 23a	talb9 0.5484 20c	hurst03 0.5537 23a	WIRR-2 0.568 23a	LAND-1 0.5704 20a	MILT-4 0.5714 28	WHITE-1 0.5728 23a	NEER-2 0.58 28	SHENT-1 0.58 21a	low04 0.5806 28	WATERRD1 0.5826 21a	WARI-2 0.584 28	WELL-2 0.5856 23a	YULE-2 0.5888 21c	BULL-11 0.5893 28	WARB-3 0.5906 23a	SHE-2 0.5909 28	card3 0.5922 21a	
GBQ02 Similarity FCT	WHITE-1 0.5152 23a	YULE-1 0.5258 23a	YULE-2 0.5306 23a	WARB-1 0.5455 23a	WIRR-2 0.5536 23a	WIRR-1 0.5556 23a	WARB-3 0.5611 23a	BULL-11 0.6111 23a	BULL-3 0.6162 23a	GOLF-1 0.6216 23a	talb5 0.6238 20c	talb7 0.6304 20c	card11 0.6308 6	MODO-4 0.6311 23a	MELA-9 0.6327 23b	TWIN-8 0.6386 21c	HARRY-4 0.6421 23a	NINE-2 0.6421 21a	ELDO-1 0.6421 23b	
GBQ02R Similarity FCT	YULE-1 0.5102 23a	YULE-2 0.5152 23a	WHITE-1 0.52 23a	WARB-1 0.5315 23a	WIRR-2 0.5398 23a	WIRR-1 0.5424 23a	WARB-3 0.5478 23a	BULL-3 0.6071 23a	talb7 0.6147 23a	hurst03 0.6129 20c	MELA-9 0.6162 23b	BULL-11 0.62 23b	ELDO-1 0.625 21a	NINE-2 0.6264 23b	MELA-2 0.6275 20a	GOLF-1 0.6275 23a	SINT-1 0.6275 20c	MODO-4 0.6346 23a	card11 0.6364 6	
GBQ04 Similarity FCT	TWIN-3 6 0.0741	MILT-1 5 0.0853	GUTHR-4 5 0.0886	card10 6 0.0889	GUTHR-2 5 0.0891	BULL-5 5 0.0892	low08 5 0.0932	GUTHR-1 4 0.0947	WHITE-2 5 0.0954	AUSTB-6 4 0.096	PLINE-5 5 0.0981	card4 6 0.0983	AUSTB-4 5 0.0984	BULL-7 5 0.1006	talb6 5 0.102	HARRY-3 5 0.1022	AUSTB-5 5 0.1028	CARAB-3 11 0.1033	WARI-1 11 0.1046	C71-1 11 0.1047
GBQ04R Similarity FCT	TWIN-3 6 0.0741	MILT-1 5 0.0853	GUTHR-4 5 0.0886	card10 6 0.0889	GUTHR-2 5 0.0891	BULL-5 5 0.0892	low08 5 0.0932	GUTHR-1 4 0.0947	WHITE-2 5 0.0954	AUSTB-6 5 0.096	PLINE-5 5 0.0981	card4 6 0.0983	AUSTB-4 5 0.0984	BULL-7 5 0.1006	talb6 5 0.102	HARRY-3 5 0.1022	AUSTB-5 5 0.1028	CARAB-3 11 0.1033	WARI-1 11 0.1046	C71-1 11 0.1047
GBQ05 Similarity FCT	brick8 0.5556 3a	FL-1 0.5814 4	card8 0.6047 20b	TWIN-7 0.6098 21c	M53 0.6154 20a	BULL-3 0.6182 23a	talb9 0.6283 20c	talb8 0.6289 23a	YULE-2 0.6327 23a	WHITE-1 0.6379 23a	WIRR-1 0.6383 23b	MPK03 0.6383 20b	card9 0.6396 20a	LAND-1 0.6444 3a	GOLF-1 0.6448 23a	BRIX-2 0.6458 3a	YULE-1 0.6481 23a	brick3 0.6486 22	MPK02 0.6522 21a	AUSTRA-1 0.6522 21a
GBQ05R Similarity FCT	brick8 0.56 3a	FL-1 0.5862 4	BULL-3 0.6036 20c	talb9 0.6092 23a	card8 0.6092 20b	YULE-2 0.6122 23a	talb8 0.614 20c	TWIN-7 0.6145 23a	M53 0.619 20a	card9 0.6211 20b	MPK03 0.6211 23a	WIRR-1 0.6239 23b	LAND-1 0.625 20a	YULE-1 0.6289 23a	ELDO-1 0.6421 23b	WIRR-2 0.6429 23a	GOLF-1 0.6436 20a	SINT-1 0.6444 23b	MILT-7 0.6444 23b	
GBQ06 Similarity FCT	BULL-3 0.4701 23a	hurst03 0.4912 23a	WHITE-1 0.5048 23a	WIRR-2 0.5085 23a	WARB-3 0.5167 23a	M53 0.5315 20a	SINT-1 0.5327 23b	YULE-1 0.534 23a	YULE-2 0.5385 23a	BULL-11 0.5429 23a	ELDO-1 0.5446 23b	KING-2 0.551 28	talb9 0.5556 20c	WAND-1 0.5577 23a	WIRR-1 0.561 23a	talb11 0.5625 23b	MPK03 0.5644 21c	DEJONG-c 0.5682 21c	FL-5 0.5699 23b	
GBQ07 Similarity FCT	talb9 0.5625 20c	talb2 0.5766 20c	BULL-10 0.5862 28	LAND-1 0.5969 20a	talb5 0.6102 20c	FL-1 0.6154 20c	talb8 0.6183 20c	YULE-3 0.6216 21c	BRIX-5 0.6303 3a	brick8 0.641 3a	GOLF-1 0.6441 20a	card3 0.6449 21a	talb6 0.6491 20c	YULE-1 0.6491 23a	APBF-2 0.6522 23a	WIRR-1 0.6563 3b	card13 0.6613 23a	hurst01 0.6641 23a	WARB-3 0.6641 23a	
GBQ07R Similarity FCT	talb9 0.5625 20c	talb2 0.5766 20c	BULL-10 0.5862 28	LAND-1 0.5969 20a	talb5 0.6102 20c	FL-1 0.6154 20c	talb8 0.6183 20c	YULE-3 0.6216 21c	BRIX-5 0.6303 3a	brick8 0.641 3a	GOLF-1 0.6441 20a	card3 0.6449 21a	talb6 0.6491 20c	YULE-1 0.6491 23a	APBF-2 0.6522 23a	WIRR-1 0.6563 3b	card13 0.6613 23a	hurst01 0.6641 23a	WARB-3 0.6641 23a	
GBQ08 Similarity FCT	YULE-1 0.5122 23a	WARB-3 0.5143 23a	KOON-1 0.5152 20a	WHITE-1 0.52 23a	hurst03 0.5224 23a	WIRR-1 0.5245 23a	YULE-2 0.5323 23a	WIRR-2 0.5362 23a	BULL-3 0.5474 23a	talb9 0.5538 20c	KOON-2 0.5588 23a	WARB-1 0.5616 21b	dard02 0.5625 23a	BANK-2 0.5625 21b	M53 0.5797 20a	LAND-1 0.5797 20a	BULL-11 0.584 28	HARRY-2 0.5862 28	NEER-2 0.589 20c	
GBQ08R Similarity FCT	KOON-1 0.5038 20a	YULE-1 0.5161 23a	WARB-3 0.5177 23a	WHITE-1 0.5238 23a	hurst03 0.5259 23a	WIRR-1 0.5278 23a	YULE-2 0.536 23a	WIRR-2 0.5396 23a	BULL-3 0.5507 23a	talb9 0.5557 20c	KOON-2 0.5573 23a	WARB-1 0.562 21b	dard02 0.5646 23a	BANK-2 0.5646 21b	M53 0.5781 20a	LAND-1 0.5781 20a	BULL-11 0.5827 28	HARRY-2 0.5878 28	NEER-2 0.5897 28	
GBQ09 Similarity FCT	MPK01 0.5048 23b	YULE-2 0.5094 23a	BULL-3 0.5126 23a	WHITE-1 0.514 23a	WIRR-2 0.5167 23a	AUSTRALIA-1 0.5248 23a	hurst03 0.5345 21a	BANK-3 0.5385 23a	WARB-3 0.541 23a	SINT-1 0.5413 23a	LAND-1 0.55 23b	BULL-11 0.5514 20a	WIRR-1 0.552 23a	NINE-2 0.5534 21a	KOON-1 0.5614 20a	WAND-1 0.566 23a	CAPEL-7 0.567 21a	YAN-3 0.5676 23a	MOKPO-4 0.5728 23b	
GBQ09R Similarity FCT	YULE-2 0.4953 23a	BULL-3 0.5 23a	WHITE-1 0.5041 23a	WIRR-2 0.5094 23a	MPK01 0.5094 23a	WARB-3 0.5285 23a	AUSTRALIA-1 0.5294 21a	hurst03 0.537 28	WIRR-1 0.5385 23a	BANK-3 0.5397 23a	SINT-1 0.5424 23b	KOON-1 0.5455 20a	LAND-1 0.5537 20a	NINE-2 0.5577 21a	M53 0.5614 20a	GOLF-1 0.5636 23a	YULE-1 0.566 23a	YAN-20 0.569 23a	WAND-1 0.5701 23a	
GBQ15 Similarity FCT	BULL-3 0.5207 23a	WIRR-2 0.5246 23a	hurst03 0.5254 23a	M53 0.5304 20a	WHITE-1 0.5413 23a	BULL-11 0.5413 28	KING-2 0.549 28	YULE-1 0.5514 23a	WARB-3 0.5645 23a	talb7 0.5686 20c	talb9 0.5702 20c	WARI-2 0.5714 28	YULE-2 0.5833 23a	WARB-1 0.5846 20a	talb10 0.5856 20c	GOLF-1 0.5856 21a	talb5 0.5876 21a	low04 0.5876 21a	WELL-2 0.5902 21a	
GBQ17 Similarity FCT	KOON-2 0.5413 20a	KOON-1 0.5495 20a	LAND-1 0.5897 20a	M53 0.6033 20a	APBF-1 0.6036 20a	card5 0.6147 20b	card1 0.6207 20b	talb9 0.6289 20b	BURNRD01 0.6289 20b	BULL-1 0.6381 20b	card6 0.646 20b	yarl04 0.646 20b	card2 0.6471 20b	card12 0.6538 3b	BULL-3 0.6552 3b	waro02 0.6585 23a	card7 0.6591 21a	card9 0.6694 20b	GOLF-1 0.6792 20a	
GBQ18 Similarity FCT	talb11 0.059 20c	KOON-2 0.061 20a	KOON-1 0.0625 20a	M53 0.0647 20a	card5 0.0655 20b	card1 0.0668 20b	LAND-1 0.0677 20b	card2 0.0686 20b	talb9 0.0691 20b	BURNRD01 0.0691 20b	BULL-4 0.0698 20b</									

Table 2: Most similar sites to each of the quadrats subject to NNB analysis for the current study (where >0.5 is less similar)

Site	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
GBQ21 Similarity FCT	KOON-1 0.5273 20a	card7 0.5402 21a	KOON-2 0.5556 20a	BURNRD01 0.5826 20b	WAND-1 0.5882 23a	card6 0.5962 20b	M53 0.5963 20a	BULL-3 0.6 23a	APBF-1 0.6034 20a	LAND-1 0.6038 20a	WARI-2 0.6129 28	YAN-3 0.6162 28	card9 0.6167 28	BULL-4 0.6182 20b	card5 0.6207 21a	WELL-2 0.625 20b	yarl04 0.6289 24	THOM-2 0.6264 21a	AUSTRA-1 0.6348 20c	talb9 0.6348 20c
GBQ22 Similarity FCT	TWIN-8 0.5065 21c	card7 0.5584 21a	low06b 0.561 21c	M53 0.5758 20a	KOON-1 0.58 20a	KING-2 0.5814 28	WARI-2 0.5833 28	low06a 0.6 21c	talb9 0.6038 20c	LAND-1 0.6038 20a	WIRR-2 0.6049 23a	THOM-2 0.6049 24	WOODV-2 0.6087 28	WAND-1 0.6092 23a	AUSTRA-1 0.618 21a	NINE-2 0.619 21a	YULE-1 0.6264 23a	card3 0.6271 6	card11 0.6275 23a	hurst03 0.6275 23a
GBQ23 Similarity FCT	card11 0.6585 6	MELA-5 0.6727 22	low07 0.6897 21c	MPK03 0.6901 23b	PLINE-4 0.6923 4	YULE-1 0.6986 23a	WAND-1 0.7027 23a	FL-6 0.7091 21c	THOM-2 0.7143 24	hurst03 0.7143 23a	MELA-6 0.7143 23b	card4 0.7209 6	MPK02 0.7255 22	HARRY-4 0.7288 23a	KING-2 0.7353 28	talb7 0.7353 20c	SHENT-1 0.746 28	WOODV-2 0.746 21a	low04 0.75 21a	WIRR-2 0.75 23a
GEHREL11 Similarity FCT	KOON-1 0.4679 20a	KOON-2 0.4953 20a	BULL-3 0.5088 23a	talb9 0.5439 20c	BULL-4 0.5462 28	BULL-11 0.549 28	APBF-1 0.563 20a	MUCK-1 0.5741 23b	M53 0.5914 20a	talb11 0.5962 20c	GOLF-1 0.6036 20a	SHENT-1 0.6036 23a	hurst03 0.6042 21a	AUSTRA-1 0.6068 23a	WARB-3 0.6071 23a	BANK-3 0.6078 23a	WHITE-1 0.6078 28	BULL-10 0.6098 20c	talb10 0.6098 20c	
GEHREL12 Similarity FCT	THOM-2 0.6 24	card7 0.6061 21a	M53 0.6136 20a	ELDO-1 0.6154 23b	GOLF-1 0.619 20a	MELA-6 0.6286 23b	WAND-1 0.6296 23a	FL-5 0.6308 21c	WHITE-1 0.6341 23a	WIRR-2 0.6421 23a	YULE-2 0.6543 23a	MILT-8 0.6563 23b	BULL-3 0.6596 23a	DEJONG-c 0.6615 21c	KOON-1 0.6629 20a	TWIN-8 0.6667 21c	PLINE-2 0.6667 23b	MILT-7 0.6712 23b	MUCK-1 0.6765 23b	KING-2 0.68 28
GEHREL15 Similarity FCT	WOODV-2 0.6949 28	FL-6 0.7255 21c	TRIG-5 0.7586 24	THOM-2 0.7627 24	SHENT-1 0.7627 28	BOLD-1 0.7627 24	YAN-4 0.7681 21c	low07 0.7778 28	card11 0.7838 6	DEPOT-1 0.7895 28	hurst04 0.791 23a	BOLD-2 0.7917 24	MODO-2 0.7922 21c	TRIG-3 0.7931 28	NEER-3 0.7931 21a	TAM-1 0.7949 6	YULE-1 0.7971 23a	hurst03 0.8 21c	low06b 0.8 21c	
GBQ24 Similarity FCT	BULL-11 0.4915 FCT 28	WHITE-1 0.5085 FCT 23a	hurst03 0.5118 FCT 23a	YULE-1 0.5172 FCT 23a	WARB-3 0.5188 FCT 23a	BULL-3 0.5231 FCT 23a	WIRR-2 0.5267 FCT 20c	talb5 0.5333 FCT 20c	GOLF-1 0.55 FCT 20a	YULE-2 0.5556 FCT 23a	M53 0.5667 FCT 20a	SINT-1 0.5683 FCT 23b	talb10 0.584 FCT 20c	KOON-1 0.5846 FCT 20a	talb9 0.5846 FCT 20c	WATERRD1 0.5856 FCT 23a	talb7 0.5873 FCT 23a	hurst02 0.5882 FCT 21b	WIRR-1 0.5971 FCT 21b	
GBQ25 Similarity FCT	FL-1 0.5876 FCT 4	YULE-3 0.5962 FCT 21c	brick8 0.6 FCT 3a	WIRR-1 0.6216 FCT 20c	YULE-1 0.622 FCT 23a	YULE-2 0.6262 FCT 23a	card8 0.6481 FCT 20b	BULL-10 0.6495 FCT 3b	card12 0.6514 FCT 23a	WHITE-1 0.6514 FCT 23a	WIRR-2 0.6557 FCT 21c	TWIN-7 0.6559 FCT 23b	SINT-1 0.6577 FCT 23a	WARB-3 0.6613 FCT 23b	MELA-9 0.6667 FCT 23a	hurst01 0.6752 FCT 3a	MPK03 0.6762 FCT 4	brick3 0.6807 FCT 4	WHITE-2 0.6818	
GBQ26 Similarity FCT	KING-2 0.5319 FCT 28	BULL-3 0.5575 FCT 23a	hurst03 0.5636 FCT 23a	AUSTRALIA-1 0.5701 FCT 20a	WIRR-2 0.5789 FCT 21a	TWIN-8 0.5965 FCT 23a	WAND-1 0.6 FCT 28	BULL-11 0.604 FCT 20c	talb11 0.6117 FCT 20a	GOLF-1 0.6117 FCT 20c	talb5 0.6134 FCT 23a	WIRR-1 0.614 FCT 20a	LAND-1 0.614 FCT 23a	YULE-1 0.6162 FCT 23a	HARRY-2 0.6226 FCT 21a	card7 0.6235 FCT 23a	WARB-1 0.625 FCT 20a	KOON-1 0.6296 FCT 20a		
GBQ27 Similarity FCT	YULE-1 0.5517 FCT 23a	talb5 0.5667 FCT 20c	hurst03 0.5692 FCT 20c	YULE-3 0.5906 FCT 23a	BULL-11 0.6102 FCT 28	talb2 0.6147 FCT 21a	card3 0.6239 FCT 23a	YULE-2 0.6241 FCT 23a	WARB-3 0.626 FCT 28	HARRY-2 0.626 FCT 20c	talb3 0.6271 FCT 23a	WHITE-1 0.6391 FCT 20c	talb8 0.6415 FCT 20c	FL-1 0.6452 FCT 20a	M53 0.6452 FCT 23a	BULL-3 0.6462 FCT 3a	brick8 0.6471 FCT 23a	WIRR-2 0.6489 FCT 20c	talb7 0.6577 FCT 20c	
GBQ28 Similarity FCT	YULE-1 0.3982 FCT 23a	YULE-2 0.4386 FCT 23a	WHITE-1 0.4435 FCT 23a	WIRR-2 0.4531 FCT 23a	BULL-3 0.4803 FCT 23a	hurst03 0.4839 FCT 23b	MELA-2 0.4906 FCT 23b	MELA-9 0.4912 FCT 23b	WARB-3 0.4923 FCT 23a	WIRR-1 0.5038 FCT 23a	WARB-1 0.5079 FCT 23a	MPK03 0.5135 FCT 23b	MELA-8 0.5207 FCT 23b	MELA-6 0.534 FCT 23a	BANK-2 0.5424 FCT 21a	NINE-2 0.5495 FCT 23b	MILT-4 0.5507 FCT 28	SINT-1 0.5556 FCT 23b	MPK01 0.5575 FCT 23a	WAND-1 0.5614 FCT 23a
GBQ29 Similarity FCT	talb7 0.5714 FCT 20c	BULL-11 0.5824 FCT 28	YULE-1 0.5955 FCT 23a	NINE-2 0.6092 FCT 21a	talb11 0.6098 FCT 20c	BULL-3 0.6117 FCT 23a	SINT-1 0.6129 FCT 23b	talb5 0.6147 FCT 20c	WIRR-1 0.6147 FCT 23a	YULE-2 0.6222 FCT 23a	WARB-1 0.6275 FCT 21c	YULE-3 0.6279 FCT 23a	WIRR-2 0.6346 FCT 23a	hurst02 0.6364 FCT 23b	YAN-20 0.6364 FCT 23b	MELA-6 0.6456 FCT 21a	MILT-6 0.6471 FCT 23b	ELDO-1 0.6552 FCT 21a	hurst01 0.6566 FCT 21a	card3 0.6585 FCT 21a
GBQ30 Similarity FCT	talb9 0.5407 FCT 20c	talb8 0.5507 FCT 20c	WIRR-2 0.5588 FCT 23a	WHITE-1 0.561 FCT 23a	hurst03 0.5909 FCT 23a	YULE-3 0.5932 FCT 21c	talb2 0.6036 FCT 20c	FL-1 0.6087 FCT 3a	WARB-3 0.6129 FCT 23a	brick8 0.6148 FCT 23a	BULL-3 0.617 FCT 23a	WIRR-1 0.6176 FCT 20a	LAND-1 0.6176 FCT 23a	YULE-1 0.6198 FCT 20a	talb5 0.6349 FCT 3a	BRIX-5 0.6471 FCT 23b	MPK03 0.6479 FCT 3a	waro 02 0.6489 FCT 28	hurst01 0.6508 FCT 28	
GBQ31 Similarity FCT	AUSTRALIA-1 0.5641 FCT 21a	M53 0.5778 FCT 20a	card3 0.6 FCT 21a	BULL-3 0.6042 FCT 23a	PLINE-3 0.6207 FCT 21a	card9 0.625 FCT 20b	MPK01 0.6341 FCT 23b	BANK-3 0.6383 FCT 23a	HARRY-4 0.6471 FCT 23a	MODO-5 0.6486 FCT 23a	SINT-1 0.6512 FCT 23b	MUCK-1 0.6571 FCT 21a	CRAMPT-2 0.6629 FCT 21b	CAPEL-1 0.6667 FCT 21a	FL-4 0.6667 FCT 20a	LAND-1 0.6701 FCT 20a	KOON-1 0.6703 FCT 21c	low06b 0.6739 FCT 23b	YAN-19 0.6744 FCT 20a	

Appendix 13

Selected PRIMER Inputs and Outputs



Table 1: List of taxa that were omitted or treated as other taxa for the purposes of the floristic analysis.

TAXON	NAME REFERRED TO FOR ANALYSIS
<i>Acacia huegelii</i>	omitted; singleton
<i>Acacia iteaphylla</i>	omitted; weed singleton
<i>Acacia longifolia</i> subsp. <i>longifolia</i>	omitted; weed singleton
<i>Adenanthes cygnorum</i>	<i>Adenanthes cygnorum</i> subsp. <i>cygnorum</i>
<i>Agonis flexuosa</i>	omitted; singleton
<i>Alternanthera denticulata</i>	omitted; singleton
<i>Amphipogon laguroides</i>	omitted; singleton
<i>Aotus cordifolia</i>	omitted; singleton
<i>Apium annuum</i>	omitted; singleton
<i>Astartea scoparia</i>	omitted; singleton
<i>Austrostipa elegantissima</i>	omitted; singleton
<i>Austrostipa flavescens</i>	omitted; singleton
<i>Avellinia michelii</i>	omitted; weed singleton
<i>Baumea rubiginosa</i>	omitted; singleton
<i>Brachypodium distachyon</i>	omitted; weed singleton
<i>Bromus hordeaceus</i>	omitted; weed singleton
<i>Caesia</i> sp.	omitted; may refer to multiple species
<i>Caladenia</i> sp.	omitted; may refer to multiple species
<i>Calandrinia granulifera</i>	omitted; singleton
<i>Callitris arenaria</i>	omitted; singleton
<i>Callitris preissii</i>	omitted; singleton
<i>Callitris pyramidalis</i>	omitted; singleton
<i>Calothamnus quadrifidus</i>	omitted; singleton
<i>Calothamnus sanguineus</i>	omitted; singleton
<i>Calytrix flavescens</i>	omitted; singleton
<i>Campsis radicans</i>	omitted; weed singleton
<i>Casuarina</i> ? <i>equisetifolia</i>	omitted; singleton
<i>Cenchrus clandestinus</i>	omitted; weed singleton
<i>Cenchrus setaceus</i>	omitted; weed singleton
<i>Centrolepis inconspicua</i>	omitted; singleton
<i>Centrolepis</i> sp.	omitted; may refer to multiple species
<i>Chamaecytisus palmensis</i>	omitted; weed singleton
<i>Comesperma calymega</i>	omitted; singleton
<i>Conostylis</i> sp.	omitted; may refer to multiple species
<i>Cortaderia selloana</i>	omitted; weed singleton
<i>Cotula turbinata</i>	omitted; weed singleton
<i>Daviesia</i> sp.	omitted; may refer to multiple species
<i>Dioscorea hastifolia</i>	omitted; singleton
<i>Dischisma arenarium</i>	omitted; weed singleton
<i>Drosera gigantea</i>	omitted; singleton
<i>Drosera macrantha</i>	omitted; singleton
<i>Drosera micrantha</i>	omitted; singleton
<i>Epilobium hirtigerum</i>	omitted; singleton
<i>Euphorbia drummondii</i>	omitted; singleton
<i>Euphorbia peplus</i>	omitted; weed singleton
<i>Gahnia decomposita</i>	omitted; singleton
<i>Gastrolobium linearifolium</i>	omitted; singleton
<i>Geranium retrorsum</i>	omitted; singleton
<i>Gladiolus cardinalis</i>	omitted; weed singleton
<i>Gonocarpus nodulosus</i>	omitted; singleton
<i>Goodenia micrantha</i>	omitted; singleton
<i>Haemodorum</i> ? <i>spicatum</i>	omitted; singleton
<i>Haemodorum paniculatum</i>	omitted; singleton
<i>Haemodorum</i> sp.	omitted; may refer to multiple species
<i>Hakea prostrata</i>	omitted; singleton
<i>Hakea ruscifolia</i>	omitted; singleton

Hakea sulcata	omitted; singleton
Hakea trifurcata	omitted; singleton
Hakea varia	omitted; singleton
Hardenbergia comptoniana	omitted; singleton
Hedypnois rhagadioloides	omitted; weed singleton
Hemiandra glabra	omitted; singleton
Hibbertia hypericoides subsp. hypericoides	Hibbertia hypericoides
Hibbertia hypericoides subsp. septentrionalis	Hibbertia hypericoides
Hibbertia striata	omitted; singleton
Hyparrhenia hirta	omitted; weed singleton
Hypolaena robusta	omitted; singleton
Ipomoea cairica	omitted; weed singleton
Isolepis sp.	omitted; may refer to multiple species
Kunzea glabrescens	omitted; singleton
Lagurus ovatus	omitted; weed singleton
Lepidosperma sp.	omitted; may refer to multiple species
Leptocarpus coangustatus	omitted; singleton
Lepyrodia muirii	omitted; singleton
Lolium perenne	omitted; weed singleton
Lomandra micrantha subsp. micrantha	omitted; singleton
Lomandra nigricans	omitted; singleton
Lomandra sp.	omitted; may refer to multiple species
Macarthuria australis	omitted; singleton
Medicago polymorpha	omitted; weed singleton
Melaleuca armillaris	omitted; weed singleton
Melaleuca fulgens	omitted; singleton
Melaleuca hamulosa	omitted; singleton
Melaleuca incana subsp. incana	omitted; singleton
Melaleuca lateritia	omitted; singleton
Melaleuca nesophila	omitted; singleton
Melaleuca sp.	omitted; may refer to multiple species
Melaleuca viminalis	omitted; singleton
Melaleuca viminea subsp. viminea	omitted; singleton
Melia azedarach	omitted; singleton
Monopsis debilis var. depressa	omitted; weed singleton
Neurachne alopecuroidae	omitted; singleton
Opercularia apiciflora	omitted; singleton
Orobanche minor	omitted; weed singleton
Paspalum dilatatum	omitted; weed singleton
Paspalum urvillei	omitted; weed singleton
Pentameris airoides subsp. airoides	omitted; weed singleton
Persoonia saccata	omitted; singleton
Petrophile biloba	omitted; singleton
Petrophile rigida	omitted; singleton
Phyllangium divergens	omitted; singleton
Pimelea sulphurea	omitted; singleton
Poa annua	omitted; weed singleton
Podotheca gnaphalioides	omitted; singleton
Polycarpon tetraphyllum	omitted; weed singleton
Polypogon monspeliensis	omitted; weed singleton
Poranthera microphylla	omitted; singleton
Pseudognaphalium luteoalbum	omitted; singleton
Pterostylis sanguinea	omitted; singleton
Pterostylis sp.	omitted; may refer to multiple species
Quinetia urvillei	omitted; singleton
Rytidosperma setaceum	omitted; singleton
Scaevola glandulifera	omitted; singleton
Senecio condylus	omitted; singleton

<i>Setaria parviflora</i>	omitted; weed singleton
<i>Silene gallica</i> var. <i>gallica</i>	omitted; weed singleton
<i>Solanum linnaeanum</i>	omitted; weed singleton
<i>Solanum nigrum</i>	omitted; weed singleton
<i>Stellaria pallida</i>	omitted; weed singleton
<i>Stylium utricularioides</i>	omitted; singleton
<i>Synaphea petiolaris</i> subsp. <i>petiolaris</i>	omitted; singleton
<i>Synaphea spinulosa</i> subsp. <i>spinulosa</i>	omitted; singleton
<i>Taxandria linearifolia</i>	omitted; singleton
<i>Thelymitra</i> sp.	omitted; may refer to multiple species
<i>Thysanotus</i> sp.	omitted; may refer to multiple species
<i>Thysanotus sparteus</i>	omitted; singleton
<i>Trifolium angustifolium</i> var. <i>angustifolium</i>	omitted; weed singleton
<i>Trifolium arvense</i> var. <i>arvense</i>	omitted; weed singleton
<i>Tropaeolum majus</i>	omitted; weed singleton
<i>Verticordia lindleyi</i> subsp. <i>lindleyi</i>	omitted; singleton
<i>Verticordia picta</i>	omitted; singleton
<i>Vulpia muralis</i>	omitted; weed singleton
<i>Wahlenbergia capensis</i>	omitted; weed singleton
<i>Xanthorrhoea gracilis</i>	omitted; singleton

Site similarity based on cover, group average method

Transform: Square root
Resemblance: S17 Bray Curtis similarity

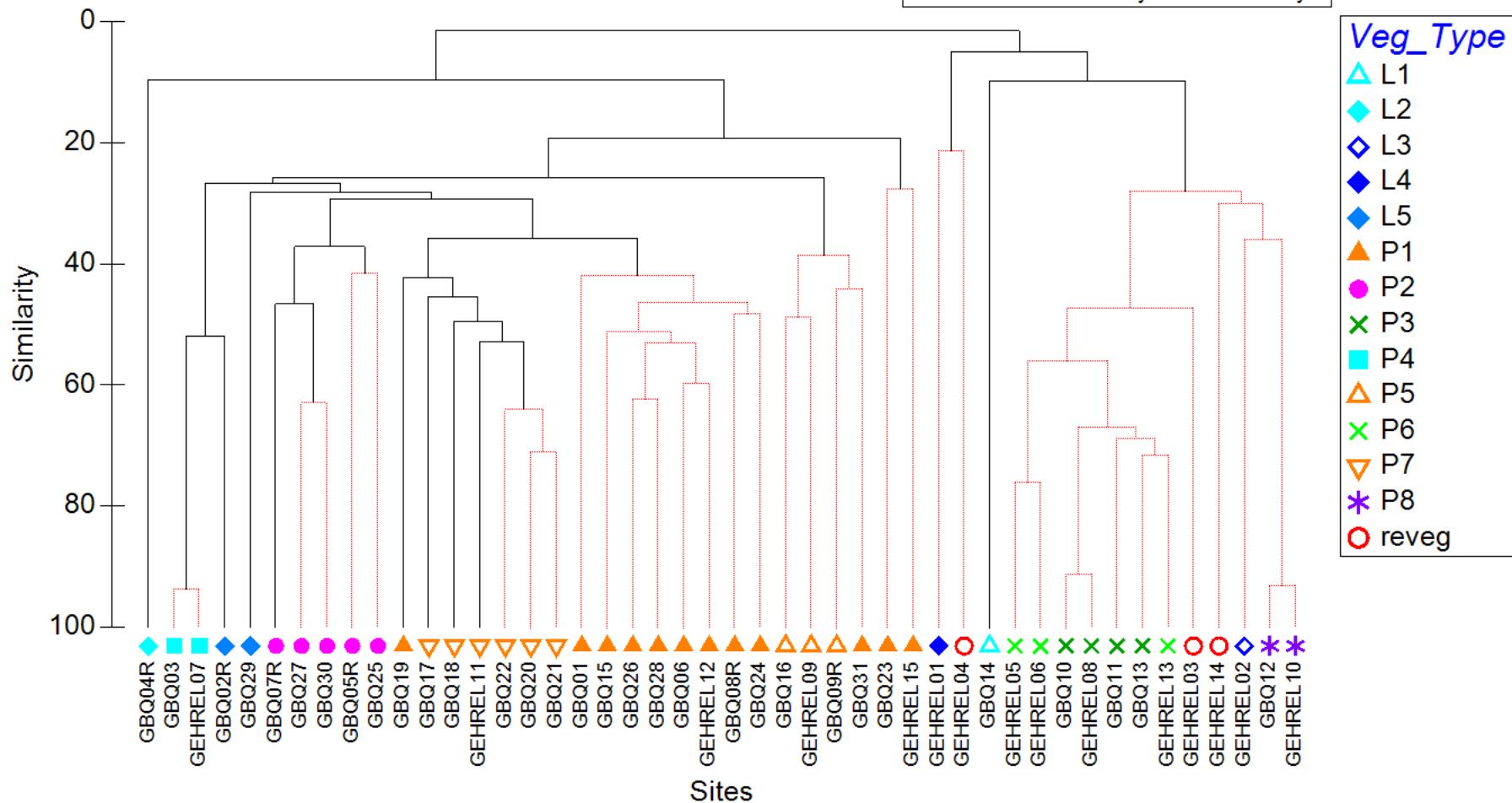


Figure 1: Dendrogram from floristic clustering analysis of sites from the current survey (based on percent cover of all annual and perennial taxa, excluding singletons; coded by vegetation type).

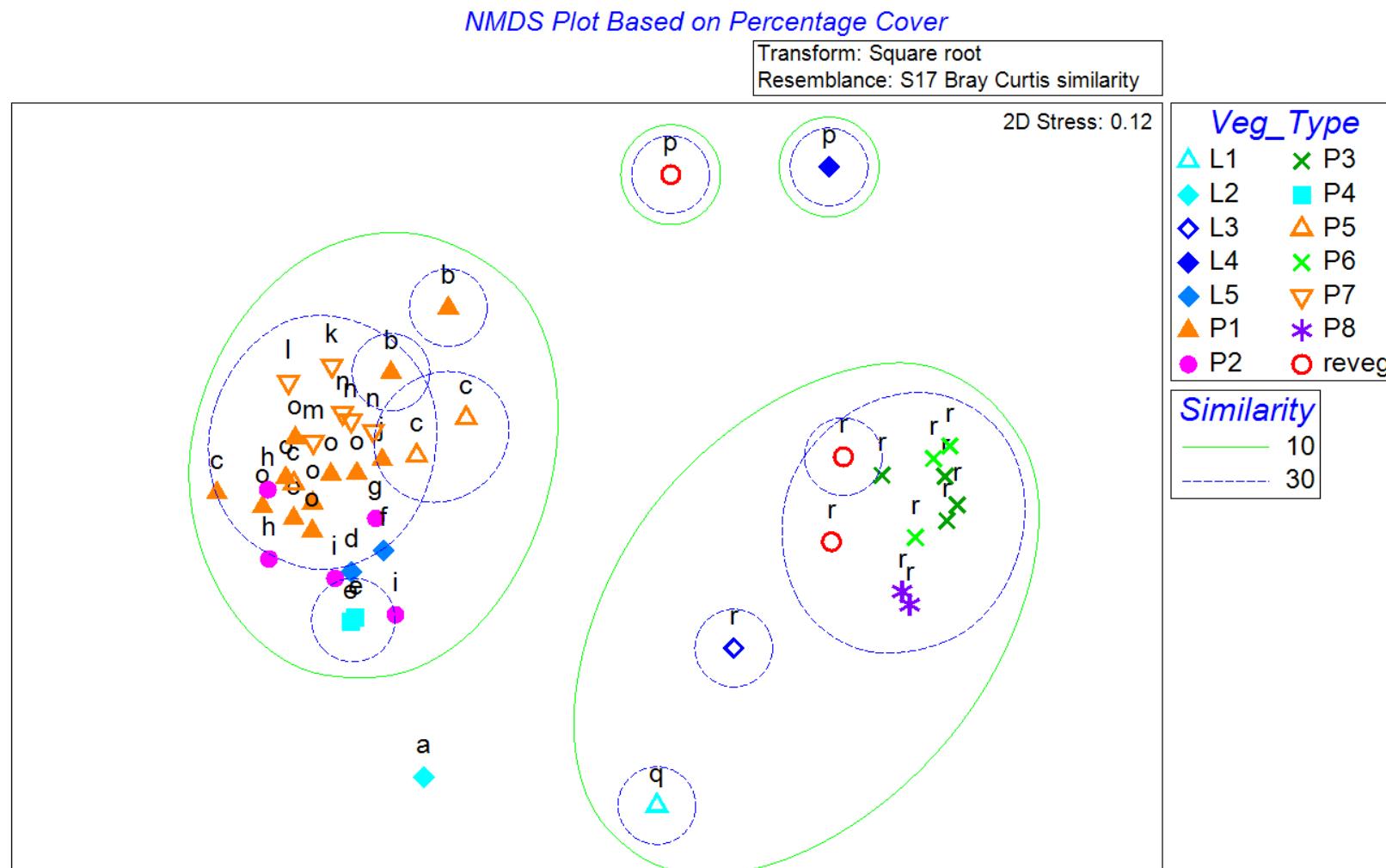


Figure 2: NMDS plot based of sites from the current survey (based on percent cover of all annual and perennial taxa, excluding singletons; coded by vegetation type).

Table 2: Indicator species for the floristic groups identified from the current survey (based on cover percentage cover), together with sites in each vegetation type

Floristic Group	SIMPER Indicator Species (maximum of top 4) (Cumulative Similarity)	Veg Code	Sites
a	N/A: less than 2 samples	L2	GBQ04R
b	<i>Eucalyptus todiana</i> , <i>Banksia menziesii</i> , <i>Gompholobium tomentosum</i> , <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i> (86.3%)	P1	GEHREL15, GBQ23
c	<i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Xanthorrhoea preissii</i> , <i>Alexgeorgea nitens</i> , <i>Lyginia barbata</i> (63.7%)	P5	GBQ09R, GBQ16, GEHREL09
		P1	GBQ31
d	N/A: less than 2 samples	L5	GBQ02R
e	<i>Eremaea pauciflora</i> var. <i>pauciflora</i> , <i>Alexgeorgea nitens</i> , <i>Astrolobroma xerophyllum</i> , <i>Lyginia imberbis</i> (63.3%)	P4	GBQ03, GEHREL07
f	N/A: less than 2 samples	L5	GBQ29
g	N/A: less than 2 samples	P2	GBQ07R
h	<i>Caustis dioica</i> , <i>Alexgeorgea nitens</i> , <i>Mesomelaena tetragona</i> , <i>Allocasuarina fraseriana</i> (43.9%)	P2	GBQ27, GBQ30
i	<i>Lyginia imberbis</i> , <i>Corymbia calophylla</i> , <i>Dasypteron bromeliifolius</i> , <i>Kingia australis</i> (44.35%)	P2	GBQ05R, GBQ25
j	N/A: less than 2 samples	P1	GBQ19
k	N/A: less than 2 samples	P7	GBQ17
l	N/A: less than 2 samples	P7	GBQ18
m	N/A: less than 2 samples	P7	GEHREL11
n	<i>Xanthorrhoea preissii</i> , <i>Allocasuarina fraseriana</i> , <i>Banksia menziesii</i> , <i>Mesomelaena pseudostygia</i> (44.3%)	P7	GBQ20, GBQ21, GBQ22
o	<i>Alexgeorgea nitens</i> , <i>Banksia menziesii</i> , <i>Adenanthera cygnorum</i> subsp. <i>cygnorum</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> (34.6%)	P1	GBQ01, GBQ06, GBQ08R, GBQ15, GBQ24, GBQ26, GBQ28, GEHREL12
p	Cynodon dactylon (100%)	L4	GEHREL01
		RE	GEHREL04
q	N/A: less than 2 samples	L1	GBQ14
r	<i>Eucalyptus rudis</i> subsp. <i>rudis</i> , <i>Ehrharta longiflora</i> , <i>Fumaria capreolata</i> , <i>Avena fatua</i> (82.8%)	P3	GBQ10, GBQ11, GBQ13, GEHREL08
		P6	GEHREL05, GEHREL06, GEHREL13
		RE	GEHREL03, GEHREL14
		L3	GEHREL02
		P8	GBQ12, GEHREL10

Appendix 14

Black Cockatoo Breeding Habitat Trees



Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Marri, <i>Corymbia calophylla</i>	530	-31.9341	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	610	-31.9341	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	860	-31.9336	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	560	-31.9332	116.018	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	860	-31.9329	116.0186	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	630	-31.9324	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	500	-31.9321	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9313	116.0178	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	740	-31.931	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	780	-31.9305	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9303	116.0176	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	620	-31.9302	116.0176	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	620	-31.9301	116.0175	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	600	-31.93	116.0175	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.93	116.0182	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.9298	116.0181	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	620	-31.9298	116.0175	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	850	-31.9298	116.0174	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.9297	116.0181	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	630	-31.9297	116.0174	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	570	-31.9296	116.0174	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.9296	116.018	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	750	-31.9293	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	750	-31.9292	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	680	-31.9292	116.0173	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	640	-31.9291	116.0173	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	820	-31.9284	116.017	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	530	-31.9282	116.017	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	550	-31.9279	116.0169	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	760	-31.9272	116.0167	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	630	-31.9265	116.0172	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	870	-31.9265	116.0172	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	710	-31.9263	116.0171	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	570	-31.926	116.0171	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	500	-31.9252	116.0167	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	820	-31.925	116.0167	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	810	-31.9249	116.0166	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	810	-31.9248	116.0166	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	600	-31.9246	116.0158	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	750	-31.9233	116.0155	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	540	-31.9232	116.0155	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	1030	-31.9232	116.0155	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	690	-31.923	116.0154	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	920	-31.9229	116.0154	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	610	-31.9225	116.0153	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	640	-31.9221	116.0152	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	660	-31.9219	116.0152	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	1220	-31.9215	116.015	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	670	-31.9183	116.0098	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9182	115.9889	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	520	-31.9181	116.0118	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	570	-31.9181	115.9896	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.918	115.9854	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	590	-31.918	116.002	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	520	-31.918	115.9915	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	910	-31.9177	116.0102	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	670	-31.9175	116.0099	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	520	-31.9175	115.9889	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	530	-31.9175	116.0102	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	610	-31.9175	115.9915	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	840	-31.9174	115.9887	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	680	-31.9174	116.0119	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9174	115.9899	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	1060	-31.9174	115.9881	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	890	-31.9174	115.988	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Marri, <i>Corymbia calophylla</i>	620	-31.9173	115.9886	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	0	-31.9173	115.9881	1	Unsuitable
Marri, <i>Corymbia calophylla</i>	940	-31.9173	115.988	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	800	-31.9146	116.0062	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	0	-31.9137	116.0033	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9122	116.0001	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.9092	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	670	-31.9092	116.0175	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	590	-31.9091	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	640	-31.9091	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	920	-31.9091	116.0178	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	560	-31.9088	116.0168	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	550	-31.9087	116.0176	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	950	-31.9082	116.0182	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	530	-31.9081	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	630	-31.9081	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	800	-31.9081	116.0183	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	720	-31.908	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	640	-31.9078	116.0163	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	570	-31.9077	116.0153	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.9073	116.0171	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	850	-31.9071	116.0189	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	640	-31.9071	116.0167	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.9068	116.0191	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	700	-31.9066	116.0177	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	650	-31.9065	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	930	-31.9064	116.0179	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	680	-31.9064	116.0175	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	550	-31.9064	116.0181	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	540	-31.9061	116.018	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	890	-31.9047	116.0162	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	750	-31.9047	116.0163	1	Unsuitable
Marri, <i>Corymbia calophylla</i>	660	-31.9046	116.0138	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	500	-31.9045	116.0194	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	920	-31.9045	116.0146	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	780	-31.9045	116.0156	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	500	-31.9045	116.0194	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	860	-31.9044	116.0156	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	630	-31.9044	116.0144	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	600	-31.9044	116.0194	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	540	-31.9043	116.0196	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.9041	116.0136	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.9041	116.0197	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	680	-31.9041	116.0134	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.904	116.0135	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.904	116.0152	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	780	-31.9039	116.0134	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	910	-31.9038	116.0185	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	670	-31.9033	116.0077	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	1230	-31.9025	116.0198	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	690	-31.9025	116.0195	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	660	-31.9024	116.0206	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	660	-31.9024	116.02	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	710	-31.9024	116.0199	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	550	-31.9024	116.0199	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	530	-31.9019	116.0088	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	670	-31.9009	116.0233	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	520	-31.9009	116.0233	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	530	-31.9007	116.0234	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	770	-31.9006	116.0237	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.9006	116.0238	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	600	-31.9003	116.0228	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	580	-31.9003	116.0229	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	710	-31.8986	116.0245	0	Unsuitable
Marri, <i>Corymbia calophylla</i>	510	-31.8986	116.0245	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Marri, <i>Corymbia calophylla</i>	720	-31.8967	116.0257	0	Unsuitable
Tuart, <i>Eucalyptus gomphocephala</i>	520	-31.9114	116.0161	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	660	-31.9335	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	850	-31.9333	116.0179	1	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1460	-31.9331	116.0187	1	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.933	116.018	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	550	-31.9329	116.018	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	940	-31.9328	116.0178	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9326	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	700	-31.9322	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1190	-31.9321	116.0179	1	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1250	-31.932	116.0185	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9318	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	750	-31.9316	116.0185	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	570	-31.9306	116.0182	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	950	-31.9299	116.0174	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9294	116.0174	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1280	-31.929	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1420	-31.9288	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	550	-31.9285	116.0177	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	550	-31.9283	116.0176	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	670	-31.9277	116.0175	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	580	-31.9254	116.0168	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	770	-31.9253	116.0168	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	540	-31.9253	116.0168	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	750	-31.9253	116.0162	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9252	116.0167	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	540	-31.9252	116.0159	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	740	-31.9244	116.0166	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	530	-31.9242	116.0158	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	680	-31.9241	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1090	-31.9241	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	590	-31.924	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.9238	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1160	-31.9238	116.0155	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	540	-31.9236	116.0175	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	500	-31.9236	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	520	-31.9235	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1400	-31.9235	116.0163	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	780	-31.9235	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	530	-31.9234	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	540	-31.9232	116.0179	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	520	-31.9232	116.0161	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9231	116.0162	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1080	-31.9229	116.0165	3	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1360	-31.9229	116.0162	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	690	-31.9229	116.0163	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	730	-31.9228	116.0154	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	520	-31.9227	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.9226	116.0176	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	670	-31.9226	116.0166	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	570	-31.9222	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1000	-31.9221	116.0166	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	680	-31.9221	116.016	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	670	-31.922	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	690	-31.9219	116.0163	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	980	-31.9219	116.015	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1000	-31.9218	116.0168	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	890	-31.9216	116.0167	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	520	-31.9215	116.0166	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.9215	116.0156	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	620	-31.9214	116.0173	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9214	116.0173	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9213	116.0149	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9212	116.0159	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Jarrah, <i>Eucalyptus marginata</i>	1100	-31.9211	116.0148	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	700	-31.9211	116.0167	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1200	-31.9211	116.0147	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	730	-31.921	116.0148	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	840	-31.921	116.0149	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1520	-31.9208	116.0156	1	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.919	116.0142	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	740	-31.9185	116.0142	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9178	116.0129	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	670	-31.9174	115.9972	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	770	-31.9173	116.0163	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	660	-31.9172	116.0161	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	730	-31.9171	116.0161	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	620	-31.917	116.0162	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	620	-31.917	116.0129	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.9169	116.0164	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9169	116.0107	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	570	-31.9168	116.0141	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	680	-31.9166	116.017	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	500	-31.9163	116.0155	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	710	-31.9159	116.0139	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	680	-31.9159	116.0139	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	890	-31.9159	116.0138	3	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	720	-31.9158	116.0142	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	580	-31.9157	116.014	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	750	-31.9152	116.0163	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.914	116.0157	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	850	-31.9139	116.0155	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	890	-31.9125	116.0158	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	1000	-31.9122	116.0002	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	590	-31.9097	116.0173	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	940	-31.9097	116.0174	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	500	-31.9097	116.0175	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	500	-31.9097	116.0176	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9096	116.0177	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	600	-31.9095	116.0167	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	800	-31.9094	116.0171	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	560	-31.9093	116.0168	0	Unsuitable
Jarrah, <i>Eucalyptus marginata</i>	510	-31.9092	116.0177	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9324	115.9953	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9322	115.9955	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9286	116.017	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9275	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9271	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9249	116.016	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1380	-31.9243	116.0158	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.918	116.0032	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.918	116.003	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.918	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.918	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.918	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9179	115.9968	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9179	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9179	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9179	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9179	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9178	115.9965	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9178	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9178	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9178	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9178	115.9832	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9174	115.993	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9174	115.9981	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9174	115.9982	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9174	115.9965	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9174	115.995	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9174	115.998	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9174	115.9964	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9174	115.9978	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9174	115.9972	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9174	115.9966	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9174	115.9998	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9174	115.9951	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9174	115.9974	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9174	115.9961	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9174	115.9973	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9174	115.9944	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9173	115.9993	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9173	115.9844	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9173	115.9937	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9173	115.9937	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9173	115.9933	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9173	115.9956	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9172	115.9944	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9172	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9172	115.9938	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9172	115.994	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9171	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9171	115.9829	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9168	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9166	116.0117	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9166	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9149	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	0	-31.9142	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	0	-31.9141	116.0061	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9137	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.913	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.913	116.0026	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9128	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9125	116.0027	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9124	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9121	116.0025	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.912	116.0027	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9118	115.9996	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.911	116.0154	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9109	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9106	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9103	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9087	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9087	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9077	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9076	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9076	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9073	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1840	-31.907	116.0162	5	Potentially suitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.907	116.0154	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.907	116.0173	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.907	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.907	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9069	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9069	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9069	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1250	-31.9069	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9069	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9069	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9068	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9068	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9068	116.0153	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9068	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9067	116.0174	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9067	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9067	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9067	116.0175	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9067	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9066	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9066	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9066	116.0154	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9065	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9065	116.0153	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2440	-31.9065	116.0155	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9064	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9064	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9064	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9064	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9064	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9064	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9064	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9064	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9063	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9063	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1220	-31.9063	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9063	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9062	116.0171	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9061	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9061	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9061	116.0165	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9061	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9061	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9061	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9061	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9061	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.906	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.906	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.906	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.906	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.906	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.906	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.906	116.017	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.906	116.0181	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.906	116.017	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.9059	116.0172	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9059	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9059	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9059	116.0173	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.9059	116.0181	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9058	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9058	116.0174	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9058	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9058	116.0171	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9058	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9058	116.0184	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9058	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9058	116.0183	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9058	116.0165	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9058	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9058	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9058	116.0181	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9057	116.0175	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9057	116.0171	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9057	116.0182	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9057	116.0175	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1140	-31.9057	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9057	116.0165	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9057	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9057	116.0168	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9057	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9057	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.9057	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9057	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9057	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9057	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1350	-31.9057	116.0176	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9056	116.0167	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1260	-31.9056	116.0183	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9056	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9056	116.0185	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9056	116.017	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.9056	116.0172	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9056	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9056	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9056	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9056	116.0178	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9056	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1400	-31.9056	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9056	116.0178	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9055	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9055	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9055	116.0174	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9055	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9055	116.0184	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9055	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9055	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9055	116.0166	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9055	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9055	116.0171	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9055	116.0185	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9055	116.0186	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9055	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9055	116.0177	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9054	116.0175	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9054	116.0186	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	0	-31.9054	116.0186	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9054	116.0177	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9054	116.0172	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9054	116.0178	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9054	116.0159	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9054	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9054	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9054	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9054	116.0186	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9054	116.0186	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9054	116.0176	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1370	-31.9054	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1920	-31.9053	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9053	116.017	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9053	116.0187	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9053	116.0187	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1490	-31.9053	116.0173	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9053	116.0177	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.9053	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9053	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1320	-31.9053	116.0149	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9052	116.0175	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9052	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9052	116.0187	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9052	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9052	116.0173	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9052	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9052	116.0176	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9052	116.0157	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9052	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9052	116.0189	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9051	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9051	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.9051	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9051	116.0169	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9051	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9051	116.0165	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9051	116.0176	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9051	116.0163	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1420	-31.9051	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9051	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9051	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9051	116.0168	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.905	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.905	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1360	-31.905	116.0162	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.905	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.905	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.905	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.905	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.905	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1400	-31.905	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.905	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9049	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9049	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9049	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9049	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9049	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9049	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9049	116.0173	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9049	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9049	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9048	116.0165	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9048	116.0171	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9048	116.0164	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9048	116.0178	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9048	116.0154	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9048	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9048	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9048	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9048	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9048	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9047	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1390	-31.9047	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9047	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9047	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9047	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9047	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9047	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9047	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9047	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2170	-31.9047	116.0146	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1540	-31.9047	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9047	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9047	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9046	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9046	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9046	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9046	116.0143	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.9046	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9046	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9046	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9046	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.9046	116.0093	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9045	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9045	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9045	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9045	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9045	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9045	116.0153	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9045	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9045	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9045	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9045	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9045	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9044	116.0156	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9044	116.0157	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9044	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9044	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9044	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9044	116.0158	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9044	116.0153	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9044	116.0138	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9044	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9044	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9044	116.0145	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9044	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9043	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1560	-31.9043	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9043	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.9043	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1420	-31.9043	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9043	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9043	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.9043	116.0145	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9043	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9043	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9042	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9042	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9042	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1400	-31.9042	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9042	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9042	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9042	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9042	116.0155	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9042	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9042	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9042	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1250	-31.9042	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9042	116.0174	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9042	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9042	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9041	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9041	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9041	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9041	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9041	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9041	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9041	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9041	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9041	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9041	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9041	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9041	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9041	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9041	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.904	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.904	116.0151	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.904	116.0138	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	1280	-31.904	116.0136	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1130	-31.904	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.904	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.904	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.904	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.904	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.904	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.904	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.904	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1490	-31.904	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.904	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.904	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1440	-31.904	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9039	116.0138	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9039	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9039	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9039	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9039	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9039	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9039	116.0204	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.9039	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1220	-31.9039	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9039	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9038	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9038	116.0129	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1220	-31.9038	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9038	116.0204	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9038	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9038	116.0143	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9038	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9038	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9038	116.0202	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9038	116.019	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9038	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9038	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9038	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9038	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9038	116.0181	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9038	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9038	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9038	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9037	116.0181	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9037	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9037	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9037	116.0138	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9037	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1450	-31.9037	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9037	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9037	116.013	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1130	-31.9037	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1520	-31.9037	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9037	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9037	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9037	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9037	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9037	116.0138	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9037	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9037	116.0145	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9037	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9037	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9037	116.0135	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9037	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9037	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.9037	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9036	116.0084	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	1570	-31.9036	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9036	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9036	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9036	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9036	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9036	116.0183	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1600	-31.9036	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9036	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9036	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.9036	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9036	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9036	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9036	116.0195	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9036	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9036	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.9036	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9036	116.0133	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.9035	116.0133	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9035	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9035	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9035	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9035	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9035	116.015	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9035	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9035	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9035	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9035	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9035	116.0136	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9035	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.9035	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9035	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	460	-31.9035	116.0089	2	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9035	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	0	-31.9035	116.0185	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9035	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9035	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9035	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9035	116.0136	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.9035	116.0205	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9035	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9035	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9035	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9035	116.0152	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.9035	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9034	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9034	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9034	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1450	-31.9034	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9034	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9034	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9034	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1520	-31.9034	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9034	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9034	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9034	116.0143	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9034	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9034	116.0197	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1720	-31.9034	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9034	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9034	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9034	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9034	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9034	116.0136	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9034	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9034	116.0088	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9034	116.0143	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9034	116.0145	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9034	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9033	116.0138	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2270	-31.9033	116.0129	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9033	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.9033	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9033	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9033	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9033	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9033	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9033	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9033	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9033	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	0	-31.9033	116.0188	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9033	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9033	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9033	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9033	116.0149	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9033	116.0133	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.9033	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9033	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9033	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9033	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9033	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9033	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9033	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9033	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9033	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1280	-31.9033	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9033	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1510	-31.9033	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9032	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9032	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9032	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9032	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9032	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1800	-31.9032	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.9032	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.9032	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9032	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9032	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9032	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9032	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9032	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.9032	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9032	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9032	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9032	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1350	-31.9032	116.0124	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1230	-31.9032	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9032	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9032	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9032	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9032	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9031	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9031	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9031	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9031	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1160	-31.9031	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9031	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.9031	116.0145	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1330	-31.9031	116.0122	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.9031	116.0116	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1320	-31.9031	116.0143	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9031	116.0141	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9031	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9031	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9031	116.013	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9031	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1140	-31.9031	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9031	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1560	-31.9031	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1690	-31.9031	116.0137	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1140	-31.9031	116.0143	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1380	-31.9031	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9031	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9031	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.9031	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9031	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9031	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9031	116.0111	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.903	116.0148	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1350	-31.903	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.903	116.0129	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.903	116.0146	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.903	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.903	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.903	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.903	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.903	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.903	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.903	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.903	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.903	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.903	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2000	-31.903	116.0122	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.903	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.903	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.903	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.903	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.903	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.903	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.903	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.903	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2240	-31.9029	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9029	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9029	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1360	-31.9029	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9029	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9029	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9029	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9029	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.9029	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9029	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9029	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1450	-31.9029	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9029	116.0099	2	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9029	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.9029	116.0123	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9029	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9029	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9029	116.0101	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2430	-31.9029	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9029	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9029	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9029	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9029	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9029	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9028	116.0106	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9028	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9028	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9028	116.0147	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9028	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9028	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9028	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9028	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9028	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9028	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9028	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9028	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.9028	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9028	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9028	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9028	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9028	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9028	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9028	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9027	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9027	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9027	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9027	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9027	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.9027	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9027	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9027	116.0101	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9027	116.0111	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9027	116.0116	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9027	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9027	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.9027	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9027	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9027	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9027	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.9026	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9026	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9026	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9026	116.0101	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9026	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9026	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9026	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9026	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9026	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9026	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.9026	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9026	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9026	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9026	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9026	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9026	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9026	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9026	116.0144	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9026	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.9026	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9026	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9026	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1520	-31.9026	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9025	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9025	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9025	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9025	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9025	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9025	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9025	116.0117	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9025	116.0109	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9025	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9025	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9025	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9025	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9025	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9025	116.0128	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9025	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9025	116.0129	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9025	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9025	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9025	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9025	116.0123	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9025	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9025	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9025	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9025	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1330	-31.9025	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.9025	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9025	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9025	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9025	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9025	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9025	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.9025	116.0125	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9025	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9025	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9025	116.0116	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9025	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1360	-31.9024	116.0124	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.9024	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9024	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9024	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9024	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.9024	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9024	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9024	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9024	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9024	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9024	116.0125	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9024	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9024	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9024	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9024	116.0111	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9024	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1250	-31.9024	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9024	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9024	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9024	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.9024	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9024	116.014	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9024	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9024	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9024	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9024	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9024	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9024	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9024	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9024	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9024	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9024	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.9024	116.0116	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1270	-31.9024	116.0124	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.9024	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9023	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9023	116.0092	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9023	116.0139	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9023	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9023	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9023	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.9023	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9023	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1400	-31.9023	116.0125	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9023	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9023	116.0142	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.9023	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9023	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9023	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1640	-31.9023	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.9023	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.9023	116.0127	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9023	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9023	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9023	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9023	116.0111	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9023	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9023	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.9023	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9023	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9023	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9023	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.9023	116.0084	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9023	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9023	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9023	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9023	116.0101	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.9023	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9023	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9023	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9023	116.0132	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9023	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9023	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9023	116.0135	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9023	116.0132	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9023	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9023	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.9022	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9022	116.0126	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9022	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9022	116.0134	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9022	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9022	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9022	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9022	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.9022	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9022	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1280	-31.9022	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9022	116.0085	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.9022	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9022	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9022	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9022	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9022	116.0116	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9022	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9022	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9022	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9022	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9022	116.0111	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.9022	116.0103	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9022	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9022	116.0122	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9022	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9022	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9021	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9021	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9021	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9021	116.01	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9021	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.9021	116.0122	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9021	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9021	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9021	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9021	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9021	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9021	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9021	116.012	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9021	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9021	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9021	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9021	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9021	116.011	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9021	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9021	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.9021	116.0101	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.9021	116.0104	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9021	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9021	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9021	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9021	116.0107	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9021	116.0106	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.902	116.0102	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.902	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.902	116.0105	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.902	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.902	116.0099	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.902	116.0119	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.902	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1540	-31.902	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.902	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.902	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.902	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.902	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.902	116.0115	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1910	-31.902	116.0088	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.902	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.902	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.902	116.0118	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.902	116.0108	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.902	116.0117	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.902	116.0112	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.902	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.902	116.0125	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.902	116.0124	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.902	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.902	116.0113	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1160	-31.902	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9019	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.9019	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.9019	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9019	116.0114	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.9019	116.0123	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9019	116.0111	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9019	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1360	-31.9019	116.0098	1	Potentially suitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9019	116.022	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1870	-31.9018	116.009	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9018	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9018	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9018	116.0109	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9018	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9018	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9018	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9018	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1460	-31.9018	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9018	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9018	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9018	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9018	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9017	116.009	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1320	-31.9017	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9017	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9017	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9017	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9017	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9017	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9017	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.9017	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9017	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.9017	116.0085	2	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.9016	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9016	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9016	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9016	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9016	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9016	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9016	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9016	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1160	-31.9016	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9015	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.9015	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9015	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1230	-31.9015	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9015	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.9015	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.9015	116.0088	1	Potentially suitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9015	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.9015	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.9015	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9014	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9014	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9014	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	830	-31.9014	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.9014	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.9014	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9014	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9014	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9014	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.9014	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.9014	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9013	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9013	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9013	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.9013	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9013	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9013	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9013	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9013	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9013	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9013	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9013	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.9013	116.0086	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9012	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9012	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9012	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.9012	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.9012	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9012	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.9012	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.9012	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9012	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.9012	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.9012	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.9012	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9012	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9012	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.9012	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.9011	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9011	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.9011	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.9011	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.9011	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9011	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9011	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9011	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.9011	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1630	-31.901	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.901	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.901	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.901	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.901	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9009	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.9009	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9009	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9009	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1120	-31.9009	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.9009	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1220	-31.9009	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9009	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1750	-31.9009	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.9009	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.9008	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9008	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.9008	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.9008	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.9008	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	860	-31.9008	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9007	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1480	-31.9007	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.9007	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1750	-31.9007	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1760	-31.9006	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.9006	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.9006	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.9006	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.9006	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.9006	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.9005	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.9005	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1750	-31.9005	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1230	-31.9005	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.9005	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.9004	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1540	-31.9004	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1210	-31.9004	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.9004	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9004	116.0088	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.9004	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.9004	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2480	-31.9004	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.9004	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9004	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.9003	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.9003	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1600	-31.9003	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.9003	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.9003	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1890	-31.9003	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.9002	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9002	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.9002	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.9002	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.9001	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.9001	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.9	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.9	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.9	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8999	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.8999	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8999	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8999	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.8998	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8998	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8998	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1120	-31.8997	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1800	-31.8997	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2180	-31.8996	116.007	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.8996	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1400	-31.8996	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1520	-31.8996	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8996	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.8996	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1770	-31.8996	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.8995	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1120	-31.8995	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8995	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1430	-31.8994	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8994	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8994	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.8994	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.8994	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.8994	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1430	-31.8994	116.0098	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1260	-31.8993	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8993	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.8992	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1420	-31.8992	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8992	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.8992	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8992	116.0067	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1490	-31.8992	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2000	-31.8992	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8992	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1650	-31.8991	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.8991	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.8991	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.8991	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.8991	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1900	-31.899	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.899	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.899	116.0067	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.899	116.0082	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.899	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.899	116.0058	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	790	-31.899	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.899	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8989	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.8989	116.0067	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.8989	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8989	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8989	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.8989	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.8989	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1850	-31.8989	116.0082	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8989	116.0064	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1030	-31.8989	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1220	-31.8989	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	840	-31.8989	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	960	-31.8989	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8988	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.8988	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.8988	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8988	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.8988	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.8988	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.8988	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8988	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.8988	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.8988	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.8988	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.8988	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1730	-31.8988	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8988	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.8988	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.8988	116.0058	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8987	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8987	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8987	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8987	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8987	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.8987	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8987	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1770	-31.8987	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.8987	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8987	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8987	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8987	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8987	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8987	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8987	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.8987	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.8987	116.0064	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8987	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8987	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8987	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8987	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8987	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.8987	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1840	-31.8987	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8987	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8986	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.8986	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.8986	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8986	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8986	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8986	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8986	116.008	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8986	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8986	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.8986	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.8986	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	630	-31.8986	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8986	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.8986	116.006	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.8986	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1320	-31.8986	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8986	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.8986	116.0045	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8985	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8985	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.8985	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.8985	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8985	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.8985	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8985	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8985	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.8985	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.8985	116.0061	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.8985	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1560	-31.8985	116.0058	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1210	-31.8985	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1450	-31.8985	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.8985	116.0064	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.8985	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8985	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1680	-31.8985	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.8985	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8985	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1210	-31.8985	116.0078	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8985	116.0042	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.8985	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1080	-31.8985	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8985	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.8985	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.8984	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8984	116.0036	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1430	-31.8984	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1530	-31.8984	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1800	-31.8984	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.8984	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1250	-31.8984	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	810	-31.8984	116.0076	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1120	-31.8984	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8984	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.8984	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.8984	116.0042	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8984	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1390	-31.8984	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	870	-31.8984	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	540	-31.8984	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.8984	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.8984	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8984	116.0035	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1570	-31.8984	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1190	-31.8984	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.8984	116.0045	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.8984	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1330	-31.8984	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.8983	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1410	-31.8983	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1130	-31.8983	116.0082	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8983	116.0075	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	1120	-31.8983	116.006	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8983	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.8983	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8983	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1070	-31.8983	116.006	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	980	-31.8983	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1600	-31.8983	116.0084	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1530	-31.8983	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8983	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1750	-31.8983	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.8983	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8983	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8983	116.0036	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8983	116.0039	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1730	-31.8983	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8983	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8983	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1870	-31.8982	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1770	-31.8982	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8982	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.8982	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1340	-31.8982	116.004	1	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.8982	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1350	-31.8982	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8982	116.0036	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	940	-31.8982	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	930	-31.8982	116.0079	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8982	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8982	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8982	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8982	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8982	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1730	-31.8982	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	580	-31.8982	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.8982	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	640	-31.8982	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.8982	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8982	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	850	-31.8981	116.0067	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.8981	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8981	116.0095	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8981	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8981	116.0061	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8981	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8981	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.8981	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1310	-31.8981	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1330	-31.8981	116.0038	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.8981	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8981	116.0064	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1590	-31.8981	116.0058	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8981	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8981	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8981	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.8981	116.0039	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8981	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1060	-31.8981	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8981	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.8981	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.8981	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1670	-31.8981	116.0087	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8981	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8981	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1280	-31.8981	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.898	116.0045	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.898	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.898	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	620	-31.898	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.898	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1260	-31.898	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.898	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1290	-31.898	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1480	-31.898	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.898	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.898	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.898	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.898	116.0071	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	730	-31.898	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1380	-31.898	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1210	-31.898	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1210	-31.898	116.0077	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.898	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1260	-31.898	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1500	-31.898	116.007	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1110	-31.898	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.898	116.0042	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1360	-31.898	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.8979	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8979	116.0089	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.8979	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1170	-31.8979	116.0038	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8979	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1150	-31.8979	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8979	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	510	-31.8979	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8979	116.0045	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	720	-31.8979	116.0094	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.8979	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.8979	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.8979	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1130	-31.8979	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8979	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1270	-31.8979	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8979	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8979	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1130	-31.8979	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.8979	116.0068	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8979	116.0063	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1660	-31.8979	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1300	-31.8979	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	2120	-31.8979	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1180	-31.8979	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1240	-31.8979	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1320	-31.8978	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8978	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.8978	116.0074	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.8978	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	650	-31.8978	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	910	-31.8978	116.0047	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8978	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.8978	116.0073	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8978	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.8978	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.8978	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.8978	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1050	-31.8978	116.0069	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	920	-31.8978	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.8978	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	880	-31.8978	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8978	116.0061	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8978	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8977	116.0061	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.8977	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1020	-31.8977	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8977	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8977	116.0051	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.8977	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.8977	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8977	116.0062	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	530	-31.8977	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8977	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	890	-31.8977	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.8977	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	680	-31.8977	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8977	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8977	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8977	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8977	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8977	116.0061	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1390	-31.8977	116.0097	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8977	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1100	-31.8977	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	820	-31.8977	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	900	-31.8977	116.0096	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1010	-31.8977	116.006	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	780	-31.8977	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1090	-31.8977	116.0057	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.8977	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8977	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8977	116.0059	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	610	-31.8977	116.0058	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.8977	116.0046	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	520	-31.8976	116.0043	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.8976	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8976	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8976	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.8976	116.0048	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8976	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8976	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	500	-31.8976	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.8976	116.0065	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.8976	116.0081	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1530	-31.8976	116.0039	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1160	-31.8976	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1040	-31.8976	116.0053	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8976	116.0056	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.8976	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	560	-31.8976	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	740	-31.8976	116.0052	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	570	-31.8976	116.0054	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	990	-31.8976	116.0055	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	710	-31.8976	116.0041	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	690	-31.8976	116.0042	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	750	-31.8976	116.0066	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	950	-31.8976	116.0042	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8976	116.004	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1140	-31.8976	116.0044	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1730	-31.8976	116.005	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	970	-31.8976	116.0049	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8975	116.0072	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8975	116.0092	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8975	116.0075	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	700	-31.8975	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	660	-31.8975	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	770	-31.8975	116.0077	0	Unsuitable

Tree Species	DBH	Latitude	Longitude	Hollows	Breeding Suitability
Flooded Gum, <i>Eucalyptus rudis</i>	2000	-31.8975	116.0083	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	550	-31.8974	116.008	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	800	-31.8974	116.0093	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1200	-31.8974	116.0091	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8974	116.009	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	670	-31.8974	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	590	-31.8974	116.0086	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	760	-31.8974	116.0085	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	600	-31.8973	116.0088	0	Unsuitable
Flooded Gum, <i>Eucalyptus rudis</i>	1000	-31.8973	116.0087	0	Unsuitable
Dead stag, Indeterminate species	940	-31.9237	116.0177	0	Unsuitable
Dead stag, Indeterminate species	1070	-31.9051	116.014	1	Unsuitable
Dead stag, Indeterminate species	970	-31.9035	116.0096	0	Unsuitable
Dead stag, Indeterminate species	870	-31.902	116.0085	1	Potentially suitable
Dead stag, Indeterminate species	840	-31.8995	116.0091	0	Unsuitable
Dead stag, Indeterminate species	760	-31.8984	116.0073	1	Unsuitable

Appendix 15

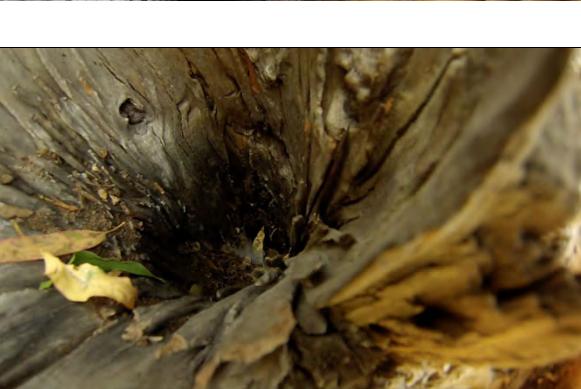
Black Cockatoo Hollow Inspection Images



Tree Species	DBH	Easting (MGA50)	Northing (MGA50)	Number of Hollows Assessed	Determination	Comments	Photos
Flooded Gum	134	405820.65	6470413.54	1	Not suitable	Base of hollow has opening to the environment	
Stag	76	406126.381	6470395.94	1	Not suitable	Too shallow	
Flooded Gum	117	406244.132	6470033.85	1	Not suitable	Too shallow	
Stag	87	406245.6	6469997.06	1	Not suitable	Too open	
Flooded Gum	109	406236.133	6469967.38	1	Potentially suitable	No signs of use	

Flooded Gum	46	406288.148	6469832.28	1	Not suitable	Too open		
Flooded Gum	105	406489.586	6469883.88	2	Not suitable	Too shallow		
Flooded Gum	150	406539.193	6469877.36	1	Not suitable	Too shallow		
Marri	75	406984.897	6469710.8	1	Not suitable	Too open		
Flooded Gum	244	406912.952	6469510.71	1	Not suitable	Too shallow		

Flooded Gum	184	406980.115	6469445.47	2	Suitable	One hollow contained Common Brushtail Possum (<i>Trichosurus vulpecula</i>), the other too shallow			
Jarrah	89	406758.961	6468465.03	3	Not suitable	Not hollow, too open and too shallow			
Jarrah	119	407160.855	6466667.14	1	Not suitable	Not hollow			
Jarrah	146	407243.767	6466563.02	1	Not suitable	Not hollow			

Flooded Gum	185	406210.209	6470341.06	1	Not suitable	Not hollow		
Flooded Gum	131	406272.514	6470053.07	1	Suitable	Contains duck eggs, suspected to be from Australian Wood Duck (<i>Chenonetta jubata</i>) or Australasian Shoveller (<i>Spatula rhynchos</i>).		
Flooded Gum	92	406291.1	6470027.19	1	Not suitable	Too shallow; Contains a feather, suspected to be from Australian Ringneck (<i>Barnardius zonarius</i>) or Rainbow Lorikeet (<i>Trichoglossus moluccanus</i>).		
Flooded Gum	136	406364.719	6470011.79	1	Suitable	Hollow entrance displayed chew marks		
Flooded Gum	80	406248.082	6469974.25	1	Not suitable	Too shallow		

Flooded Gum	200	406596.749	6469891.62	1	Not suitable	Not hollow		
Jarrah	152	406933.468	6467917.89	2	Not suitable	Too narrow		
Jarrah	108	407025.417	6467684.14	3	Not suitable	Not hollow		