

5.2 FIELD ASSESSMENT

5.2.1 Flora

A total 156 flora species, from 97 genera and 42 families were recorded. The dominant families were found to be Proteaceae (Protea family – 20 taxa), Fabaceae (Pea family – 16 taxa) and Myrtaceae (Myrtle family – 9 taxa) (**Table 21**). The total includes 156 native species and 6 introduced (weed) species. No WoNS or DP plants listed under the BAM Act were recorded within the survey area (Centre for Invasive Species Solutions 2022; DPIRD 2022). The full list of vascular flora species recorded is presented by vegetation unit in **Appendix C**, with individual relevé data presented in **Appendix D**.

Table 21 - Summary of Flora Taxa Recorded in the Survey Area

Overview	Total
Families	42
Genera	97
Taxa (species, sub species, varieties)	156
Native Flora	150
Introduced Flora	6
Threatened Flora	0
Priority Flora	4
Range Extensions	1
Undescribed Flora	2
WoNS	0
Declared Pest Plant	0
Families	Number of Taxa
Proteaceae	20
Fabaceae	16
Myrtaceae	9
Genera	Number of Taxa
<i>Drosera</i>	7
<i>Hibbertia</i>	6
<i>Banksia</i>	5

5.2.1.1 Significant Flora

No species listed as Threatened flora under the BC Act or under the EPBC Act were recorded during the field assessment. Three Priority flora species were recorded, *Netrostylis* sp. Blackwood River (P3), *Acacia semitrullata* (P4) and *Hypolaena robusta* (P4) (**Table 22**). The locations of significant flora recorded in the survey area are presented in **Figure 17**.

Table 22 – Recorded Significant Flora in the Survey Area

Species	EBPC Cons. Code	WA Cons. Code	Vegetation Unit/s	No. Individuals Recorded
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)	-	Priority 3	EmBgHh, EmBgPu, EmDhHh, EmKaHh, EmTlMt	6
<i>Acacia semitrullata</i>	-	Priority 4	EmBgHh	1
<i>Hypolaena robusta</i>	-	Priority 4	EmTlMt	1
TOTAL				8

5.2.1.2 Range Extensions

One species, *Stylium affine*, recorded within the survey area, was found to be occurring outside its known range of occurrence, according to records of the Western Australian Herbarium (WAH) (1998b-) and Atlas of Living Australia (2022); and this constitutes a range extension (**Table 23**).

Stylium affine was recorded in vegetation unit EmBgHh. The collection from the survey area represents the most western for this species known to date (WAH 1998b-).

Table 23 – Recorded Range Extensions of Species Recorded in the Survey Area

Species	EBPC Cons. Code	WA Cons. Code	Vegetation Unit	No. Individuals Recorded
<i>Stylium affine</i>	-	-	EmBgHh	1
TOTAL				1

5.2.1.3 Undescribed Flora Species

Two flora taxa were found to be undescribed (phrase name) species in accordance with records of the Western Australian Herbarium (WAH). These species are summarised in **Table 24**.

Table 24 - Undescribed Flora Species in the Survey Area

Species	EBPC Cons. Code	WA Cons. Code	Vegetation Units	No. Individuals Recorded
<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736)	-		EmBgHh, EmBgPu	3
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)	-		EmBgHh, EmBgPu, EmDhHh, EmKaHh, EmTlMt	6
TOTAL				9

Re-assessment of the likelihood of occurrence of significant flora was carried out to further refine these conclusions, based on field observations (**Table 25**). The desktop assessment (pre-field survey) indicated that 25 species have the potential to be supported by the survey area (considered 'likely to occur' or 'may occur').

The post-field survey determined that 28 species have the potential to be supported by the survey area (considered 'likely to occur', 'may occur' or were recorded). Of these 28 flora species, seven are listed as Threatened, four are P1, one is P2, 12 are P3 and four are P4 taxa.

Netrostylis sp. Blackwood River (A.R. Annel 3043) (P3), *Acacia semitrullata* (P4) and *Hypolaena robusta* (P4) were not identified as potentially occurring in the survey area nor included in the pre-survey likelihood of occurrence assessment, but were incorporated into the post survey assessment, since they were recorded.

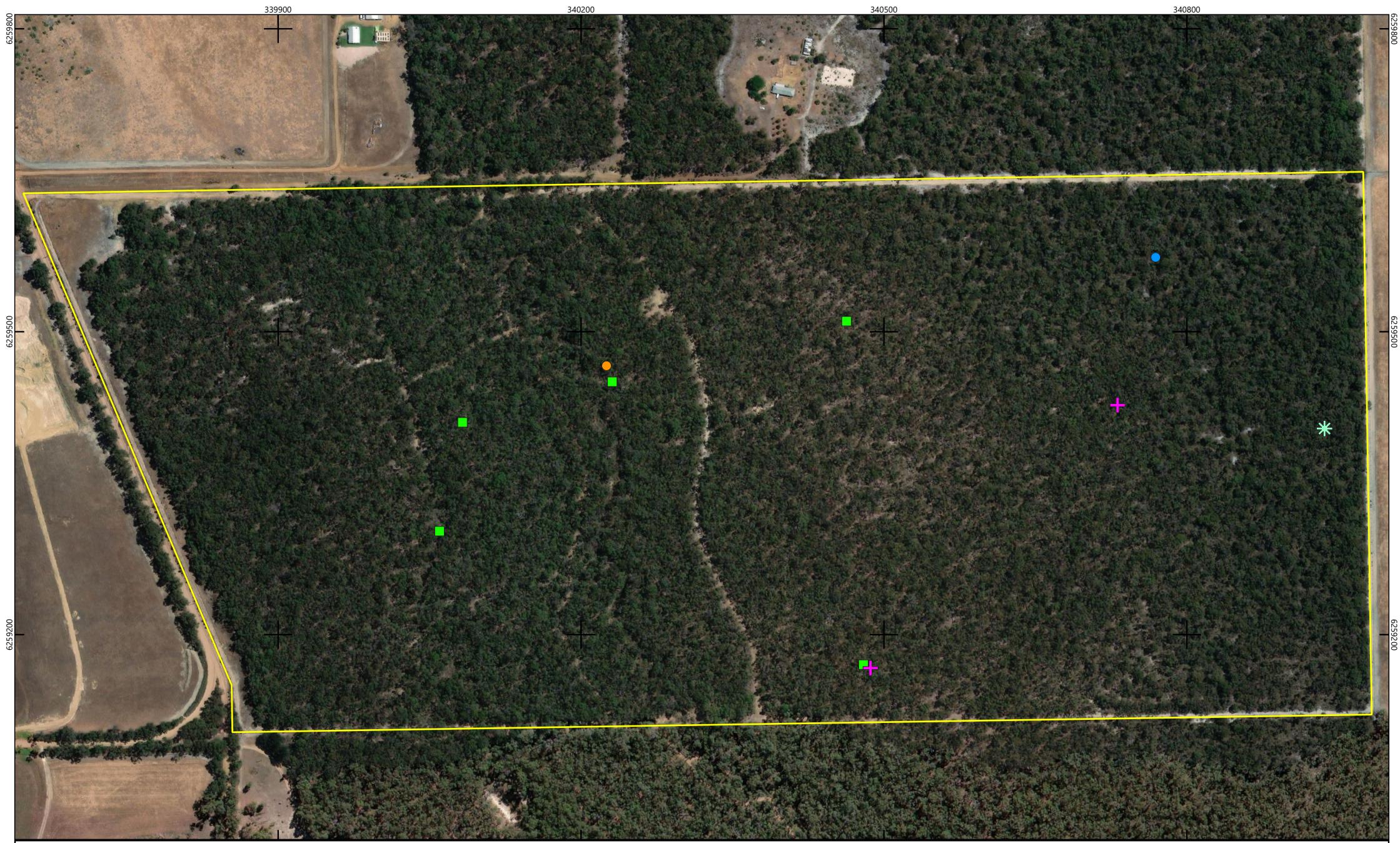


Figure 17 - Recorded Significant Flora

- Legend**
- Survey Area
 - Acacia semitrullata (P4)
 - ✚ Adenanthes sp. Whicher Range (G.J. Keighery 9736) (Undescribed)
 - Hypolaena robusta (P4)
 - Netrostylis sp. Blackwood River (A.R. Annels 3043) (P3)
 - ✳ Stylium affine (Range Extension)

Table 25 - Post-Field Survey Threatened and Priority Flora Likelihood of Occurrence in the Survey Area

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Caladenia busselliana</i>	CR	T	Tuberous perennial herb growing to 0.2 to 0.3 m high. Produces green, cream and red flowers in September to October.	Winter-wet swamps. On sandy loam.	Unlikely to occur - the nearest record found 18.34 km north-west of survey area on different soil and geology that is present within the survey area.	PMST
<i>Caladenia huegelii</i>	CR	T	Tuberous perennial herb growing to 0.25 to 0.6 m high. Produces green, cream and red flowers in September to October.	Coastal plain. On grey or brown sand, clay loam.	Unlikely to occur - the nearest record found 26.7 km north-east of survey area on different soil and geology that is present within the survey area.	PMST
<i>Eucalyptus x phylacis</i>	CR	T	Mallee or tree growing to 5 m high, with rough and flaky bark. Produces cream flowers in May.	Coastal areas. On laterite, loam over granite.	Unlikely to occur - the nearest record found 28.58 km north-west of survey area on different soil and geology that is present within the survey area.	PMST
<i>Gastrolobium papilio</i>	CR	T	Tangled, clumped shrub growing to 1.5 m high. Produces cream-red flowers in October to December.	Flat plains. On sandy clay over ironstone and laterite.	Unlikely to occur - the nearest record found 8.2 km south-east of survey area on different soil though on similar geology that is present within the survey area.	NatureMap, PMST
<i>Grevillea brachystylis</i> subsp. <i>grandis</i>	CR	T	Erect, spreading shrub growing to 1.8 m high. Produces red flowers in September to January.	Plains and flats, road verges. On brown sandy loam, laterite clay soils.	May occur - one occurrence 2.6 km west of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap, PMST
<i>Lambertia echinata</i> subsp. <i>occidentalis</i>	CR	T	Prickly, much-branched non-lignotuberous shrub growing to 3 m high. Produces yellow flowers in February or April or December.	Flats to foothills, winter-wet sites. On white sandy soils over laterite, orange, brown-red clay over ironstone.	Unlikely to occur - the nearest record found 16.33 km north of survey area on different soil and geology that is present within the survey area.	PMST
<i>Petrophile latericola</i>	CR	T	Multi-stemmed shrub growing from 0.4 to 1.5 m high. Produces yellow flowers in November.	Winter-wet flats. On red lateritic clay.	Unlikely to occur - the nearest record found 25.6 km north-west of survey area on different soil and geology that is present within the survey area.	PMST

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Synaphea</i> sp. Fairbridge Farm (D. Papenfus 696)	CR	T	Dense clumped shrub growing to 0.3 m high and to 0.4 m wide. Produces yellow flowers in October.	Near winter-wet flats, in low woodland with weedy grasses. On sandy with lateritic pebbles.	Unlikely to occur - the nearest record found 64.7 km north-east of survey area on different soil though on similar geology that is present within the survey area.	PMST
<i>Verticordia plumosa</i> var. <i>ananeotes</i>	CR	T	Erect sparsely branched shrub growing from 0.3 to 0.5 m high. Produces pink-purple or white flowers in November to December.	Seasonally inundated plains. On sandy loam.	May occur - two occurrences, one of them found 2.7 km west on similar soil and geology that is present within the survey area.	DBCA, NatureMap, PMST
<i>Banksia nivea</i> subsp. <i>uliginosa</i>	EN	T	Dense, erect, non-lignotuberous shrub growing from 0.2 to 1.5 m high. Produces yellow-brown flowers in August to September.	Flat plain seasonally inundated. On sand or sandy clay, gravel.	Likely to occur - six occurrences on similar soil and geology that is present within the survey area. Two of which 1.2 km east of the survey area.	DBCA, NatureMap, PMST
<i>Caladenia hoffmannii</i>	EN	T	Tuberous perennial herb growing to 0.13 to 0.3 m high. Produces green, yellow and red flowers in August to October.	Clay, loam, laterite, granite. On rocky outcrops and hillsides, ridges, swamps and gullies.	Unlikely to occur - the nearest record found 563 km north of survey area on different soil and geology that is present within the survey area.	PMST
<i>Drakaea micrantha</i>	EN	T	Tuberous perennial herb growing from 0.15 to 0.3 m high. Produces red and yellow flowers in September to October.	Slope to creek line. On white-grey sand.	Unlikely to occur - the nearest record found 10.1 km south of survey area on different soil though on similar geology that is present within the survey area.	NatureMap, PMST
<i>Verticordia densiflora</i> var. <i>pedunculata</i>	EN	T	Erect to spreading shrub growing from 0.3 to 0.6 m high. Produces pink or pink-white flowers in December or January.	Winter-wet low-lying areas. On grey or yellow sand, sandy loam.	Unlikely to occur - the nearest record found 6.2 km north of survey area on different soil and geology that is present within the survey area.	NatureMap, PMST
<i>Verticordia plumosa</i> var. <i>vassensis</i>	EN	T	Shrub growing from 0.3 to 1 m high. Produces pink flowers in September to December or January to February.	Winter-wet flats. On white or grey sand.	Unlikely to occur - the nearest record found 6.2 km north of survey area on different soil and geology that is present within the survey area.	NatureMap, PMST

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Banksia mimica</i>	VU	T	Prostrate, lignotuberous shrub growing to 0.4 m high. Produces yellow-brown flowers from December to February.	Slopes and flats. On white or grey sand, sandy loam soils over laterite.	May occur - one occurrence 5 km south of survey area on different soil though similar geology that is present within the survey area.	NatureMap, PMST
<i>Banksia squarrosa</i> subsp. <i>argillacea</i>	VU	T	Erect, open shrub growing to 4 m high. Produces yellow flowers from June to November.	Seasonally inundated depressions and plains and clay flats. On white-grey sand, gravelly clay or loam soils.	Likely to occur - four occurrences on similar soil and geology that is present within the survey area. One of which 880 m east of the survey area.	DBCA, NatureMap, PMST
<i>Chamelaucium royceri</i> (Syn. <i>Chamelaucium</i> sp. S coastal plain (R.D. Royce 4872))	VU	T	Bushy shrub growing from 0.3 to 1.5 m high. Produces white to pink flowers in August to December.	Winter-wet flats, swamps, stream banks. On sandy clay, clay, lateritic soils.	Unlikely to occur - the nearest record found 5.6 km north-west of survey area on different soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Daviesia elongata</i>	VU	T	Spreading or sprawling shrub growing from 0.4 to 1 m high. Produces yellow, orange and red flowers in September or December or January to February.	Gentle slopes, undulating plain. On sand, sandy loam or laterite.	Likely to occur - 11 occurrences on similar soil and/or geology that is present within the survey area. Five of which found from 760 m to 1 km south and south-east of the survey area.	DBCA, NatureMap, PMST
<i>Diuris micrantha</i>	VU	T	Tuberous perennial herb growing from 0.3 to 0.6 m high. Produces yellow and brown flowers in September to October.	Winter-wet swamps, in shallow water. On brown loamy clay.	Unlikely to occur - the nearest record found 120 km north-east of survey area on different soil and geology that is present within the survey area.	PMST
<i>Drakaea elastica</i>	VU	T	Tuberous perennial herb growing from 0.12 to 0.3 m high. Produces red, green and yellow flowers in October to November.	White or grey sand. On low-lying situations adjoining winter-wet swamps.	Unlikely to occur - the nearest record found 14.63 km north-east of survey area on different soil and geology that is present within the survey area.	PMST
<i>Gastrolobium modestum</i>	VU	T	Prostrate to clumped shrub growing to 0.5 m high. Produces cream-green-pink flowers in September to November.	Gullies and edges of flats. On shallow red clay-loam or grey sand, ironstone.	Likely to occur - group of 11 occurrences found from 930 m to 1.7 km south of the survey area on similar soil and geology.	DBCA, NatureMap, PMST

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Morelotia australiensis</i> (Syn. <i>Tetaria australiensis</i>)	VU	T	Rhizomatous tufted perennial sedge growing to 1 m high. Produces brown flowers in November to December.	Flats with grey or brown sandy clay loam.	Unlikely to occur - the nearest record found 26.78 km north-west of survey area on different soil and geology that is present within the survey area.	PMST
<i>Andersonia ferricola</i>		P1	Shrub growing from 0.2 m to 0.5 m high. Produces purple flowers in October.	Seasonally wet flats. On white sand or red-brown loam over ironstone. Seasonally wet flats.	Likely to occur - one occurrence 1.4 km east of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Loxocarya striata</i> subsp. <i>implexa</i>		P1	Rhizomatous tangled sedge growing from 20 to 30 cm, though can reach up to 1.2 m.	Winter wet flats, red clay. On ironstone or silty soil over massive laterite pavement.	Likely to occur - one occurrence 842 m east of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Stylium ferricola</i>		P1	Caespitose perennial herb from 0.09 to 0.15 m high. Produces pale orange flowers in November.	Seasonally wet poorly drained slopes. On shallow red-brown clay loam over ironstone.	Likely to occur - one occurrence 1.1 km east of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Thysanotus formosus</i>		P1	Caespitose perennial herb growing to 0.3 m high. Produces purple flowers in November to December or January.	In situations often inundated in winter. On clayey sand, sandy loam.	Likely to occur - one occurrence 930 m south of survey area on similar soil and geology that is present within the survey area.	DBCA
<i>Leucopogon</i> sp. Busselton (D. Cooper 243)		P2	Slender, erect shrub growing to 0.7 m. Produces white flowers in March, April or September.	Seasonal wet flats. On sand or sandy clay over clay.	Unlikely to occur - one occurrence 4.5 km north of survey area on different soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Melaleuca incana</i> subsp. Gingilup (N. Gibson & M. Lyons 593)		P2	Shrub growing from 1.2 to 1.8 m high. Produces cream-yellow flowers in May to June.	Seasonally wet flats. On red-grey sand, sandy clay over ironstone.	Likely to occur - one occurrence 1.9 km west of survey area on similar soil and geology that is present within the survey area.	DBCA

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Boronia tetragona</i>		P3	Perennial herb growing from 0.3 to 0.7 m high, leaves sessile, entire, with papillate margins, branches quadrangular, sepals ciliate. Produces pink & red flowers in October to December.	Winter-wet flats, swamps, open woodland. On black or white sand, laterite, or brown sandy loam.	May occur - one occurrence 4.4 km south-east of survey area on different soil though similar geology that is present within the survey area.	DBCA, NatureMap
<i>Calothamnus lateralis</i> var. <i>crassus</i>		P3	Shrub growing to 1.5 m high. Produces red flowers in August to September.	Wet depressions. On sand.	May occur - one occurrence 2.9 km west of survey area on different soil though similar geology that is present within the survey area.	DBCA, NatureMap
<i>Grevillea brachystylis</i> subsp. <i>brachystylis</i>		P3	Much-branched, prostrate or decumbent, non-lignotuberous shrub growing from 0.2 to 0.5 m high and to 3 m wide. Produces red flowers in August to November.	Swampy situations. On black sand, sandy clay.	Likely to occur - two occurrences, with one of them found 1.6 km west of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Hakea oldfieldii</i>		P3	Open, straggling shrub growing to 2.5 m high. Produces white-cream or yellow flowers in August to October.	Seasonally wet flats. On red clay or sand over laterite.	Likely to occur - five occurrences, with one of them found 1.6 km west of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Isopogon formosus</i> subsp. <i>dasylepis</i>		P3	Low upright, non-lignotuberous shrub growing from 0.2 to 2 m high. Produces pink-purple or red flowers in June to December.	Often swampy areas. On sand, sandy clay, gravelly sandy soils over laterite.	Likely to occur - five occurrences on similar soil and geology that is present within the survey area; one of which found 250 m east of the survey area.	DBCA, NatureMap
<i>Lasiopetalum laxiflorum</i>		P3	Erect, compact perennial shrub growing up to 1.5 m high. Produces purple/pink sticky flowers in October to December.	Hill, sandy clay over ironstone/laterite.	Likely to occur - three occurrences approximately 6 km south-west/south-east of the survey area. Similar geology likely present within the survey area.	DBCA
<i>Loxocarya magna</i>		P3	Rhizomatous, perennial sedge-like herb growing from 0.5 to 1.5 m high. Produces flowers in September or November.	Seasonally inundated or damp habitats. On sand, loam, clay, ironstone.	Likely to occur - one occurrence 1.05 km east of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap

Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		P3	Erect sprawling, perennial erect sedge to 1 m with brown flowers on elongated pedicels.	Permanently wet creek line. dark peaty clay loam.	Recorded – recorded within the survey area associated with vegetation EmBgPu, EmDhHh, EmKaHh, EmTimt.	Recorded by FVC
<i>Pultenaea pinifolia</i>		P3	Erect, slender multi-stemmed shrub growing from 1 to 3 m high. Produces flowers with yellow and orange parts from September to November.	Floodplains and swampy areas. On loam or clay soils.	May occur - population of six records found from 3.5 to 4.2 km north-west of survey area on different soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Schoenus benthamii</i>		P3	Tufted perennial sedge growing from 0.15 to 0.45 m high. Produces brown flowers from October to November.	Winter-wet flats and swamps. On white, grey sand, sandy clay soils.	Unlikely to occur - one occurrence 3.5 km north of survey area on different soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Synaphea hians</i>		P3	Prostrate or decumbent shrub growing from 0.15 to 0.6 m high and to 1 m wide. Produces yellow flowers in July or September to November.	Rises. On sandy soils.	May occur - one occurrence 2.9 km west of survey area on different soil though similar geology that is present within the survey area.	DBCA, NatureMap
<i>Synaphea petiolaris</i> subsp. <i>simplex</i>		P3	Tufted shrub growing from 0.1 to 0.6 m high. Produces yellow flowers in September to October.	Flats, winter-wet areas. On sandy soils.	Likely to occur - one occurrence 1.6 km east of survey area on similar soil and geology that is present within the survey area.	DBCA, NatureMap
<i>Acacia semitrullata</i>		P3	Slender, erect, pungent shrub from 0.2m to 1.5m m high. Produces cream-white flowers in May to October.	White/grey sand, sometimes over laterite, clay. Sandplains, swampy areas.	Recorded – recorded within the survey area associated with vegetation EmBgHh.	Recorded by FVC
<i>Calothamnus quadrifidus</i> subsp. <i>teretifolius</i>		P4	Erect or sprawling shrub growing to 2 to 3 m high, leaves are linear. Produces red flowers in November.	Flats, winter wet flats or slopes. On grey sand or red-brown clay loam.	Likely to occur - four occurrences on similar soil and geology that is present within the survey area. One of which is found 88 m east of the survey area.	DBCA, NatureMap
<i>Chamelaucium erythrochlorum</i>		P4	Erect shrub growing to 1.5 (-2) m high. Produces pink-red flowers in November to December or January.	Flats or slopes. On gravelly lateritic soils, clayey sand or clay.	May occur - one occurrence 2.6 km west of survey area on similar soil and geology that is present within the survey area.	DBCA

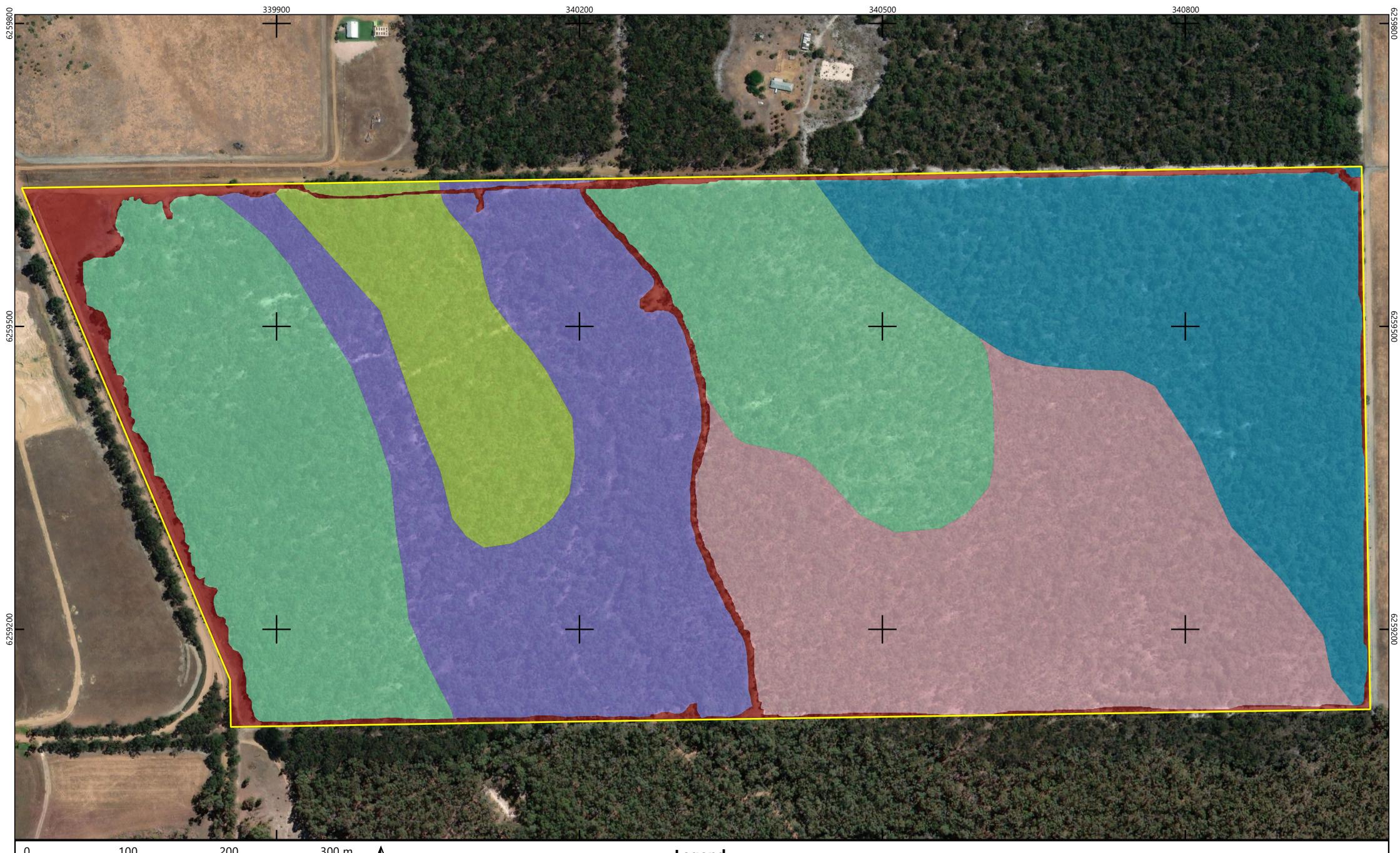
Species	EPBC Cons. Status	WA Cons. Status	Description	Preferred Habitat*	Likelihood of Occurrence (Post-Survey)	Source
<i>Hypolaena robusta</i>		P4	Dioecious rhizomatous, perennial, herb, growing to 0.5 m high. Produces white flowers in September and October .	White sand and sandplains.	Recorded – recorded within the survey area associated with vegetation EmTIMt.	Recorded by FVC
<i>Lambertia rariflora</i> subsp. <i>rariflora</i>		P4	Small tree or shrub growing to 7 m high. Produces green, yellow-green flowers in February to Mar or May.	Near intermittent streams. On red-brown clay soils, black organic loam or laterite.	May occur - four occurrences from 2.1 km to 3.1 km south of survey area on different soil though similar geology that is present within the survey area.	DBCA, NatureMap

5.2.2 Vegetation

A total of five vegetation units were recorded and mapped within the survey area as described in **Table 26** and presented spatially in **Figure 18**. The survey area supports Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*) and Sheoak (*Allocasuarina fraseriana*) Woodlands with a mixed midstorey and understorey on slight rises of elevation (60 m-72 m above sea level). Vegetation unit EmTIMt occurs on soil system 214Ws (brown deep sands and brown loamy earths) and is located on a lower depression (58 m above sea level), associated with Buayanyup River that runs through the centre of the survey area (18.579 %, 12.170 ha). This vegetation is distinctly different from the other vegetation units with a sedgeland midstorey and it also intersects with the Groundwater Dependent Ecosystems Atlas as a 'Moderate Potential GDE' as described in **Section 3.5.2**. Cleared areas make up 5.106% (3.34 ha) of the survey area. These areas have been subject to historical clearing, grazing, and clearing for firebreaks and access tracks.

Table 26 – Summary of Recorded Vegetation Types in the Survey Area

Vegetation Unit Code	Vegetation Type and Description	Representative Photo	Relevé No.	Area (ha)	Area (%)
EmBgHh	Jarrah Woodland <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Allocasuarina fraseriana</i> , <i>Corymbia haematoxylon</i> mid woodland over <i>Banksia grandis</i> , <i>Persoonia longifolia</i> tall open shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Taxandria parviceps</i> , <i>Anarthria prolifera</i> low sparse shrubland.		BO01 BO03	12.369	18.883
EmBgPu	Jarrah / Marri Woodland / Sheoak Woodland <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Banksia grandis</i> , <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Persoonia longifolia</i> mid to tall open shrubland over <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Podocarpus drouynianus</i> low sparse shrub.		BO02 BO04	14.532	22.185
EmDhHh	Jarrah / Marri Woodland / Sheoak Woodland <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Dasygordon hookeri</i> , <i>Banksia grandis</i> , <i>Persoonia longifolia</i> mid to tall shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Persoonia longifolia</i> .		BO05 BO07	18.334	27.989
EmKaHh	Jarrah / Marri Woodland / Sheoak Woodland <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Kingia australis</i> tall sparse shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> Low sparse shrubland.		BO09	4.748	7.248
EmTlMt	Jarrah / Marri Woodland / Sheoak Woodland with Sedgeland Associated with Drainage. <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Taxandria linearifolia</i> , <i>Lepidosperma gladiatum</i> , <i>Astartea pulchella</i> mid open sedgeland/ shrubland over <i>Mesomelaena tetragona</i> , <i>Hypolaena robusta</i> low open sedgeland.		BO06 BO08	12.170	18.579
			CLEARED	3.352	5.117
			TOTAL	65.505	100



Legend

Survey Area	EmKaHh
EmBgHh	EmTiMt
EmBgPu	Cleared
EmDhHh	

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Figure 18 - Vegetation Units

5.2.3 Vegetation Condition

The condition of the vegetation within the survey area was found to range from 'Excellent' to 'Completely Degraded'. The majority of the vegetation was observed to be in 'Excellent' condition, making up 77.85% (51 ha) of the survey area, with only 0.04% (0.02 ha) considered to be in 'Degraded' condition (**Table 27**). Areas that have been subject to disturbances such as historical clearing and pastoral activities are considered to be 'Completely Degraded' (**Figure 19**). Cleared areas, which include firebreaks and tracks, contributed to 5.11% (3.35 ha) of survey area.

Table 27 – Summary of Recorded Vegetation Condition in the Survey Area

Condition	Total	
	Area (ha)	Area (%)
Excellent	51.00	77.85
Very Good to Excellent	6.16	9.41
Very Good	4.05	6.19
Good	0.93	1.41
Completely Degraded	0.02	0.04
Cleared	3.35	5.11
TOTAL	65.505	100

5.2.4 Dieback

The survey area covers 65.50 hectares of vegetation which was suitable to be assessed for the presence of *Phytophthora* dieback. The field assessment concluded that there are two *Phytophthora* dieback infested areas (creek boundary and north-western corner) within the survey area, totalling 25.63 ha (39%) (**Figure 20**). The remainder of the survey area was determined to be uninfested with 39.87 ha (61%) of this area being protectable from the disease (**Table 28**).

Table 28 - *Phytophthora* Dieback Assessment Summary within the Survey Area

Category	Area (ha)	Protectable Area (ha)	% of Survey Area
Infested	25.6	0	39
Uninfested - protectable	39.9	34	61
Uninfested - unprotectable	-		
Uninterpretable	-		
Temporary uninterpretable	-		
TOTAL	65.5	34	100



Figure 19- Vegetation Condition



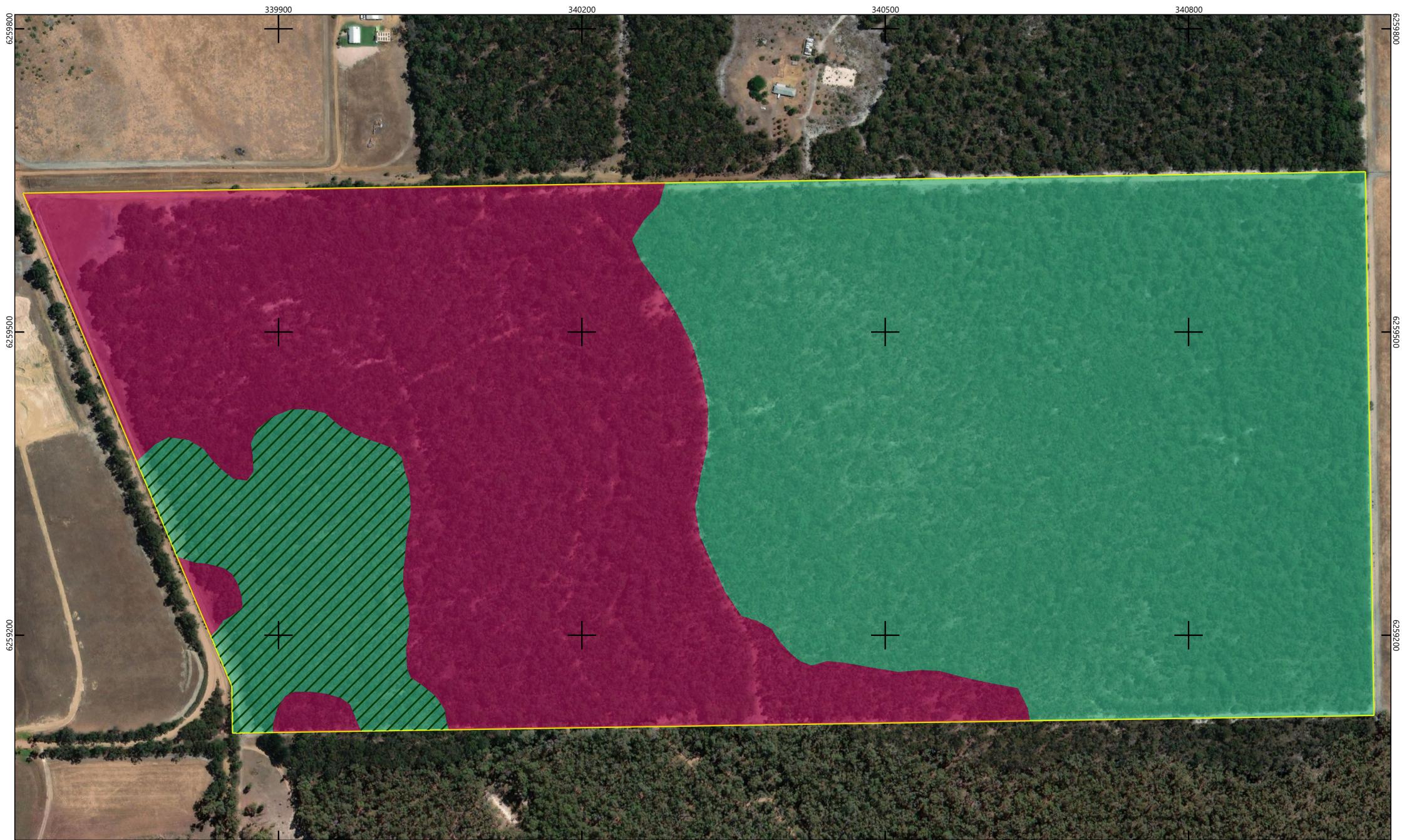


Figure 20 - Phytophthora Dieback Occurrence

5.2.5 Fauna

A total of eight vertebrate fauna species (five birds and three mammals) were recorded during the field assessment, either from direct sightings, or from evidence such as calls, scats, tracks, digging, foraging evidence, feathers or bones. All of the vertebrate fauna recorded are native to Western Australia (**Table 29**).

Table 29 – Fauna Species Recorded in the Survey Area

Species	Status	Observation
BIRDS		
<i>Zanda baudinii</i> (Baudin's Black-Cockatoo)	Endangered	Roosting evidence
<i>Zanda latirostris</i> (Carnaby's Black-Cockatoo)	Endangered	Roosting evidence
<i>Calyptorhynchus banksii</i> subsp. <i>naso</i> (Forest Red-tailed Black-Cockatoo)	Vulnerable	Feather evidence
<i>Dromaius novaehollandiae</i> (Emu)		Feather evidence
<i>Aquila audax</i> (Wedge-tailed Eagle)		Likely nest
MAMMALS		
<i>Pseudocheirus occidentalis</i> (Western Ringtail Possum)	Critically Endangered	Sighting
<i>Macropus fuliginosus</i> (Western Grey Kangaroo)		Lays observed
<i>Trichosurus vulpecula</i> (Brush-tailed Possum)		Sighting

5.2.5.1 Significant Fauna

Four fauna species of significance, the Baudin's Black-Cockatoo (*Zanda baudinii*) the Carnaby's Black-Cockatoo (*Zanda latirostris*), the Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*) and the Western Ringtail Possum (*Pseudocheirus occidentalis*) were recorded within the survey area and observed through direct and indirect evidence (**Figure 21**).

All three species of Threatened Black-Cockatoo were observed during both daytime and dawn/dusk surveys. The Forest Red-tailed Black-Cockatoo was recorded in the survey area through the identification of a feather. The two white-tailed species were recorded through feather identification and directly observed through calls and sightings from within the survey area.

Five Black-Cockatoo flocks were recorded during the field assessment on three separate occasions, from within the survey area. One flock of greater than 20 individuals was recorded flying south from within the north-west portion of the survey area. The largest flock observed consisted of approximately 24 White-tailed Black-Cockatoos recorded at 1910 flying south-west through the survey area to a site outside the survey area.

The Western Ringtail Possum was observed through direct observation on two occasions from within the survey area, and on one occasion two individuals were observed. This species is listed as CS1 (Critically Endangered) and Schedule 1 (Critically Endangered) under the EPBC and BC Act, respectively.

Based on the findings of the desktop assessment, combined with field observations confirming habitat provided in the survey area, it is considered that ten significant fauna species may occur as residents (four species) or regular visitors (six species).

The post-field survey assessment of the likelihood of occurrence of significant fauna within the survey area is presented in **Table 30**.

Table 30 – Post-Field Survey Significant Fauna Expected Occurrence in the Survey Area

Species	EPBC Cons. Code	WA Cons. Code	Significance	Post-Survey Expected Occurrence	Source
BIRDS					
<i>Zanda baudinii</i> (Baudin's Black-Cockatoo)	EN	EN	CS1 (EN, S2[en])	Resident - Roosting observed, seasonal resident.	DBCA, NatureMap, PMST
<i>Zanda latirostris</i> (Carnaby's Black-Cockatoo)	EN	EN	CS1 (EN, S2[en])	Resident - Roosting observed, seasonal resident.	DBCA, NatureMap, PMST
<i>Calyptorhynchus banksii naso</i> (Forest Red-tailed Black-Cockatoo)	VU	VU	CS1 (VU, S3[vu])	Resident - Suitable habitat present with evidence of presence identified; however, no roosting observed.	DBCA, NatureMap, PMST
<i>Falco hypoleucus</i> (Grey Falcon)	VU	VU	CS1 (VU, S3[vu])	Would not occur – No suitable habitat provided.	PMST
<i>Leipoa ocellata</i> (Malleefowl)	VU	VU	CS1 (VU, S3[vu])	Would not occur – No suitable habitat provided	DBCA, NatureMap
<i>Oxyura australis</i> (Blue-billed Duck)		P4	CS2 (P4)	Would not occur - No suitable habitat provided.	DBCA, NatureMap
<i>Cacatua pastinator pastinator</i> (Muir's Corella)		CD	S6	Regular visitor – Suitable habitat present.	DBCA, NatureMap
<i>Falco peregrinus</i> (Peregrine Falcon)		OS	S7	Regular visitor – Habitat is potentially suitable, and prey is present. Large eagle nest observed within the survey area. Peregrine falcons utilise the nests of other species (The Australian Museum 2019).	DBCA, NatureMap
MAMMALS					
<i>Pseudochirus occidentalis</i> (Western Ringtail Possum)			CS1 (CR, S1[cr])	Resident – confirmed presence.	DBCA, NatureMap and PMST
<i>Bettongia penicillata ogilbyi</i> (Woyley)			CS1 (CR, S2[e])	Would not occur – Outside known range.	DBCA and NatureMap
<i>Dasyurus geoffroii</i> (Chuditch)			CS1 (EN, S2[e])	Regular Visitor – Suitable habitat potentially present	DBCA, NatureMap and PMST
<i>Macrotis lagotis</i> (Bilby)			CS1 (VU, S3[vu])	Would not occur – Outside of known range with no suitable habitat present within the survey area.	DBCA and NatureMap
<i>Setonix brachyurus</i> (Quokka)			CS1 (VU, S3[vu])	Would not occur – Outside known range, even though habitat potentially present.	DBCA and NatureMap
<i>Falsistrellus mackenziei</i> (Western False Pipistrelle)			CS2 (P4)	Regular visitor - Suitable habitat potentially present.	DBCA and NatureMap
<i>Hydromys chrysogaster</i> (Rakali)			CS2 (P4)	Would not occur - No suitable habitat provided. The two streams flowing in the survey area are small and unlikely to be suitable.	DBCA and NatureMap
<i>Isoodon fusciventer</i> (Quenda)			CS2 (P4)	Regular visitor – Suitable habitat present.	DBCA and NatureMap

Species	EPBC Cons. Code	WA Cons. Code	Significance	Post-Survey Expected Occurrence	Source
<i>Notamacropus irma</i> (Western Brush Wallaby)			CS2 (P4)	Would not occur - No suitable habitat provided.	DBCA and NatureMap
<i>Phascogale tapoatafa wambenger</i> (South-western Brush-tailed Phascogale)			S6	Regular visitor – Suitable habitat present.	DBCA and NatureMap
REPTILES					
<i>Ctenotus ora</i> (Coastal Plains Skink)			CS2 (P3)	Would not occur - No suitable habitat provided.	DBCA and NatureMap

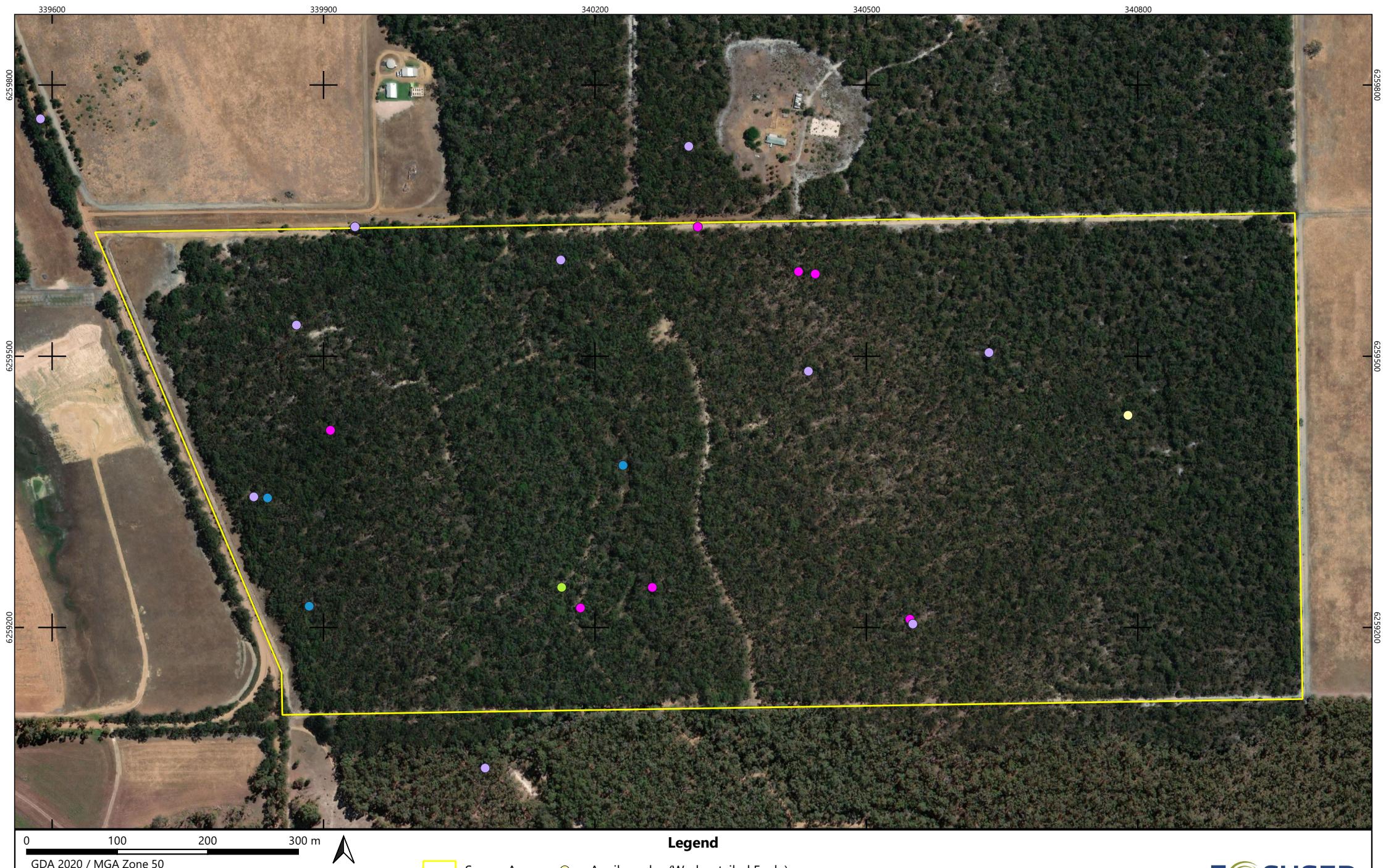


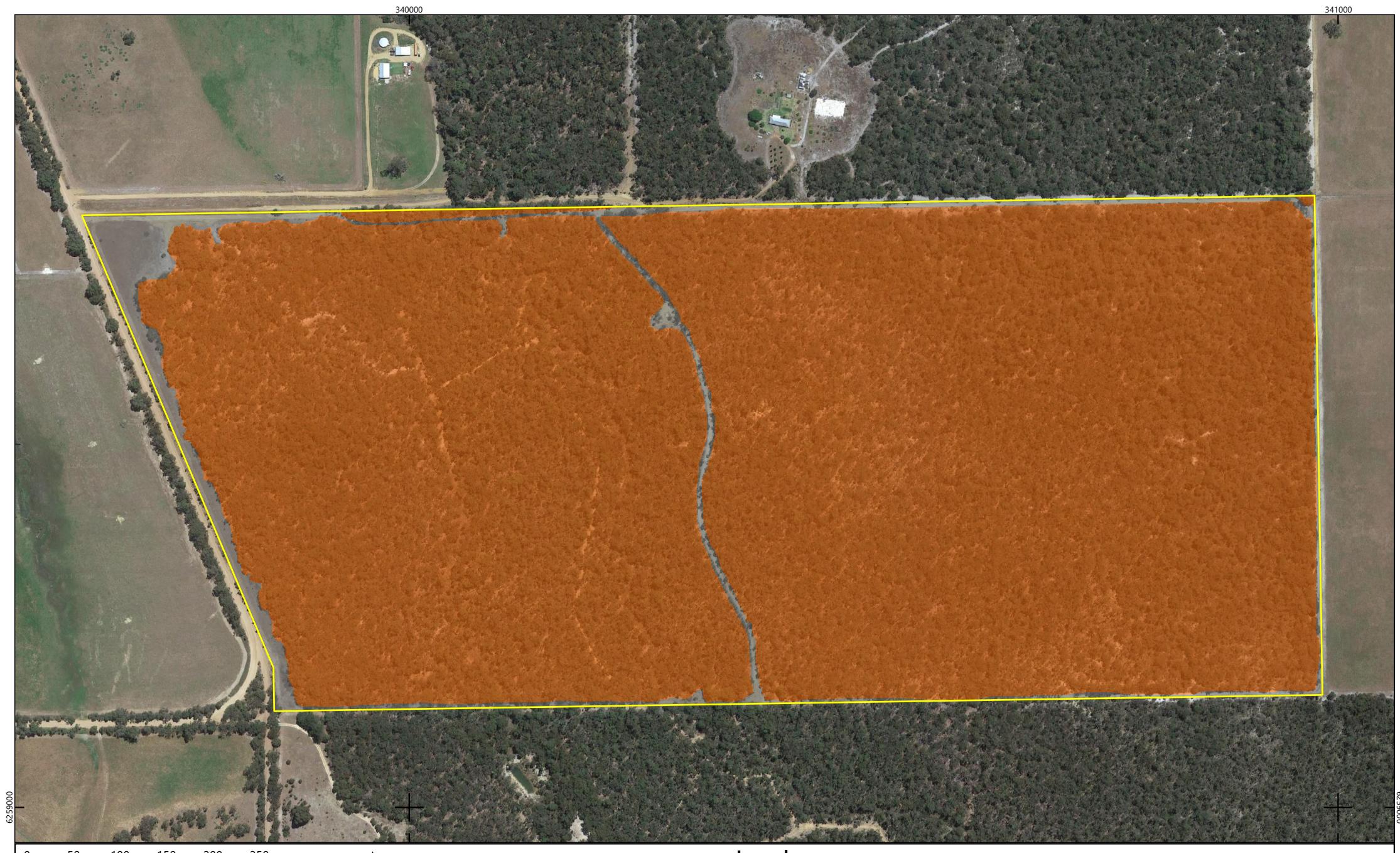
Figure 21 - Recorded Significant Fauna

5.2.6 Fauna Habitat

The survey area was found to support one intact and one heavily modified fauna habitat as summarised in **Table 31**. The spatial extent within the survey area is presented in **Figure 22**.

Table 31 - Summary of Fauna Habitats in the Survey Area

Habitat Description	Photograph	Area (ha)	Area (%)
Jarra, Marri, Sheoak Woodland Jarrah (<i>Eucalyptus marginata</i>) Marri (<i>Corymbia calophylla</i>) and Sheoak (<i>Allocasuarina fraseriana</i>) Woodlands with a mixed midstorey and understorey on sand.		62.154	94.884
Cleared/Grassland Firebreaks and access tracks with degraded open ground or weedy grasslands. Variable (seasonally) ground cover in weedy, grassed areas.	NA	3.351	5.116
		TOTAL	65.05
			100



Legend

- Survey Area
- Cleared
- Jarrah, Marri, Sheoak Woodland

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Figure 22 - Fauna Habitat

5.2.7 Black-Cockatoo Habitat Assessment

5.2.7.1 Foraging Habitat

The two fauna habitats described and mapped within the survey area have each been assigned a foraging quality value in accordance with the Bamford Consulting Ecologists (BCE 2020) methodology for each of the species of Black-Cockatoo, based on vegetation characteristics (out of six), context (out of three) and species presence (stocking rate) (out of one), for a total score out of 10. A summary of key Black-Cockatoo foraging species is summarised in **Table 32**.

Table 32 - Summary of Key Black-Cockatoo Foraging Species Within the Survey Area

Species	Baudin's Black-Cockatoo	Carnaby's Black-Cockatoo	Forest Red-tailed Black-Cockatoo
<i>Eucalyptus marginata</i>	✓		✓
<i>Corymbia calophylla</i>	✓	✓	✓
<i>Hakea</i> spp.	✓	✓	✓
<i>Banksia grandis</i> and <i>B. dallanneyi</i>	✓	✓	
<i>Allocasuarina fraseriana</i> (WA Sheoak)			✓
<i>Persoonia longifolia</i>			✓

The majority (62.15 ha, 94.88%) of the survey area provides 'High' quality foraging habitat for Carnaby's Black-Cockatoo and Forest Red-tailed Black-Cockatoo and 'Very High' quality foraging habitat for Baudin's Black-Cockatoo. The cleared areas within the survey area provide 'Negligible' quality foraging habitat for all species of Black-Cockatoo.

Application of additional scores for context and stocking rate for those habitats that have recorded vegetation characteristic scores ≥ 3 are applicable as shown in **Table 33**. The site context score considered factors such as the presence of a known Black-Cockatoo breeding sites within or near of the survey area. No known Black-Cockatoo breeding sites occur within 15 km of the survey area.

In order to further consider context, and to select the appropriate site context score, the proportion of native vegetation within the survey area in the context of the local area (15 km radius) was considered. The study area contains 26,514.13 ha of remnant vegetation, of which 60.814 ha (0.23 %) occurs within the survey area. Based on the proportion of remnant vegetation remaining within the survey area and the lack of known breeding locations within the study area (15 km buffer), a site context of one (out of three) was applied for all three Black-Cockatoo species.

The species stocking rate (presence) score considered factors such as numerous and regular DBCA database records for the various species of Black-Cockatoo in the survey area and vicinity, and observations made in the field. In this instance, all Black-Cockatoo species were observed during the field assessment and therefore, a score of one (out of one) for stocking rate was applied for all three species.

The foraging habitat value for the three Black-Cockatoo species is presented in **Table 33** and is presented spatially in the **Figure 23** series.

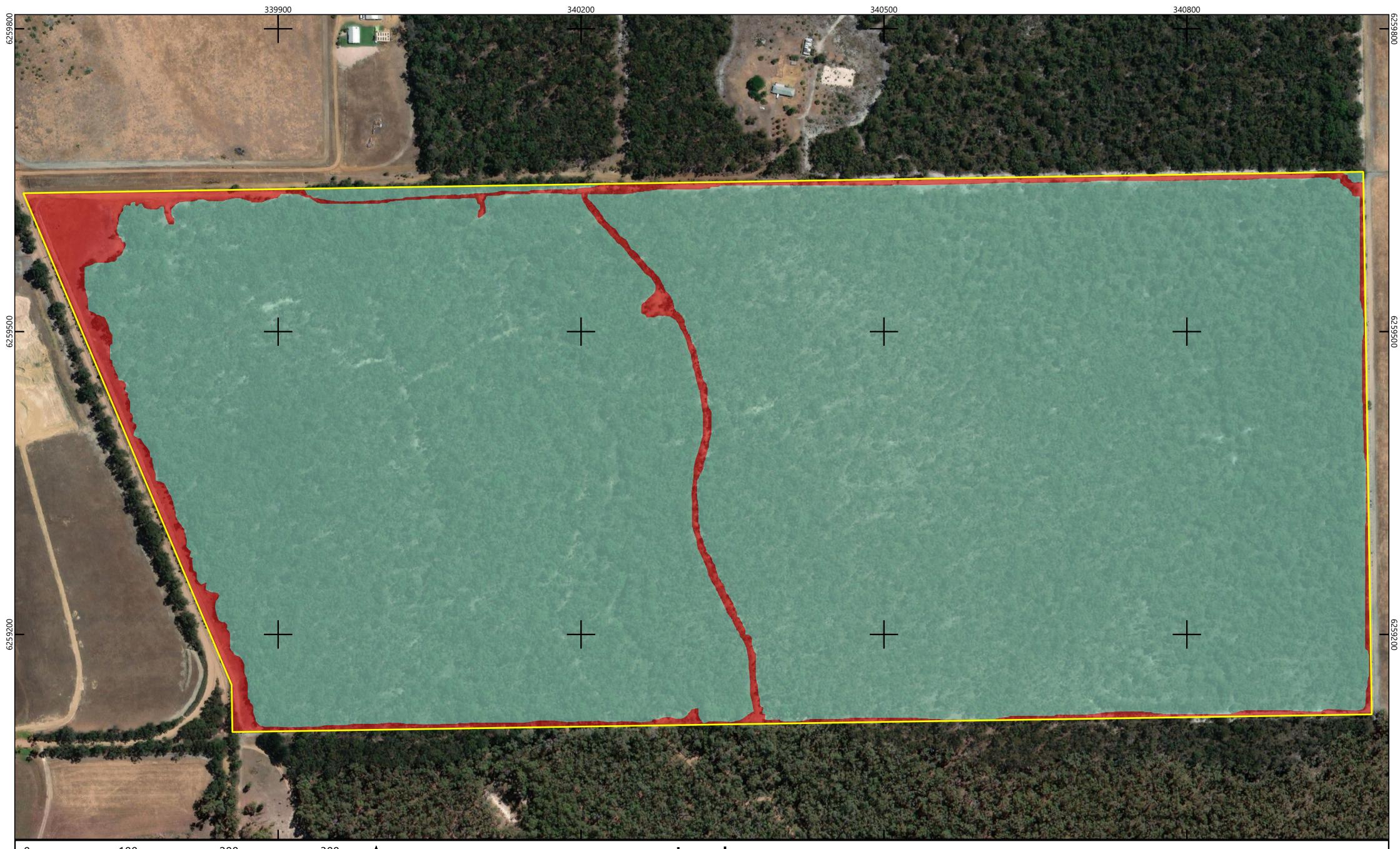
Table 33 - Summary of Black-Cockatoo Foraging Habitat Quality within the Survey Area

Habitat	Habitat Quality Scores			
	Vegetation Characteristics	Site Context*	Stocking Rate/ Species Density*	Total Score
Carnaby's Black-Cockatoo				
Jarrahd, Marri, Sheoak Woodland	4	1	1	6
Cleared	0	NA	NA	0
Baudin's Black-Cockatoo				
Jarrahd, Marri, Sheoak Woodland	5	1	1	7
Cleared	0	NA	NA	0
Forest Red-tailed Black-Cockatoo				
Jarrahd, Marri, Sheoak Woodland	4	1	1	6
Cleared	0	NA	NA	0

Foraging Habitat Quality Scores:

0 = none/negligible; 1 = negligible to low; 2 = low; 3 = low to moderate; 4 = moderate; 5 = moderate to high; 6 = high; 7+ = very high

*Vegetation characteristic scores ≤2 are not further analysed for context and stocking rate as these habitats are of negligible foraging value.



**Figure 23a - Carnaby's Black Cockatoo
Foraging Habitat**

- Legend**
- Survey Area
 - 0 - No Foraging Value
 - 6 - Moderate to High Foraging Value



**Figure 23b - Baudin's Black Cockatoo
Foraging Habitat**

Legend

- Survey Area
- 0 - No Foraging Value
- 7 - Very High Foraging Value



Legend

- Survey Area
- 0 - No Foraging Value
- 6 - Moderate to High Foraging Value

**Figure 23c - Forest Red-tailed Black Cockatoo
Foraging Habitat**

5.2.7.2 Potential Breeding Habitat

A total of 3,187 potential trees for Black-Cockatoo nesting (DBH >500 mm) were recorded within the survey area. Of the 3,187 trees recorded, 2,458 trees are *Eucalyptus marginata*, 655 are *Corymbia calophylla*, three are *Eucalyptus patens* and 71 dead/stag trees were recorded. Of 3,187 trees recorded, 2,805 are rank 5 (no suitable hollows for Black-Cockatoos), 38 are rank 4 (have unsuitable hollows), 315 are rank 3 (potentially suitable hollow, but with no evidence of use) and 24 trees were found to be rank 2 (suitable hollow/s and evidence of use). Five *Corymbia calophylla* trees were observed to provide hollows but were found to be colonised by bees (x). No trees were found to be rank 1 (active nest). The species and rankings of recorded trees is summarised in **Table 34** with further tree details presented in **Appendix E** and the locations of the recorded Suitable DBH Trees are presented in **Figure 24**.

Table 34 - Summary of Suitable DBH Trees for Black-Cockatoo Breeding Habitat in the Survey Area

Species	Total No. Trees	Total Number in Tree Rank/Category					
		1 – Active nest	2 – Sufficient DBH, suitable hollow, evidence	3 – Potential hollow, no evidence	4 – Hollow but unsuitable	5 – Sufficient DBH, no hollows	X – Potential (3) hollow colonised by bees
<i>Corymbia calophylla</i>	655		4	43	4	604	5
<i>Eucalyptus marginata</i>	2,458		20	266	34	2140	
<i>Eucalyptus patens</i>	3			1		2	
Stag	71			11		59	
Total	3,187	0	24	315	38	2,805	5



Legend

- | | |
|--|-------------|
| | Survey Area |
| | 2 |
| | 3 |
| | 4 |
| | 5 |
| | 3 and 2 |
| | 3 and 4 |
| | 4 |
| | 5 |
| | x3 |

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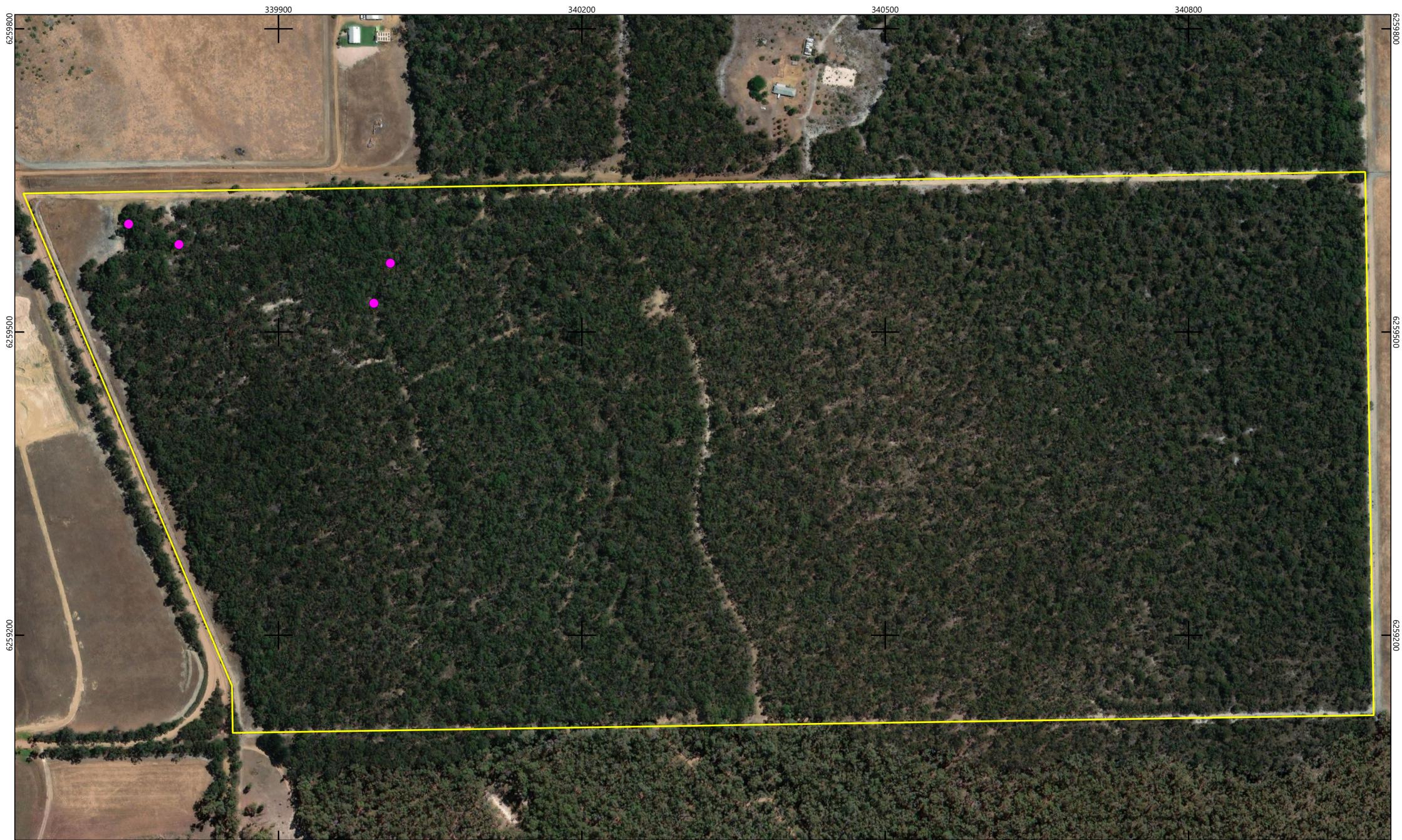
**Figure 24 - Black-Cockatoo Potential Breeding
Trees**

5.2.7.3 Roosting Habitat

No DBCA confirmed or unconfirmed roost sites occur within the survey area (**Figure 15**). The desktop assessment identified one potential roosting site 2.4 km south-east of the survey area and no confirmed DBCA roosting sites within the study area.

Four White-tailed Black-Cockatoo night-roosts were positively identified during the field survey in the north-west portion of the survey area, with one of these roost sites observed to support six individuals (**Figure 23**).

Identified roost sites had a high amount of observed activity, including calls heard. All roost sites were observed during the survey as being utilised by White-tailed Black-Cockatoos. Due to the similarity in appearance, between Carnaby's and Baudin's Black-Cockatoo, it was not possible to differentiate between these species in the field.



0 100 200 300 m
GDA 2020 / MGA Zone 50

Legend

- Survey Area
- Black-Cockatoo Roost Sites

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Figure 25 - Recorded Black-Cockatoo Roost Sites

5.2.8 Western Ringtail Possum and South-western Brush-tailed Phascogale Habitat Assessment

No dreys or noticeable signs of scats of Western Ringtail Possums or South-western Brush-tailed Phascogales were observed within the survey area. However, Western Ringtail Possums were directly observed within the survey area during the field assessment.

The survey area contains suitable foraging habitat for both species in the upper storey, being Jarrah and Marri open forest (Ecosystem Solutions 2022). The presence of *Banksia grandis* in the eastern portion and scattered throughout the survey area suggests that a food source for South-western Brush-tailed Phascogales of invertebrates may be seasonally supported.

The Western Ringtail Possum and South-western Brush-tailed Phascogale reside in tree hollows. As part of the Black-Cockatoo Breeding habitat assessment a total of 385 trees containing hollows were recorded (**Table 34**). These trees may be considered as potential rest sites and provide suitable nesting habitat for both species (Ecosystem Solutions 2022).

6 DISCUSSION

6.1 FLORA

A total 156 flora species, from 97 genera and 42 families was recorded from a reconnaissance flora and vegetation field assessment. Six introduced (weed) species contributed to 3.8% of the species diversity with no WoNS or DP plants were recorded within the survey area.

The timing of the field survey (November) is considered to have been optimal for the identification of flowering flora and annual and ephemeral species; however, further field assessment to identify floristic diversity throughout the survey area with focus on targeted surveys to detect further threatened or priority species is recommended.

The native floral diversity for a reconnaissance survey (156 species) is considered high, which is largely attributable to the excellent vegetation condition with little-to-no disturbance, favourable seasonal conditions and a robust survey consisting of a single phase field assessment.

A total of 14 of the flora specimens collected were not able to be identified with certainty to species level, due to inadequate or sterile material for identification purposes. However, this represents a small proportion of the total collected taxa (9%) and is not considered a constraint for the survey.

6.1.1 Significant Flora

The pre-survey desktop assessment identified 25 Threatened and Priority flora species that are likely to or may occur within the survey area (**Table 18**). An assessment of suitable habitat, proximity of previous records and current condition of study area indicated that 25 of these species have the potential to be supported by the study area (considered 'likely to occur' or 'may occur'). Of these 25 flora species, seven are listed as Threatened flora, four species are P1, one is P2, nine are P3 and three are P4 taxa.

The following three Priority flora were recorded to occur during the survey:

- *Netrostylis* sp. Blackwood River (A.R. Annels 3043) (P3)
- *Acacia semitrullata* (P4)
- *Hypolaeania robusta* (P4).

One collected specimen was unable to be identified with certainty to species level. Further review of this specimen by a specialist WA Herbarium taxonomist, determined the identification of *Synaphea* sp. (aff. *otostigma*). *Synaphea otostigma* is a P3 species. However, the collected specimen does not correlate to any of the currently recognised taxa (Mike Hislop, WA Herbarium, pers. comm.) and therefore has not been reported to be (or likely be) the P3 species *Synaphea otostigma*.

6.1.1.1 *Netrostylis* sp. Blackwood River (A.R. Annels 3043) (P3)

Netrostylis sp. Blackwood River was previously listed as *Tetaria* sp. Blackwood River (A.R. Annels 3043) and renamed in 2021. It is in the sedge family (Cyperaceae) and is described as an erect sprawling, perennial erect sedge that grows to 1 m with brown flowers on elongated pedicels. It predominantly occurs in permanently wet creek lines on dark peaty clay loam. This species has 16 records within Western Australia, with the most northerly record 15 km south-west of Boddington, and the most southerly location near Wongup Creek, east of Albany (WAH 1998b-). *Netrostylis* sp. Blackwood River was recorded in the survey area within quadrats BO01 and BO06 on grey and dark orange-brown sandy loam, with laterite and gravel. The closest previous record of this species occurs 5.5 km south. This species was recorded within all vegetation units except EmBgPu.

6.1.1.2 *Acacia semitrullata* (P4)

Acacia semitrullata is in the pea family (Fabaceae) and is described as a slender, erect, pungent shrub that grows to 1.5 m. It produces cream-white flowers in May to October and occurs on white/grey sand, sometimes over laterite, clay, associated with sandplains and swamp areas (**Plate 1**). This species has 88 records within Western Australia, with the most northerly record near Pinjarra the most southerly location at John Rate Lookout, Mount Clare Camp, which is in close proximity to Walpole (WAH 1998b-). One individual of this species was opportunistically recorded adjacent to quadrat BO03 on grey sandy loam flats. This species was recorded within vegetation unit EmBgHh in the western portion of the survey with higher elevation. The closest previous record of this species occurs 6.7 km southeast.



Plate 1 - *Acacia semitrullata* (WAH 1998-)

6.1.1.3 *Hypolaena robusta* (P4)

Hypolaena robusta is in the sedge/rush family (Restionaceae) and is described as a perennial rhizomatous sedge/rush, growing to 0.5 m high. It is easily distinguished from *Hypolaena exsulca* by well-spaced culms growing from robust rhizomes and also sparser male inflorescences (Meney *et al.* 1996). It produces white flowers in September and October and occurs on white sand and sandplains. This species has 47 records within Western Australia, with the most northerly record near Eneabba and the most southerly location north of Augusta (WAH 1998b-). *Hypolaena robusta* was recorded within quadrat BO06 in the survey area on dark orange-brown sandy loam, with laterite and gravel. The closest previous record of this species occurs 40 km south. *Hypolaena robusta* was only recorded within vegetation unit EmTiMt (sedgeland understorey) in the central portion of the survey area with lower elevation, associated with the Buawayup River.



Plate 2 - *Hypolaena robusta* (WAH 1998b-)

6.1.2 Range Extending Flora

Significance is not limited to species covered by State and Commonwealth legislation, and also includes species of local significance and species showing significant range extensions or occurring at the edge of their known range. *Stylium affine* is a tuft perennial, herb, growing to 0.75 cm high, and produces purple flower in September to November and occurs on sandy loam, sandy clay over laterite, granite associated with coastal areas, hillslopes and gullies within Wandoo or Jarrah forests (WAH 1998b-). *Stylium affine* was only recorded within vegetation unit EmBgHh in the western portion of the survey with higher elevation. The closest current known location of this species occurs near Dunsborough, approximately 25 km north-west of the survey area.

6.1.3 Undescribed Flora

Two of the recorded flora species are undescribed (phrase name) species in accordance with records of the Western Australian Herbarium. *Adenanthes* sp. Whicher Range (G.J. Keighery 9736) (**Plate 3**) is a sprawling dwarf shrub that flowers red and occurs on gravelly loam over laterite. This species has 47 records within Western Australia and was recorded within vegetation units EmBgHh and EmBgPu (WAH 1998b-). *Netrostylis* sp. Blackwood River (A.R. Annels 3043) (P3) is also an undescribed taxon and a P3 flora, and a summary of this species is outlined in **Section 6.1.1.1**.



Plate 3 - *Adenanthes* sp. Whicher Range (G.J. Keighery 9736) (WAH 1998-)

6.2 VEGETATION

6.2.1 Vegetation Units

The reconnaissance flora and vegetation field survey determined that the survey area supports five remnant vegetation units, defined by nine relevés. Due to the survey being a reconnaissance assessment, the number of relevés used to record vegetation is considered adequate to sample the various vegetation units within the survey area.

All five vegetation units were broadly described as Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*) and Sheoak (*Allocasuarina fraseriana*). Woodlands with a mixed midstorey and understorey on slight rises of elevation (60m-72 m above sea level (asl)). Vegetation units EmTiMt and EmKaHh are located in a valley and are distinctly different as they occur on deep brown sands and brown loamy earths and is located on a lower depression (58 m asl). The deeper sands and loamy earths within the valley are associated with Buayanyup River that runs through the centre of the survey area, whilst the other defined vegetation units on upland landforms. Cleared occur along the boundary and within the survey area and consists of historical clearing, grazing practices, fire break and access tracks.

6.2.2 Vegetation Condition

The condition of the vegetation within the survey area ranged from 'Excellent' to 'Completely Degraded'. The majority of the vegetation was observed to be in 'Excellent' condition, making up 77.85% (51 ha) of the survey area, with only 0.04% (0.02 ha) considered to be in 'Degraded' condition. Areas that have been subject to disturbance such as historical clearing and pastoral activities are considered to be 'Completely Degraded', but this was a very small proportion of the survey area (0.02 ha). Cleared areas which include firebreaks and tracks contributed to 5.11% (3.35 ha) of survey area.

6.2.3 Vegetation Representation

Two vegetation associations (1000 and 1181) are present within the survey area. Vegetation association 1181 is represented by more than 30% for all spatial extents. However vegetation association 1000 is represented by 27.81%, 26.41% and 26.41% (all less than 30%) of its pre-European extent within the contexts of Western Australia, the Swan Coastal Plain IBRA Region and the Perth IBRA Subregion, respectively. Therefore, retention of vegetation association 1000 does not meet the EPA objective of retention for the purpose of biodiversity conservation.

6.3 THREATENED AND PRIORITY ECOLOGICAL COMMUNITIES

The desktop assessment identified seven significant ecological communities that are known to occur within the study area (**Table 18**). A reconnaissance field assessment was undertaken to provide context and gather broad information about the survey area. The field assessment was undertaken in low intensity sampling (relevé) of the flora and vegetation, to describe the general vegetation characteristics and condition at an appropriate scale. As quadrats were not used in the assessment, the likelihood of each significant ecological communities was reviewed based on the literature, DBCA TEC and PEC database, land systems and geology, and the general floral composition and structure recorded in the field. Each significant ecological community occurring within the study area is summarised below.

6.3.1.1 SCP10b – Shrublands on southern Swan Coastal Plain Ironstones (Busselton area)

The *Shrublands on southern Swan Coastal Plain Ironstones (Busselton area)* ecological community is a Commonwealth-listed Endangered community listed as Critically Endangered at State level. SCP10b is characterised by high diversity of endemic and conservation significant species (Endangered Species Scientific Subcommittee 2000) on seasonal wetlands on ironstone and heavy clay soils within the Swan Coastal Plain near Busselton (Meissner and English 2005).

The DBCA Threatened and Priority ecological communities database indicated that eight instances of this TEC occur within 5 km of the survey area (**Figure 13**). Two records of this TEC and their associated buffers occur within the survey area, covering 100% (65.50 ha) of the survey area (**Figure 13**). Typical and common native species in the 'southern ironstone' community are the shrubs *Kunzea* aff. *micrantha* (BJK and NG 040), *Pericalymma ellipticum*, *Hakea* sp. Williamson (BJK and NG 226), *Hemianдра pungens* and *Viminaria juncea*, and the herbs *Aphelia cyperoides*, *Centrolepis aristata* (DCCEWA 2021). The typical species that are characteristic of this TEC were not recorded within the survey area and therefore, it is considered that none of the defined vegetation units are considered representative of this TEC.

6.3.1.2 Banksia WL SCP – Banksia Woodlands of the Swan Coastal Plain

The *Banksia Woodlands of the Swan Coastal Plain ecological community* (Banksia woodlands TEC) was approved for inclusion as an Endangered TEC under the EPBC Act on 16 September 2016 (DEE 2016) and is a Priority 3 PEC at the State level.

The Banksia woodlands TEC is largely restricted to the Swan Coastal Plain IBRA bioregion, within the Perth (SWA02) and Dandaragan (SWA01) sub-regions. It extends into the adjacent Jarrah Forrest IBRA region (JA01 and JA02 sub-regions) and areas of the Whicher and Darling escarpments where pockets of Banksia woodland may occur. Associated with deep Bassendean sands, Spearwood sands and occasionally Quindalup sands this community occurs as a woodland supporting a prominent tree layer of Banksia with scattered Eucalypts and other tree species among or emerging above the canopy, with a rich understorey comprised of sclerophyllous shrubs, graminoids and forbs (DEE 2016).

The DBCA Threatened and Priority ecological communities database indicated that 23 instances of this TEC occur within and up to 3.3 km north-east of the survey area (**Figure 13**). One record of this TEC or its associated buffer occur within the survey area, covering 3.98 ha (6.07%) of the north-eastern corner of the survey area (**Figure 13**). *Banksia attenuata*, a characteristic species of this TEC, was recorded within one quadrat BO03 within vegetation unit EmBgHh. This vegetation unit may be representative of the Banksia woodlands TEC and further analysis may be required.

6.3.1.3 Whicher Scarp C1 - Central Whicher Scarp Jarrah woodland

The *Central Whicher Scarp Jarrah Woodland Ecological Community* (Whicher Scarp C1) is a Priority1 PEC at the State level associated with moderate to gentle slopes on coloured sands of the Central Whicher Scarp in the Whicher and Treeton forests (Keighery *et al.* 2008). This community has a substantial representation of southern taxa including: *Acacia preissiana*, *Allocasuarina fraseriana*, *Comesperma calymega* and *Hibbertia quadricolor* (DBCA 2022c).

The DBCA Threatened and Priority ecological communities database indicated that four instances of this PEC occur within and up to 2 km south of the survey area (**Figure 13**). Two records of this PEC and their associated buffers occur within the survey area, covering 63.68% (41.71 ha) of the survey area (**Figure 13**). Typical understorey species of this PEC were not recorded to occur within the survey area and the vegetation units defined within the survey area are not considered likely to be representative of this PEC.

6.3.1.4 Whicher Scarp C2 - Whicher Scarp Jarrah woodland of deep coloured sands

The *Whicher Scarp Jarrah woodland of deep coloured sands ecological community* (Whicher Scarp C2) forms part of the Commonwealth-listed Endangered listed Banksia woodlands TEC and is a Priority 1 PEC at the State level. The community is located through the Central and North Whicher Scarp on midslopes associated with deep, coloured sands. *Banksia attenuata* is commonly present, often dominate within this community (DBCA 2022c).

The DBCA Threatened and Priority ecological communities database indicated that one occurrence of this PEC is found 0.1 km south-east of the survey area (**Figure 13**). However, no known occurrences of this PEC are documented within the survey area, nor were any of the defined vegetation units considered likely to be representative of this PEC. Therefore, it is considered unlikely for this PEC to occur within the survey area.

6.3.1.5 Whicher Scarp G2 - Shrublands of near permanent wetlands in creek lines of the Whicher Scarp

The *Shrublands of near permanent wetlands in creek lines of the Whicher Scarp (Whicher Scarp G2) ecological community* is a Priority 1 PEC at State level and is considered a species poor community including the following taxa: **Anthoxanthum odoratum*, *Astartea scoparia*, *Baumea rubringosa*, *Cyathochaeta teretifolia*, *Homalospermum firmum*, *Isolepis cernua*, *Taxandria fragrans* and *Taraxis grossa*.

The DBCA Threatened and Priority ecological communities database indicated that one occurrence of this PEC was found 0.8 km south-east of the survey area (**Figure 13**). No known occurrences of this PEC were found within the survey area, nor were any of the defined vegetation units considered likely to be representative of this PEC. Therefore, it is considered unlikely for this PEC to occur within the survey area.

6.3.1.6 Whicher Scarp Paluslope Wetlands - Swan Coastal Plain Paluslope Wetlands

The *Swan Coastal Plain Paluslope Wetlands ecological community* is a Priority 1 PEC at the State level associated with areas of groundwater seepage at the base of the Whicher Scarp on sandy low hills. The community is commonly wet all year round and can join with neighbouring Pinjarra Plain wetlands. Species typically found include combinations of the following: *Cyathochaeta teretifolia*, *Melaleuca preissiana*, *Melaleuca incana*, *Taxandria linearifolia* and *Taxandria fragrans* (DBCA 2022c).

The DBCA Threatened and Priority ecological communities database indicated that one occurrence of this PEC was found 2 km south-east of the survey area (**Figure 13**). No known occurrences of this PEC were found within the survey area, nor were any of the defined vegetation units considered likely to be representative of this PEC.

6.4 DIEBACK

A dieback assessment was conducted for the entire survey area. Dieback infested vegetation within the survey area encompasses the creek that flows in a northerly direction near the centre of the survey area, and the north-western corner of the survey area (**Figure 20**). The infested area is one contiguous infestation, that previously may have had numerous points of disease introduction that have joined over time. Two additional infestations were noted on the western and southern boundaries that were probably introduced by historical disturbances along the boundary track of the survey area.

The disease was mainly expressing in the *Xanthorrhoea* species, with the extent of the disease determined by occasional recent deaths aligned with a perceptible change in biomass and vegetation composition. *Banksia* deaths were generally apparent in the upper-slope of the infested areas.

Two areas of 'Uninfested' vegetation were observed in the survey area. One encompasses the eastern portion of the survey area and is in 'Good' condition. Some *Banksia* deaths were observed, but all corresponded with rocky areas with very shallow soils.

The second 'Uninfested' area occurs in the western side of the survey area and has been classified as Unprotectable as it is downslope of existing 'Infested' vegetation. Due to the position in the landscape, dieback is likely to be carried to this 'Uninfested' area, contributing to it becoming 'Infested' over time and it is therefore considered 'Unprotectable'.

6.5 FAUNA

6.5.1 Fauna Assemblage

A total of eight vertebrate fauna species (five birds and three mammals) were recorded during the field assessment, either from direct sightings, or from evidence such as calls, scats, tracks, digging, foraging evidence, feathers, or bones. The fauna assessment confirmed the presence of Western Ringtail Possum (Critically Endangered), Baudin's Black-Cockatoo (Endangered), Carnaby's Black-Cockatoo (Endangered) and Forest Red-tailed Black-Cockatoo (Vulnerable). Other fauna observed within the survey area, which are not threatened, included Brushtail Possums and likely a Wedge-tailed Eagle nest, *Aquila audax*. Evidence of Emus and Kangaroos was observed throughout the survey area.

6.5.2 Significant Fauna

The desktop assessment identified 19 vertebrate of significance that area considered likely to occur within the survey area. The field assessment recorded four significant species, Baudin's Black-Cockatoo (Endangered under the EPBC Act; Schedule 2 under the BC Act), Carnaby's Black-Cockatoo (Endangered under the EPBC Act; Schedule 2 under the BC Act), the Western Ringtail Possum (Critically Endangered under the EPBC Act; Schedule 1 under the BC Act), the Forest Red-tailed Black-Cockatoo (Vulnerable under the EPBC Act; Schedule 3 under the BC Act).

Based on the habitats present in the survey area, and current documented distributions, the post-survey likelihood of occurrence assessment determined that six significant species would use the survey area as regular visitors and four species were confirmed to use the area as residents (**Table 30**). Species considered to be regular visitors or residents within the survey area are described below.

6.5.2.1 *Zanda baudinii* (Baudin's Black-Cockatoo) – CS1 (EN, S2) – Resident (Observed)

Baudin's Black-Cockatoo is listed as Endangered under the EPBC Act and the BC Act. This species is distributed through the south-western humid and subhumid zones, from the northern Darling Range and adjacent far east of the SCP (south of the Swan River), south to Bunbury and across to Albany (Johnstone *et al.* 2011). Baudin's Black-Cockatoo rarely occurs near the coast north of Mandurah and north of the Swan River (Johnstone and Storr 1998; Johnstone and Kirkby 2008). Baudin's Black-Cockatoo usually occur in small flocks of up to 30, or occasionally up to 50 and rarely in aggregations of up to 1200 (Johnstone and Kirkby 2008). Baudin's Black-Cockatoo is distinguished from Carnaby's Black-Cockatoo by its longer bill and slightly different call.

This species forages primarily in Eucalypt forests, where it feeds on Marri seeds, flowers, nectar and buds. They also feed on a wide range of seeds of *Eucalyptus*, *Banksia*, *Hakea* and Pines (*Pinus* sp.) as well as fruiting apples and pears and beetle larvae from under the bark of trees (Johnstone and Kirkby 2008; Johnstone and Storr 1998). Baudin's Black-Cockatoo forages at all levels of the forest, from the canopy to the ground, often feeding in the understorey on proteaceous trees and shrubs, especially Banksia, and in orchards both in trees and on dropped or fallen fruit on the ground.

The species is confirmed as a resident as roosting within the survey area was observed. Furthermore, the survey area supports habitat trees utilised by the species, with foraging evidence observed during the habitat assessment.

6.5.2.2 *Zanda latirostris* (Carnaby's Black-Cockatoo) – CS1 (EN, S2) – Resident (Observed)

Carnaby's Black-Cockatoo is listed as Endangered under the EPBC Act and the BC Act and is endemic to southwest WA, and is distributed from the Murchison River to Esperance and inland to Coorow, Kellerberrin and Lake Cronin (Cooper *et al.* 2002). The species was once common, but the population has declined significantly in the last half century, and is now locally extinct in some areas (Johnstone and Storr 1998; Shah 2006; Johnstone and Kirkby 2008).

The habitat of Carnaby's Black-Cockatoo includes forests, woodlands, heathlands, and farms. The species feeds primarily on *Banksia*, *Hakea* and Marri, in addition to other Proteaceous species and fruits from introduced trees such as Pines and Cape Lilac. The species is confirmed as a resident as roosting within the survey area was observed. In addition, the survey area supports habitat trees utilised by the species, with foraging evidence observed during the field assessment.

Carnaby's Black-Cockatoo has specific nesting site requirements, with nests mostly in smoothed-barked eucalypts and in hollows ranging from 2.5 to 12 m above the ground, an entrance from 23 to 30 cm in diameter and a depth of 0.1 to 2.5 m (Johnstone & Storr 1998).

Breeding occurs in winter/spring mainly in the eastern forest and wheatbelt where they can find mature hollow bearing trees to nest in (Morcombe 2004). Based on records in the Johnstone and Storr (1998), this species is currently expanding its breeding range westward and south into the Jarrah – Marri Forest of the Darling Scarp and into the Tuart forests of the Swan Coastal Plain, including the region between Mandurah and Bunbury. Carnaby's Black-Cockatoo has been known to breed close to the town of Mandurah, as well as at Dawesville, Lake Clifton and Baldivis (Ron Johnstone, pers. comm), and there are small resident populations on the southern Swan Coastal Plain near Mandurah, Lake Clifton and near Bunbury. At each of these sites the birds forage in remnant vegetation and adjacent pine plantations (Johnstone & Storr 1998).

Carnaby's Black-Cockatoo lays eggs from July or August to October or November, with most clutches being laid in August and September (Saunders 1986). Birds in inland regions may begin laying up to three weeks earlier than those in coastal areas (Saunders 1986). The female incubates the eggs over a period of 28 to 29 days. The young depart the nest 10 to 12 weeks after hatching (Saunders 1977; Saunders & Smith 1981).

Evidence of foraging activity, and roosting and breeding trees were identified and observed within the survey area during the field assessment. A large portion of the survey area comprises Jarrah and Marri woodlands containing numerous flora species that are known to be a food source for Black-Cockatoos.

6.5.2.3 *Calyptorhynchus banksii naso* (Forest Red-tailed Black-Cockatoo) - CS1 (VU, S3) - Resident (Observed)

The FRTBC is listed as Vulnerable under the EPBC Act and the BC Act. It is distributed through the humid and subhumid south-west of WA from Gingin through the Darling Ranges to the south-west from Bunbury to Albany (primarily in the hilly interior) (Johnstone and Storr 1998; Johnstone *et al.* 2013). In these areas, the FRTBC inhabits dense Jarrah, Karri, and Marri forests that receive more than 600 mm average annual rainfall (Johnstone and Storr 1998). However, in recent years the FRTBC has moved on to the SCP to forage in the Perth metropolitan area (Johnstone *et al.* 2011). The FRTBC occurs in pairs or small flocks, or occasionally large flocks of up to 200 birds (Johnstone and Storr 1998).

The FRTBC feeds primarily on Marri and Jarrah fruit, but also Tuart and to a lesser extent on Blackbutt, Albany Blackbutt (*Eucalyptus staeri*), Karri, Sheoak (*Allocasuarina fraseriana*) and Snottygobble (*Persoonia longifolia*) (Johnstone *et al.* 2013). The FRTBC can obtain energy faster when feeding on Marri and Jarrah than other food sources (Cooper *et al.* 2002), and these two-plant species make up most of their diet (Johnstone *et al.* 2013).

The FRTBC is monogamous and pairs nest in tree hollows from 6.5 – 33 m above ground and most nests are in large and old mature Marri, and these trees are the most important nesting tree throughout the FRTBC range (Johnstone *et al.* 2013). Nest trees of the FRTBC have a mean circumference at breast height of 2.79 m, a mean estimated age of 222 years and a mean overall height of 20.24 m (Johnstone *et al.* 2013).

Breeding has been recorded in all months, with peaks in April-June and August-October. Only one egg is laid, which the female incubates for 29 to 31 days, before a nestling hatches and weighs between 27 and 32 g. The female remains in the hollow during incubation and only leaves for a short period in the evening to be fed by the male, usually at dusk (Johnstone *et al.* 2013). Brooding is for up to 10 days, after which the female leaves the nest between dawn and dusk. Pairs of birds appear to recognise each other by calls, not responding to calls by others in the area. Chicks only respond when the parent is heard and are fully feathered at 48 days (Johnstone *et al.* 2013).

The species is considered a resident within the survey area as its presence was confirmed through feather and foraging evidence. FRTBC were not observed to be roosting within the survey area.

6.5.2.4 *Cacatua pastinator pastinator* (Muir's Corella- S6 (CD) - Regular Visitor

Muir's Corella is Conservation Dependant under the BC Act. Muir's corella, one of four corella species in the southern part of Western Australia, once inhabited most of the south-west of Western Australia from the Swan and Avon Rivers south to Broomehill and Augusta (DPAW 2015). The species now has a restricted distribution of approximately 12,000 km² in the Tone Bridge, Rocky Gully, Frankland River and Lake Muir area in parts of the Warren, South West and Wheatbelt regions (DPAW 2015).

Muir's Corella feeds on a wide variety of corms, tubers and seeds from both introduced and native plant species, and insect larvae (Higgins 1999). Muir's Corella predominantly eats corms of the Guildford Grass (*Romulea rosea*) (Smith and Moore 1991).

Flocks of Muir's Corella are widely distributed, probably because of the patchy distribution of suitable habitat within their range (Smith 1982). During the breeding season, the nest tree is the focus of activity, and feeding takes place nearby (Higgins 1999). Preferred habitat of this species includes large live or dead eucalypts, particularly *Corymbia calophylla* and *Eucalyptus marginata*, *Eucalyptus rudis*, *Eucalyptus cornuta* and *Melaleuca*

preissiana in forested areas or as lone trees in paddocks and along roadsides (Ecosystem solutions 2022). Suitable habitat for this species is present within the survey area.

6.5.2.5 *Falco peregrinus* (Peregrine Falcon – S7 (OS) - Regular Visitor

The Peregrine Falcon occurs in a wide variety of habitats, including coastal and inland cliffs or open woodland near water (Ecosystem solutions 2022). They require secure nest sites and abundant prey, normally feeding on small and medium sized birds, rabbits and other day active mammals (The Australian Museum 2019). Rather than building a nest, the peregrine falcon lays its eggs in recesses of cliff faces, tree hollows or in large abandoned nest of other birds (The Australian Museum 2019). Potentially suitable habitat and prey are present within the survey area. In addition, a large potential Wedge tailed Eagle nest occurs within the survey area and may provide a suitable nest as the Peregrine Falcon is known to utilise the nest of other species (The Australian Museum 2019).

6.5.2.6 *Pseudochirus occidentalis* (Western Ringtail Possum) – CS1 (CR, S1) – Resident (Observed)

The Western Ringtail Possum is listed as Critically Endangered (CR) under the EPBC Act and the BC Act. Western Ringtail Possum populations have declined or become locally extinct over much of their former range in the south-west as a result of clearing and fragmentation of habitat associated with agricultural development (Jones *et al.* 1994; Shedley and Williams 2014). However, even in the relatively intact forested regions of the south-west, populations have declined significantly, particularly since 1998 (Woinarski *et al.* 2014; Shedley and Williams 2014). Threatening processes include logging intensity, inappropriate fire regimes, dieback, and a drying climate may have all contributed to the degradation of Western Ringtail Possum habitat, and increased the exposure of Western Ringtail Possum to predation by Red Foxes (*Vulpes vulpes*) and feral Cats (*Felis catus*), or to heat stress (Jones *et al.* 1994; Wayne 2005; Woinarski *et al.* 2014).

The highest population densities of Western Ringtail Possum are now found around the Bunbury (Binningup) to Dunsborough coastal strip, which coincides with an area of urban development and loss of prime habitat (Shedley and Williams 2014). This coastal strip is considered to be a stronghold for the Western Ringtail Possum and is therefore a focus for recovery and conservation of the species. High Western Ringtail Possum population densities have been recorded in some urban areas, particularly where mature Peppermint trees (*Agonis flexuosa*) with large, dense and overlapping canopies have been retained (Harewood 2008). This habitat type is thought to provide high quality shelter and food. High population densities may indicate that Western Ringtail Possum have benefited from some forms of urbanisation, or alternatively have been displaced from the broader setting by vegetation clearing and are confined to smaller pockets of remnant habitat.

The main component of suitable habitat for Western Ringtail Possum is the Peppermint tree (*Agonis flexuosa*) either as a dominant woodland species or as an understorey component of Eucalypt woodland (Jones *et al.* 1994). In coastal areas, the Western Ringtail Possum diet is largely dominated by Peppermint leaves (Jones *et al.* 1994; Van Dyck and Strahan 2008). Ideal Western Ringtail Possum habitat comprises of long unburnt mature remnants of Peppermint woodlands with high canopy continuity and high foliage nutrients (high in nitrogen and low toxin levels); other habitats comprise of Jarrah/Marri forests and woodlands with adequate hollows, coastal heath, myrtaceous heaths and shrublands, Bullich (*Eucalyptus megacarpa*) dominated riparian zones and karri forests. The presence of the Western Ringtail Possum was observed and the species is confirmed to occur within the survey area.

6.5.2.7 *Dasyurus geoffroii* (Chuditch) – CS1 (VU, S3) – Regular Visitor

This species is listed as Vulnerable under the EPBC Act and BC Act. It formerly ranged over 70 % of mainland Australia to the western coastline but is now largely confined to south-west Western Australia, with small populations in the Midwest, Wheatbelt and South Coast (DEC 2012b). Chuditch are largely absent on the Swan Coastal Plain since the 1930s, however they have been recorded in outer metropolitan Perth, generally adjacent to the Darling Scarp (DEC 2012b).

Chuditch inhabit Jarrah forest, particularly riparian areas, and wet and dry sclerophyll forest of the south coast, woodland, mallee and heathlands. They require suitable habitat for dens, including horizontal hollow logs, tree limbs, rocky outcrops and burrows (DEC 2012b). Chuditch are generally present in low numbers and require large areas of habitat that are not excessively fragmented (DEC 2012b).

This species is considered to be a regular visitor within the survey area. The current distribution of the Chuditch, once extending across several states, is now restricted to Western Australia (DEC 2012b). The threatened status of this species is a result of land clearing and predation by and competition from the Red Fox and feral Cat (DBCA 2017). Breeding generally occurs between May and September. Young disperse after 15 weeks, seeking new territories. The Chuditch is a highly mobile species with males and females ranging approximately 15 km² and 4 km², respectively (DBCA 2017). Given this high mobility, previous records in the remnant vegetation to the south of the survey area, indicates that it is possible that this species uses the survey area.

6.5.2.8 *Falsistrellus mackenziei* (Western False Pipistrelle – CS2 (P4) - Regular Visitor

Western False Pipistrelles live mainly in wet sclerophyll forests of Karri, Jarrah and Tuart eucalypts (Australian Museum 2019b) and is considered to be a regular visitor of the survey area. This species eats flying insects caught in the spaces between the canopy and understorey of tall forest trees and are vulnerable to the loss of roost sites in tree hollows and loss of feeding grounds due to forestry, clearing for agriculture and housing (Australian Museum 2020). The closest recorded occurrence is approximately 7 km south of survey area and suitable species habitat, including roosting hollows is present within the survey area.

6.5.2.9 *Isodon fusciventer* (Quenda – CS2 (P4) - Regular Visitor

The Quenda is endemic to south-west Western Australia ranging from just north of Perth, south along the coast and east to Esperance. This species prefers densely vegetated habitat for cover from predators (Red Fox and feral Cat), often inhabiting fringing vegetation adjacent to wetlands/swamps and foraging in open forest and woodlands (DEC 2012c). Jarrah-Marri and Wandoo forest populations generally occur in riparian areas, considered suitable habitat for this species. Although this species was not sighted during the field assessment within the survey area, it is likely to be a regular visitor as a result of nearby previous sightings (recorded in 2017 approximately 0.4 km south of the survey area) and suitable habitat being present.

6.5.2.10 *Phascogale tapoatafa wambenger* (South-western Brush-tailed Phascogale – S6(CD) - Regular Visitor

The South-western Brush-tailed Phascogale is listed as Conservation Dependent under the BC Act. This species occurs in the Jarrah Forest of south-west Western Australia and spends most of their in trees (DBCA [no date]). This species have been observed in dry sclerophyll forest and open woodlands that contain hollow bearing trees with the highest densities of the species occurring in the Perup/Kingston area, Collie River Valley, near Margaret River and Busselton (DBCA 2012a).

The South-western Brush-tailed Phascogale is active between dusk and dawn, with individuals foraging almost exclusively among the tree canopy (DBCA 2012a). Nesting varies throughout the year with individuals using more than 20 nest sites during the year (DBCA 2012a).

Habitat clearing, fragmentation, logging and mining are the greatest threats to South-western Brush-tailed Phascogales, as they have reduced the availability of trees with hollows (DBCA 2012a). This may subsequently increase susceptibility of the South-western Bush-tailed Phascogale to predation by foxes and cats. The species is considered to be a regular visitor to the survey area, due to the presence of suitable habitat and known DBCA records for this species have been recorded approximately 0.5 km south of the survey area (Ecosystem Solutions 2022).

6.5.3 Fauna Habitats

One intact fauna habitat was recorded, described and mapped within the survey area, considered to be in 'Good' to 'Excellent' condition. This habitat is described as Jarrah (*Eucalyptus marginata*), Marri (*Corymbia calophylla*) and Sheoak (*Allocasuarina fraseriana*) Woodlands with a mixed midstorey and understorey on sand. This habitat supports some distinctly different areas with a sedgeland understorey occurs on deep brown sands and brown loamy earths and is occurs on a lower depression (58 m), associated with Buanyup River, through the centre of the survey area (**Figure 20**).

Connectivity to the fauna habitat of the survey areas is excellent, with extensive areas of remnant vegetation in close proximity to the survey area, including the State Forest bordering the lot to the south-east. The surrounding vegetation includes protected areas of conservation which support populations of Black-Cockatoos, Western Ringtail Possums and South-western Brush-tailed Phascogales.

The remaining fauna habitat is cleared tracks and firebreaks, however the degraded open ground can support some degraded native fauna habitats as weedy grasslands with shrubs.

6.6 BLACK-COCKATOO HABITAT

All three species of Threatened Black-Cockatoo are considered regular visitors within the survey area. The presence and value of foraging, breeding and roosting habitat for Black-Cockatoos within the survey area was assessed at a desktop level and in the field, the key results of which are discussed further in the following sections.

6.6.1 Foraging Habitat

The site contains Jarrah, Marri and Sheoak Woodland across the entire survey area with proteaceous understorey species which represents foraging habitat for all three Black-Cockatoo species. An assessment against the relevant EPBC Act Referral Guidelines foraging quality scoring assessment is included so a comparison can be made against the areas that are being offset (**Table 32**). The survey area has a foraging quality score of 6 (High) for Carnaby's and Forest Red-tailed Black-Cockatoo and a foraging quality score of 7 (Very High) for Baudin's Black-Cockatoo.

Evidence of foraging from Black-Cockatoos was observed within the survey area through direct observation of foraging activities. During the day surveys opportunistic observations of Black-Cockatoos were recorded, indicating that both white-tailed and Forest Red-tailed Black-Cockatoos utilise the survey area for foraging. The ideal foraging times in Jarrah forests for Baudin's Black-Cockatoo is February and March to September, Carnaby Baudin's Black-Cockatoo in July to December and Red-Tailed Black-Cockatoo is all year round with the peak period in April to June and August to October.

Marri represents a primary foraging species for Baudin's and Forest Red-tailed Black-Cockatoos, and it is also suitable for Carnaby's. However, a range of species are considered suitable within the foraging habitat. Foraging areas associated with breeding areas are critical for the survival of the population. Foraging areas can occur up to a 12 km radius of their nesting site with large foraging habitat required to support Black-Cockatoo populations. All three birds forage on the seeds and fruit of the Marri and Jarrah trees(DBCA 2017a; b). Baudin's Black-Cockatoo also feed on *Banksia* spp., *Hakea* spp., insects and insect larvae and the Forest Red-Tailed Black-Cockatoos also forage on Blackbutt (*E. patens*), Karri (*E. diversicolor*), Sheoak (*Allocasuarina fraseriana*), *Persoonia*

longifolia and *Hakea* spp. (DBCA 2017a; b; DAWE 2022). The Carnaby's Black-Cockatoo primarily feed on proteaceous species, particularly species within the *Banksia*, *Hakea* and *Grevillea* genera; additionally feeding on *Pinus* spp. and myrtaceous species, in particular Marri, Jarrah (Valentine and Stock 2008; DBCA 2017c). A summary of flora species identified within the survey area and their potential foraging habitat for Black-Cockatoos is summarised in **Table 33**. Mostly completely lacking in native vegetation, the 'Cleared/Grassland' habitat provides limited foraging habitat ('None/Negligible', score 0) for all three Black-Cockatoo species, due to the lack of suitable foraging species including seed-capsule forming weed species such as Brassicaceae and Erodium, which are an alternative (but not preferred) food source for Black-cockatoos.

An entire flora species list within the survey area has not been fully quantified due to the scope of the field assessment; however, relevé data confirmed the presence of proteaceous species (*Banksia* spp., *Hakea* spp. and *Grevillea* spp.) and myrtaceous species (*C. calophylla*, *E. marginata*).

6.6.2 Potential Breeding Habitat

The survey area is located within the Jarrah Forest, Region 3, as defined by the *Referral Guidelines for the 3 Black Cockatoo Species* (DAWE 2022). This region is characterised by Jarrah and Marri Forest which support all three Black-Cockatoo species and is the main breeding area for Baudin's and Forest Red-tailed Black-Cockatoos. The DBCA desktop assessment did not identify any known or potential breeding sites for Black-Cockatoos within the survey and study area; however, this region is characterised by Jarrah (*Eucalyptus marginata*) and Marri (*Corymbia calophylla*) Forest with all three Black-Cockatoo species present. The region is also the main breeding area for Baudin's and Forest Red-tailed Black-Cockatoo (DAWE 2022). The fauna field assessment evaluated the habitat tree potential which supports the breeding of the three Black-Cockatoo species. The survey effort was high across the entire site, as shown by tracks provided in **Figure 10b**.

All three Black-Cockatoo species breed in the Jarrah Forest region which is characterised by Jarrah and Marri forests or Marri-Wandoo woodlands towards the eastern edge.

The desktop assessment did not identify any known or potential breeding sites for Black-Cockatoos within the survey area. No confirmed Black-Cockatoo breeding sites occur within the survey area (**Figure 14**). Of the 3,187 individual trees within the survey area that were of sufficient DBH (>500 mm), 24 were recorded to support a suitable hollow with evidence of chew marks (Rank 2), while 315 were recorded to support a potential suitable hollow (Rank 3) (**Figure 22**). Therefore, it is considered that suitable Black-Cockatoo breeding habitat is present within the survey area. The majority of the Suitable DBH Trees identified in the survey area were ranked Rank 5 (2,805 trees of adequate DBH, but without hollows).

6.6.3 Roosting Habitat

The desktop assessment identified no confirmed or potential Black-Cockatoo roosting sites within the survey area. However, during the field assessment, a total of four roosting sites were identified in the northwest portion of the survey area, which exhibited the highest level of activity, including direct observation and calls heard. A maximum number of six individuals were observed on two occasions roosting within the survey area. Activity to the west, north and south of the survey area was also observed, with up to 24 Black-Cockatoos seen in close proximity of the survey area.

6.7 WESTERN RINGTAIL POSSUM AND SOUTH-WESTERN BRUSH-TAILED PHASCOGALE HABITAT

The survey area contains suitable foraging habitat for Western Ringtail Possums and South-western Brush-tailed Phascogales in the upper storey, being Jarrah and Marri open forest (Ecosystem Solutions 2022). The presence of *Banksia grandis* in the eastern portion, and scattered throughout the survey area, could seasonally support increased invertebrates for South-western Brush-tailed Phascogales.

The main component of suitable habitat for the Western Ringtail Possum is the Peppermint tree (*Agonis flexuosa*), either as a dominant woodland species or as an understorey component of Eucalypt woodland (Jones *et al.* 1994). This is due to Western Ringtail Possum utilising peppermint trees for both foraging and denning (Jones *et al.* 1994; Van Dyck and Strahan 2008).

No substantial areas of Peppermint trees (*Agonis flexuosa*) were observed within the survey area, however while the population does not solely rely on Peppermint, it appears it is associated with increased density of Western Ringtail Possum within the inland coastal plain (Shedley and Williams 2014). In addition to Peppermint, the Western Ringtail Possum also forage on Myrtaceae species. Limited suitable Myrtaceous species were observed within the understorey, however the Western Ringtail Possum are not dependent on foraging species within the understorey as foraging species within the upper storey was considered adequate.

As part of the Black-Cockatoo breeding habitat assessment, a total of 385 trees containing hollows were recorded. Tree hollows are important across the range of the species and hollow abundance has been positively correlated with possum abundance (DPAW 2017). In the Jarrah Forest, tree hollows can comprise of more than 70% of the rest sites for Western Ringtail Possum (Ecosystem Solutions 2022).

The observed habitat and survey results partially align with the results from the habitat assessment by Shedley & Williams (2014) for the Western Ringtail Possum on the southern Swan Coastal Plain (Binningup to Dunsborough). Shedley & Williams (2014), determined the that the survey area has a medium to high habitat suitability for Western Ringtail Possum, with a predicted density of 2-5 and 5-10 western Ringtail Possums per hectare respectively. Despite only three Western Ringtail Possums being observed within the survey area, the area traversed each night would not include the entire home range of the species, and it is likely that there were more Western Ringtail Possums present than those observed.

7 CONCLUSIONS

The key findings and conclusions arising from the detailed biological assessment within the survey area were:

- The timing of the field surveys (November) was considered optimal for the identification of biological values, especially flowering flora and annual and ephemeral species.
- No Threatened flora listed under the BC Act or under the EPBC Act were recorded.
- Three Priority flora species were recorded; *Netrostylis* sp. Blackwood River (P3) *Acacia semitrullata* (P4) and *Hypolaena robusta* (P4) were recorded across four of the five mapped vegetation units.
- Based on the findings of desktop assessment, combined with field observations regarding habitat suitability, further to the three recorded Priority flora, it is considered that seven species of Threatened flora and 21 species of Priority flora may occur in the survey area.
- No DP plants or WoNS listed under the BAM Act were recorded within the survey area.
- Remnant vegetation of the survey area supports five vegetation units broadly characterised as Jarrah, Marri and Sheoak Woodlands, with vegetation unit EmTlMt being distinctly different due to the presence of a sedgeland midstorey associated with the Buawayup River.
- The condition of the vegetation within the survey area was found to range from 'Excellent' to 'Completely Degraded'. The majority of the vegetation was observed to be in 'Excellent' condition, making up 77.85% (51 ha) of the survey area, with 0.04% (0.02 ha) considered to be in 'Degraded' condition.
- Potential Banksia woodlands of the Swan Coastal Plain TEC may occur within the survey area and further determination of the presence may be required.
- One fauna habitat was described and mapped within the survey area; Jarrah, Marri and Sheoak Woodlands, which is considered significant for fauna, also providing the best quality foraging habitat for all three Threatened Black-Cockatoos species, Western Ringtail Possum and the South-western Brush-tailed Phascogale.
- Four fauna species of significance were recorded within the survey area, Baudin's Black-Cockatoo (*Zanda baudinii*), Carnaby's Black-Cockatoo *Zanda latirostris*, Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii naso*) and Western Ringtail Possum (*Pseudocheirus occidentalis*).
- Based on the findings of desktop assessment, combined with field observations confirming habitat provided in the survey area, it is considered that ten significant fauna species may occur as either residents (four species) or regular visitors (six species).
- Baudin's Black-Cockatoo, Carnaby's Black-Cockatoo, Forest Red-tailed Black-Cockatoo and the Western Ringtail Possum are considered residents of the survey area.
- Muir's Corella, Peregrine Falcon, Chuditch, Western Falsistrelle, Quenda and the South-western Brush-tailed Phascogale are considered to be regular visitors.
- The survey area supports 'High' quality foraging habitat for Carnaby's Black-Cockatoo and Forest Red-tailed Black-Cockatoo and 'Very High' quality foraging habitat for Baudin's Black-Cockatoo.
- A total of 3,187 Suitable DBH Trees relating to breeding habitat for Black-Cockatoos were identified within the survey area, of which 2,805 are rank 5 (no suitable hollows for Black-Cockatoos), 38 are rank 4 (have unsuitable hollows), 315 are rank 3 (potentially suitable hollow/s, but with no evidence of use) and 24 trees were found to be rank 2 (suitable hollow/s and evidence of use). No trees with active nests (Rank 1) were recorded.
- During the field assessment, four Black-Cockatoo night-roosts were positively identified in the north-west portion of the survey area, with one of these roost sites directly observed to support six individuals.

8 LIST OF PARTICIPANTS

The personnel who contributed to the project are summarised in **Table 37**.

Table 35 – Project Team

Name	Qualification	Years of Relevant Experience	Role
Kellie Bauer-Simpson Principal Ecologist	BSc. (Biological Science) [Flora Collecting License No. FB62000018]	24	Project manager, study planning, report technical and authorisation review
Lisa Chappell Senior Botanist/ Environmental Scientist	BEnvSc. (Hons) (Environmental Science) [Flora Collecting License No. FB62000236]	19	Reporting support
Julie Fielder Senior Botanist	BSc. Botany, Geography and Environmental Studies (Hons.) [Flora Collecting License No. FB62000236]	21	Field survey, data analysis, vegetation mapping, reporting
Evan Brown <i>Phytophthora</i> Dieback Interpreter	BSc. (Science) DBCA Registration Number DPW-PDI-004	28	Field assessment, dieback report
Daniel Roberts Botanist/Ecologist	BSc (Environmental Biology) [Flora Collecting License No. FB62000435]	10	Report support, data management, GIS
Megan Gray Botanist	BSc. Environmental Biology [Flora Collecting License No. FB62000334]	4	Report, data management, GIS
Olga Nazarova Botanist/Ecologist	BSc. (Botany and Genetics) [Flora Collecting License No. FB62000439]	4	Report support, data management
Sarah Beckwith Undergraduate Ecologist	BSc. (Environmental Biology) (degree pending)	0.5	Field assessment, reporting
Margaret Collins Botanist/Taxonomist	PhD (Botany) BSc. (Hons.) (Organic Chemistry) BSc. (Microbiology) Masters (Biotechnology and Molecular Biology)	26	Flora identifications
Will Bauer-Simpson Technician	Cert IV (Health and Safety)	9	GIS mapping, spatial data management
Kristen Bleby Senior Ecologist	B.Sc. (Hons) Natural Resource Management PhD (Ecology)	10	Report technical review
Gary McMahon Principal Zoologist	BSc. (Biological Science) Master (Environmental Management)	28	Project Manager, dawn, dusk and nocturnal surveys, report reviewer,
Danae Plowman Ecologist	BSc. Pst Grad Dip. (Energy and the Environment) (Flora Collecting Licence Number FB62000342)	13	Project Manager, fauna surveys, report preparer.
Kelly Lamp Ecologist	BSc. (Hons) (Natural Resource Management) (Flora Collecting Licence Number FB62000182 & TFL 54-2021)	13	Fauna Survey
Lorraine Duffy Ecologist	BSc Env Biology & B. Arts Geo (Flora Collecting Licence Number FB62000280)	18	Fauna Survey
Dani Cuthbert Technician	Dip Bus & Dip TM	5	Fauna Survey, Data Collection
Barbara Black Environmental Consultant	BSc. (Sustainability)	2	Fauna Survey
Hayley Drake Ecologist	BSc (Conservation & Wildlife Bio and Mol. Bio. (Flora Collecting Licence Number FB62000348)	3	Data Collection
Linda Hosking Administration		35	Editorial support

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APPENDIX A - DBCA NATURE MAP SEARCH REPORT

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KINGDOM	CLASS	TAXON	WA CONS
Animalia	AMPHIBIAN	<i>Crinia georgiana</i>	
Animalia	AMPHIBIAN	<i>Crinia glauerti</i>	
Animalia	AMPHIBIAN	<i>Crinia insignifera</i>	
Animalia	AMPHIBIAN	<i>Crinia pseudinsignifera</i>	
Animalia	AMPHIBIAN	<i>Crinia</i> sp.	
Animalia	AMPHIBIAN	<i>Heleioporus eyrei</i>	
Animalia	AMPHIBIAN	<i>Heleioporus psammophilus</i>	
Animalia	AMPHIBIAN	<i>Neobatrachus kunapalari</i>	
Animalia	AMPHIBIAN	<i>Pseudophryne guentheri</i>	
Animalia	BIRD	<i>Acanthiza apicalis</i>	
Animalia	BIRD	<i>Acanthiza chrysorrhoa</i>	
Animalia	BIRD	<i>Acanthiza inornata</i>	
Animalia	BIRD	<i>Acanthorhynchus superciliosus</i>	
Animalia	BIRD	<i>Accipiter fasciatus</i>	
Animalia	BIRD	<i>Anas gracilis</i>	
Animalia	BIRD	<i>Anas rhynchos</i>	
Animalia	BIRD	<i>Anas superciliosa</i>	
Animalia	BIRD	<i>Anthochaera carunculata</i>	
Animalia	BIRD	<i>Aquila audax</i>	
Animalia	BIRD	<i>Ardea modesta</i>	
Animalia	BIRD	<i>Ardea pacifica</i>	
Animalia	BIRD	<i>Artamus cinereus</i>	
Animalia	BIRD	<i>Artamus cyanopterus</i>	
Animalia	BIRD	<i>Aythya australis</i>	
Animalia	BIRD	<i>Barnardius zonarius</i>	
Animalia	BIRD	<i>Biziura lobata</i>	
Animalia	BIRD	<i>Cacatua sanguinea</i>	
Animalia	BIRD	<i>Cacomantis flabelliformis</i>	
Animalia	BIRD	<i>Cacomantis pallidus</i>	
Animalia	BIRD	<i>Calyptorhynchus banksii</i>	
Animalia	BIRD	<i>Calyptorhynchus banksii</i> subsp. <i>naso</i>	VU
Animalia	BIRD	<i>Calyptorhynchus baudinii</i>	EN
Animalia	BIRD	<i>Calyptorhynchus latirostris</i>	EN
Animalia	BIRD	<i>Calyptorhynchus</i> sp.	
Animalia	BIRD	<i>Calyptorhynchus</i> sp. 'white-tailed black cockatoo'	
Animalia	BIRD	<i>Chenonetta jubata</i>	
Animalia	BIRD	<i>Chroicocephalus novaehollandiae</i>	
Animalia	BIRD	<i>Cincloramphus mathewsi</i>	
Animalia	BIRD	<i>Circus approximans</i>	
Animalia	BIRD	<i>Colluricinclla harmonica</i>	
Animalia	BIRD	<i>Coracina novaehollandiae</i>	
Animalia	BIRD	<i>Corvus coronoides</i>	
Animalia	BIRD	<i>Coturnix pectoralis</i>	
Animalia	BIRD	<i>Cracticus tibicen</i>	
Animalia	BIRD	<i>Cracticus torquatus</i>	
Animalia	BIRD	<i>Cygnus atratus</i>	
Animalia	BIRD	<i>Dacelo novaeguineae</i>	
Animalia	BIRD	<i>Daphoenositta chrysoptera</i>	
Animalia	BIRD	<i>Dromaius novaehollandiae</i>	
Animalia	BIRD	<i>Egretta novaehollandiae</i>	
Animalia	BIRD	<i>Elanus axillaris</i>	
Animalia	BIRD	<i>Elseyornis melanops</i>	

KINGDOM	CLASS	TAXON	WA CONS
Animalia	BIRD	<i>Eopsaltria georgiana</i>	
Animalia	BIRD	<i>Eopsaltria griseogularis</i>	
Animalia	BIRD	<i>Epthianura albifrons</i>	
Animalia	BIRD	<i>Falco cenchroides</i>	
Animalia	BIRD	<i>Fulica atra</i>	
Animalia	BIRD	<i>Gerygone fusca</i>	
Animalia	BIRD	<i>Grallina cyanoleuca</i>	
Animalia	BIRD	<i>Haliastur sphenurus</i>	
Animalia	BIRD	<i>Hieraetus morphnoides</i>	
Animalia	BIRD	<i>Hirundo neoxena</i>	
Animalia	BIRD	<i>Leipoa ocellata</i>	VU
Animalia	BIRD	<i>Lichenostomus virescens</i>	
Animalia	BIRD	<i>Lichmera indistincta</i>	
Animalia	BIRD	<i>Malacorhynchus membranaceus</i>	
Animalia	BIRD	<i>Malurus elegans</i>	
Animalia	BIRD	<i>Malurus splendens</i>	
Animalia	BIRD	<i>Melithreptus lunatus</i>	
Animalia	BIRD	<i>Merops ornatus</i>	
Animalia	BIRD	<i>Microcarbo melanoleucos</i>	
Animalia	BIRD	<i>Neophema elegans</i>	
Animalia	BIRD	<i>Ninox novaeseelandiae</i>	
Animalia	BIRD	<i>Ocyphaps lophotes</i>	
Animalia	BIRD	<i>Pachycephala pectoralis</i>	
Animalia	BIRD	<i>Pachycephala rufiventris</i>	
Animalia	BIRD	<i>Pardalotus punctatus</i>	
Animalia	BIRD	<i>Pardalotus striatus</i>	
Animalia	BIRD	<i>Petrochelidon nigricans</i>	
Animalia	BIRD	<i>Petroica boodang</i>	
Animalia	BIRD	<i>Phalacrocorax sulcirostris</i>	
Animalia	BIRD	<i>Phaps chalcoptera</i>	
Animalia	BIRD	<i>Phylidonyris novaehollandiae</i>	
Animalia	BIRD	<i>Platalea flavipes</i>	
Animalia	BIRD	<i>Platycercus icterotis</i>	
Animalia	BIRD	<i>Podargus strigoides</i>	
Animalia	BIRD	<i>Poliocephalus poliocephalus</i>	
Animalia	BIRD	<i>Polytelis anthopeplus</i>	
Animalia	BIRD	<i>Porphyrio porphyrio</i>	
Animalia	BIRD	<i>Porzana tabuensis</i>	
Animalia	BIRD	<i>Purpleicephalus spurius</i>	
Animalia	BIRD	<i>Rhipidura albiscapa</i>	
Animalia	BIRD	<i>Rhipidura leucophrys</i>	
Animalia	BIRD	<i>Sericornis frontalis</i>	
Animalia	BIRD	<i>Smicromis brevirostris</i>	
Animalia	BIRD	<i>Stagonopleura oculata</i>	
Animalia	BIRD	<i>Stipiturus malachurus</i>	
Animalia	BIRD	<i>Stipiturus malachurus subsp. <i>westernensis</i></i>	
Animalia	BIRD	<i>Strepera versicolor</i>	
Animalia	BIRD	<i>Tachybaptus novaehollandiae</i>	
Animalia	BIRD	<i>Tadorna tadornoides</i>	
Animalia	BIRD	<i>Threskiornis molucca</i>	
Animalia	BIRD	<i>Threskiornis spinicollis</i>	
Animalia	BIRD	<i>Todiramphus sanctus</i>	
Animalia	BIRD	<i>Turnix varius</i>	
Animalia	BIRD	<i>Vanellus miles</i>	
Animalia	BIRD	<i>Vanellus tricolor</i>	

KINGDOM	CLASS	TAXON	WA CONS
Animalia	BIRD	<i>Zosterops lateralis</i>	
Animalia	FISH	<i>Galaxias occidentalis</i>	
Animalia	FISH	<i>Galaxiella munda</i>	VU
Animalia	FISH	<i>Lepidogalaxias salamandroides</i>	EN
Animalia	FISH	<i>Nannatherina balstoni</i>	VU
Animalia	FISH	<i>Nannoperca vittata</i>	
Animalia	INVERT	<i>Acariformes</i> sp.	
Animalia	INVERT	<i>Aeshnidae</i> sp.	
Animalia	INVERT	<i>Amphisopodidae</i> sp.	
Animalia	INVERT	<i>Ancylidae</i> sp.	
Animalia	INVERT	<i>Australotiphys barmutai</i>	
Animalia	INVERT	<i>Baetidae</i> sp.	
Animalia	INVERT	<i>Bothriembryon irvineanus</i>	P2
Animalia	INVERT	<i>Caenidae</i> sp.	
Animalia	INVERT	<i>Ceratopogonidae</i> sp.	
Animalia	INVERT	<i>Cercophonius sulcatus</i>	
Animalia	INVERT	<i>Cherax cainii</i>	
Animalia	INVERT	<i>Cherax cainii x tenuimanus</i>	
Animalia	INVERT	<i>Cherax destructor</i>	
Animalia	INVERT	<i>Cherax quinquecarinatus</i>	
Animalia	INVERT	<i>Cherax</i> sp.	
Animalia	INVERT	<i>Cherax tenuimanus</i>	CR
Animalia	INVERT	<i>Cherax tenuimanus x cainii</i>	
Animalia	INVERT	<i>Chironominae</i> sp.	
Animalia	INVERT	<i>Corduliidae</i> sp.	
Animalia	INVERT	<i>Corixidae</i> sp.	
Animalia	INVERT	<i>Culicidae</i> sp.	
Animalia	INVERT	<i>Curculionidae</i> sp.	
Animalia	INVERT	<i>Dytiscidae</i> sp.	
Animalia	INVERT	<i>Empididae</i> sp.	
Animalia	INVERT	<i>Engaewa pseudoreducta</i>	CR
Animalia	INVERT	<i>Engaewa reducta</i>	EN
Animalia	INVERT	<i>Engaewa similis</i>	
Animalia	INVERT	<i>Gomphidae</i> sp.	
Animalia	INVERT	<i>Gripopterygidae</i> sp.	
Animalia	INVERT	<i>Gyrinidae</i> sp.	
Animalia	INVERT	<i>Hemicorduliidae</i> sp.	
Animalia	INVERT	<i>Hydraenidae</i> sp.	
Animalia	INVERT	<i>Hydrophilidae</i> sp.	
Animalia	INVERT	<i>Hydroptilidae</i> sp.	
Animalia	INVERT	<i>Hyriidae</i> sp.	
Animalia	INVERT	<i>Leptoceridae</i> sp.	
Animalia	INVERT	<i>Leptophlebiidae</i> sp.	
Animalia	INVERT	<i>Libellulidae</i> sp.	
Animalia	INVERT	<i>Megapodagrionidae</i> sp.	
Animalia	INVERT	<i>Neoniphargidae</i> sp.	
Animalia	INVERT	<i>Oligochaeta</i> sp.	
Animalia	INVERT	<i>Orthocladiinae</i> sp.	
Animalia	INVERT	<i>Palaemonidae</i> sp.	
Animalia	INVERT	<i>Parastacidae</i> sp.	
Animalia	INVERT	<i>Perthiidae</i> sp.	
Animalia	INVERT	<i>Physidae</i> sp.	
Animalia	INVERT	<i>Planorbidae</i> sp.	
Animalia	INVERT	<i>Prionosternum nitidiceps</i>	
Animalia	INVERT	<i>Pyralidae</i> sp.	

KINGDOM	CLASS	TAXON	WA CONS
Animalia	INVERT	<i>Richardsonianidae</i> sp.	
Animalia	INVERT	<i>Scirtidae</i> sp.	
Animalia	INVERT	<i>Simuliidae</i> sp.	
Animalia	INVERT	springtail sp.	
Animalia	INVERT	<i>Stratiomyidae</i> sp.	
Animalia	INVERT	<i>Styloniscidae</i> sp.	
Animalia	INVERT	<i>Synsphyronus magnus</i>	
Animalia	INVERT	<i>Synthemistidae</i> sp.	
Animalia	INVERT	<i>Talitridae</i> sp.	
Animalia	INVERT	<i>Tanypodinae</i> sp.	
Animalia	INVERT	<i>Telephlebiidae</i> sp.	
Animalia	INVERT	<i>Tipulidae</i> sp.	
Animalia	INVERT	<i>Veliidae</i> sp.	
Animalia	INVERT	<i>Westralunio carteri</i>	VU
Animalia	MAMMAL	<i>Antechinus flavipes</i> subsp. <i>leucogaster</i>	
Animalia	MAMMAL	<i>Balaenoptera musculus</i> subsp. <i>intermedia</i>	
Animalia	MAMMAL	<i>Cercartetus concinnus</i>	
Animalia	MAMMAL	<i>Chalinolobus gouldii</i>	
Animalia	MAMMAL	<i>Chalinolobus morio</i>	
Animalia	MAMMAL	<i>Dasyurus geoffroii</i>	VU
Animalia	MAMMAL	<i>Falsistrellus mackenziei</i>	P4
Animalia	MAMMAL	<i>Hydromys chrysogaster</i>	P4
Animalia	MAMMAL	<i>Isoodon fusciventer</i>	P4
Animalia	MAMMAL	<i>Isoodon obesulus</i>	
Animalia	MAMMAL	<i>Isoodon obesulus</i> subsp. <i>fusciventer</i>	
Animalia	MAMMAL	<i>Mus musculus</i>	
Animalia	MAMMAL	<i>Notamacropus irma</i>	P4
Animalia	MAMMAL	<i>Nyctophilus geoffroyi</i>	
Animalia	MAMMAL	<i>Nyctophilus gouldi</i>	
Animalia	MAMMAL	<i>Nyctophilus major</i>	
Animalia	MAMMAL	<i>Nyctophilus</i> sp.	
Animalia	MAMMAL	<i>Phascogale tapoatafa</i> subsp. <i>tapoatafa</i>	
Animalia	MAMMAL	<i>Phascogale tapoatafa</i> subsp. <i>wambenger</i>	CD
Animalia	MAMMAL	<i>Pseudocheirus occidentalis</i>	CR
Animalia	MAMMAL	<i>Rattus fuscipes</i>	
Animalia	MAMMAL	<i>Rattus rattus</i>	
Animalia	MAMMAL	<i>Vespadelus regulus</i>	
Animalia	REPTILE	<i>Acritoscincus trilineatus</i>	
Animalia	REPTILE	<i>Chelodina colliei</i>	
Animalia	REPTILE	<i>Ctenotus catenifer</i>	
Animalia	REPTILE	<i>Menetia greyii</i>	
Animalia	REPTILE	<i>Morethia lineoocellata</i>	
Animalia	REPTILE	<i>Parasuta nigriceps</i>	
Animalia	REPTILE	<i>Pseudonaja affinis</i> subsp. <i>affinis</i>	
Animalia	REPTILE	<i>Ramphotyphlops australis</i>	
Fungi	FUNGUS	<i>Amanita walpolei</i>	P2
Fungi	FUNGUS	<i>Austroboletus occidentalis</i>	
Fungi	FUNGUS	<i>Fistulina hepatica</i>	
Fungi	FUNGUS	<i>Gyroporus cyanescens</i>	
Fungi	FUNGUS	<i>Hebeloma</i> sp.	
Fungi	FUNGUS	<i>Hebeloma westraliense</i>	
Fungi	FUNGUS	<i>Inocybe serrata</i> group clade 3	
Fungi	FUNGUS	<i>Mycena subgalericulata</i>	
Fungi	FUNGUS	<i>Phytophthora cinnamomi</i>	
Fungi	FUNGUS	<i>Russula</i> sp.	

KINGDOM	CLASS	TAXON	WA CONS
Fungi	LICHEN	<i>Candelariella vitellina</i>	
Fungi	LICHEN	<i>Carbonicola foveata</i>	
Fungi	LICHEN	<i>Chrysothrix candelaris</i>	
Fungi	LICHEN	<i>Cladonia aggregata</i>	
Fungi	LICHEN	<i>Cladonia rigida</i>	
Fungi	LICHEN	<i>Hypocenomyce scalaris</i>	
Fungi	LICHEN	<i>Notoparmelia erumpens</i>	
Fungi	LICHEN	<i>Pannoparmelia wilsonii</i>	
Fungi	LICHEN	<i>Parmotrema cooperi</i>	
Fungi	LICHEN	<i>Ramboldia stuartii</i>	
Fungi	LICHEN	<i>Thysanothecium hookeri</i>	
Plantae	DICOT	<i>Acacia applanata</i>	
Plantae	DICOT	<i>Acacia browniana</i> var. <i>browniana</i>	
Plantae	DICOT	<i>Acacia divergens</i>	
Plantae	DICOT	<i>Acacia drummondii</i> subsp. <i>drummondii</i>	
Plantae	DICOT	<i>Acacia extensa</i>	
Plantae	DICOT	<i>Acacia flagelliformis</i>	P4
Plantae	DICOT	<i>Acacia gilbertii</i>	
Plantae	DICOT	<i>Acacia incurva</i>	
Plantae	DICOT	<i>Acacia lateriticola</i>	
Plantae	DICOT	<i>Acacia lateriticola</i> var. Glabrous variant (B.R.Maslin 6765)	
Plantae	DICOT	<i>Acacia littorea</i>	
Plantae	DICOT	<i>Acacia mooreana</i>	
Plantae	DICOT	<i>Acacia myrtifolia</i>	
Plantae	DICOT	<i>Acacia nervosa</i>	
Plantae	DICOT	<i>Acacia obovata</i>	
Plantae	DICOT	<i>Acacia pulchella</i>	
Plantae	DICOT	<i>Acacia pulchella</i> var. <i>pulchella</i>	
Plantae	DICOT	<i>Acacia saligna</i> subsp. <i>saligna</i>	
Plantae	DICOT	<i>Acacia semitrullata</i>	P4
Plantae	DICOT	<i>Acacia stenoptera</i>	
Plantae	DICOT	<i>Acacia tetragonocarpa</i>	
Plantae	DICOT	<i>Acacia varia</i> var. <i>varia</i>	
Plantae	DICOT	<i>Acacia willdenowiana</i>	
Plantae	DICOT	<i>Actinodium cunninghamii</i>	
Plantae	DICOT	<i>Actinotus whicheranus</i>	P2
Plantae	DICOT	<i>Adenanthes barbiger</i>	
Plantae	DICOT	<i>Adenanthes intermedius</i>	
Plantae	DICOT	<i>Adenanthes meisneri</i>	
Plantae	DICOT	<i>Adenanthes obovatus</i>	
Plantae	DICOT	<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736)	
Plantae	DICOT	<i>Agonis flexuosa</i>	
Plantae	DICOT	<i>Agonis parviceps</i>	
Plantae	DICOT	<i>Allocasuarina fraseriana</i>	
Plantae	DICOT	<i>Allocasuarina humilis</i>	
Plantae	DICOT	<i>Allocasuarina</i> sp.	
Plantae	DICOT	<i>Allocasuarina thuyoides</i>	
Plantae	DICOT	<i>Amperea ericoides</i>	
Plantae	DICOT	<i>Amperea simulans</i>	
Plantae	DICOT	<i>Andersonia aristata</i>	
Plantae	DICOT	<i>Andersonia barbata</i>	P2
Plantae	DICOT	<i>Andersonia caerulea</i>	
Plantae	DICOT	<i>Andersonia caerulea</i> subsp. <i>caerulea</i>	
Plantae	DICOT	<i>Andersonia ferricola</i>	P1

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Andersonia heterophylla</i>	
Plantae	DICOT	<i>Andersonia involucrata</i>	
Plantae	DICOT	<i>Andersonia longifolia</i>	P2
Plantae	DICOT	<i>Andersonia micrantha</i>	
Plantae	DICOT	<i>Andersonia</i> sp. Ironstone (BJK & NG 227)	
Plantae	DICOT	<i>Angianthus preissianus</i>	
Plantae	DICOT	<i>Arcotheca calendula</i>	
Plantae	DICOT	<i>Astartea aff. fascicularis</i>	
Plantae	DICOT	<i>Astartea scoparia</i>	
Plantae	DICOT	<i>Astartea</i> sp.	
Plantae	DICOT	<i>Astartea zephyra</i>	
Plantae	DICOT	<i>Astroloma drummondii</i>	
Plantae	DICOT	<i>Astroloma pallidum</i>	
Plantae	DICOT	<i>Astroloma</i> sp. indet.	
Plantae	DICOT	<i>Banksia attenuata</i>	
Plantae	DICOT	<i>Banksia dallanneyi</i>	
Plantae	DICOT	<i>Banksia dallanneyi</i> subsp. <i>dallanneyi</i> var. <i>mellicula</i>	
Plantae	DICOT	<i>Banksia grandis</i>	
Plantae	DICOT	<i>Banksia meisneri</i> subsp. <i>ascendens</i>	P4
Plantae	DICOT	<i>Banksia mimica</i>	VU
Plantae	DICOT	<i>Banksia nivea</i>	
Plantae	DICOT	<i>Banksia nivea</i> subsp. <i>uliginosa</i>	EN
Plantae	DICOT	<i>Banksia</i> sp.	
Plantae	DICOT	<i>Banksia squarrosa</i>	
Plantae	DICOT	<i>Banksia squarrosa</i> subsp. <i>argillacea</i>	VU
Plantae	DICOT	<i>Beaufortia sparsa</i>	
Plantae	DICOT	<i>Bellardia viscosa</i>	
Plantae	DICOT	<i>Billardiera floribunda</i>	
Plantae	DICOT	<i>Billardiera</i> sp. indet.	
Plantae	DICOT	<i>Billardiera variifolia</i>	
Plantae	DICOT	<i>Boronia capitata</i> subsp. <i>gracilis</i>	P3
Plantae	DICOT	<i>Boronia crenulata</i>	
Plantae	DICOT	<i>Boronia crenulata</i> subsp. <i>pubescens</i>	
Plantae	DICOT	<i>Boronia defoliata</i>	
Plantae	DICOT	<i>Boronia heterophylla</i>	
Plantae	DICOT	<i>Boronia megastigma</i>	
Plantae	DICOT	<i>Boronia spathulata</i>	
Plantae	DICOT	<i>Boronia tenuior</i>	
Plantae	DICOT	<i>Boronia tenuis</i>	P4
Plantae	DICOT	<i>Boronia tetragona</i>	P3
Plantae	DICOT	<i>Bossiaea aquifolium</i> subsp. <i>aquifolium</i>	
Plantae	DICOT	<i>Bossiaea eriocarpa</i>	
Plantae	DICOT	<i>Bossiaea ornata</i>	
Plantae	DICOT	<i>Calandrinia liniflora</i>	
Plantae	DICOT	<i>Callistemon glaucus</i>	
Plantae	DICOT	<i>Calothamnus lateralis</i>	
Plantae	DICOT	<i>Calothamnus lateralis</i> var. <i>crassus</i>	P3
Plantae	DICOT	<i>Calothamnus lateralis</i> var. <i>crassus</i> / <i>lateralis</i> var. <i>lateralis</i>	
Plantae	DICOT	<i>Calothamnus lateralis</i> var. <i>lateralis</i>	
Plantae	DICOT	<i>Calothamnus montanus</i>	
Plantae	DICOT	<i>Calothamnus pallidifolius</i>	
Plantae	DICOT	<i>Calothamnus planifolius</i> var. <i>pallidifolius</i>	
Plantae	DICOT	<i>Calothamnus quadrifidus</i> subsp. <i>teretifolius</i>	P4
Plantae	DICOT	<i>Calothamnus sanguineus</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Cardamine hirsuta</i>	
Plantae	DICOT	<i>Cassytha glabella</i>	
Plantae	DICOT	<i>Cassytha micrantha</i>	
Plantae	DICOT	<i>Cassytha racemosa</i>	
Plantae	DICOT	<i>Cassytha</i> sp.	
Plantae	DICOT	<i>Centaurium erythraea</i>	
Plantae	DICOT	<i>Chamaelaucium</i> sp. S coastal plain (R.D.Royce 4872)	
Plantae	DICOT	<i>Chamaelaucium</i> sp. Yoongarillup (G.J. Keighery 3635)	
Plantae	DICOT	<i>Cheiranthera parviflora</i>	
Plantae	DICOT	<i>Chorizema glycinfolium</i>	
Plantae	DICOT	<i>Chorizema rhombeum</i>	
Plantae	DICOT	<i>Chorizema spathulatum</i>	
Plantae	DICOT	<i>Comesperma virgatum</i>	
Plantae	DICOT	<i>Comesperma volubile</i>	
Plantae	DICOT	<i>Conospermum caeruleum</i>	
Plantae	DICOT	<i>Conospermum caeruleum</i> subsp. <i>debile</i>	
Plantae	DICOT	<i>Conospermum caeruleum</i> subsp. <i>spathulatum</i>	
Plantae	DICOT	<i>Conospermum capitatum</i>	
Plantae	DICOT	<i>Conospermum flexuosum</i>	
Plantae	DICOT	<i>Conospermum flexuosum</i> subsp. <i>laevigatum</i>	
Plantae	DICOT	<i>Conospermum paniculatum</i>	
Plantae	DICOT	<i>Conospermum pedunculatum</i>	
Plantae	DICOT	<i>Conospermum teretifolium</i>	
Plantae	DICOT	<i>Conostephium pendulum</i>	
Plantae	DICOT	<i>Conyza albida</i>	
Plantae	DICOT	<i>Corymbia calophylla</i>	
Plantae	DICOT	<i>Corymbia calophylla</i> x <i>haematoxylon</i>	
Plantae	DICOT	<i>Corymbia haematoxylon</i>	
Plantae	DICOT	<i>Cotula cotuloides</i>	
Plantae	DICOT	<i>Crassula natans</i>	
Plantae	DICOT	<i>Crassula pedicellosa</i>	
Plantae	DICOT	<i>Crepis capillaris</i>	
Plantae	DICOT	<i>Cryptandra arbutiflora</i> var. <i>tubulosa</i>	
Plantae	DICOT	<i>Cuscuta epithymum</i>	
Plantae	DICOT	<i>Dampiera alata</i>	
Plantae	DICOT	<i>Dampiera hederacea</i>	
Plantae	DICOT	<i>Dampiera linearis</i>	
Plantae	DICOT	<i>Dampiera pedunculata</i>	
Plantae	DICOT	<i>Dampiera</i> sp. indet.	
Plantae	DICOT	<i>Darwinia citriodora</i>	
Plantae	DICOT	<i>Darwinia oederoides</i>	
Plantae	DICOT	<i>Darwinia whicherensis</i>	CR
Plantae	DICOT	<i>Daviesia angulata</i>	
Plantae	DICOT	<i>Daviesia comutata</i>	
Plantae	DICOT	<i>Daviesia cordata</i>	
Plantae	DICOT	<i>Daviesia decurrens</i> subsp. <i>decurrens</i>	
Plantae	DICOT	<i>Daviesia decurrens</i> subsp. <i>hamata</i>	
Plantae	DICOT	<i>Daviesia elongata</i>	VU
Plantae	DICOT	<i>Daviesia inflata</i>	
Plantae	DICOT	<i>Daviesia physodes</i>	
Plantae	DICOT	<i>Daviesia preissii</i>	
Plantae	DICOT	<i>Daviesia rhombifolia</i>	
Plantae	DICOT	<i>Diaspasis filifolia</i>	
Plantae	DICOT	<i>Dillwynia cinerascens</i>	
Plantae	DICOT	<i>Dillwynia laxiflora</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Dillwynia</i> sp.	
Plantae	DICOT	<i>Dillwynia</i> sp. Capel (P.A. Jurjevich 1771)	P1
Plantae	DICOT	<i>Dipogon lignosus</i>	
Plantae	DICOT	<i>Dittrichia graveolens</i>	
Plantae	DICOT	<i>Dodonea ceratocarpa</i>	
Plantae	DICOT	<i>Drosera barbigera</i>	
Plantae	DICOT	<i>Drosera enodes</i>	
Plantae	DICOT	<i>Drosera erythrorhiza</i>	
Plantae	DICOT	<i>Drosera geniculata</i>	
Plantae	DICOT	<i>Drosera gigantea</i>	
Plantae	DICOT	<i>Drosera gigantea</i> subsp. <i>geniculata</i>	
Plantae	DICOT	<i>Drosera glanduligera</i>	
Plantae	DICOT	<i>Drosera huegelii</i>	
Plantae	DICOT	<i>Drosera macrantha</i>	
Plantae	DICOT	<i>Drosera macrantha</i> sthcst subsp. <i>macrantha</i>	
Plantae	DICOT	<i>Drosera marchantii</i>	
Plantae	DICOT	<i>Drosera marchantii</i> subsp. <i>marchantii</i>	
Plantae	DICOT	<i>Drosera menziesii</i>	
Plantae	DICOT	<i>Drosera menziesii</i> subsp. <i>menziesii</i>	
Plantae	DICOT	<i>Drosera menziesii</i> subsp. <i>penicularis</i>	
Plantae	DICOT	<i>Drosera myriantha</i>	
Plantae	DICOT	<i>Drosera neesii</i>	
Plantae	DICOT	<i>Drosera neesii</i> (pink southern form) (BJK&NG 096)	
Plantae	DICOT	<i>Drosera nitidula</i> subsp. <i>nitidula</i>	
Plantae	DICOT	<i>Drosera pallida</i>	
Plantae	DICOT	<i>Drosera pulchella</i>	
Plantae	DICOT	<i>Drosera rosulata</i>	
Plantae	DICOT	<i>Drosera</i> sp. Branched styles (S.C. Coffey 193)	
Plantae	DICOT	<i>Drosera</i> sp. indet.	
Plantae	DICOT	<i>Drosera stelliflora</i>	
Plantae	DICOT	<i>Drosera stolonifera</i>	
Plantae	DICOT	<i>Drosera sulphurea</i>	
Plantae	DICOT	<i>Dryandra</i> aff. <i>nivea</i> (GJK 6622)	
Plantae	DICOT	<i>Dryandra</i> aff. <i>squarrosa</i> (ASG 11657)	
Plantae	DICOT	<i>Dryandra nivea</i>	
Plantae	DICOT	<i>Epilobium billardiereanum</i>	
Plantae	DICOT	<i>Eriostemon spicatus</i>	
Plantae	DICOT	<i>Eucalyptus calophylla</i>	
Plantae	DICOT	<i>Eucalyptus haematoxylon</i>	
Plantae	DICOT	<i>Eucalyptus marginata</i>	
Plantae	DICOT	<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	
Plantae	DICOT	<i>Eucalyptus megacarpa</i>	
Plantae	DICOT	<i>Eucalyptus patens</i>	
Plantae	DICOT	<i>Euchiloglossis linearis</i>	
Plantae	DICOT	<i>Eutaxia epacridooides</i>	
Plantae	DICOT	<i>Eutaxia virgata</i>	
Plantae	DICOT	<i>Gastrolobium capitatum</i>	
Plantae	DICOT	<i>Gastrolobium celsianum</i>	
Plantae	DICOT	<i>Gastrolobium ebracteolatum</i>	
Plantae	DICOT	<i>Gastrolobium minus</i>	
Plantae	DICOT	<i>Gastrolobium modestum</i>	VU
Plantae	DICOT	<i>Gastrolobium papilio</i>	CR
Plantae	DICOT	<i>Gastrolobium whickerense</i>	P2
Plantae	DICOT	<i>Gleditsia triacanthos</i>	
Plantae	DICOT	<i>Glischrocaryon aureum</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Gnaphalium sphaericum</i>	
Plantae	DICOT	<i>Gompholobium aristatum</i>	
Plantae	DICOT	<i>Gompholobium capitatum</i>	
Plantae	DICOT	<i>Gompholobium confertum</i>	
Plantae	DICOT	<i>Gompholobium knightianum</i>	
Plantae	DICOT	<i>Gompholobium marginatum</i>	
Plantae	DICOT	<i>Gompholobium ovatum</i>	
Plantae	DICOT	<i>Gompholobium polymorphum</i>	
Plantae	DICOT	<i>Gompholobium preissii</i>	
Plantae	DICOT	<i>Gompholobium tomentosum</i>	
Plantae	DICOT	<i>Gompholobium villosum</i>	
Plantae	DICOT	<i>Gonocarpus diffusus</i>	
Plantae	DICOT	<i>Goodenia coerulea</i>	
Plantae	DICOT	<i>Goodenia eatoniana</i>	
Plantae	DICOT	<i>Goodenia incana</i>	
Plantae	DICOT	<i>Goodenia leptoclada</i>	
Plantae	DICOT	<i>Goodenia pusilla</i>	
Plantae	DICOT	<i>Grevillea brachystylis</i>	
Plantae	DICOT	<i>Grevillea brachystylis</i> subsp. <i>brachystylis</i>	P3
Plantae	DICOT	<i>Grevillea brachystylis</i> subsp. <i>grandis</i>	CR
Plantae	DICOT	<i>Grevillea bronwenae</i>	P3
Plantae	DICOT	<i>Grevillea centristigma</i>	
Plantae	DICOT	<i>Grevillea diversifolia</i>	
Plantae	DICOT	<i>Grevillea manglesioides</i>	
Plantae	DICOT	<i>Grevillea manglesioides</i> subsp. <i>ferricola</i>	P3
Plantae	DICOT	<i>Grevillea manglesioides</i> subsp. <i>manglesioides</i>	
Plantae	DICOT	<i>Grevillea manglesioides</i> subsp. <i>metaxa</i>	
Plantae	DICOT	<i>Grevillea quercifolia</i>	
Plantae	DICOT	<i>Grevillea trifida</i>	
Plantae	DICOT	<i>Hakea aff. varia</i>	
Plantae	DICOT	<i>Hakea amplexicaulis</i>	
Plantae	DICOT	<i>Hakea ceratophylla</i>	
Plantae	DICOT	<i>Hakea cyclocarpa</i>	
Plantae	DICOT	<i>Hakea falcata</i>	
Plantae	DICOT	<i>Hakea lasiantha</i>	
Plantae	DICOT	<i>Hakea lasianthoides</i>	
Plantae	DICOT	<i>Hakea linearis</i>	
Plantae	DICOT	<i>Hakea oldfieldii</i>	P3
Plantae	DICOT	<i>Hakea ruscifolia</i>	
Plantae	DICOT	<i>Hakea</i> sp. Ironstone (BJK & NG 226)	
Plantae	DICOT	<i>Hakea sulcata</i>	
Plantae	DICOT	<i>Hakea trifurcata</i>	
Plantae	DICOT	<i>Hakea varia</i>	
Plantae	DICOT	<i>Haloragis digyna</i>	
Plantae	DICOT	<i>Hardenbergia comptoniana</i>	
Plantae	DICOT	<i>Hemiandra pungens</i>	
Plantae	DICOT	<i>Hemiandra</i> sp.	
Plantae	DICOT	<i>Hemigenia humilis</i>	
Plantae	DICOT	<i>Hemigenia pritzelii</i>	
Plantae	DICOT	<i>Hemiphora bartlingii</i>	
Plantae	DICOT	<i>Hibbertia acerosa</i>	
Plantae	DICOT	<i>Hibbertia amplexicaulis</i>	
Plantae	DICOT	<i>Hibbertia aurea</i>	
Plantae	DICOT	<i>Hibbertia cunninghamii</i>	
Plantae	DICOT	<i>Hibbertia diamesogenos</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Hibbertia ferruginea</i>	
Plantae	DICOT	<i>Hibbertia glomerata</i>	
Plantae	DICOT	<i>Hibbertia glomerata</i> subsp. <i>glomerata</i>	
Plantae	DICOT	<i>Hibbertia hypericoides</i>	
Plantae	DICOT	<i>Hibbertia lasiopus</i>	
Plantae	DICOT	<i>Hibbertia quadricolor</i>	
Plantae	DICOT	<i>Hibbertia rhadinopoda</i>	
Plantae	DICOT	<i>Hibbertia</i> sp.	
Plantae	DICOT	<i>Hibbertia stellaris</i>	
Plantae	DICOT	<i>Hibbertia subvaginata</i>	
Plantae	DICOT	<i>Hibbertia vaginata</i>	
Plantae	DICOT	<i>Homalospermum firmum</i>	
Plantae	DICOT	<i>Hovea chorizemifolia</i>	
Plantae	DICOT	<i>Hovea elliptica</i>	
Plantae	DICOT	<i>Hovea trisperma</i>	
Plantae	DICOT	<i>Hovea trisperma</i> var. <i>grandiflora</i>	
Plantae	DICOT	<i>Hovea trisperma</i> var. <i>trisperma</i>	
Plantae	DICOT	<i>Hybanthus debilissimus</i>	
Plantae	DICOT	<i>Hydrocotyle callicarpa</i>	
Plantae	DICOT	<i>Hypocalymma angustifolium</i>	
		<i>Hypocalymma angustifolium</i> subsp. <i>Swan Coastal Plain</i> (G.J. Keighery 16777)	
Plantae	DICOT	<i>Hypocalymma cordifolium</i>	
Plantae	DICOT	<i>Hypocalymma ericifolium</i>	
Plantae	DICOT	<i>Hypochaeris glabra</i>	
Plantae	DICOT	<i>Illecebrum verticillatum</i>	
Plantae	DICOT	<i>Isopogon axillaris</i>	
Plantae	DICOT	<i>Isopogon formosus</i> subsp. <i>dasylepis</i>	P3
Plantae	DICOT	<i>Isopogon scaber</i>	
Plantae	DICOT	<i>Isotropis cuneifolia</i>	
Plantae	DICOT	<i>Ixiolaena viscosa</i>	
Plantae	DICOT	<i>Jacksonia furcellata</i>	
Plantae	DICOT	<i>Jacksonia horrida</i>	
Plantae	DICOT	<i>Jacksonia lehmannii</i>	
Plantae	DICOT	<i>Jacksonia</i> sp. Busselton (G.J. Keighery 4482)	
Plantae	DICOT	<i>Kennedia carinata</i>	
Plantae	DICOT	<i>Kennedia coccinea</i>	
Plantae	DICOT	<i>Kennedia prostrata</i>	
Plantae	DICOT	<i>Kunzea aff. micrantha</i> (BJK & NG 040)	
Plantae	DICOT	<i>Kunzea micrantha</i>	
Plantae	DICOT	<i>Kunzea recurva</i>	
Plantae	DICOT	<i>Kunzea rostrata</i>	
Plantae	DICOT	<i>Kunzea</i> sp.	
Plantae	DICOT	<i>Labichea punctata</i>	
Plantae	DICOT	<i>Lagenifera huegelii</i>	
Plantae	DICOT	<i>Lagenophora huegelii</i>	
Plantae	DICOT	<i>Lambertia multiflora</i> var. <i>darlingensis</i>	
Plantae	DICOT	<i>Lambertia rariflora</i>	
Plantae	DICOT	<i>Lambertia rariflora</i> subsp. <i>rariflora</i>	P4
Plantae	DICOT	<i>Lasiopetalum laxiflorum</i>	P3
Plantae	DICOT	<i>Lasiopetalum occidentale</i>	
Plantae	DICOT	<i>Lechenaultia biloba</i>	
Plantae	DICOT	<i>Lechenaultia expansa</i>	
Plantae	DICOT	<i>Leptomeria ellytes</i>	
Plantae	DICOT	<i>Leptomeria ericoides</i>	

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Plantae	DICOT	<i>Leptomeria furtiva</i>	
Plantae	DICOT	<i>Leptomeria pauciflora</i>	
Plantae	DICOT	<i>Leptomeria scrobiculata</i>	
Plantae	DICOT	<i>Leptomeria squarrulosa</i>	
Plantae	DICOT	<i>Leucopogon australis</i>	
Plantae	DICOT	<i>Leucopogon conostephioides</i>	
Plantae	DICOT	<i>Leucopogon glabellus</i>	
Plantae	DICOT	<i>Leucopogon gracillimus</i>	
Plantae	DICOT	<i>Leucopogon interstans</i>	
Plantae	DICOT	<i>Leucopogon microcarpus</i>	
Plantae	DICOT	<i>Leucopogon nutans</i>	
Plantae	DICOT	<i>Leucopogon parviflorus</i>	
Plantae	DICOT	<i>Leucopogon pendulus</i>	
Plantae	DICOT	<i>Leucopogon propinquus</i>	
Plantae	DICOT	<i>Leucopogon pulchellus</i>	
Plantae	DICOT	<i>Leucopogon</i> sp. Busselton (D. Cooper 243)	P2
Plantae	DICOT	<i>Leucopogon</i> sp. Margaret River (J. Scott 207)	
Plantae	DICOT	<i>Leucopogon tenuis</i>	
Plantae	DICOT	<i>Levenhookia pusilla</i>	
Plantae	DICOT	<i>Levenhookia</i> sp. Whicher Range (J.A. Wege 2090)	
Plantae	DICOT	<i>Lobelia alata</i>	
Plantae	DICOT	<i>Lobelia anceps</i>	
Plantae	DICOT	<i>Lobelia rhombifolia</i>	
Plantae	DICOT	<i>Lobelia tenuior</i>	
Plantae	DICOT	<i>Logania serpyllifolia</i>	
Plantae	DICOT	<i>Logania vaginalis</i>	
Plantae	DICOT	<i>Logfia gallica</i>	
Plantae	DICOT	<i>Lotus angustissimus</i>	
Plantae	DICOT	<i>Lotus</i> sp.	
Plantae	DICOT	<i>Lotus</i> sp. indet.	
Plantae	DICOT	<i>Lotus subbiflorus</i>	
Plantae	DICOT	<i>Lotus uliginosus</i>	
Plantae	DICOT	<i>Lysinema ciliatum</i>	
Plantae	DICOT	<i>Lysinema pentapetalum</i>	
Plantae	DICOT	<i>Melaleuca cuticularis</i>	
Plantae	DICOT	<i>Melaleuca densa</i>	
Plantae	DICOT	<i>Melaleuca incana</i>	
Plantae	DICOT	<i>Melaleuca incana</i> subsp. <i>incana</i>	
Plantae	DICOT	<i>Melaleuca preissiana</i>	
Plantae	DICOT	<i>Melaleuca raphiophylla</i>	
Plantae	DICOT	<i>Melaleuca</i> sp.	
Plantae	DICOT	<i>Melaleuca thymoides</i>	
Plantae	DICOT	<i>Melaleuca trichophylla</i>	
Plantae	DICOT	<i>Millotia tenuifolia</i>	
Plantae	DICOT	<i>Mirbelia dilatata</i>	
Plantae	DICOT	<i>Mitrasacme paradoxa</i>	
Plantae	DICOT	<i>Monopsis debilis</i>	
Plantae	DICOT	<i>Monopsis debilis</i> var. <i>depressa</i>	
Plantae	DICOT	<i>Myriophyllum crispatum</i>	
Plantae	DICOT	<i>Myriophyllum</i> sp.	
Plantae	DICOT	<i>Needhamiella pumilio</i>	
Plantae	DICOT	<i>Nuytsia floribunda</i>	
Plantae	DICOT	<i>Oenothera lindheimeri</i>	
Plantae	DICOT	<i>Olax benthamiana</i>	
Plantae	DICOT	<i>Opercularia</i> aff. <i>vaginata</i> (BJK & NG 238)	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Opercularia apiciflora</i>	
Plantae	DICOT	<i>Opercularia echinocephala</i>	
Plantae	DICOT	<i>Opercularia</i> sp. indet.	
Plantae	DICOT	<i>Opercularia vaginata</i>	
Plantae	DICOT	<i>Orianthera campanulata</i>	
Plantae	DICOT	<i>Orianthera serpyllifolia</i> subsp. <i>angustifolia</i>	
Plantae	DICOT	<i>Ornithopus compressus</i>	
Plantae	DICOT	<i>Ornithopus pinnatus</i>	
Plantae	DICOT	<i>Oxalis pes-caprae</i>	
Plantae	DICOT	<i>Oxalis purpurea</i>	
Plantae	DICOT	<i>Papaver somniferum</i>	
Plantae	DICOT	<i>Parentucellia viscosa</i>	
Plantae	DICOT	<i>Pentapeltis peltigera</i>	
Plantae	DICOT	<i>Pericalymma ellipticum</i>	
Plantae	DICOT	<i>Pericalymma ellipticum</i> var. <i>ellipticum</i>	
Plantae	DICOT	<i>Persoonia elliptica</i>	
Plantae	DICOT	<i>Persoonia longifolia</i>	
Plantae	DICOT	<i>Persoonia saccata</i>	
Plantae	DICOT	<i>Petrophile diversifolia</i>	
Plantae	DICOT	<i>Petrophile juncifolia</i>	
Plantae	DICOT	<i>Petrophile linearis</i>	
Plantae	DICOT	<i>Petrophile media</i> var. <i>juncifolius</i>	
Plantae	DICOT	<i>Petrophile serruriae</i>	
Plantae	DICOT	<i>Petrophile squamata</i>	
Plantae	DICOT	<i>Petrophile squamata</i> subsp. <i>squamata</i>	
Plantae	DICOT	<i>Philotheeca nodiflora</i> subsp. <i>lasiocalyx</i>	
Plantae	DICOT	<i>Phyllangium paradoxum</i>	
Plantae	DICOT	<i>Pilostyles hamiltonii</i>	
Plantae	DICOT	<i>Pimelea angustifolia</i>	
Plantae	DICOT	<i>Pimelea ciliata</i> subsp. <i>longituba</i>	P3
Plantae	DICOT	<i>Pimelea imbricata</i> var. <i>imbricata</i>	
Plantae	DICOT	<i>Pimelea imbricata</i> var. <i>piligera</i>	
Plantae	DICOT	<i>Pimelea longiflora</i>	
Plantae	DICOT	<i>Pimelea preissii</i>	
Plantae	DICOT	<i>Pimelea</i> sp.	
Plantae	DICOT	<i>Pimelea spectabilis</i>	
Plantae	DICOT	<i>Pimelea suaveolens</i> subsp. <i>suaveolens</i>	
Plantae	DICOT	<i>Pithocarpa corymbulosa</i>	P3
Plantae	DICOT	<i>Pithocarpa pulchella</i> var. <i>melanostigma</i>	
Plantae	DICOT	<i>Platysace compressa</i>	
Plantae	DICOT	<i>Platysace filiformis</i>	
Plantae	DICOT	<i>Platysace tenuissima</i>	
Plantae	DICOT	<i>Platytheca galiooides</i>	
Plantae	DICOT	<i>Podolepis gracilis</i>	
Plantae	DICOT	<i>Podolepis</i> sp. indet.	
Plantae	DICOT	<i>Polypompholyx multifida</i>	
Plantae	DICOT	<i>Poranthera huegelii</i>	
Plantae	DICOT	<i>Pseudanthus virgatus</i>	
Plantae	DICOT	<i>Pseudognaphalium luteo-album</i>	
Plantae	DICOT	<i>Pultenaea brachytropis</i>	
Plantae	DICOT	<i>Pultenaea ericifolia</i>	
Plantae	DICOT	<i>Pultenaea pinifolia</i>	P3
Plantae	DICOT	<i>Pultenaea radiata</i>	
Plantae	DICOT	<i>Pultenaea reticulata</i>	
Plantae	DICOT	<i>Pultenaea skinneri</i>	P4

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Pultenaea</i> sp. southern (L.A. Orthia 39)	
Plantae	DICOT	<i>Quinetia urvillei</i>	
Plantae	DICOT	<i>Regelia ciliata</i>	
Plantae	DICOT	<i>Rhadinothamnus anceps</i>	
Plantae	DICOT	<i>Rhodanthe citrina</i>	
Plantae	DICOT	<i>Scaevola calliptera</i>	
Plantae	DICOT	<i>Scaevola glandulifera</i>	
Plantae	DICOT	<i>Scaevola phlebopetala</i>	
Plantae	DICOT	<i>Scaevola striata</i>	
Plantae	DICOT	<i>Schoenolaena juncea</i>	
Plantae	DICOT	<i>Siloxerus filifolius</i>	
Plantae	DICOT	<i>Siloxerus humifusus</i>	
Plantae	DICOT	<i>Siloxerus</i> sp. indet.	
Plantae	DICOT	<i>Solanum nigrum</i>	
Plantae	DICOT	<i>Sonchus asper</i>	
Plantae	DICOT	<i>Sonchus oleraceus</i>	
Plantae	DICOT	<i>Sphaerolobium</i> aff. <i>macranthum</i>	
Plantae	DICOT	<i>Sphaerolobium</i> <i>medium</i>	
Plantae	DICOT	<i>Sphaerolobium</i> <i>vimineum</i>	
Plantae	DICOT	<i>Sphenotoma</i> <i>capitata</i>	
Plantae	DICOT	<i>Stachystemon</i> <i>vermicularis</i>	
Plantae	DICOT	<i>Stachystemon</i> <i>virgatus</i>	
Plantae	DICOT	<i>Stackhousia</i> <i>monogyna</i>	
Plantae	DICOT	<i>Stackhousia</i> sp.	
Plantae	DICOT	<i>Stirlingia latifolia</i>	
Plantae	DICOT	<i>Strangea</i> <i>stenocarpoides</i>	
Plantae	DICOT	<i>Stylium</i> aff. <i>bulbiferum</i>	
Plantae	DICOT	<i>Stylium</i> <i>amoenum</i>	
Plantae	DICOT	<i>Stylium</i> <i>androsaceum</i>	
Plantae	DICOT	<i>Stylium</i> <i>barleei</i>	
Plantae	DICOT	<i>Stylium</i> <i>brunonianum</i>	
Plantae	DICOT	<i>Stylium</i> <i>brunonianum</i> subsp. <i>minor</i>	
Plantae	DICOT	<i>Stylium</i> <i>bulbiferum</i>	
Plantae	DICOT	<i>Stylium</i> <i>caespitosum</i>	
Plantae	DICOT	<i>Stylium</i> <i>calcaratum</i>	
Plantae	DICOT	<i>Stylium</i> <i>crassifolium</i>	
Plantae	DICOT	<i>Stylium</i> <i>ecorne</i>	
Plantae	DICOT	<i>Stylium</i> <i>ferricola</i>	P1
Plantae	DICOT	<i>Stylium</i> <i>imbricatum</i>	
Plantae	DICOT	<i>Stylium</i> <i>inundatum</i>	
Plantae	DICOT	<i>Stylium</i> <i>junceum</i>	
Plantae	DICOT	<i>Stylium</i> <i>latericola</i>	
Plantae	DICOT	<i>Stylium</i> <i>lateriticola</i>	
Plantae	DICOT	<i>Stylium</i> <i>leeuwinense</i>	P4
Plantae	DICOT	<i>Stylium</i> <i>megacarpum</i>	
Plantae	DICOT	<i>Stylium</i> <i>neurophyllum</i>	
Plantae	DICOT	<i>Stylium</i> <i>nymphaeum</i>	
Plantae	DICOT	<i>Stylium</i> <i>obtusatum</i>	
Plantae	DICOT	<i>Stylium</i> <i>perpusillum</i>	
Plantae	DICOT	<i>Stylium</i> <i>petiolare</i>	
Plantae	DICOT	<i>Stylium</i> <i>piliferum</i>	
Plantae	DICOT	<i>Stylium</i> <i>pygmaeum</i>	
Plantae	DICOT	<i>Stylium</i> <i>repens</i>	
Plantae	DICOT	<i>Stylium</i> <i>scandens</i>	
Plantae	DICOT	<i>Stylium</i> <i>schoenoides</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Stylium</i> sp.	
Plantae	DICOT	<i>Stylium spathulatum</i>	
Plantae	DICOT	<i>Styphelia</i> sp. Nannup (R.D. Royce 3978)	
Plantae	DICOT	<i>Styphelia tenuiflora</i>	
Plantae	DICOT	<i>Synaphea decumbens</i>	P3
Plantae	DICOT	<i>Synaphea floribunda</i>	
Plantae	DICOT	<i>Synaphea hians</i>	P3
Plantae	DICOT	<i>Synaphea obtusata</i>	
Plantae	DICOT	<i>Synaphea petiolaris</i>	
Plantae	DICOT	<i>Synaphea petiolaris</i> subsp. <i>simplex</i>	P3
Plantae	DICOT	<i>Synaphea petiolaris</i> subsp. <i>triloba</i>	
Plantae	DICOT	<i>Synaphea</i> sp.	
Plantae	DICOT	<i>Synaphea</i> sp. (Busselton)	
Plantae	DICOT	<i>Synaphea</i> sp. (wicher)	
Plantae	DICOT	<i>Synaphea</i> sp. indet.	
Plantae	DICOT	<i>Synaphea whicherensis</i>	
Plantae	DICOT	<i>Taxandria fragrans</i>	
Plantae	DICOT	<i>Taxandria juniperina</i>	
Plantae	DICOT	<i>Taxandria linearifolia</i>	
Plantae	DICOT	<i>Taxandria linearifolia</i> x <i>parviceps</i>	
Plantae	DICOT	<i>Tetratheca hirsuta</i>	
Plantae	DICOT	<i>Tetratheca hirsuta</i> (glabrous form)	
Plantae	DICOT	<i>Tetratheca hirsuta</i> subsp. <i>viminea</i>	
Plantae	DICOT	<i>Tetratheca setigera</i>	
Plantae	DICOT	<i>Thomasia grandiflora</i>	
Plantae	DICOT	<i>Thomasia paniculata</i>	
Plantae	DICOT	<i>Thomasia pauciflora</i>	
Plantae	DICOT	<i>Trachymene pilosa</i>	
Plantae	DICOT	<i>Trichocline</i> sp. (GJK 6382)	
Plantae	DICOT	<i>Trichocline</i> sp. Treeton (B.J. Keighery & N. Gibson 564)	
Plantae	DICOT	<i>Trichocline spathulata</i>	
Plantae	DICOT	<i>Trifolium arvense</i> var. <i>arvense</i>	
Plantae	DICOT	<i>Trifolium dubium</i>	
Plantae	DICOT	<i>Trifolium glomeratum</i>	
Plantae	DICOT	<i>Trifolium micranthum</i>	
Plantae	DICOT	<i>Trifolium</i> sp. indet.	
Plantae	DICOT	<i>Trifolium subterraneum</i>	
Plantae	DICOT	<i>Tripterococcus brunonis</i>	
Plantae	DICOT	<i>Trithuria bibracteata</i>	
Plantae	DICOT	<i>Utricularia simplex</i>	
Plantae	DICOT	<i>Utricularia violacea</i>	
Plantae	DICOT	<i>Velleia trinervis</i>	
Plantae	DICOT	<i>Vellereophyton dealbatum</i>	
Plantae	DICOT	<i>Verticordia densiflora</i> var. <i>cespitosa</i>	
Plantae	DICOT	<i>Verticordia densiflora</i> var. <i>pedunculata</i>	EN
Plantae	DICOT	<i>Verticordia habrantha</i>	
Plantae	DICOT	<i>Verticordia lehmannii</i>	P4
Plantae	DICOT	<i>Verticordia plumosa</i>	
Plantae	DICOT	<i>Verticordia plumosa</i> var. <i>ananeotes</i>	CR
Plantae	DICOT	<i>Verticordia plumosa</i> var. <i>plumosa</i>	
Plantae	DICOT	<i>Verticordia plumosa</i> var. <i>vassensis</i>	EN
Plantae	DICOT	<i>Villarsia</i> sp. indet.	
Plantae	DICOT	<i>Viminaria juncea</i>	
Plantae	DICOT	<i>Vitis vinifera</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	DICOT	<i>Waitzia citrina</i>	
Plantae	DICOT	<i>Xanthosia candida</i>	
Plantae	DICOT	<i>Xanthosia huegelii</i>	
Plantae	DICOT	<i>Xanthosia tasmanica</i>	
Plantae	DICOT	<i>Xylomelum occidentale</i>	
Plantae	FERN	<i>Histiopteris incisa</i>	
Plantae	FERN	<i>Lindsaea linearis</i>	
Plantae	FERN	<i>Phylloglossum drummondii</i>	
Plantae	FERN	<i>Pteridium esculentum</i> subsp. <i>esculentum</i>	
Plantae	FERN	<i>Selaginella gracillima</i>	
Plantae	GYMNO	<i>Pinus pinaster</i>	
Plantae	GYMNO	<i>Podocarpus drouynianus</i>	
Plantae	MONOCOT	<i>Agrostocrinum hirsutum</i>	
Plantae	MONOCOT	<i>Agrostocrinum scabrum</i>	
Plantae	MONOCOT	<i>Aira caryophyllea</i>	
Plantae	MONOCOT	<i>Aira cupaniana</i>	
Plantae	MONOCOT	<i>Aira praecox</i>	
Plantae	MONOCOT	<i>Aira</i> sp. indet.	
Plantae	MONOCOT	<i>Amphibromus nervosus</i>	
Plantae	MONOCOT	<i>Amphipogon amphipogonoides</i>	
Plantae	MONOCOT	<i>Amphipogon debilis</i>	
Plantae	MONOCOT	<i>Amphipogon laguroides</i>	
Plantae	MONOCOT	<i>Anarthria gracilis</i>	
Plantae	MONOCOT	<i>Anarthria laevis</i>	
Plantae	MONOCOT	<i>Anarthria prolifera</i>	
Plantae	MONOCOT	<i>Anthoxanthum odoratum</i>	
Plantae	MONOCOT	<i>Aphelia cyperoides</i>	
Plantae	MONOCOT	<i>Asparagus officinalis</i>	
Plantae	MONOCOT	<i>Austrostipa campylachne</i>	
Plantae	MONOCOT	<i>Austrostipa compressa</i>	
Plantae	MONOCOT	<i>Austrostipa semibarbata</i>	
Plantae	MONOCOT	<i>Avellinia michelii</i>	
Plantae	MONOCOT	<i>Axonopus fissifolius</i>	
Plantae	MONOCOT	<i>Baumea acuta</i>	
Plantae	MONOCOT	<i>Baumea juncea</i>	
Plantae	MONOCOT	<i>Baumea rubiginosa</i>	
Plantae	MONOCOT	<i>Baumea vaginalis</i>	
Plantae	MONOCOT	<i>Baxteria australis</i>	
Plantae	MONOCOT	<i>Bolboschoenus caldwellii</i>	
Plantae	MONOCOT	<i>Borya scirpoidea</i>	
Plantae	MONOCOT	<i>Briza maxima</i>	
Plantae	MONOCOT	<i>Briza minor</i>	
Plantae	MONOCOT	<i>Brizula nutans</i>	
Plantae	MONOCOT	<i>Burchardia congesta</i>	
Plantae	MONOCOT	<i>Burchardia multiflora</i>	
Plantae	MONOCOT	<i>Burchardia umbellata</i>	
Plantae	MONOCOT	<i>Caesia aff. micrantha</i> (GJK 10857)	
Plantae	MONOCOT	<i>Caesia micrantha</i>	
Plantae	MONOCOT	<i>Caesia occidentalis</i>	
Plantae	MONOCOT	<i>Caladenia brownii</i>	
Plantae	MONOCOT	<i>Caladenia flava</i>	
Plantae	MONOCOT	<i>Caladenia flava</i> subsp. <i>flava</i>	
Plantae	MONOCOT	<i>Caladenia hirta</i> subsp. <i>hirta</i>	
Plantae	MONOCOT	<i>Caladenia latifolia</i>	
Plantae	MONOCOT	<i>Caladenia marginata</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	MONOCOT	<i>Caladenia nana</i> subsp. <i>unita</i>	
Plantae	MONOCOT	<i>Caladenia procera</i>	CR
Plantae	MONOCOT	<i>Caladenia rhomboidiformis</i>	
Plantae	MONOCOT	<i>Caladenia</i> sp. indet.	
Plantae	MONOCOT	<i>Caustis dioica</i>	
Plantae	MONOCOT	<i>Centrolepis alepyroides</i>	
Plantae	MONOCOT	<i>Centrolepis aristata</i>	
Plantae	MONOCOT	<i>Centrolepis drummondiana</i>	
Plantae	MONOCOT	<i>Centrolepis mutica</i>	
Plantae	MONOCOT	<i>Centrolepis pilosa</i>	
Plantae	MONOCOT	<i>Chaetanthus leptocarpoides</i>	
Plantae	MONOCOT	<i>Chamaescilla corymbosa</i>	
Plantae	MONOCOT	<i>Chamaescilla versicolor</i>	
Plantae	MONOCOT	<i>Chordifex amblycoleus</i>	
Plantae	MONOCOT	<i>Chordifex gracilior</i>	P3
Plantae	MONOCOT	<i>Chordifex isomorphus</i>	
Plantae	MONOCOT	<i>Chordifex laxus</i>	
Plantae	MONOCOT	<i>Chorizandra cymbalaria</i>	
Plantae	MONOCOT	<i>Conostylis aculeata</i>	
Plantae	MONOCOT	<i>Conostylis aculeata</i> subsp. <i>aculeata</i>	
Plantae	MONOCOT	<i>Conostylis laxiflora</i>	
Plantae	MONOCOT	<i>Conostylis setigera</i>	
Plantae	MONOCOT	<i>Conostylis setigera</i> subsp. <i>setigera</i>	
Plantae	MONOCOT	<i>Cortaderia selloana</i> subsp. <i>selloana</i>	
Plantae	MONOCOT	<i>Cyanicula sericea</i>	
Plantae	MONOCOT	<i>Cyathochaeta avenacea</i>	
Plantae	MONOCOT	<i>Cyathochaeta clandestina</i>	
Plantae	MONOCOT	<i>Cyathochaeta equitans</i>	
Plantae	MONOCOT	<i>Cyathochaeta teretifolia</i>	P3
Plantae	MONOCOT	<i>Cyperus tenellus</i>	
Plantae	MONOCOT	<i>Cytogonidium leptocarpoides</i>	
Plantae	MONOCOT	<i>Danthonia occidentalis</i>	
Plantae	MONOCOT	<i>Danthonia setacea</i>	
Plantae	MONOCOT	<i>Danthonia</i> sp. indet.	
Plantae	MONOCOT	<i>Dasygordon bromeliifolius</i>	
Plantae	MONOCOT	<i>Dasygordon hookeri</i>	
Plantae	MONOCOT	<i>Desmocladus lateriflorus</i>	
Plantae	MONOCOT	<i>Diuris corymbosa</i>	
Plantae	MONOCOT	<i>Diuris jonesii</i>	
Plantae	MONOCOT	<i>Drakaea micrantha</i>	EN
Plantae	MONOCOT	<i>Elythranthera brunonis</i>	
Plantae	MONOCOT	<i>Elythranthera emarginata</i>	
Plantae	MONOCOT	<i>Epiblema grandiflorum</i>	
Plantae	MONOCOT	<i>Eriochilus dilatatus</i>	
Plantae	MONOCOT	<i>Eriochilus dilatatus</i> subsp. <i>magnus</i>	
Plantae	MONOCOT	<i>Eriochilus helonomos</i>	
Plantae	MONOCOT	<i>Evandra aristata</i>	
Plantae	MONOCOT	<i>Gahnia decomposita</i>	
Plantae	MONOCOT	<i>Gladiolus</i> sp. indet.	
Plantae	MONOCOT	<i>Gladiolus undulatus</i>	
Plantae	MONOCOT	<i>Gymnoschoenus anceps</i>	
Plantae	MONOCOT	<i>Haemodorum laxum</i>	
Plantae	MONOCOT	<i>Haemodorum</i> sp. indet.	
Plantae	MONOCOT	<i>Haemodorum sparsiflorum</i>	
Plantae	MONOCOT	<i>Hodgsoniola junciformis</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	MONOCOT	<i>Holcus setiger</i>	
Plantae	MONOCOT	<i>Hyparrhenia hirta</i>	
Plantae	MONOCOT	<i>Hypolaena caespitosa</i>	
Plantae	MONOCOT	<i>Hypolaena exsulca</i>	
Plantae	MONOCOT	<i>Hypolaena fastigiata</i>	
Plantae	MONOCOT	<i>Hypolaena pubescens</i>	
Plantae	MONOCOT	<i>Hypolaena viridis</i>	
Plantae	MONOCOT	<i>Isolepis cernua</i>	
Plantae	MONOCOT	<i>Isolepis cyperoides</i>	
Plantae	MONOCOT	<i>Isolepis marginata</i>	
Plantae	MONOCOT	<i>Isolepis producta</i>	
Plantae	MONOCOT	<i>Ixia maculata</i>	
Plantae	MONOCOT	<i>Ixia maculata hybrid</i>	
Plantae	MONOCOT	<i>Johnsonia acaulis</i>	
Plantae	MONOCOT	<i>Johnsonia inconspicua</i>	P3
Plantae	MONOCOT	<i>Johnsonia lupulina</i>	
Plantae	MONOCOT	<i>Juncus capitatus</i>	
Plantae	MONOCOT	<i>Juncus pallidus</i>	
Plantae	MONOCOT	<i>Juncus subsecundus</i>	
Plantae	MONOCOT	<i>Kingia australis</i>	
Plantae	MONOCOT	<i>Laxmannia jamesii</i>	
Plantae	MONOCOT	<i>Laxmannia minor</i>	
Plantae	MONOCOT	<i>Laxmannia sessiliflora subsp. australis</i>	
Plantae	MONOCOT	<i>Lepidosperma angustatum</i>	
Plantae	MONOCOT	<i>Lepidosperma carphoides</i>	
Plantae	MONOCOT	<i>Lepidosperma eastern terete</i> (BJK&NG 232)	
Plantae	MONOCOT	<i>Lepidosperma effusum</i>	
Plantae	MONOCOT	<i>Lepidosperma gracile</i>	
Plantae	MONOCOT	<i>Lepidosperma obtusum</i>	
Plantae	MONOCOT	<i>Lepidosperma persecan</i> s	
Plantae	MONOCOT	<i>Lepidosperma pubisquamum</i>	
Plantae	MONOCOT	<i>Lepidosperma sp.</i>	
Plantae	MONOCOT	<i>Lepidosperma sp. Blackwood</i> (R. Davis 7696)	
Plantae	MONOCOT	<i>Lepidosperma sp. Margaret River</i> (B.J. Lepschi 1841)	
Plantae	MONOCOT	<i>Leptocarpus denmarkicus</i>	
Plantae	MONOCOT	<i>Leptocarpus scariosus</i>	
Plantae	MONOCOT	<i>Leptocarpus sp. indet.</i>	
Plantae	MONOCOT	<i>Leptocarpus tenax</i>	
Plantae	MONOCOT	<i>Leptocarpus thysananthus</i>	
Plantae	MONOCOT	<i>Leptocarpus trisepalus</i>	
Plantae	MONOCOT	<i>Lepyrodia drummondiana</i>	
Plantae	MONOCOT	<i>Lepyrodia extensa</i>	P2
Plantae	MONOCOT	<i>Lepyrodia macra</i>	
Plantae	MONOCOT	<i>Lepyrodia muirii</i>	
Plantae	MONOCOT	<i>Lepyrodia sp. indet.</i>	
Plantae	MONOCOT	<i>Lolium perenne</i>	
Plantae	MONOCOT	<i>Lolium sp. indet.</i>	
Plantae	MONOCOT	<i>Lomandra britannii</i>	
Plantae	MONOCOT	<i>Lomandra caespitosa</i>	
Plantae	MONOCOT	<i>Lomandra hermaphrodita</i>	
Plantae	MONOCOT	<i>Lomandra nigricans</i>	
Plantae	MONOCOT	<i>Lomandra preissii</i>	
Plantae	MONOCOT	<i>Lomandra purpurea</i>	
Plantae	MONOCOT	<i>Lomandra sericea</i>	
Plantae	MONOCOT	<i>Lomandra sonderi</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	MONOCOT	<i>Lomandra suaveolens</i>	
Plantae	MONOCOT	<i>Loxocarya cinerea</i>	
Plantae	MONOCOT	<i>Loxocarya fasciculata</i>	
Plantae	MONOCOT	<i>Loxocarya flexuosa</i>	
Plantae	MONOCOT	<i>Loxocarya magna</i>	P3
Plantae	MONOCOT	<i>Loxocarya pubescens</i>	
Plantae	MONOCOT	<i>Loxocarya striata</i> subsp. <i>implexa</i>	P1
Plantae	MONOCOT	<i>Lyginia barbata</i>	
Plantae	MONOCOT	<i>Lyginia imberbis</i>	
Plantae	MONOCOT	<i>Lyperanthus nigricans</i>	
Plantae	MONOCOT	<i>Lyperanthus serratus</i>	
Plantae	MONOCOT	<i>Meeboldina denmarkica</i>	
Plantae	MONOCOT	<i>Melanostachya ustulata</i>	
Plantae	MONOCOT	<i>Mesomelaena graciliceps</i>	
Plantae	MONOCOT	<i>Mesomelaena tetragona</i>	
Plantae	MONOCOT	<i>Microtis atrata</i>	
Plantae	MONOCOT	<i>Microtis</i> sp. indet.	
Plantae	MONOCOT	<i>Neurachne alopecuroides</i>	
Plantae	MONOCOT	<i>Neurachne amphipogonoides</i>	
Plantae	MONOCOT	<i>Orthrosanthus laxus</i> var. <i>laxus</i>	
Plantae	MONOCOT	<i>Ottelia ovalifolia</i>	
Plantae	MONOCOT	<i>Paspalum distichum</i>	
Plantae	MONOCOT	<i>Patersonia babianoides</i>	
Plantae	MONOCOT	<i>Patersonia juncea</i>	
Plantae	MONOCOT	<i>Patersonia occidentalis</i>	
Plantae	MONOCOT	<i>Patersonia occidentalis</i> (swamp form)	
Plantae	MONOCOT	<i>Patersonia occidentalis</i> var. <i>occidentalis</i>	
Plantae	MONOCOT	<i>Patersonia pygmaea</i>	
Plantae	MONOCOT	<i>Patersonia umbrosa</i> var. <i>xanthina</i>	
Plantae	MONOCOT	<i>Pauridia occidentalis</i> var. <i>quadriloba</i>	
Plantae	MONOCOT	<i>Philydrella pygmaea</i>	
Plantae	MONOCOT	<i>Phlebocarya ciliata</i>	
Plantae	MONOCOT	<i>Poa annua</i>	
Plantae	MONOCOT	<i>Praecoxanthus aphyllus</i>	
Plantae	MONOCOT	<i>Prasophyllum elatum</i>	
Plantae	MONOCOT	<i>Prasophyllum parvifolium</i>	
Plantae	MONOCOT	<i>Prasophyllum</i> sp. indet.	
Plantae	MONOCOT	<i>Prasophyllum triangulare</i>	
Plantae	MONOCOT	<i>Pterostylis recurva</i>	
Plantae	MONOCOT	<i>Pterostylis vittata</i>	
Plantae	MONOCOT	<i>Restio elegans</i>	
Plantae	MONOCOT	<i>Restio gracilior</i>	
Plantae	MONOCOT	<i>Restio serialis</i>	
Plantae	MONOCOT	<i>Restio tremulus</i>	
Plantae	MONOCOT	<i>Rytidosperma caespitosum</i>	
Plantae	MONOCOT	<i>Schoenus benthamii</i>	P3
Plantae	MONOCOT	<i>Schoenus bifidus</i>	
Plantae	MONOCOT	<i>Schoenus brevisetis</i>	
Plantae	MONOCOT	<i>Schoenus clandestinus</i>	
Plantae	MONOCOT	<i>Schoenus curvifolius</i>	
Plantae	MONOCOT	<i>Schoenus discifer</i>	
Plantae	MONOCOT	<i>Schoenus efoliatus</i>	
Plantae	MONOCOT	<i>Schoenus grandiflorus</i>	
Plantae	MONOCOT	<i>Schoenus laevigatus</i>	
Plantae	MONOCOT	<i>Schoenus nanus</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	MONOCOT	<i>Schoenus odontocarpus</i>	
Plantae	MONOCOT	<i>Schoenus rodwayanus</i>	
Plantae	MONOCOT	<i>Schoenus</i> sp.	
Plantae	MONOCOT	<i>Schoenus</i> sp. (brown bracts)	
Plantae	MONOCOT	<i>Schoenus</i> sp. indet.	
Plantae	MONOCOT	<i>Schoenus</i> sp. Jindong (R.D. Royce 2485)	P1
Plantae	MONOCOT	<i>Schoenus subbarbatus</i>	
Plantae	MONOCOT	<i>Schoenus subbulbosus</i>	
Plantae	MONOCOT	<i>Schoenus subflavus</i>	
Plantae	MONOCOT	<i>Schoenus subflavus</i> subsp. long leaves (K.L. Wilson 2865)	
Plantae	MONOCOT	<i>Schoenus sublateralis</i>	
Plantae	MONOCOT	<i>Schoenus unispiculatus</i>	
Plantae	MONOCOT	<i>Sowerbaea laxiflora</i>	
Plantae	MONOCOT	<i>Sparaxis bulbifera</i>	
Plantae	MONOCOT	<i>Stipa campylachne</i>	
Plantae	MONOCOT	<i>Stipa compressa</i>	
Plantae	MONOCOT	<i>Stipa semibarbata</i> group	
Plantae	MONOCOT	<i>Stypandra glauca</i>	
Plantae	MONOCOT	<i>Taraxis grossa</i>	
Plantae	MONOCOT	<i>Tetraria australiensis</i>	
Plantae	MONOCOT	<i>Tetraria australiensis</i> x <i>octandra</i>	
Plantae	MONOCOT	<i>Tetraria capillaris</i>	
Plantae	MONOCOT	<i>Tetraria octandra</i>	
Plantae	MONOCOT	<i>Tetraria</i> sp. Jarrah Forest (R. Davis 7391)	
Plantae	MONOCOT	<i>Tetrarrhena laevis</i>	
Plantae	MONOCOT	<i>Thelymitra</i> aff. <i>holmesii</i>	
Plantae	MONOCOT	<i>Thelymitra antennifera</i>	
Plantae	MONOCOT	<i>Thelymitra canaliculata</i>	
Plantae	MONOCOT	<i>Thelymitra crinita</i>	
Plantae	MONOCOT	<i>Thelymitra flexuosa</i>	
Plantae	MONOCOT	<i>Thelymitra graminea</i>	
Plantae	MONOCOT	<i>Thelymitra nuda</i>	
Plantae	MONOCOT	<i>Thelymitra paludosa</i>	
Plantae	MONOCOT	<i>Thelymitra</i> sp. indet.	
Plantae	MONOCOT	<i>Thysanotus glaucus</i>	P4
Plantae	MONOCOT	<i>Thysanotus gracilis</i>	
Plantae	MONOCOT	<i>Thysanotus multiflorus</i>	
Plantae	MONOCOT	<i>Thysanotus patersonii</i>	
Plantae	MONOCOT	<i>Thysanotus</i> sp. indet.	
Plantae	MONOCOT	<i>Thysanotus</i> sp. <i>manglesianus/patersonii</i> group	
Plantae	MONOCOT	<i>Thysanotus sparteus</i>	
Plantae	MONOCOT	<i>Thysanotus thyrsoides</i>	
Plantae	MONOCOT	<i>Thysanotus triandrus</i>	
Plantae	MONOCOT	<i>Tribonanthes australis</i>	
Plantae	MONOCOT	<i>Tribonanthes australis</i> x <i>brachypetala</i>	
Plantae	MONOCOT	<i>Tribonanthes brachypetala</i>	
Plantae	MONOCOT	<i>Tribonanthes longipetala</i>	
Plantae	MONOCOT	<i>Tribonanthes</i> sp.	
Plantae	MONOCOT	<i>Tribonanthes</i> sp. indet.	
Plantae	MONOCOT	<i>Tribonanthes variabilis</i>	
Plantae	MONOCOT	<i>Tribonanthes violacea</i>	
Plantae	MONOCOT	<i>Tricoryne elatior</i>	
Plantae	MONOCOT	<i>Tricoryne humilis</i>	
Plantae	MONOCOT	<i>Tricoryne tenella</i>	

KINGDOM	CLASS	TAXON	WA CONS
Plantae	MONOCOT	<i>Tricostularia neesii</i>	
Plantae	MONOCOT	<i>Tricostularia neesii</i> var. <i>neesii</i>	
Plantae	MONOCOT	<i>Tyrbastes glaucescens</i>	
Plantae	MONOCOT	<i>Vulpia bromoides</i>	
Plantae	MONOCOT	<i>Vulpia myuros</i>	
Plantae	MONOCOT	<i>Vulpia</i> sp. indet.	
Plantae	MONOCOT	<i>Xanthorrhoea gracilis</i>	
Plantae	MONOCOT	<i>Xanthorrhoea preissii</i>	
Plantae	MONOCOT	<i>Xyris atrovirida</i>	
Plantae	MONOCOT	<i>Xyris lanata</i>	
Plantae	MONOCOT	<i>Xyris laxiflora</i>	
Plantae	MONOCOT	<i>Zantedeschia aethiopica</i>	
Plantae	MOSS	<i>Didymodon torquatus</i>	
Plantae	MOSS	<i>Rosulabryum billarderii</i>	

APPENDIX B – EBPC PROTECTED MATTERS SEARCH REPORT



EPBC Act Protected Matters Report

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

Report created: 27-Jul-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	39
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

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

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

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

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

Extra Information

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

State and Territory Reserves:	2
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name Vasse-wonnerup system	Proximity 10 - 20km upstream from Ramsar site	Buffer Status In feature area

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

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Shrublands on southern Swan Coastal Plain ironstones	Endangered	Community likely to occur within area	In feature area
Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species	[Resource Information]
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Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris canutus			
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In buffer area only
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Calyptorhynchus banksii naso</u>			
Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Falco hypoleucus</u>			
Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Numenius madagascariensis</u>			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Sternula nereis nereis</u>			
Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Zanda baudinii listed as Calyptorhynchus baudinii</u>			
Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Breeding likely to occur within area	In feature area
<u>Zanda latirostris listed as Calyptorhynchus latirostris</u>			
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat likely to occur within area	In feature area
CRUSTACEAN			
<u>Cherax tenuimanus</u>			
Hairy Marron, Margaret River Hairy Marron, Margaret River Marron [78931]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<u>Engaewa pseudoreducta</u>			
Margaret River Burrowing Crayfish [82674]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Engaewa reducta</u>			
Dunsborough Burrowing Crayfish [82675]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only
FISH			
<u>Nannatherina balstoni</u>			
Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat known to occur within area	In feature area
MAMMAL			
<u>Dasyurus geoffroii</u>			
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Pseudocheirus occidentalis</u> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
OTHER			
<u>Westralunio carteri</u> Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			
<u>Banksia mimica</u> Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Banksia nivea subsp. uliginosa</u> Swamp Honeypot [82766]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Banksia squarrosa subsp. argillacea</u> Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Brachysciás verecundus</u> Ironstone Brachysciás [81321]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<u>Caladenia busselliana</u> Bussell's Spider-orchid [24369]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Caladenia hoffmanii</u> Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Caladenia huegelii</u> King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Chamelaucium sp. S coastal plain (R.D.Royce 4872)</u> Royce's Waxflower [87814]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Daviesia elongata subsp. elongata</u> Long-leaved Daviesia [64883]	Vulnerable	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Diuris micrantha</u> Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Drakaea elastica</u> Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat may occur within area	In feature area
<u>Drakaea micrantha</u> Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat likely to occur within area	In feature area
<u>Eucalyptus x phylacis</u> Meelup Mallee [87817]	Endangered	Species or species habitat may occur within area	In feature area
<u>Gastrolobium modestum</u> Broad-leaved Gastrolobium [78361]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Gastrolobium papilio</u> Butterfly-leaved Gastrolobium [78415]	Endangered	Species or species habitat may occur within area	In feature area
<u>Grevillea brachystylis subsp. grandis</u> Large-flowered Short-styled Grevillea [85001]	Critically Endangered	Species or species habitat known to occur within area	In feature area
<u>Lambertia echinata subsp. occidentalis</u> Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Morelotia australiensis listed as Tetraria australiensis</u> Southern Tetraria [92784]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<u>Petrophile latericola</u> Laterite Petrophile [64532]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Synaphea sp. Fairbridge Farm (D. Papenfus 696)</u> Selena's Synaphea [82881]	Critically Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Verticordia densiflora var. pedunculata</u>			
Long-stalked Featherflower [55689]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Verticordia plumosa var. ananeotes</u>			
Tufted Plumed Featherflower [23871]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Verticordia plumosa var. vassensis</u>			
Vasse Featherflower [55804]	Endangered	Species or species habitat likely to occur within area	In buffer area only

Listed Migratory Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
<u>Apus pacificus</u>			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area
Migratory Terrestrial Species			
<u>Motacilla cinerea</u>			
Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
<u>Actitis hypoleucus</u>			
Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
<u>Calidris acuminata</u>			
Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<u>Calidris canutus</u>			
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Calidris ferruginea</u>			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Calidris melanotos</u>			
Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u><i>Numenius madagascariensis</i></u> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u><i>Tringa nebularia</i></u> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<u><i>Actitis hypoleucus</i></u> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
<u><i>Apus pacificus</i></u> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
<u><i>Bubulcus ibis</i> as <i>Ardea ibis</i></u> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
<u><i>Calidris acuminata</i></u> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<u><i>Calidris canutus</i></u> Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area overfly marine area	In buffer area only
<u><i>Calidris ferruginea</i></u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Calidris melanotos</u>			
Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
<u>Haliaeetus leucogaster</u>			
White-bellied Sea-Eagle [943]		Species or species habitat likely to occur within area	In feature area
<u>Merops ornatus</u>			
Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<u>Motacilla cinerea</u>			
Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area
<u>Numenius madagascariensis</u>			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Tringa nebularia</u>			
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
NTWA Bushland covenant (0069)	Conservation Covenant	WA	In feature area
Unnamed WA45533	Nature Reserve	WA	In buffer area only

Regional Forest Agreements			[Resource Information]
Note that all areas with completed RFAs have been included.			
RFA Name <u>South West WA RFA</u>	State	Western Australia	Buffer Status In feature area

EPBC Act Referrals			[Resource Information]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
<u>Yarragadee Water Supply Development</u>	2005/2073	Controlled Action	Completed	In buffer area only
Not controlled action				
<u>Busselton to Margaret River Transmission Line</u>	2008/3964	Not Controlled Action	Completed	In buffer area only
<u>Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</u>	2015/7522	Not Controlled Action	Completed	In feature area
<u>INDIGO Central Submarine Telecommunications Cable</u>	2017/8127	Not Controlled Action	Completed	In feature area
Not controlled action (particular manner)				
<u>INDIGO Marine Cable Route Survey (INDIGO)</u>	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
<u>Locations 2629, 2699 & 2991 - Jamisons Road</u>	2002/771	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

Please feel free to provide feedback via the [Contact us](#) page.

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APPENDIX C – FLORA SPECIES BY VEGETATION UNIT

*denotes introduced (weed) species

Family	Species	EmBgHh	EmBgPu	EmDhHh	EmKaHh	EmTlMt
Anarthriaceae	<i>Anarthria prolifera</i>	+	+			
Apiaceae	<i>Pentapeltis peltigera</i>	+	+	+		
Apiaceae	<i>Platysace tenuissima</i>		+	+		
Apiaceae	<i>Xanthosia candida</i>			+		
Apiaceae	<i>Xanthosia huegelii</i>	+		+		
Apiaceae	<i>Xanthosia</i> sp.			+		
Apiaceae	<i>Xanthosia tasmanica</i>			+		
Asparagaceae	<i>Lomandra ?sonderi</i>	+			+	
Asparagaceae	<i>Lomandra preissii</i>			+		
Asparagaceae	<i>Lomandra purpurea</i>			+	+	
Asparagaceae	<i>Lomandra sericea</i>		+	+	+	
Asparagaceae	<i>Lomandra suaveolens</i>	+				
Asparagaceae	<i>Thysanotus tenellus</i>		+			+
Asparagaceae	<i>Thysanotus thyrsoides</i>		+	+		
Asteraceae	* <i>Arctotheca calendula</i>			+		
Asteraceae	* <i>Cotula turbinata</i>			+		
Asteraceae	* <i>Hypochaeris glabra</i>			+		
Asteraceae	<i>Lagenophora huegelii</i>		+		+	
Asteraceae	<i>Rhodanthe citrina</i>	+				
Campanulaceae	<i>Lobelia tenuior</i>			+		
Casuarinaceae	<i>Allocasuarina fraseriana</i>	+	+	+	+	+
Celastraceae	<i>Stackhousia huegelii</i>					+
Celastraceae	<i>Tripterooccus brunonis</i>					+
Centrolepidaceae	<i>Centrolepis aristata</i>			+		
Colchicaceae	<i>Burchardia congesta</i>	+				
Cyperaceae	<i>Cyathochaeta equitans</i>	+	+			
Cyperaceae	<i>Lepidosperma gladiatum</i>					+
Cyperaceae	<i>Lepidosperma pubisquamum</i>	+				
Cyperaceae	<i>Mesomelaena tetragona</i>					+
Cyperaceae	<i>Morelotia octandra</i>	+	+	+		
Cyperaceae	<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043) (P3)	+	+	+	+	+
Dasygordonaceae	<i>Dasygordon bromeliifolius</i>	+				
Dasygordonaceae	<i>Dasygordon hookeri</i>	+	+	+		+
Dasygordonaceae	<i>Kingia australis</i>	+	+			+
Dilleniaceae	<i>Hibbertia ?commutata</i>		+			
Dilleniaceae	<i>Hibbertia amplexicaulis</i>				+	+
Dilleniaceae	<i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>	+	+	+		
Dilleniaceae	<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	+	+	+		+
Dilleniaceae	<i>Hibbertia semipilosa</i>		+			
Dilleniaceae	<i>Hibbertia spectabilis</i>	+	+	+		
Droseraceae	<i>Drosera ?neesii</i>					+
Droseraceae	<i>Drosera erythrorhiza</i>	+				

Family	Species	EmBgHh	EmBgPu	EmDhHh	EmKaHh	EmTlMt
Droseraceae	<i>Drosera glanduligera</i>				+	
Droseraceae	<i>Drosera platystigma</i>					+
Droseraceae	<i>Drosera</i> sp.					+
Droseraceae	<i>Drosera stelliflora</i>		+	+		+
Droseraceae	<i>Drosera stolonifera</i>		+	+	+	
Elaeocarpaceae	<i>Tetratheca hirsuta</i> subsp. <i>viminea</i>		+			
Elaeocarpaceae	<i>Tetratheca setigera</i>	+	+			
Ericaceae	<i>Andersonia aristata</i>	+				
Ericaceae	<i>Conostephium pendulum</i>	+				
Ericaceae	<i>Leucopogon australis</i>					+
Ericaceae	<i>Leucopogon pulchellus</i>	+				
Ericaceae	<i>Leucopogon verticillatus</i>			+		
Ericaceae	<i>Styphelia globosa</i>		+	+		
Euphorbiaceae	<i>Monotaxis occidentalis</i>					+
Fabaceae	<i>Acacia extensa</i>		+			
Fabaceae	<i>Acacia obovata</i>	+	+	+		+
Fabaceae	<i>Acacia pulchella</i> var. <i>goadbyi</i>	+				+
Fabaceae	<i>Acacia semitrullata</i> (P4)	+				
Fabaceae	<i>Bossiaea ornata</i>			+		
Fabaceae	<i>Daviesia preissii</i>					+
Fabaceae	<i>Daviesia rhombifolia</i>			+		
Fabaceae	<i>Gompholobium confertum</i>	+				+
Fabaceae	<i>Gompholobium knightianum</i>	+	+			
Fabaceae	<i>Gompholobium polymorphum</i>				+	+
Fabaceae	<i>Gompholobium</i> sp.					+
Fabaceae	<i>Gompholobium tomentosum</i>	+				
Fabaceae	<i>Hovea chorizemifolia</i>		+	+	+	
Fabaceae	<i>Hovea elliptica</i>					+
Fabaceae	<i>Labichea punctata</i>	+				
Fabaceae	<i>Mirbelia dilatata</i>					+
Goodeniaceae	<i>Dampiera pedunculata</i>	+				+
Goodeniaceae	<i>Goodenia macrophylla</i>				+	
Goodeniaceae	<i>Lechenaultia biloba</i>	+		+		
Goodeniaceae	<i>Scaevola calliptera</i>	+				
Haemodoraceae	<i>Conostylis setigera</i> subsp. <i>setigera</i>	+	+			
Haemodoraceae	<i>Conostylis</i> sp.	+				
Hemerocallidaceae	<i>Agrostocrinum hirsutum</i>		+			
Hemerocallidaceae	<i>Chamaescilla</i> sp.				+	
Hemerocallidaceae	<i>Johnsonia lupulina</i>				+	
Hemerocallidaceae	<i>Stypandra</i> ? <i>glauca</i>					+
Iridaceae	<i>Patersonia babianaoides</i>		+			
Iridaceae	<i>Patersonia umbrosa</i> var. <i>xanthina</i>	+	+			+
Lamiaceae	<i>Hemiphora bartlingii</i>	+				
Lindsaeaceae	<i>Lindsaea linearis</i>	+	+			
Loganiaceae	<i>Orianthera serpyllifolia</i> subsp. <i>serpyllifolia</i>		+	+		
Loganiaceae	<i>Phyllangium divergens</i>	+				

Family	Species	EmBgHh	EmBgPu	EmDhHh	EmKaHh	EmTlMt
Loranthaceae	<i>Nuytsia floribunda</i>	+				
Menyanthaceae	<i>Liparophyllum lasiospermum</i>					+
Myrtaceae	<i>Astarteal pulchella</i>					+
Myrtaceae	<i>Corymbia calophylla</i>	+	+	+	+	+
Myrtaceae	<i>Corymbia haematoxylon</i>	+	+			
Myrtaceae	<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	+	+	+	+	+
Myrtaceae	<i>Hypocalymma ?angustifolium</i>		+			
Myrtaceae	<i>Hypocalymma cordifolium</i>					+
Myrtaceae	<i>Melaleuca thymoides</i>		+			
Myrtaceae	<i>Taxandria linearifolia</i>					+
Myrtaceae	<i>Taxandria parviceps</i>		+			
Orchidaceae	<i>Caladenia attingens</i>				+	
Orchidaceae	<i>Caladenia brownii</i>				+	
Orchidaceae	<i>Caladenia flava</i>				+	
Orchidaceae	<i>Caladenia</i> sp.		+	+		
Orchidaceae	<i>Paracaleana nigrita</i>	+				
Orchidaceae	<i>Prasophyllum</i> sp.	+				
Orchidaceae	<i>Thelymitra crinita</i>	+				
Orchidaceae	<i>Thelymitra macrophylla</i>	+				
Orchidaceae	<i>Thelymitra vulgaris</i>	+				
Pittosporaceae	<i>Billardiera variifolia</i>	+			+	+
Poaceae	* <i>Aira cupaniana</i>				+	
Poaceae	<i>Amphipogon amphiogonooides</i>				+	
Poaceae	* <i>Anthoxanthum odoratum</i>				+	+
Poaceae	* <i>Lolium rigidum</i>				+	+
Podocarpaceae	<i>Podocarpus drouynianus</i>	+	+	+		
Polygalaceae	<i>Comesperma calymega</i>				+	
Proteaceae	<i>Adenanthes meisneri</i>	+				
Proteaceae	<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736) (U)	+	+			
Proteaceae	<i>Banksia ?dallanneyi</i>			+		
Proteaceae	<i>Banksia attenuata</i>	+				
Proteaceae	<i>Banksia grandis</i>	+	+	+		
Proteaceae	<i>Banksia sessilis</i> var. <i>sessilis</i>			+		
Proteaceae	<i>Conospermum paniculatum</i>			+		
Proteaceae	<i>Grevillea quercifolia</i>				+	+
Proteaceae	<i>Grevillea trifida</i>			+		
Proteaceae	<i>Hakea amplexicaulis</i>	+	+	+		+
Proteaceae	<i>Hakea cyclocarpa</i>			+		
Proteaceae	<i>Hakea ruscifolia</i>	+	+			
Proteaceae	<i>Isopogon sphaerocephalus</i> subsp. <i>sphaerocephalus</i>	+	+			
Proteaceae	<i>Persoonia elliptica</i>			+		
Proteaceae	<i>Persoonia longifolia</i>	+	+		+	
Proteaceae	<i>Petrophile linearis</i>	+				
Proteaceae	<i>Stirlingia latifolia</i>	+				
Proteaceae	<i>Synaphea petiolaris</i> subsp. <i>triloba</i>			+		

Family	Species	EmBgHh	EmBgPu	EmDhHh	EmKaHh	EmTlMt
Proteaceae	<i>Synaphea</i> sp.		+			
Proteaceae	<i>Xylomelum occidentale</i>	+	+	+		+
Restionaceae	? <i>Loxocarya cinerea</i>					+
Restionaceae	<i>Desmocladus fasciculatus</i>	+				
Restionaceae	<i>Hypolaena exsulca</i>	+				
Restionaceae	<i>Hypolaena robusta</i> (P4)					+
Restionaceae	<i>Hypolaena</i> sp.	+				+
Restionaceae	<i>Leptocarpus scariosus</i>					+
Rhamnaceae	<i>Trymalium ledifolium</i> var. <i>rosmarinifolium</i>					+
Rubiaceae	<i>Opercularia hispidula</i>		+			
Rutaceae	<i>Boronia crenulata</i> subsp. <i>pubescens</i>			+		
Rutaceae	<i>Philotheca spicata</i>	+				
Santalaceae	<i>Leptomeria squarrulosa</i>		+			
Stylidiaceae	<i>Levenhookia pusilla</i>	+		+		
Stylidiaceae	<i>Styliodium affine</i>	+				
Stylidiaceae	<i>Styliodium amoenum</i>		+	+		
Stylidiaceae	<i>Styliodium barleei</i>	+	+	+		
Stylidiaceae	<i>Styliodium calcaratum</i>		+			
Thymelaeaceae	<i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>		+	+		
Thymelaeaceae	<i>Pimelea preissii</i>			+		
Thymelaeaceae	<i>Pimelea</i> sp.				+	
Violaceae	<i>Hybanthus debilissimus</i>			+	+	
Xanthorrhoeaceae	<i>Xanthorrhoea gracilis</i>		+	+	+	

APPENDIX D – RELEVE DATA

Site BO01

Date	11/15/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340082 mE 6259410 mN
Vegetation Unit	EmBgHh - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Allocasuarina fraseriana</i> , <i>Corymbia haematoxylon</i> mid woodland over <i>Banksia grandis</i> , <i>Persoonia longifolia</i> tall open shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Taxandria parviceps</i> , <i>Anarthria prolifera</i> low sparse shrubland.
Slope	Gentle
Landform	Flat
Soil Colour	Grey
Soil Type	Loamy Sand
Litter	30%
Bare Ground	2%
Fire Age	>10 Years
Vegetation Condition	Excellent
Disturbances/Impacts	Quambalara infection in marri, adjacent track



Species	Height (m)	Cover (%)
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	30
<i>Corymbia haematoxylon</i>	15	10
<i>Banksia grandis</i>	7	2
<i>Kingia australis</i>	5	5
<i>Persoonia longifolia</i>	5	1
<i>Dasypogon hookeri</i>	3	1
<i>Podocarpus drouynianus</i>	1.5	7
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043) (P3)	0.8	15
<i>Patersonia umbrosa</i> var. <i>xanthina</i>	0.8	15
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.8	5
<i>Anarthria prolifera</i>	0.6	15
<i>Dasypogon bromeliifolius</i>	0.6	15
<i>Acacia obovata</i>		+
<i>Adenanthes meisneri</i>		+
<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736)		+
<i>Billardiera variifolia</i>		+
<i>Burchardia congesta</i>		+
<i>Conostephium pendulum</i>		+
<i>Conostylis setigera</i> subsp. <i>setigera</i>		+
<i>Dampiera pedunculata</i>		+
<i>Desmocladus fasciculatus</i>		+
<i>Hakea amplexicaulis</i>		+
<i>Isopogon sphaerocephalus</i> subsp. <i>sphaerocephalus</i>		+
<i>Labichea punctata</i>		+
<i>Lepidosperma pubisquamum</i>		+
<i>Lindsaea linearis</i>		+
<i>Morelotia octandra</i>		+
<i>Pentapeltis peltigera</i>		+
<i>Petrophile linearis</i>		+
<i>Prasophyllum</i> sp.		+
<i>Scaevola calliptera</i>		+
<i>Stirlingia latifolia</i>		+
<i>Stylidium affine</i>		+
<i>Taxandria parviceps</i>		+
<i>Tetratheca setigera</i>		+

Site BO02

Date	11/15/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340486 mE 6259167 mN
Vegetation Unit	EmBgPu - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Banksia grandis</i> , <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Persoonia longifolia</i> mid to tall open shrubland over <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Podocarpus drouynianus</i> low sparse shrub.
Slope	Flat
Landform	Flat
Soil Colour	Light Brown
Soil Type	Sandy Loam
Litter	75%
Bare Ground	2%
Fire Age	>10 Years
Vegetation Condition	Excellent
Disturbances/Impacts	Kangaroo disturbance, wood hocking



Species	Height (cm)	Cover (%)
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	15
<i>Corymbia calophylla</i>	15	5
<i>Allocasuarina fraseriana</i>	12	15
<i>Banksia grandis</i>	8	5
<i>Persoonia longifolia</i>	5	2
<i>Podocarpus drouynianus</i>	2	8
<i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>	0.8	2
<i>Cyathochaeta equitans</i>	0.6	3
<i>Dasypogon hookeri</i>	0.6	3
<i>Patersonia umbrosa</i> var. <i>xanthina</i>	0.6	3
<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736)		+
<i>Anarthria prolifera</i>		+
<i>Banksia ? dallanneyi</i>		+
<i>Bossiaea ornata</i>		+
<i>Hakea amplexicaulis</i>		+
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>		+
<i>Hibbertia semipilosa</i>		+
<i>Hibbertia spectabilis</i>		+
<i>Hypocalymma ? angustifolium</i>		+
<i>Isopogon sphaerocephalus</i> subsp. <i>sphaerocephalus</i>		+
<i>Leptomeria squarrulosa</i>		+
<i>Lindsaea linearis</i>		+
<i>Morelotia octandra</i>		+
<i>Pentapeltis peltigera</i>		+
<i>Persoonia elliptica</i>		+
<i>Persoonia longifolia</i>		+
<i>Podocarpus drouynianus</i>		+
<i>Tetratheca hirsuta</i> subsp. <i>viminea</i>		+
<i>Xanthorrhoea gracilis</i>		+
<i>Xylomelum occidentale</i>		+

Site BO03

Date	11/15/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340936 mE 6259404 mN
Vegetation Unit	EmBgHh - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Allocasuarina fraseriana</i> , <i>Corymbia haematoxylon</i> mid woodland over <i>Banksia grandis</i> , <i>Persoonia longifolia</i> tall open shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Taxandria parviceps</i> , <i>Anarthria prolifera</i> low sparse shrubland.
Slope	Flat
Landform	Flat
Soil Colour	Grey
Soil Type	Sandy Loam
Litter	70%
Bare Ground	1%
Fire Age	>10 Years
Vegetation Condition	Excellent-Pristine
Disturbances/Impacts	Kangaroo grazing / flattening



Species	Height (cm)	Cover (%)
<i>Allocasuarina fraseriana</i>	15	15
<i>Corymbia calophylla</i>	15	5
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	2
<i>Nuytsia floribunda</i>	12	5
<i>Banksia attenuata</i>	10	10
<i>Banksia grandis</i>	10	10
<i>Taxandria parviceps</i>	4	10
<i>Adenanthes meisneri</i>	1	2
<i>Anarthria prolifera</i>	0.6	8.
<i>Dasypogon bromeliifolius</i>	0.6	2
<i>Dasypogon hookeri</i>	0.6	2
<i>Lepidosperma pubisquamum</i>	0.6	2
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.4	2
<i>Acacia pulchella</i> var. <i>goadbyi</i>		+
<i>Burchardia congesta</i>		+
<i>Conostephium pendulum</i>		+
<i>Conostylis</i> sp.		+
<i>Cyathochaeta equitans</i>		+
<i>Dampiera pedunculata</i>		+
<i>Gompholobium tomentosum</i>		+
<i>Hakea ruscifolia</i>		+
<i>Hypolaena exsulca</i>		+
<i>Hypolaena</i> sp.		+
<i>Lindsaea linearis</i>		+
<i>Persoonia longifolia</i>		+
<i>Philoteca spicata</i>		+
<i>Thelymitra macrophylla</i>		+
<i>Thelymitra vulgaris</i>		+
<i>Xanthosia huegelii</i>		+

Site BO04

Date	11/15/2022 12:34:00 PM
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340773 mE 6259607 mN
Vegetation Unit	EmBgPu - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Banksia grandis</i> , <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Persoonia longifolia</i> mid to tall open shrubland over <i>Patersonia umbrosa</i> var. <i>xanthina</i> , <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Podocarpus drouynianus</i> low sparse shrub.
Slope	Flat
Landform	Flat
Soil Colour	Yellow Brown
Soil Type	Silty Loam
Litter	80%
Bare Ground	1%
Fire Age	>10 Years
Vegetation Condition	Very Good-Excellent
Disturbances/Impacts	Kangaroo grazing / flattening woodhocking/ logging, fire scars,



Species	Height (cm)	Cover (%)
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	14.0	28.0
<i>Corymbia calophylla</i>	14.0	2.0
<i>Allocasuarina fraseriana</i>	12.0	1.0
<i>Banksia grandis</i>	4.0	2.0
<i>Kingia australis</i>	3.0	2.0
<i>Persoonia longifolia</i>	2.0	2.0
<i>Xylomelum occidentale</i>	0.8	2.0
<i>Hakea cyclocarpa</i>	0.8	1.0
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.6	10.0
<i>Patersonia umbrosa</i> var. <i>xanthina</i>	0.6	2.0
<i>Xanthorrhoea gracilis</i>	0.6	2.0
<i>Acacia obovata</i>		+
<i>Adenanthes</i> sp. Whicher Range (G.J. Keighery 9736)		+
<i>Anarthria prolifera</i>		+
<i>Bossiaea ornata</i>		+
<i>Caladenia</i> sp.		+
<i>Conospermum paniculatum</i>		+
<i>Conostylis setigera</i> subsp. <i>setigera</i>		+
<i>Drosera stolonifera</i>		+
<i>Gompholobium knightianum</i>		+
<i>Hakea amplexicaulis</i>		+
<i>Hibbertia? commutata</i>		+
<i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>		+
<i>Hovea chorizemifolia</i>		+
<i>Isopogon sphaerocephalus</i> subsp. <i>sphaerocephalus</i>		+
<i>Lomandra sericea</i>		+
<i>Lomandra sericea</i>		+
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		+
<i>Orianthera serpyllifolia</i> subsp. <i>serpyllifolia</i>		+
<i>Pentapeltis peltigera</i>		+
<i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>		+
<i>Podocarpus drouynianus</i>		+
<i>Stylium amoenum</i>		+
<i>Tetratheca hirsuta</i> subsp. <i>viminea</i>		+
<i>Tetratheca setigera</i>		+

Site BO05

Date	11/15/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	339942 mE 6259237 mN
Vegetation Unit	EmDhHh - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Dasygordon hookeri</i> , <i>Banksia grandis</i> , <i>Persoonia longifolia</i> mid to tall shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Persoonia longifolia</i>
Slope	Flat
Landform	Flat
Soil Colour	Dark Grey Brown
Soil Type	Medium Loam
Litter	45%
Bare Ground	7%
Fire Age	>10 Years
Vegetation Condition	Very Good-Excellent
Disturbances/Impacts	Kangaroo disturbance grazing, evidence of previous of hot fire, wood logging/hocking



Species	Height (cm)	Cover (%)
<i>Corymbia calophylla</i>	15	10
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	10
<i>Allocasuarina fraseriana</i>	14	5
<i>Dasypogon hookeri</i>	3	1
<i>Podocarpus drouynianus</i>	1	1
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.4	5
<i>Acacia obovata</i>		+
<i>Aira cupaniana</i>		+
<i>Anthoxanthum odoratum</i>		+
<i>Arctotheca calendula</i>		+
<i>Billardiera variifolia</i>		+
<i>Centrolepis aristata</i>		+
<i>Chamaescilla</i> sp.		+
<i>Dasypogon hookeri</i>		+
<i>Drosera stelliflora</i>		+
<i>Drosera stolonifera</i>		+
<i>Hakea amplexicaulis</i>		+
<i>Hovea chorizemifolia</i>		+
<i>Lechenaultia biloba</i>		+
<i>Levenhookia pusilla</i>		+
<i>Lomandra sericea</i>		+
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		+
<i>Pentapeltis peltigera</i>		+
<i>Pimelea lehmanniana</i> subsp. <i>nervosa</i>		+
<i>Styliidium amoenum</i>		+
<i>Styliidium barleei</i>		+
<i>Styphelia globosa</i>		+
<i>Xanthosia</i> sp.		+
<i>Xylomelum occidentale</i>		+

Site BO06

Date	11/15/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340462 mE 6259511 mN
Vegetation Unit	EmTlMt - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Taxandria linearifolia</i> , <i>Lepidosperma gladiatum</i> , <i>Astartea pulchella</i> mid open sedgeland/shrubland over <i>Mesomelaena tetragona</i> , <i>Hypolaena robusta</i> low open sedgeland.
Slope	Gentle
Landform	Gully
Soil Colour	Dark Orange Brown
Soil Type	Sandy Loam
Litter	80%
Bare Ground	2%
Fire Age	> 10 Years
Vegetation Condition	Excellent
Disturbances/Impacts	Kangaroo lie downs



Species	Height (cm)	Cover (%)
<i>Corymbia calophylla</i>	15	12
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	12
<i>Allocasuarina fraseriana</i>	14	8
<i>Taxandria linearifolia</i>	4	5
<i>Astartea pulchella</i>	3	3
<i>Lepidosperma gladiatum</i>	1.5	8
<i>Hypolaena robusta</i>	1.2	8
<i>Leptocarpus scariosus</i>	1.2	8
<i>Astartea pulchella</i>		+
<i>Dasypogon hookeri</i>		+
<i>Drosera ?neesii</i>		+
<i>Drosera stelliflora</i>		+
<i>Grevillea quercifolia</i>		+
<i>Hovea elliptica</i>		+
<i>Mesomelaena tetragona</i>		+
<i>Mirbelia dilatata</i>		+
<i>Monotaxis occidentalis</i>		+
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		+
<i>Taxandria linearifolia</i>		+
<i>Xylomelum occidentale</i>		+

Site BO07

Date	11/16/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340731 mE 6259427mN
Vegetation Unit	EmDhHh - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Dasygordon hookeri</i> , <i>Banksia grandis</i> , <i>Persoonia longifolia</i> mid to tall shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> , <i>Persoonia longifolia</i>
Slope	Flat
Landform	Residual Rise
Soil Colour	Orange Brown
Soil Type	Sandy Loam
Litter	70%
Bare Ground	1%
Fire Age	>10 Years
Vegetation Condition	Very Good
Disturbances/Impacts	Kangaroo disturbance and not burned for a while after an intense fire



Species	Height (cm)	Cover (%)
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	18
<i>Corymbia calophylla</i>	15	5
<i>Allocasuarina fraseriana</i>	14	5
<i>Banksia grandis</i>	4	1
<i>Persoonia longifolia</i>	4	1
<i>Dasygordon hookeri</i>	0.8	2
<i>Xanthorrhoea gracilis</i>	0.8	2
<i>Acacia obovata</i>		+
<i>Amphipogon amphipogonoides</i>		+
<i>Boronia crenulata</i> subsp. <i>pubescens</i>		+
<i>Caladenia flava</i>		+
<i>Cotula turbinata</i>		+
<i>Drosera stelliflora</i>		+
<i>Drosera stolonifera</i>		+
<i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>		+
<i>Hibbertia glomerata</i> subsp. <i>darlingensis</i>		+
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>		+
<i>Hibbertia spectabilis</i>		+
<i>Hovea chorizemifolia</i>		+
<i>Hypochaeris glabra</i>		+
<i>Lechenaultia biloba</i>		+
<i>Morelotia octandra</i>		+
<i>Orianthera serpyllifolia</i> subsp. <i>serpyllifolia</i>		+
<i>Platysace tenuissima</i>		+
<i>Podocarpus drouynianus</i>		+
<i>Thysanotus thyrsoideus</i>		+
<i>Xanthorrhoea gracilis</i>		+
<i>Xanthosia candida</i>		+
<i>Xanthosia tasmanica</i>		+
<i>Xylomelum occidentale</i>		+

Site BO08

Date	11/16/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	340230 mE 6259451mN
Vegetation Unit	EmTlMt - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Taxandria linearifolia</i> , <i>Lepidosperma gladiatum</i> , <i>Astartea pulchella</i> mid open sedgeland/shrubland over <i>Mesomelaena tetragona</i> , <i>Hypolaena robusta</i> low open sedgeland.
Slope	Gentle
Landform	Drainage Depression
Soil Colour	Brown
Soil Type	Medium Loam
Litter	65%
Bare Ground	2%
Fire Age	> 10 Years
Vegetation Condition	Excellent
Disturbances/Impacts	Kangaroo disturbance, lie downs



Species	Height (cm)	Cover (%)
<i>Corymbia calophylla</i>	15	8
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15	8
<i>Allocasuarina fraseriana</i>	14	4
<i>Taxandria linearifolia</i>	1.4	7
<i>Taxandria linearifolia</i>	1.2	8
<i>Mesomelaena tetragona</i>	0.6	8
<i>Hypolaena</i> sp.	0.4	1
<i>Acacia obovata</i>		+
<i>Anthoxanthum odoratum</i>		+
<i>Billardiera variifolia</i>		+
<i>Dampiera pedunculata</i>		+
<i>Dasypogon hookeri</i>		+
<i>Hakea amplexicaulis</i>		+
<i>Hibbertia amplexicaulis</i>		+
<i>Leucopogon australis</i>		+
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		+
<i>Stypandra</i> ? <i>glaucoides</i>		+
<i>Thysanotus tenellus</i>		+

Site BO09

Date	11/16/2022
Botanist	Julie Fielder & Sarah Beckwith
Quadrat Size	10 x 10 m
NW Corner Coordinates	115.273 mE -33.793 mN
Vegetation Unit	EmKaHh - <i>Eucalyptus marginata</i> subsp. <i>marginata</i> , <i>Corymbia calophylla</i> , <i>Allocasuarina fraseriana</i> mid woodland over <i>Kingia australis</i> tall sparse shrubland over <i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i> Low sparse shrubland.
Slope	Flat
Landform	Flat
Soil Colour	Brown
Soil Type	Sand Clay Loam
Litter	50%
Bare Ground	1%
Fire Age	>10 Years
Vegetation Condition	Excellent
Disturbances/Impacts	Kangaroo disturbance, lie downs, high fire scars and wood hocking, emu disturbance



Species	Height (cm)	Cover (%)
<i>Corymbia calophylla</i>	15.0	16.0
<i>Eucalyptus marginata</i> subsp. <i>marginata</i>	15.0	16.0
<i>Allocasuarina fraseriana</i>	15.0	1.0
<i>Kingia australis</i>	4.0	9.0
<i>Hibbertia hypericoides</i> subsp. <i>hypericoides</i>	0.4	45.0
<i>Acacia pulchella</i> var. <i>goadbyi</i>		+
<i>Drosera stolonifera</i>		+
<i>Gompholobium polymorphum</i>		+
<i>Hibbertia amplexicaulis</i>		+
<i>Hovea chorizemifolia</i>		+
<i>Hybanthus debilissimus</i>		+
<i>Lagenophora huegelii</i>		+
<i>Lolium rigidum</i>		+
<i>Lomandra ?sonderi</i>		+
<i>Lomandra purpurea</i>		+
<i>Lomandra sericea</i>		+
<i>Netrostylis</i> sp. Blackwood River (A.R. Annels 3043)		+
<i>Patersonia umbrosa</i> var. <i>xanthina</i>		+
<i>Pimelea</i> sp.		+
<i>Xanthorrhoea gracilis</i>		+

APPENDIX E – POTENTIAL BREEDING TREE LOCATIONS

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	76	2	340626	6259312	Hollow at 10m
<i>Corymbia calophylla</i>	84	2	340217	6259400	Hollow at 10m
<i>Corymbia calophylla</i>	55	2	340082	6259582	Hollow at 10m
<i>Corymbia calophylla</i>	117	2	339831	6259528	Hollow at 9.5m (Termites)
<i>Eucalyptus marginata</i>	74	2	340961	6259290	Hollow at 7m
<i>Eucalyptus marginata</i>	95	2	340619	6259346	Hollow at 13m
<i>Eucalyptus marginata</i>	86	2	340402	6259397	Hollow at 10m
<i>Eucalyptus marginata</i>	131	2	340450	6259188	Hollow at 9m
<i>Eucalyptus marginata</i>	103	2	340252	6259255	Hollow at 12m
<i>Eucalyptus marginata</i>	110	2	339988	6259505	Hollow at 15m
<i>Eucalyptus marginata</i>	71	2	340017	6259592	Hollow at 10m
<i>Eucalyptus marginata</i>	61	2	340188	6259177	2 hollows at 12m
<i>Eucalyptus marginata</i>	59	2	340086	6259635	Hollow at 11m
<i>Eucalyptus marginata</i>	53	2	339996	6259332	Hollow at 5m
<i>Eucalyptus marginata</i>	81	2	339919	6259580	Hollow at 12m
<i>Eucalyptus marginata</i>	87	2	339947	6259608	Hollow at 7m
<i>Eucalyptus marginata</i>	84	2	340287	6259547	Hollows at 8.8m and 10m
<i>Eucalyptus marginata</i>	103	2	340332	6259298	Hollows at 11m and 13.6m
<i>Eucalyptus marginata</i>	69	2	339728	6259538	Hollow at 6m
<i>Eucalyptus marginata</i>	73	2	339761	6259444	Hollow at 12m
<i>Eucalyptus marginata</i>	50	2	339820	6259550	Hollow at 11
<i>Eucalyptus marginata</i>	102	2	339849	6259508	Hollow at 8m
<i>Corymbia calophylla</i>	57	3	340455	6259271	Hollow at 12m
<i>Corymbia calophylla</i>	89	3	340446	6259274	Hollow at 10m
<i>Corymbia calophylla</i>	105	3	340417	6259306	Hollow at 12m
<i>Corymbia calophylla</i>	112	3	340416	6259407	Multiple hollows at 20m
<i>Corymbia calophylla</i>	67	3	340228	6259461	Hollow at 11m
<i>Corymbia calophylla</i>	117	3	340246	6259378	Hollow at 17m
<i>Corymbia calophylla</i>	98	3	340222	6259547	Hollow at 12m
<i>Corymbia calophylla</i>	82	3	340287	6259369	Hollow at 15m and 14m
<i>Corymbia calophylla</i>	99	3	340298	6259369	Hollow at 10m and 12m
<i>Corymbia calophylla</i>	100	3	340320	6259415	Hollow at 11m
<i>Corymbia calophylla</i>	63	3	340053	6259488	Hollow at 10m
<i>Corymbia calophylla</i>	78	3	340060	6259465	Chimney hollow
<i>Corymbia calophylla</i>	100	3	340084	6259416	Hollow at 12m
<i>Corymbia calophylla</i>	86	3	340157	6259368	Hollow at 10m
<i>Corymbia calophylla</i>	82	3	340202	6259122	Hollow at 8m
<i>Corymbia calophylla</i>	131	3	340157	6259212	Hollow at 10m
<i>Corymbia calophylla</i>	77	3	340154	6259434	Hollow at 10m
<i>Corymbia calophylla</i>	54	3	340059	6259517	Hollow at 8m
<i>Corymbia calophylla</i>	91	3	340125	6259510	Dead. Hollow at 12m
<i>Corymbia calophylla</i>	85	3	340244	6259116	Hollow at 7m
<i>Corymbia calophylla</i>	>50	3	340198	6259223	Hollow at 10m
<i>Corymbia calophylla</i>	121	3	340236	6259246	Hollow at 10m
<i>Corymbia calophylla</i>	69	3	340202	6259311	Hollow at 6m
<i>Corymbia calophylla</i>	59	3	340189	6259452	Hollow at 6m
<i>Corymbia calophylla</i>	94	3	339830	6259594	Hollow at 12m
<i>Corymbia calophylla</i>	67	3	339980	6259458	Hollow at 8m
<i>Corymbia calophylla</i>	110	3	340026	6259483	Hollow at 11m

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	86	3	340007	6259520	Hollow at 9.5m
<i>Corymbia calophylla</i>	98	3	339965	6259575	Hollow at 10m
<i>Corymbia calophylla</i>	74	3	339906	6259621	Hollow at 12m
<i>Corymbia calophylla</i>	63	3	340251	6259597	Hollow at 9.6m
<i>Corymbia calophylla</i>	70	3	340344	6259412	Hollow at 10.2
<i>Corymbia calophylla</i>	61	3	340389	6259154	Hollow at 8.5m
<i>Corymbia calophylla</i>	76	3	340368	6259291	Hollow at 14m
<i>Corymbia calophylla</i>	82	3	339889	6259190	Hollow at 10m
<i>Corymbia calophylla</i>	79	3	339983	6259274	Hollow at 12m
<i>Corymbia calophylla</i>	148	3	340035	6259134	Hollows at 19m, 12m, 10m and 16m
<i>Corymbia calophylla</i>	55	3	339918	6259456	Hollow at 7m
<i>Eucalyptus marginata</i>	122	3	340921	6259504	Hollow at 10m
<i>Eucalyptus marginata</i>	99	3	340797	6259453	Hollow at 8m
<i>Eucalyptus marginata</i>	124	3	340809	6259425	Two hollows at 9m
<i>Eucalyptus marginata</i>	162	3	340819	6259354	Hollow at 8m and 18m
<i>Eucalyptus marginata</i>	112	3	340865	6259298	Hollow at 10m
<i>Eucalyptus marginata</i>	56	3	340870	6259192	Hollow at 10m
<i>Eucalyptus marginata</i>	88	3	340575	6259550	Hollow at 13m
<i>Eucalyptus marginata</i>	126	3	340611	6259428	Hollow at 16m
<i>Eucalyptus marginata</i>	62	3	340617	6259278	Hollow at 11m
<i>Eucalyptus marginata</i>	105	3	340654	6259312	Hollow at 11m
<i>Eucalyptus marginata</i>	89	3	340594	6259465	Hollow at 11m
<i>Eucalyptus marginata</i>	110	3	340625	6259579	Hollow at 9m
<i>Eucalyptus marginata</i>	98	3	340691	6259364	Hollow at 15m
<i>Eucalyptus marginata</i>	121	3	340720	6259320	Hollow at 12m
<i>Eucalyptus marginata</i>	113	3	340748	6259203	Hollow at 7m
<i>Eucalyptus marginata</i>	115	3	340775	6259232	Hollow at 11m
<i>Eucalyptus marginata</i>	52	3	340699	6259378	Hollow at 8m
<i>Eucalyptus marginata</i>	85	3	340655	6259545	Dead. Hollow at 12m and 11m
<i>Eucalyptus marginata</i>	77	3	340602	6259630	Hollow at 10m
<i>Eucalyptus marginata</i>	62	3	340739	6259438	Hollow at 10m
<i>Eucalyptus marginata</i>	96	3	340682	6259474	Hollow at 8m
<i>Eucalyptus marginata</i>	164	3	340727	6259362	Hollow at 16m
<i>Eucalyptus marginata</i>	107	3	340755	6259321	Hollow at 8m
<i>Eucalyptus marginata</i>	136	3	340745	6259290	Hollow at 14m
<i>Eucalyptus marginata</i>	95	3	340827	6259211	Hollow at 9m and 7m
<i>Eucalyptus marginata</i>	106	3	340784	6259309	Hollow at 10m
<i>Eucalyptus marginata</i>	116	3	340774	6259410	Hollow at 11m
<i>Eucalyptus marginata</i>	124	3	340783	6259448	Hollow at 11m
<i>Eucalyptus marginata</i>	70	3	340779	6259452	Hollow at 12m
<i>Eucalyptus marginata</i>	157	3	340673	6259622	Hollow at 18m
<i>Eucalyptus marginata</i>	45	3	340734	6259603	Hollow at 8m
<i>Eucalyptus marginata</i>	>50	3	340276	6259645	Hollow at 16m
<i>Eucalyptus marginata</i>	82	3	340320	6259536	Hollow at 12m
<i>Eucalyptus marginata</i>	57	3	340321	6259535	Hollow at 12m and 10m
<i>Eucalyptus marginata</i>	82	3	340367	6259511	Hollow at 15m
<i>Eucalyptus marginata</i>	66	3	340373	6259497	Hollow at 10m and 11m
<i>Eucalyptus marginata</i>	54	3	340376	6259493	Hollow at 6m
<i>Eucalyptus marginata</i>	76	3	340366	6259469	Hollow at 10m and 14m
<i>Eucalyptus marginata</i>	105	3	340408	6259436	Hollow at 13m and 10m

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	53	3	340400	6259416	Hollow at 10m
<i>Eucalyptus marginata</i>	85	3	340384	6259377	Hollow at 12m
<i>Eucalyptus marginata</i>	144	3	340438	6259221	Hollows at 16m, 16m and 14m
<i>Eucalyptus marginata</i>	86	3	340495	6259233	Dead. Hollow at 7m
<i>Eucalyptus marginata</i>	84	3	340476	6259229	Hollow at 10m
<i>Eucalyptus marginata</i>	49	3	340463	6259219	Hollow at 10m
<i>Eucalyptus marginata</i>	59	3	340454	6259249	Hollow at 8m
<i>Eucalyptus marginata</i>	66	3	340435	6259279	Hollow at 12m
<i>Eucalyptus marginata</i>	127	3	340410	6259302	Many hollows
<i>Eucalyptus marginata</i>	89	3	340401	6259303	Hollow at 10m and 9m
<i>Eucalyptus marginata</i>	121	3	340394	6259330	Hollow at 10m
<i>Eucalyptus marginata</i>	102	3	340384	6259352	Hollow at 10m and 12m
<i>Eucalyptus marginata</i>	99	3	340423	6259358	Hollow at 14m
<i>Eucalyptus marginata</i>	67	3	340427	6259510	Hollow at 10m and 16m
<i>Eucalyptus marginata</i>	110	3	340346	6259637	Hollow at 16m
<i>Eucalyptus marginata</i>	155	3	340458	6259426	Multiple hollows at 10m to 16m
<i>Eucalyptus marginata</i>	126	3	340523	6259235	Hollow at 12m
<i>Eucalyptus marginata</i>	72	3	340528	6259141	Hollow at 8m and 10m
<i>Eucalyptus marginata</i>	>50	3	340530	6259297	Hollow at 10m
<i>Eucalyptus marginata</i>	95	3	340534	6259374	Hollow at 12m and 16m
<i>Eucalyptus marginata</i>	52	3	340404	6259563	Hollow at 10m
<i>Eucalyptus marginata</i>	69	3	340411	6259592	Hollow at 18m
<i>Eucalyptus marginata</i>	63	3	340534	6259451	Hollow at 8m
<i>Eucalyptus marginata</i>	132	3	340558	6259393	Hollow at 18m
<i>Eucalyptus marginata</i>	78	3	340562	6259390	2 hollows at 10m
<i>Eucalyptus marginata</i>	145	3	340567	6259491	Hollow at 14m
<i>Eucalyptus marginata</i>	72	3	340529	6259508	Hollow at 6m
<i>Eucalyptus marginata</i>	97	3	340547	6259519	Hollow at 14m
<i>Eucalyptus marginata</i>	44	3	340505	6259596	Hollow at 6m
<i>Eucalyptus marginata</i>	70	3	340106	6259578	Hollow at 18m
<i>Eucalyptus marginata</i>	70	3	340237	6259449	Hollow at 16m
<i>Eucalyptus marginata</i>	118	3	340249	6259344	Hollow at 17m
<i>Eucalyptus marginata</i>	75	3	340241	6259337	Dead. Hollow at 17m
<i>Eucalyptus marginata</i>	>50	3	340246	6259232	Hollow at 11m
<i>Eucalyptus marginata</i>	122	3	340239	6259227	Hollow at 20m
<i>Eucalyptus marginata</i>	102	3	340261	6259200	Dead. Hollow at 12m
<i>Eucalyptus marginata</i>	73	3	340268	6259414	Hollow at 14m
<i>Eucalyptus marginata</i>	102	3	340196	6259512	Hollow at 2m and 9m
<i>Eucalyptus marginata</i>	57	3	340199	6259542	Dead. Hollow at 11m
<i>Eucalyptus marginata</i>	>50	3	340173	6259539	Hollow at 10m and 14m
<i>Eucalyptus marginata</i>	120	3	340161	6259621	Hollow at 9m
<i>Eucalyptus marginata</i>	101	3	340177	6259606	Dead. Hollow at 14m
<i>Eucalyptus marginata</i>	67	3	340210	6259537	Hollow at 8m
<i>Eucalyptus marginata</i>	45	3	340284	6259474	Hollow at 11m
<i>Eucalyptus marginata</i>	44	3	340291	6259364	Hollow at 14m
<i>Eucalyptus marginata</i>	84	3	340302	6259330	Hollow at 12m
<i>Eucalyptus marginata</i>	86	3	340346	6259204	Hollow at 16m
<i>Eucalyptus marginata</i>	138	3	340006	6259477	Hollow at 10m
<i>Eucalyptus marginata</i>	79	3	340026	6259527	Hollow at 10m
<i>Eucalyptus marginata</i>	107	3	340025	6259530	Chimney hollow

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	61	3	340043	6259501	Hollow at 6m
<i>Eucalyptus marginata</i>	86	3	340064	6259460	Hollow at 12m & multiple chimney hollows
<i>Eucalyptus marginata</i>	73	3	340147	6259379	Chimney hollow
<i>Eucalyptus marginata</i>	85	3	340146	6259357	Dead Hollow at 10m and 12m
<i>Eucalyptus marginata</i>	74	3	340120	6259292	Hollow at 12m and 14m
<i>Eucalyptus marginata</i>	55	3	340135	6259280	Dead. Hollow at 9m
<i>Eucalyptus marginata</i>	60	3	340180	6259341	Hollow at 10m
<i>Eucalyptus marginata</i>	71	3	340139	6259432	Hollow at 11m
<i>Eucalyptus marginata</i>	122	3	340078	6259495	Hollow at 10m and 12m (x2)
<i>Eucalyptus marginata</i>	64	3	340123	6259459	Hollow at 8m and 10m
<i>Eucalyptus marginata</i>	80	3	340161	6259447	Hollow at 8m
<i>Eucalyptus marginata</i>	80	3	340061	6259629	Dead
<i>Eucalyptus marginata</i>	161	3	340119	6259548	Dead
<i>Eucalyptus marginata</i>	73	3	340176	6259412	3 hollows at 10m
<i>Eucalyptus marginata</i>	59	3	340185	6259393	Hollow at 10m
<i>Eucalyptus marginata</i>	54	3	340171	6259211	Hollow at 10m obstructed
<i>Eucalyptus marginata</i>	80	3	340276	6259127	Hollow at 8m
<i>Eucalyptus marginata</i>	96	3	340253	6259160	Hollow at 10m
<i>Eucalyptus marginata</i>	70	3	340224	6259400	Hollow at 10m
<i>Eucalyptus marginata</i>	124	3	340200	6259450	Multiple potential hollows
<i>Eucalyptus marginata</i>	108	3	340189	6259462	
<i>Eucalyptus marginata</i>	129	3	339859	6259562	Hollow at 10m
<i>Eucalyptus marginata</i>	59	3	339916	6259476	Dead. Hollow at 11m
<i>Eucalyptus marginata</i>	111	3	339971	6259414	Hollow at 12m
<i>Eucalyptus marginata</i>	88	3	340011	6259333	Hollow at 10m
<i>Eucalyptus marginata</i>	38	3	340003	6259321	Hollow at 5m
<i>Eucalyptus marginata</i>	88	3	340015	6259298	Hollows at 13m and 16m and 14m
<i>Eucalyptus marginata</i>	95	3	340030	6259207	Hollow at 16m
<i>Eucalyptus marginata</i>	206	3	340048	6259186	Hollows at 16m and 12m and 9m
<i>Eucalyptus marginata</i>	103	3	340040	6259177	Hollow at 13m
<i>Eucalyptus marginata</i>	103	3	340053	6259134	Hollow at 9m
<i>Eucalyptus marginata</i>	159	3	340083	6259128	Hollow at 16m
<i>Eucalyptus marginata</i>	76	3	340064	6259120	Hollow at 6m
<i>Eucalyptus marginata</i>	81	3	340112	6259138	Hollow at 11m
<i>Eucalyptus marginata</i>	104	3	340098	6259172	Dead Hollows at 13m and 15m
<i>Eucalyptus marginata</i>	62	3	340047	6259288	Dead Hollow at 9m
<i>Eucalyptus marginata</i>	56	3	340023	6259344	Hollow at 12m
<i>Eucalyptus marginata</i>	58	3	340039	6259359	Dead. Hollow at 9.5m
<i>Eucalyptus marginata</i>	55	3	339993	6259397	Hollow at 9m
<i>Eucalyptus marginata</i>	53	3	339993	6259439	Hollow at 7m
<i>Eucalyptus marginata</i>	110	3	339948	6259498	Hollows at 9m and 12m
<i>Eucalyptus marginata</i>	127	3	339864	6259563	Hollows at 10m, 12m, 11m and 13m
<i>Eucalyptus marginata</i>	64	3	339888	6259571	Hollow at 13m
<i>Eucalyptus marginata</i>	43	3	339899	6259558	Hollow at 9m
<i>Eucalyptus marginata</i>	69	3	339887	6259615	Hollow at 11m
<i>Eucalyptus marginata</i>	113	3	339932	6259564	Hollow at 16m
<i>Eucalyptus marginata</i>	91	3	339956	6259522	Hollow at 11m

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	67	3	339997	6259467	Hollow at 12m
<i>Eucalyptus marginata</i>	92	3	340020	6259432	Hollow at 12m
<i>Eucalyptus marginata</i>	59	3	340025	6259423	Dead Hollow at 6m
<i>Eucalyptus marginata</i>	79	3	340043	6259405	Hollows at 12m and 14m
<i>Eucalyptus marginata</i>	48	3	340071	6259290	Hollow at 7m
<i>Eucalyptus marginata</i>	65	3	340082	6259283	Hollow at 11m
<i>Eucalyptus marginata</i>	49	3	340078	6259222	Hollow at 11m
<i>Eucalyptus marginata</i>	89	3	340146	6259126	Hollow at 10m
<i>Eucalyptus marginata</i>	67	3	340131	6259182	Hollow at 8m
<i>Eucalyptus marginata</i>	126	3	340111	6259234	Hollow at 11m and 14m
<i>Eucalyptus marginata</i>	109	3	340090	6259239	Hollow at 8m and 9m
<i>Eucalyptus marginata</i>	51	3	340119	6259249	Hollow at 15m
<i>Eucalyptus marginata</i>	78	3	340105	6259327	Hollow at 14m
<i>Eucalyptus marginata</i>	55	3	340096	6259343	Hollow at 10m
<i>Eucalyptus marginata</i>	68	3	340099	6259366	Dead. Hollow at 16m
<i>Eucalyptus marginata</i>	50	3	340096	6259372	Hollow at 5.5m
<i>Eucalyptus marginata</i>	93	3	340013	6259510	Hollow at 18m
<i>Eucalyptus marginata</i>	52	3	340011	6259532	Hollow at 11m and 14m
<i>Eucalyptus marginata</i>	41	3	339954	6259571	Hollow at 6.5m
<i>Eucalyptus marginata</i>	110	3	339999	6259632	Hollow at 8m
<i>Eucalyptus marginata</i>	63	3	340239	6259601	Hollow at 8.2m
<i>Eucalyptus marginata</i>	50.5	3	340249	6259600	Hollow at 10m
<i>Eucalyptus marginata</i>	60.5	3	340269	6259570	Hollow at 9.2m
<i>Eucalyptus marginata</i>	52	3	340278	6259550	Hollow at 9.6m
<i>Eucalyptus marginata</i>	60.5	3	340290	6259542	Hollow at 12.8m
<i>Eucalyptus marginata</i>	89	3	340306	6259535	Stag Hollows at 10.4m and 8m
<i>Eucalyptus marginata</i>	58	3	340313	6259523	Hollow at 10.4m
<i>Eucalyptus marginata</i>	61	3	340317	6259517	Hollow at 9.2m
<i>Eucalyptus marginata</i>	59	3	340331	6259499	Hollow at 12.2m
<i>Eucalyptus marginata</i>	55	3	340329	6259483	Hollow at 14.2
<i>Eucalyptus marginata</i>	95	3	340333	6259463	Hollow at 11.5m
<i>Eucalyptus marginata</i>	105	3	340340	6259459	Hollow at 10.8m
<i>Eucalyptus marginata</i>	114.5	3	340338	6259370	Hollow at 11.8
<i>Eucalyptus marginata</i>	57	3	340339	6259356	Hollow at 8.8m
<i>Eucalyptus marginata</i>	59	3	340325	6259348	Hollow at 9.2m
<i>Eucalyptus marginata</i>	56	3	340336	6259344	Hollow at 9m
<i>Eucalyptus marginata</i>	71	3	340340	6259341	Hollow at 10.2m
<i>Eucalyptus marginata</i>	53	3	340335	6259337	Hollow at 9.8m
<i>Eucalyptus marginata</i>	74	3	340335	6259318	Hollow at 9.8m
<i>Eucalyptus marginata</i>	53	3	340340	6259287	Hollow at 12m
<i>Eucalyptus marginata</i>	74.5	3	340352	6259286	Hollow at 13.8m
<i>Eucalyptus marginata</i>	71.5	3	340347	6259275	Hollow at 8m
<i>Eucalyptus marginata</i>	59.5	3	340359	6259269	Hollow at 8.8m
<i>Eucalyptus marginata</i>	68.5	3	340365	6259261	Hollow at 8.4m
<i>Eucalyptus marginata</i>	107	3	340367	6259257	Hollow at 7m
<i>Eucalyptus marginata</i>	74	3	340376	6259223	Hollow at 9.8m
<i>Eucalyptus marginata</i>	86	3	340377	6259212	Hollow at 11.6m
<i>Eucalyptus marginata</i>	60	3	340396	6259196	Hollow at 10.8m
<i>Eucalyptus marginata</i>	55	3	340401	6259177	
<i>Eucalyptus marginata</i>	57	3	340382	6259166	Hollow at 10.6m
<i>Eucalyptus marginata</i>	82	3	340237	6259645	Hollow at 7m

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	56	3	340247	6259608	Hollow at 10.6m
<i>Eucalyptus marginata</i>	90	3	340279	6259606	Hollow at 11m
<i>Eucalyptus marginata</i>	90	3	340285	6259599	
<i>Eucalyptus marginata</i>	89	3	340288	6259587	Hollow at 10m
<i>Eucalyptus marginata</i>	62	3	340283	6259585	Hollow at 12m
<i>Eucalyptus marginata</i>	52.5	3	340280	6259574	Hollow at 17m
<i>Eucalyptus marginata</i>	80	3	340293	6259577	
<i>Eucalyptus marginata</i>	66	3	340323	6259558	Hollow at 7m
<i>Eucalyptus marginata</i>	73	3	340321	6259549	Hollow at 8.4m
<i>Eucalyptus marginata</i>	82	3	340324	6259540	Hollow at 10.4m
<i>Eucalyptus marginata</i>	58	3	340330	6259538	Hollow at 13m
<i>Eucalyptus marginata</i>	78	3	340344	6259542	Hollows at 8.4m and 12m
<i>Eucalyptus marginata</i>	59	3	340340	6259528	Hollow at 9m
<i>Eucalyptus marginata</i>	93.5	3	340330	6259505	Dead. Hollow at 10m
<i>Eucalyptus marginata</i>	71	3	340353	6259476	
<i>Eucalyptus marginata</i>	83	3	340352	6259467	
<i>Eucalyptus marginata</i>	78	3	340366	6259472	Hollow at 12.8m
<i>Eucalyptus marginata</i>	80	3	340369	6259450	Dead. Hollow at 14.8m
<i>Eucalyptus marginata</i>	69	3	340372	6259450	Hollow at 12.4m
<i>Eucalyptus marginata</i>	69	3	340357	6259413	Hollow at 16.2m
<i>Eucalyptus marginata</i>	59	3	340353	6259396	Hollow at 10.6m
<i>Eucalyptus marginata</i>	50	3	340362	6259400	Hollow at 12.2m
<i>Eucalyptus marginata</i>	64	3	340362	6259386	Hollow at 4.2m
<i>Eucalyptus marginata</i>	73	3	340360	6259340	Hollow at 11.8m
<i>Eucalyptus marginata</i>	56	3	340361	6259329	Hollow at 14m
<i>Eucalyptus marginata</i>	82	3	340352	6259310	Hollow at 16m
<i>Eucalyptus marginata</i>	52.5	3	340375	6259294	Hollow at 11m
<i>Eucalyptus marginata</i>	115	3	340399	6259256	Hollow at 14m
<i>Eucalyptus marginata</i>	101	3	340422	6259213	Hollow at 9.4m
<i>Eucalyptus marginata</i>	70	3	340424	6259196	Hollow at 16m
<i>Eucalyptus marginata</i>	98.5	3	340436	6259198	Hollow at 12m
<i>Eucalyptus marginata</i>	136	3	340429	6259149	Hollow at 10m
<i>Eucalyptus marginata</i>	91	3	340418	6259152	Hollow at 14m
<i>Eucalyptus marginata</i>	153	3	339728	6259548	Hollow at 7m
<i>Eucalyptus marginata</i>	82	3	339732	6259518	Hollow at 10.5m
<i>Eucalyptus marginata</i>	89	3	339738	6259511	Hollow at 8m
<i>Eucalyptus marginata</i>	97	3	339747	6259498	Hollow at 12m
<i>Eucalyptus marginata</i>	>50	3	339769	6259432	
<i>Eucalyptus marginata</i>	129	3	339806	6259372	2 hollows at 15m
<i>Eucalyptus marginata</i>	113	3	339816	6259331	Hollow at 7.5m
<i>Eucalyptus marginata</i>	81	3	339872	6259214	Hollow at 14m
<i>Eucalyptus marginata</i>	131	3	339930	6259128	Hollows at 11m, 12m and 13m
<i>Eucalyptus marginata</i>	59	3	339913	6259156	Hollow at 9m
<i>Eucalyptus marginata</i>	68	3	339907	6259166	Dead. Hollow at 16m
<i>Eucalyptus marginata</i>	113	3	339908	6259180	Hollow at 9m
<i>Eucalyptus marginata</i>	102	3	339881	6259231	Hollows at 12m and 13m
<i>Eucalyptus marginata</i>	211	3	339899	6259247	Hollow at 10m
<i>Eucalyptus marginata</i>	82	3	339862	6259294	Hollow at 11m
<i>Eucalyptus marginata</i>	111	3	339820	6259361	Hollow at 10m
<i>Eucalyptus marginata</i>	52	3	339804	6259393	2 Hollows at 12m
<i>Eucalyptus marginata</i>	88	3	339802	6259404	Hollow at 12m

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	84	3	339799	6259416	Hollow at 13m
<i>Eucalyptus marginata</i>	59	3	339793	6259442	Hollow at 11m
<i>Eucalyptus marginata</i>	70	3	339754	6259543	Hollow at 8m
<i>Eucalyptus marginata</i>	66	3	339771	6259569	Hollows at 6m and 10m
<i>Eucalyptus marginata</i>	114	3	339781	6259557	Hollow at 10m
<i>Eucalyptus marginata</i>	115	3	339782	6259522	Dead. Hollow at 13m
<i>Eucalyptus marginata</i>	119	3	339815	6259474	Hollow at 16m
<i>Eucalyptus marginata</i>	80	3	339818	6259475	Dead. Hollow at 10m
<i>Eucalyptus marginata</i>	108	3	339834	6259415	Dead. Hollow at 10m
<i>Eucalyptus marginata</i>	135	3	339885	6259289	Dead. Hollow at 11m
<i>Eucalyptus marginata</i>	87	3	339945	6259243	Hollow at 8m
<i>Eucalyptus marginata</i>	68	3	339955	6259241	Hollow at 12m
<i>Eucalyptus marginata</i>	142	3	339939	6259192	Hollow at 10m
<i>Eucalyptus marginata</i>	130	3	339866	6259386	Hollow at 13m
<i>Eucalyptus marginata</i>	107	3	339838	6259410	Dead. Hollow at 13m
<i>Eucalyptus marginata</i>	73	3	339829	6259461	Hollow at 8m
<i>Eucalyptus marginata</i>	140	3	339835	6259519	Hollows at 11m and 6m
<i>Eucalyptus marginata</i>	61	3	339977	6259251	Hollows at 11m and 13m
<i>Eucalyptus marginata</i>	>50	3	339998	6259204	Small hollows at 15m, 14m and 13m
<i>Eucalyptus marginata</i>	111	3	339980	6259185	Hollow at 13
<i>Eucalyptus marginata</i>	>50	3	339998	6259157	Dead Hollow at 11m
<i>Eucalyptus marginata</i>	63	3	340038	6259126	Hollow at 9m
<i>Eucalyptus marginata</i>	96	3	340036	6259166	Hollow at 17m
<i>Eucalyptus marginata</i>	98	3	340007	6259273	Hollow at 11m
<i>Eucalyptus marginata</i>	108	3	339927	6259452	Hollows at 13m(x3) and 15m
<i>Eucalyptus patens</i>	64	3	340264	6259587	Hollow at 8.6m
Stag	86.5	3	340324	6259473	Hollow at 8m
Stag	147	3	340653	6259312	Dead Hollows at 16-18m (Stags)
Stag	85	3	340267	6259325	Dead. Hollow at 9m
Stag	82	3	340159	6259604	Dead. Hollow at 12m and 14m
Stag	99	3	340036	6259591	Dead. Hollow at 18m
Stag	74	3	340216	6259163	Hollow at 12m
Stag	87	3	340217	6259314	Dead. Chimney hollow
Stag	159	3	340124	6259123	Dead Hollow at 9m
Stag	94	3	340074	6259226	Dead. Hollow at 13m
Stag	80	3	340366	6259449	Hollow at 14.2m. Dead
Stag	56	3	340351	6259350	Hollow at 10m. Dead
Stag	62	3	340353	6259332	Hollow at 12m. Dead
<i>Corymbia calophylla</i>	>50	4	340463	6259420	Too small
<i>Corymbia calophylla</i>	>50	4	340357	6259152	Hollow at 6m down facing
<i>Corymbia calophylla</i>	70	4	340327	6259493	Hollow at 13.6m
<i>Corymbia calophylla</i>	96	4	340438	6259189	Hollow at 13m
<i>Eucalyptus marginata</i>	>50	4	340623	6259632	Too small
<i>Eucalyptus marginata</i>	>50	4	340366	6259350	Too small
<i>Eucalyptus marginata</i>	>50	4	340495	6259155	Dead Too open
<i>Eucalyptus marginata</i>	>50	4	340364	6259576	Too small
<i>Eucalyptus marginata</i>	61	4	340468	6259443	Hollow at 10m branch blocking
<i>Eucalyptus marginata</i>	>50	4	340556	6259434	Blocked

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	4	340158	6259516	Hollow at 12m
<i>Eucalyptus marginata</i>	78	4	340239	6259475	Hollow at 4m
<i>Eucalyptus marginata</i>	>50	4	340100	6259499	Too small
<i>Eucalyptus marginata</i>	64	4	340100	6259469	Dead. Too low 2m
<i>Eucalyptus marginata</i>	>50	4	340189	6259378	Hollow at 4m
<i>Eucalyptus marginata</i>	56	4	339981	6259340	Hollow at 12m obstructed
<i>Eucalyptus marginata</i>	83	4	340021	6259367	Hollow at 8m. Obstructed
<i>Eucalyptus marginata</i>	95	4	340004	6259462	Hollow at 8m. Obstructed
<i>Eucalyptus marginata</i>	110	4	340067	6259404	Hollow at 14m
<i>Eucalyptus marginata</i>	67	4	340277	6259574	Hollow at 10.6m
<i>Eucalyptus marginata</i>	>50	4	340315	6259512	
<i>Eucalyptus marginata</i>	63	4	340333	6259494	Hollow at 12m
<i>Eucalyptus marginata</i>	60	4	340352	6259388	
<i>Eucalyptus marginata</i>	60	4	340386	6259168	
<i>Eucalyptus marginata</i>	67	4	340395	6259157	Hollow at 8m
<i>Eucalyptus marginata</i>	52	4	340270	6259607	
<i>Eucalyptus marginata</i>	56	4	340332	6259516	Hollow at 9m
<i>Eucalyptus marginata</i>	78	4	340327	6259510	
<i>Eucalyptus marginata</i>	53	4	340351	6259488	
<i>Eucalyptus marginata</i>	58	4	340370	6259438	Hollow at 9.5m
<i>Eucalyptus marginata</i>	54	4	340354	6259386	Hollow at 9m
<i>Eucalyptus marginata</i>	64	4	340361	6259383	Hollow at 12m
<i>Eucalyptus marginata</i>	86	4	340353	6259353	Hollow at 15m
<i>Eucalyptus marginata</i>	54	4	340402	6259237	Hollow at 7m
<i>Eucalyptus marginata</i>	85	4	340412	6259233	
<i>Eucalyptus marginata</i>	61	4	340441	6259174	Hollow at 16m
<i>Eucalyptus marginata</i>	69	4	340425	6259144	Hollow at 15m
<i>Eucalyptus marginata</i>	>50	4	339750	6259480	
<i>Corymbia calophylla</i>	>50	5	340863	6259642	
<i>Corymbia calophylla</i>	>50	5	340768	6259631	
<i>Corymbia calophylla</i>	>50	5	340718	6259628	
<i>Corymbia calophylla</i>	>50	5	340861	6259633	
<i>Corymbia calophylla</i>	>50	5	340913	6259609	
<i>Corymbia calophylla</i>	>50	5	340928	6259609	
<i>Corymbia calophylla</i>	>50	5	340948	6259603	
<i>Corymbia calophylla</i>	>50	5	340954	6259611	
<i>Corymbia calophylla</i>	>50	5	340967	6259588	
<i>Corymbia calophylla</i>	>50	5	340953	6259582	
<i>Corymbia calophylla</i>	>50	5	340855	6259568	
<i>Corymbia calophylla</i>	>50	5	340949	6259543	
<i>Corymbia calophylla</i>	>50	5	340957	6259537	
<i>Corymbia calophylla</i>	>50	5	340958	6259526	
<i>Corymbia calophylla</i>	>50	5	340947	6259512	
<i>Corymbia calophylla</i>	>50	5	340916	6259502	
<i>Corymbia calophylla</i>	>50	5	340800	6259467	
<i>Corymbia calophylla</i>	>50	5	340838	6259469	Dead
<i>Corymbia calophylla</i>	>50	5	340895	6259495	
<i>Corymbia calophylla</i>	>50	5	340949	6259487	
<i>Corymbia calophylla</i>	>50	5	340840	6259352	
<i>Corymbia calophylla</i>	>50	5	340871	6259376	
<i>Corymbia calophylla</i>	>50	5	340967	6259445	
<i>Corymbia calophylla</i>	>50	5	340969	6259652	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340809	6259335	
<i>Corymbia calophylla</i>	>50	5	340794	6259323	
<i>Corymbia calophylla</i>	>50	5	340823	6259295	
<i>Corymbia calophylla</i>	>50	5	340879	6259303	
<i>Corymbia calophylla</i>	>50	5	340969	6259357	
<i>Corymbia calophylla</i>	>50	5	340890	6259294	
<i>Corymbia calophylla</i>	>50	5	340852	6259236	
<i>Corymbia calophylla</i>	>50	5	340904	6259271	
<i>Corymbia calophylla</i>	>50	5	340957	6259314	
<i>Corymbia calophylla</i>	>50	5	340964	6259217	
<i>Corymbia calophylla</i>	>50	5	340889	6259146	
<i>Corymbia calophylla</i>	>50	5	340956	6259157	
<i>Corymbia calophylla</i>	>50	5	340576	6259585	
<i>Corymbia calophylla</i>	>50	5	340585	6259543	
<i>Corymbia calophylla</i>	>50	5	340588	6259451	
<i>Corymbia calophylla</i>	>50	5	340605	6259438	
<i>Corymbia calophylla</i>	>50	5	340624	6259394	
<i>Corymbia calophylla</i>	>50	5	340662	6259204	
<i>Corymbia calophylla</i>	>50	5	340700	6259151	
<i>Corymbia calophylla</i>	>50	5	340713	6259159	
<i>Corymbia calophylla</i>	>50	5	340656	6259323	
<i>Corymbia calophylla</i>	>50	5	340634	6259459	
<i>Corymbia calophylla</i>	>50	5	340695	6259353	
<i>Corymbia calophylla</i>	>50	5	340677	6259327	
<i>Corymbia calophylla</i>	>50	5	340743	6259174	
<i>Corymbia calophylla</i>	>50	5	340744	6259245	
<i>Corymbia calophylla</i>	>50	5	340717	6259277	
<i>Corymbia calophylla</i>	>50	5	340712	6259381	
<i>Corymbia calophylla</i>	>50	5	340674	6259489	
<i>Corymbia calophylla</i>	>50	5	340603	6259632	
<i>Corymbia calophylla</i>	>50	5	340664	6259575	
<i>Corymbia calophylla</i>	>50	5	340713	6259541	
<i>Corymbia calophylla</i>	>50	5	340725	6259422	
<i>Corymbia calophylla</i>	>50	5	340678	6259491	
<i>Corymbia calophylla</i>	>50	5	340704	6259429	
<i>Corymbia calophylla</i>	>50	5	340692	6259457	
<i>Corymbia calophylla</i>	>50	5	340694	6259467	
<i>Corymbia calophylla</i>	>50	5	340741	6259369	
<i>Corymbia calophylla</i>	>50	5	340743	6259348	
<i>Corymbia calophylla</i>	>50	5	340756	6259315	
<i>Corymbia calophylla</i>	>50	5	340810	6259178	
<i>Corymbia calophylla</i>	>50	5	340764	6259344	
<i>Corymbia calophylla</i>	>50	5	340776	6259433	
<i>Corymbia calophylla</i>	>50	5	340765	6259478	
<i>Corymbia calophylla</i>	>50	5	340764	6259485	
<i>Corymbia calophylla</i>	>50	5	340715	6259539	
<i>Corymbia calophylla</i>	>50	5	340696	6259565	
<i>Corymbia calophylla</i>	>50	5	340693	6259574	
<i>Corymbia calophylla</i>	>50	5	340759	6259602	
<i>Corymbia calophylla</i>	>50	5	340721	6259626	
<i>Corymbia calophylla</i>	>50	5	340254	6259620	
<i>Corymbia calophylla</i>	>50	5	340269	6259626	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340298	6259559	
<i>Corymbia calophylla</i>	>50	5	340310	6259545	
<i>Corymbia calophylla</i>	>50	5	340317	6259537	
<i>Corymbia calophylla</i>	>50	5	340397	6259458	
<i>Corymbia calophylla</i>	>50	5	340404	6259438	
<i>Corymbia calophylla</i>	>50	5	340398	6259406	
<i>Corymbia calophylla</i>	>50	5	340367	6259325	
<i>Corymbia calophylla</i>	>50	5	340366	6259309	
<i>Corymbia calophylla</i>	>50	5	340425	6259220	
<i>Corymbia calophylla</i>	>50	5	340466	6259137	
<i>Corymbia calophylla</i>	>50	5	340494	6259141	
<i>Corymbia calophylla</i>	>50	5	340463	6259256	
<i>Corymbia calophylla</i>	>50	5	340461	6259269	
<i>Corymbia calophylla</i>	>50	5	340396	6259356	
<i>Corymbia calophylla</i>	>50	5	340421	6259349	
<i>Corymbia calophylla</i>	>50	5	340417	6259372	
<i>Corymbia calophylla</i>	>50	5	340423	6259401	
<i>Corymbia calophylla</i>	>50	5	340398	6259506	
<i>Corymbia calophylla</i>	>50	5	340390	6259535	
<i>Corymbia calophylla</i>	>50	5	340345	6259582	
<i>Corymbia calophylla</i>	>50	5	340297	6259617	
<i>Corymbia calophylla</i>	>50	5	340354	6259601	
<i>Corymbia calophylla</i>	>50	5	340371	6259558	
<i>Corymbia calophylla</i>	>50	5	340465	6259473	
<i>Corymbia calophylla</i>	>50	5	340461	6259448	
<i>Corymbia calophylla</i>	>50	5	340459	6259394	
<i>Corymbia calophylla</i>	>50	5	340454	6259387	
<i>Corymbia calophylla</i>	>50	5	340467	6259338	
<i>Corymbia calophylla</i>	>50	5	340477	6259289	
<i>Corymbia calophylla</i>	>50	5	340478	6259277	
<i>Corymbia calophylla</i>	>50	5	340482	6259269	
<i>Corymbia calophylla</i>	>50	5	340534	6259194	
<i>Corymbia calophylla</i>	>50	5	340529	6259192	
<i>Corymbia calophylla</i>	>50	5	340519	6259134	
<i>Corymbia calophylla</i>	>50	5	340544	6259131	
<i>Corymbia calophylla</i>	>50	5	340559	6259158	
<i>Corymbia calophylla</i>	>50	5	340563	6259215	
<i>Corymbia calophylla</i>	>50	5	340567	6259240	
<i>Corymbia calophylla</i>	>50	5	340544	6259354	
<i>Corymbia calophylla</i>	>50	5	340505	6259380	
<i>Corymbia calophylla</i>	>50	5	340465	6259381	
<i>Corymbia calophylla</i>	>50	5	340506	6259416	
<i>Corymbia calophylla</i>	>50	5	340529	6259454	
<i>Corymbia calophylla</i>	>50	5	340499	6259470	
<i>Corymbia calophylla</i>	>50	5	340497	6259505	
<i>Corymbia calophylla</i>	>50	5	340455	6259545	
<i>Corymbia calophylla</i>	>50	5	340431	6259552	
<i>Corymbia calophylla</i>	>50	5	340440	6259567	
<i>Corymbia calophylla</i>	>50	5	340404	6259605	
<i>Corymbia calophylla</i>	>50	5	340402	6259611	
<i>Corymbia calophylla</i>	>50	5	340387	6259618	
<i>Corymbia calophylla</i>	>50	5	340371	6259620	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340371	6259633	
<i>Corymbia calophylla</i>	>50	5	340399	6259635	
<i>Corymbia calophylla</i>	>50	5	340416	6259614	
<i>Corymbia calophylla</i>	>50	5	340423	6259618	
<i>Corymbia calophylla</i>	>50	5	340429	6259615	
<i>Corymbia calophylla</i>	>50	5	340426	6259608	
<i>Corymbia calophylla</i>	>50	5	340529	6259478	
<i>Corymbia calophylla</i>	>50	5	340546	6259466	
<i>Corymbia calophylla</i>	>50	5	340515	6259400	
<i>Corymbia calophylla</i>	>50	5	340531	6259391	
<i>Corymbia calophylla</i>	>50	5	340556	6259394	
<i>Corymbia calophylla</i>	>50	5	340585	6259261	
<i>Corymbia calophylla</i>	>50	5	340593	6259241	
<i>Corymbia calophylla</i>	>50	5	340608	6259210	
<i>Corymbia calophylla</i>	>50	5	340593	6259205	
<i>Corymbia calophylla</i>	>50	5	340611	6259192	
<i>Corymbia calophylla</i>	>50	5	340615	6259183	
<i>Corymbia calophylla</i>	>50	5	340645	6259140	
<i>Corymbia calophylla</i>	>50	5	340660	6259169	
<i>Corymbia calophylla</i>	>50	5	340663	6259198	
<i>Corymbia calophylla</i>	>50	5	340646	6259226	
<i>Corymbia calophylla</i>	>50	5	340611	6259316	
<i>Corymbia calophylla</i>	>50	5	340578	6259355	
<i>Corymbia calophylla</i>	>50	5	340593	6259383	
<i>Corymbia calophylla</i>	>50	5	340556	6259441	
<i>Corymbia calophylla</i>	>50	5	340564	6259464	
<i>Corymbia calophylla</i>	>50	5	340535	6259545	
<i>Corymbia calophylla</i>	>50	5	340543	6259571	
<i>Corymbia calophylla</i>	>50	5	340488	6259567	
<i>Corymbia calophylla</i>	>50	5	340544	6259594	
<i>Corymbia calophylla</i>	>50	5	340506	6259595	
<i>Corymbia calophylla</i>	>50	5	340479	6259593	Dead
<i>Corymbia calophylla</i>	>50	5	340481	6259610	
<i>Corymbia calophylla</i>	>50	5	340490	6259606	
<i>Corymbia calophylla</i>	>50	5	340486	6259614	
<i>Corymbia calophylla</i>	>50	5	340480	6259624	
<i>Corymbia calophylla</i>	>50	5	340122	6259605	
<i>Corymbia calophylla</i>	>50	5	340125	6259579	
<i>Corymbia calophylla</i>	>50	5	340151	6259584	
<i>Corymbia calophylla</i>	>50	5	340158	6259585	
<i>Corymbia calophylla</i>	>50	5	340164	6259569	
<i>Corymbia calophylla</i>	>50	5	340168	6259565	
<i>Corymbia calophylla</i>	>50	5	340167	6259545	
<i>Corymbia calophylla</i>	>50	5	340157	6259549	
<i>Corymbia calophylla</i>	>50	5	340152	6259550	
<i>Corymbia calophylla</i>	>50	5	340147	6259536	
<i>Corymbia calophylla</i>	>50	5	340196	6259498	
<i>Corymbia calophylla</i>	>50	5	340197	6259493	
<i>Corymbia calophylla</i>	>50	5	340201	6259493	
<i>Corymbia calophylla</i>	>50	5	340201	6259484	
<i>Corymbia calophylla</i>	>50	5	340197	6259477	
<i>Corymbia calophylla</i>	>50	5	340227	6259469	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340233	6259437	
<i>Corymbia calophylla</i>	>50	5	340249	6259346	
<i>Corymbia calophylla</i>	>50	5	340227	6259302	
<i>Corymbia calophylla</i>	>50	5	340224	6259303	
<i>Corymbia calophylla</i>	>50	5	340227	6259288	
<i>Corymbia calophylla</i>	>50	5	340251	6259273	
<i>Corymbia calophylla</i>	>50	5	340250	6259271	
<i>Corymbia calophylla</i>	>50	5	340275	6259186	
<i>Corymbia calophylla</i>	>50	5	340285	6259151	
<i>Corymbia calophylla</i>	>50	5	340324	6259121	
<i>Corymbia calophylla</i>	>50	5	340333	6259168	
<i>Corymbia calophylla</i>	>50	5	340320	6259200	
<i>Corymbia calophylla</i>	>50	5	340307	6259185	
<i>Corymbia calophylla</i>	>50	5	340301	6259202	
<i>Corymbia calophylla</i>	>50	5	340288	6259212	
<i>Corymbia calophylla</i>	>50	5	340271	6259245	
<i>Corymbia calophylla</i>	>50	5	340263	6259293	
<i>Corymbia calophylla</i>	>50	5	340271	6259317	
<i>Corymbia calophylla</i>	>50	5	340266	6259320	
<i>Corymbia calophylla</i>	>50	5	340265	6259377	
<i>Corymbia calophylla</i>	>50	5	340260	6259391	
<i>Corymbia calophylla</i>	>50	5	340255	6259378	
<i>Corymbia calophylla</i>	>50	5	340265	6259417	
<i>Corymbia calophylla</i>	>50	5	340255	6259425	
<i>Corymbia calophylla</i>	>50	5	340247	6259428	
<i>Corymbia calophylla</i>	>50	5	340257	6259451	
<i>Corymbia calophylla</i>	>50	5	340241	6259506	
<i>Corymbia calophylla</i>	>50	5	340221	6259508	
<i>Corymbia calophylla</i>	>50	5	340209	6259500	
<i>Corymbia calophylla</i>	>50	5	340203	6259510	
<i>Corymbia calophylla</i>	>50	5	340201	6259510	
<i>Corymbia calophylla</i>	>50	5	340202	6259540	
<i>Corymbia calophylla</i>	>50	5	340200	6259542	
<i>Corymbia calophylla</i>	>50	5	340179	6259571	
<i>Corymbia calophylla</i>	>50	5	340176	6259590	
<i>Corymbia calophylla</i>	>50	5	340168	6259602	
<i>Corymbia calophylla</i>	>50	5	340198	6259570	
<i>Corymbia calophylla</i>	>50	5	340202	6259569	
<i>Corymbia calophylla</i>	>50	5	340243	6259532	
<i>Corymbia calophylla</i>	>50	5	340237	6259525	
<i>Corymbia calophylla</i>	>50	5	340273	6259474	
<i>Corymbia calophylla</i>	>50	5	340284	6259460	
<i>Corymbia calophylla</i>	>50	5	340303	6259444	
<i>Corymbia calophylla</i>	>50	5	340294	6259424	
<i>Corymbia calophylla</i>	>50	5	340291	6259409	
<i>Corymbia calophylla</i>	>50	5	340290	6259401	
<i>Corymbia calophylla</i>	>50	5	340296	6259384	
<i>Corymbia calophylla</i>	>50	5	340299	6259366	
<i>Corymbia calophylla</i>	>50	5	340298	6259320	
<i>Corymbia calophylla</i>	>50	5	340297	6259290	Dead
<i>Corymbia calophylla</i>	>50	5	340322	6259245	
<i>Corymbia calophylla</i>	>50	5	340329	6259208	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340348	6259190	
<i>Corymbia calophylla</i>	>50	5	340353	6259171	
<i>Corymbia calophylla</i>	>50	5	340356	6259173	
<i>Corymbia calophylla</i>	>50	5	340360	6259144	
<i>Corymbia calophylla</i>	>50	5	340358	6259139	
<i>Corymbia calophylla</i>	>50	5	340304	6259492	
<i>Corymbia calophylla</i>	>50	5	340215	6259573	
<i>Corymbia calophylla</i>	>50	5	340219	6259597	
<i>Corymbia calophylla</i>	>50	5	340225	6259600	
<i>Corymbia calophylla</i>	>50	5	340195	6259628	
<i>Corymbia calophylla</i>	>50	5	340207	6259632	
<i>Corymbia calophylla</i>	>50	5	340207	6259633	
<i>Corymbia calophylla</i>	>50	5	339977	6259608	
<i>Corymbia calophylla</i>	>50	5	340003	6259592	
<i>Corymbia calophylla</i>	>50	5	339989	6259525	
<i>Corymbia calophylla</i>	>50	5	339979	6259523	
<i>Corymbia calophylla</i>	>50	5	340013	6259606	
<i>Corymbia calophylla</i>	>50	5	340033	6259531	
<i>Corymbia calophylla</i>	>50	5	340083	6259440	
<i>Corymbia calophylla</i>	>50	5	340088	6259445	Termites
<i>Corymbia calophylla</i>	>50	5	340090	6259416	
<i>Corymbia calophylla</i>	>50	5	340093	6259411	
<i>Corymbia calophylla</i>	>50	5	340095	6259419	
<i>Corymbia calophylla</i>	>50	5	340105	6259410	
<i>Corymbia calophylla</i>	>50	5	340118	6259414	
<i>Corymbia calophylla</i>	>50	5	340100	6259388	
<i>Corymbia calophylla</i>	>50	5	340119	6259376	Termites
<i>Corymbia calophylla</i>	>50	5	340148	6259360	
<i>Corymbia calophylla</i>	>50	5	340125	6259344	
<i>Corymbia calophylla</i>	>50	5	340117	6259349	
<i>Corymbia calophylla</i>	>50	5	340113	6259355	
<i>Corymbia calophylla</i>	>50	5	340159	6259333	
<i>Corymbia calophylla</i>	>50	5	340125	6259289	
<i>Corymbia calophylla</i>	>50	5	340136	6259277	
<i>Corymbia calophylla</i>	>50	5	340138	6259262	
<i>Corymbia calophylla</i>	>50	5	340125	6259232	
<i>Corymbia calophylla</i>	>50	5	340131	6259241	
<i>Corymbia calophylla</i>	>50	5	340203	6259197	
<i>Corymbia calophylla</i>	>50	5	340207	6259194	
<i>Corymbia calophylla</i>	>50	5	340198	6259169	
<i>Corymbia calophylla</i>	>50	5	340195	6259162	
<i>Corymbia calophylla</i>	>50	5	340180	6259175	
<i>Corymbia calophylla</i>	>50	5	340187	6259133	
<i>Corymbia calophylla</i>	>50	5	340192	6259135	
<i>Corymbia calophylla</i>	>50	5	340163	6259120	
<i>Corymbia calophylla</i>	>50	5	340201	6259120	
<i>Corymbia calophylla</i>	>50	5	340155	6259217	
<i>Corymbia calophylla</i>	>50	5	340172	6259248	
<i>Corymbia calophylla</i>	>50	5	340166	6259257	
<i>Corymbia calophylla</i>	>50	5	340162	6259253	
<i>Corymbia calophylla</i>	>50	5	340151	6259267	
<i>Corymbia calophylla</i>	>50	5	340157	6259275	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340154	6259280	
<i>Corymbia calophylla</i>	>50	5	340159	6259297	
<i>Corymbia calophylla</i>	>50	5	340173	6259284	
<i>Corymbia calophylla</i>	>50	5	340179	6259347	
<i>Corymbia calophylla</i>	>50	5	340198	6259363	
<i>Corymbia calophylla</i>	>50	5	340194	6259362	
<i>Corymbia calophylla</i>	>50	5	340167	6259377	
<i>Corymbia calophylla</i>	>50	5	340163	6259379	
<i>Corymbia calophylla</i>	>50	5	340149	6259388	
<i>Corymbia calophylla</i>	>50	5	340154	6259395	
<i>Corymbia calophylla</i>	>50	5	340151	6259407	
<i>Corymbia calophylla</i>	>50	5	340153	6259429	
<i>Corymbia calophylla</i>	>50	5	340131	6259426	
<i>Corymbia calophylla</i>	>50	5	340051	6259623	
<i>Corymbia calophylla</i>	>50	5	340057	6259613	
<i>Corymbia calophylla</i>	>50	5	340061	6259604	
<i>Corymbia calophylla</i>	>50	5	340055	6259599	
<i>Corymbia calophylla</i>	>50	5	340059	6259554	
<i>Corymbia calophylla</i>	>50	5	340068	6259534	
<i>Corymbia calophylla</i>	>50	5	340073	6259523	
<i>Corymbia calophylla</i>	>50	5	340062	6259522	
<i>Corymbia calophylla</i>	>50	5	340068	6259503	
<i>Corymbia calophylla</i>	>50	5	340099	6259479	
<i>Corymbia calophylla</i>	>50	5	340146	6259450	
<i>Corymbia calophylla</i>	>50	5	340151	6259461	
<i>Corymbia calophylla</i>	>50	5	340125	6259476	
<i>Corymbia calophylla</i>	>50	5	340116	6259490	
<i>Corymbia calophylla</i>	>50	5	340101	6259509	
<i>Corymbia calophylla</i>	>50	5	340066	6259573	
<i>Corymbia calophylla</i>	>50	5	340064	6259580	
<i>Corymbia calophylla</i>	>50	5	340058	6259596	
<i>Corymbia calophylla</i>	>50	5	340072	6259612	
<i>Corymbia calophylla</i>	>50	5	340088	6259629	
<i>Corymbia calophylla</i>	>50	5	340093	6259562	
<i>Corymbia calophylla</i>	>50	5	340111	6259542	
<i>Corymbia calophylla</i>	>50	5	340114	6259528	
<i>Corymbia calophylla</i>	>50	5	340129	6259506	
<i>Corymbia calophylla</i>	>50	5	340130	6259490	
<i>Corymbia calophylla</i>	>50	5	340193	6259374	
<i>Corymbia calophylla</i>	>50	5	340195	6259340	
<i>Corymbia calophylla</i>	>50	5	340193	6259320	
<i>Corymbia calophylla</i>	>50	5	340185	6259286	
<i>Corymbia calophylla</i>	>50	5	340219	6259120	
<i>Corymbia calophylla</i>	>50	5	340263	6259129	
<i>Corymbia calophylla</i>	>50	5	340264	6259135	
<i>Corymbia calophylla</i>	>50	5	340244	6259147	
<i>Corymbia calophylla</i>	>50	5	340239	6259173	
<i>Corymbia calophylla</i>	>50	5	340232	6259155	
<i>Corymbia calophylla</i>	>50	5	340201	6259164	
<i>Corymbia calophylla</i>	>50	5	340215	6259188	
<i>Corymbia calophylla</i>	>50	5	340216	6259227	
<i>Corymbia calophylla</i>	>50	5	340223	6259350	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340226	6259367	
<i>Corymbia calophylla</i>	>50	5	340230	6259379	
<i>Corymbia calophylla</i>	>50	5	340225	6259387	
<i>Corymbia calophylla</i>	>50	5	340217	6259402	
<i>Corymbia calophylla</i>	>50	5	340211	6259397	
<i>Corymbia calophylla</i>	>50	5	340200	6259394	
<i>Corymbia calophylla</i>	>50	5	340210	6259436	
<i>Corymbia calophylla</i>	>50	5	340182	6259439	
<i>Corymbia calophylla</i>	>50	5	340171	6259474	
<i>Corymbia calophylla</i>	>50	5	340187	6259479	
<i>Corymbia calophylla</i>	>50	5	340159	6259498	
<i>Corymbia calophylla</i>	>50	5	340122	6259550	
<i>Corymbia calophylla</i>	>50	5	340078	6259583	
<i>Corymbia calophylla</i>	>50	5	340087	6259598	
<i>Corymbia calophylla</i>	>50	5	339809	6259615	
<i>Corymbia calophylla</i>	>50	5	339815	6259622	
<i>Corymbia calophylla</i>	>50	5	339816	6259622	
<i>Corymbia calophylla</i>	>50	5	339866	6259523	
<i>Corymbia calophylla</i>	>50	5	339945	6259464	
<i>Corymbia calophylla</i>	>50	5	339965	6259434	
<i>Corymbia calophylla</i>	>50	5	339959	6259429	
<i>Corymbia calophylla</i>	>50	5	339971	6259419	
<i>Corymbia calophylla</i>	>50	5	339982	6259382	
<i>Corymbia calophylla</i>	>50	5	339987	6259328	
<i>Corymbia calophylla</i>	>50	5	340000	6259316	
<i>Corymbia calophylla</i>	>50	5	340008	6259313	
<i>Corymbia calophylla</i>	>50	5	340016	6259301	
<i>Corymbia calophylla</i>	>50	5	340020	6259296	
<i>Corymbia calophylla</i>	>50	5	340031	6259291	
<i>Corymbia calophylla</i>	>50	5	340030	6259267	Dead
<i>Corymbia calophylla</i>	>50	5	340033	6259249	
<i>Corymbia calophylla</i>	>50	5	340074	6259142	
<i>Corymbia calophylla</i>	>50	5	340123	6259119	
<i>Corymbia calophylla</i>	>50	5	340126	6259119	
<i>Corymbia calophylla</i>	>50	5	340100	6259157	
<i>Corymbia calophylla</i>	>50	5	340072	6259188	
<i>Corymbia calophylla</i>	>50	5	340061	6259271	
<i>Corymbia calophylla</i>	>50	5	340048	6259307	
<i>Corymbia calophylla</i>	>50	5	340036	6259316	
<i>Corymbia calophylla</i>	>50	5	340036	6259302	
<i>Corymbia calophylla</i>	>50	5	340035	6259302	
<i>Corymbia calophylla</i>	>50	5	340045	6259341	
<i>Corymbia calophylla</i>	>50	5	340029	6259344	
<i>Corymbia calophylla</i>	>50	5	340022	6259346	
<i>Corymbia calophylla</i>	>50	5	340028	6259351	
<i>Corymbia calophylla</i>	>50	5	340043	6259359	
<i>Corymbia calophylla</i>	>50	5	340041	6259372	
<i>Corymbia calophylla</i>	>50	5	340027	6259371	
<i>Corymbia calophylla</i>	>50	5	340001	6259363	
<i>Corymbia calophylla</i>	>50	5	340014	6259397	
<i>Corymbia calophylla</i>	>50	5	339980	6259472	
<i>Corymbia calophylla</i>	>50	5	339957	6259482	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	339895	6259538	
<i>Corymbia calophylla</i>	>50	5	339835	6259616	
<i>Corymbia calophylla</i>	>50	5	339846	6259618	
<i>Corymbia calophylla</i>	>50	5	339847	6259618	
<i>Corymbia calophylla</i>	>50	5	339853	6259624	
<i>Corymbia calophylla</i>	>50	5	339856	6259614	
<i>Corymbia calophylla</i>	>50	5	339857	6259609	
<i>Corymbia calophylla</i>	>50	5	339865	6259602	
<i>Corymbia calophylla</i>	>50	5	339868	6259626	
<i>Corymbia calophylla</i>	>50	5	339879	6259625	
<i>Corymbia calophylla</i>	>50	5	339878	6259625	
<i>Corymbia calophylla</i>	>50	5	339879	6259623	
<i>Corymbia calophylla</i>	>50	5	339881	6259611	
<i>Corymbia calophylla</i>	>50	5	339879	6259603	
<i>Corymbia calophylla</i>	>50	5	339892	6259600	
<i>Corymbia calophylla</i>	>50	5	339902	6259586	
<i>Corymbia calophylla</i>	>50	5	339904	6259592	
<i>Corymbia calophylla</i>	>50	5	339954	6259542	
<i>Corymbia calophylla</i>	>50	5	339958	6259514	
<i>Corymbia calophylla</i>	>50	5	339989	6259480	
<i>Corymbia calophylla</i>	>50	5	339998	6259464	
<i>Corymbia calophylla</i>	>50	5	340026	6259414	
<i>Corymbia calophylla</i>	>50	5	340027	6259409	
<i>Corymbia calophylla</i>	>50	5	340038	6259411	
<i>Corymbia calophylla</i>	>50	5	340044	6259402	
<i>Corymbia calophylla</i>	>50	5	340055	6259389	
<i>Corymbia calophylla</i>	>50	5	340054	6259367	
<i>Corymbia calophylla</i>	>50	5	340056	6259345	
<i>Corymbia calophylla</i>	>50	5	340073	6259282	
<i>Corymbia calophylla</i>	>50	5	340070	6259272	
<i>Corymbia calophylla</i>	>50	5	340081	6259268	
<i>Corymbia calophylla</i>	>50	5	340077	6259251	
<i>Corymbia calophylla</i>	>50	5	340075	6259230	
<i>Corymbia calophylla</i>	>50	5	340084	6259214	
<i>Corymbia calophylla</i>	>50	5	340099	6259190	
<i>Corymbia calophylla</i>	>50	5	340125	6259159	
<i>Corymbia calophylla</i>	>50	5	340136	6259126	
<i>Corymbia calophylla</i>	>50	5	340148	6259123	
<i>Corymbia calophylla</i>	>50	5	340149	6259133	
<i>Corymbia calophylla</i>	>50	5	340148	6259135	
<i>Corymbia calophylla</i>	>50	5	340155	6259134	
<i>Corymbia calophylla</i>	>50	5	340154	6259140	
<i>Corymbia calophylla</i>	>50	5	340163	6259154	
<i>Corymbia calophylla</i>	>50	5	340131	6259179	
<i>Corymbia calophylla</i>	>50	5	340124	6259187	
<i>Corymbia calophylla</i>	>50	5	340119	6259215	
<i>Corymbia calophylla</i>	>50	5	340098	6259211	
<i>Corymbia calophylla</i>	>50	5	340101	6259241	
<i>Corymbia calophylla</i>	>50	5	340086	6259236	
<i>Corymbia calophylla</i>	>50	5	340093	6259220	
<i>Corymbia calophylla</i>	>50	5	340105	6259283	
<i>Corymbia calophylla</i>	>50	5	340112	6259292	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340096	6259330	
<i>Corymbia calophylla</i>	>50	5	340095	6259332	
<i>Corymbia calophylla</i>	>50	5	340095	6259344	
<i>Corymbia calophylla</i>	>50	5	340066	6259404	
<i>Corymbia calophylla</i>	>50	5	340060	6259415	
<i>Corymbia calophylla</i>	>50	5	340068	6259426	
<i>Corymbia calophylla</i>	>50	5	340037	6259439	
<i>Corymbia calophylla</i>	>50	5	340036	6259437	
<i>Corymbia calophylla</i>	>50	5	340037	6259424	
<i>Corymbia calophylla</i>	>50	5	340026	6259461	
<i>Corymbia calophylla</i>	>50	5	340011	6259548	
<i>Corymbia calophylla</i>	>50	5	339978	6259565	
<i>Corymbia calophylla</i>	>50	5	339965	6259593	
<i>Corymbia calophylla</i>	>50	5	339966	6259599	
<i>Corymbia calophylla</i>	>50	5	339919	6259596	
<i>Corymbia calophylla</i>	>50	5	339921	6259599	
<i>Corymbia calophylla</i>	>50	5	339932	6259593	
<i>Corymbia calophylla</i>	>50	5	339934	6259603	
<i>Corymbia calophylla</i>	>50	5	339933	6259608	
<i>Corymbia calophylla</i>	>50	5	339955	6259614	
<i>Corymbia calophylla</i>	>50	5	339958	6259616	
<i>Corymbia calophylla</i>	>50	5	339931	6259620	
<i>Corymbia calophylla</i>	>50	5	339915	6259635	
<i>Corymbia calophylla</i>	>50	5	339917	6259628	
<i>Corymbia calophylla</i>	>50	5	339913	6259617	
<i>Corymbia calophylla</i>	>50	5	339911	6259615	
<i>Corymbia calophylla</i>	>50	5	339907	6259618	
<i>Corymbia calophylla</i>	>50	5	339905	6259622	
<i>Corymbia calophylla</i>	>50	5	339893	6259625	
<i>Corymbia calophylla</i>	>50	5	339940	6259637	
<i>Corymbia calophylla</i>	>50	5	339947	6259638	
<i>Corymbia calophylla</i>	>50	5	339951	6259636	
<i>Corymbia calophylla</i>	>50	5	339953	6259638	
<i>Corymbia calophylla</i>	>50	5	339954	6259637	
<i>Corymbia calophylla</i>	>50	5	339958	6259638	
<i>Corymbia calophylla</i>	>50	5	339959	6259634	
<i>Corymbia calophylla</i>	>50	5	339954	6259631	
<i>Corymbia calophylla</i>	>50	5	339955	6259632	
<i>Corymbia calophylla</i>	>50	5	339957	6259628	
<i>Corymbia calophylla</i>	>50	5	339968	6259638	
<i>Corymbia calophylla</i>	>50	5	339970	6259638	
<i>Corymbia calophylla</i>	>50	5	339970	6259637	
<i>Corymbia calophylla</i>	>50	5	339970	6259632	
<i>Corymbia calophylla</i>	>50	5	339975	6259637	
<i>Corymbia calophylla</i>	>50	5	339980	6259640	
<i>Corymbia calophylla</i>	>50	5	339981	6259640	
<i>Corymbia calophylla</i>	>50	5	339981	6259631	
<i>Corymbia calophylla</i>	>50	5	339986	6259630	
<i>Corymbia calophylla</i>	>50	5	339988	6259632	
<i>Corymbia calophylla</i>	>50	5	340000	6259638	
<i>Corymbia calophylla</i>	>50	5	339984	6259615	
<i>Corymbia calophylla</i>	>50	5	339973	6259617	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	339997	6259611	
<i>Corymbia calophylla</i>	>50	5	340011	6259625	
<i>Corymbia calophylla</i>	>50	5	340015	6259632	
<i>Corymbia calophylla</i>	>50	5	340011	6259638	
<i>Corymbia calophylla</i>	>50	5	340019	6259636	
<i>Corymbia calophylla</i>	>50	5	340034	6259628	
<i>Corymbia calophylla</i>	>50	5	340039	6259625	
<i>Corymbia calophylla</i>	>50	5	340041	6259633	
<i>Corymbia calophylla</i>	>50	5	340043	6259643	
<i>Corymbia calophylla</i>	>50	5	340046	6259629	
<i>Corymbia calophylla</i>	>50	5	340055	6259634	
<i>Corymbia calophylla</i>	>50	5	340081	6259636	
<i>Corymbia calophylla</i>	>50	5	340127	6259642	
<i>Corymbia calophylla</i>	>50	5	340216	6259634	
<i>Corymbia calophylla</i>	>50	5	340333	6259429	
<i>Corymbia calophylla</i>	>50	5	340332	6259321	
<i>Corymbia calophylla</i>	>50	5	340359	6259429	
<i>Corymbia calophylla</i>	>50	5	340381	6259430	
<i>Corymbia calophylla</i>	>50	5	340361	6259429	
<i>Corymbia calophylla</i>	>50	5	340351	6259379	
<i>Corymbia calophylla</i>	>50	5	340390	6259243	
<i>Corymbia calophylla</i>	>50	5	340416	6259200	
<i>Corymbia calophylla</i>	>50	5	340431	6259199	
<i>Corymbia calophylla</i>	>50	5	340419	6259128	
<i>Corymbia calophylla</i>	>50	5	340426	6259121	
<i>Corymbia calophylla</i>	>50	5	339724	6259549	
<i>Corymbia calophylla</i>	>50	5	339724	6259546	
<i>Corymbia calophylla</i>	>50	5	339730	6259553	
<i>Corymbia calophylla</i>	>50	5	339730	6259530	
<i>Corymbia calophylla</i>	>50	5	339724	6259526	
<i>Corymbia calophylla</i>	>50	5	339730	6259513	
<i>Corymbia calophylla</i>	>50	5	339747	6259479	
<i>Corymbia calophylla</i>	>50	5	339751	6259471	
<i>Corymbia calophylla</i>	>50	5	339749	6259463	
<i>Corymbia calophylla</i>	>50	5	339759	6259461	
<i>Corymbia calophylla</i>	>50	5	339776	6259418	
<i>Corymbia calophylla</i>	>50	5	339769	6259412	
<i>Corymbia calophylla</i>	>50	5	339779	6259390	Evidence of canker
<i>Corymbia calophylla</i>	>50	5	339796	6259372	
<i>Corymbia calophylla</i>	>50	5	339789	6259371	
<i>Corymbia calophylla</i>	>50	5	339795	6259368	
<i>Corymbia calophylla</i>	>50	5	339856	6259235	
<i>Corymbia calophylla</i>	>50	5	339860	6259226	
<i>Corymbia calophylla</i>	>50	5	339878	6259191	
<i>Corymbia calophylla</i>	>50	5	339873	6259186	
<i>Corymbia calophylla</i>	>50	5	339878	6259174	
<i>Corymbia calophylla</i>	>50	5	339885	6259165	
<i>Corymbia calophylla</i>	>50	5	339886	6259137	
<i>Corymbia calophylla</i>	>50	5	339899	6259131	
<i>Corymbia calophylla</i>	>50	5	339903	6259123	
<i>Corymbia calophylla</i>	>50	5	339923	6259118	
<i>Corymbia calophylla</i>	>50	5	339910	6259170	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	339886	6259267	
<i>Corymbia calophylla</i>	>50	5	339830	6259331	
<i>Corymbia calophylla</i>	>50	5	339798	6259395	
<i>Corymbia calophylla</i>	>50	5	339807	6259409	
<i>Corymbia calophylla</i>	>50	5	339783	6259494	
<i>Corymbia calophylla</i>	>50	5	339769	6259513	
<i>Corymbia calophylla</i>	>50	5	339752	6259544	
<i>Corymbia calophylla</i>	>50	5	339741	6259569	
<i>Corymbia calophylla</i>	>50	5	339738	6259563	
<i>Corymbia calophylla</i>	>50	5	339738	6259561	
<i>Corymbia calophylla</i>	>50	5	339757	6259569	
<i>Corymbia calophylla</i>	>50	5	339761	6259570	
<i>Corymbia calophylla</i>	>50	5	339774	6259570	
<i>Corymbia calophylla</i>	>50	5	339775	6259543	
<i>Corymbia calophylla</i>	>50	5	339773	6259541	
<i>Corymbia calophylla</i>	>50	5	339783	6259505	
<i>Corymbia calophylla</i>	>50	5	339812	6259474	
<i>Corymbia calophylla</i>	>50	5	339834	6259395	
<i>Corymbia calophylla</i>	>50	5	339840	6259390	
<i>Corymbia calophylla</i>	>50	5	339831	6259368	
<i>Corymbia calophylla</i>	>50	5	339857	6259342	
<i>Corymbia calophylla</i>	>50	5	339915	6259265	
<i>Corymbia calophylla</i>	>50	5	339949	6259139	
<i>Corymbia calophylla</i>	>50	5	339980	6259129	
<i>Corymbia calophylla</i>	>50	5	339877	6259333	
<i>Corymbia calophylla</i>	>50	5	339823	6259470	
<i>Corymbia calophylla</i>	>50	5	339836	6259488	
<i>Corymbia calophylla</i>	>50	5	339783	6259578	
<i>Corymbia calophylla</i>	>50	5	339783	6259589	
<i>Corymbia calophylla</i>	>50	5	339775	6259586	
<i>Corymbia calophylla</i>	>50	5	339767	6259589	
<i>Corymbia calophylla</i>	>50	5	339763	6259590	
<i>Corymbia calophylla</i>	>50	5	339765	6259594	
<i>Corymbia calophylla</i>	>50	5	339767	6259601	
<i>Corymbia calophylla</i>	>50	5	339764	6259601	
<i>Corymbia calophylla</i>	>50	5	339767	6259603	
<i>Corymbia calophylla</i>	>50	5	339771	6259609	
<i>Corymbia calophylla</i>	>50	5	339776	6259609	Dead
<i>Corymbia calophylla</i>	>50	5	339773	6259610	White tailed cockatoos foraging
<i>Corymbia calophylla</i>	>50	5	339762	6259610	
<i>Corymbia calophylla</i>	>50	5	339757	6259617	
<i>Corymbia calophylla</i>	>50	5	339800	6259622	
<i>Corymbia calophylla</i>	>50	5	339796	6259587	
<i>Corymbia calophylla</i>	>50	5	339854	6259488	
<i>Corymbia calophylla</i>	>50	5	339908	6259411	
<i>Corymbia calophylla</i>	>50	5	339999	6259142	
<i>Corymbia calophylla</i>	>50	5	340004	6259137	
<i>Corymbia calophylla</i>	>50	5	340014	6259121	
<i>Corymbia calophylla</i>	>50	5	340019	6259119	
<i>Corymbia calophylla</i>	>50	5	340017	6259153	
<i>Corymbia calophylla</i>	>50	5	340042	6259175	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Corymbia calophylla</i>	>50	5	340020	6259201	
<i>Corymbia calophylla</i>	>50	5	340024	6259233	
<i>Corymbia calophylla</i>	>50	5	340023	6259238	
<i>Corymbia calophylla</i>	>50	5	340007	6259287	
<i>Corymbia calophylla</i>	>50	5	340003	6259294	
<i>Corymbia calophylla</i>	>50	5	339997	6259299	
<i>Corymbia calophylla</i>	>50	5	339991	6259314	
<i>Corymbia calophylla</i>	>50	5	339971	6259297	
<i>Corymbia calophylla</i>	>50	5	339956	6259319	
<i>Eucalyptus marginata</i>	>50	5	340934	6259659	
<i>Eucalyptus marginata</i>	>50	5	340928	6259654	
<i>Eucalyptus marginata</i>	>50	5	340890	6259643	
<i>Eucalyptus marginata</i>	>50	5	340874	6259645	
<i>Eucalyptus marginata</i>	>50	5	340842	6259643	
<i>Eucalyptus marginata</i>	>50	5	340843	6259634	
<i>Eucalyptus marginata</i>	>50	5	340826	6259632	
<i>Eucalyptus marginata</i>	>50	5	340811	6259627	
<i>Eucalyptus marginata</i>	>50	5	340786	6259634	
<i>Eucalyptus marginata</i>	>50	5	340762	6259642	
<i>Eucalyptus marginata</i>	>50	5	340747	6259639	
<i>Eucalyptus marginata</i>	>50	5	340732	6259635	
<i>Eucalyptus marginata</i>	>50	5	340729	6259632	
<i>Eucalyptus marginata</i>	>50	5	340719	6259629	
<i>Eucalyptus marginata</i>	>50	5	340717	6259622	
<i>Eucalyptus marginata</i>	>50	5	340748	6259597	
<i>Eucalyptus marginata</i>	>50	5	340810	6259620	
<i>Eucalyptus marginata</i>	>50	5	340843	6259626	
<i>Eucalyptus marginata</i>	>50	5	340852	6259631	
<i>Eucalyptus marginata</i>	>50	5	340876	6259622	Dead
<i>Eucalyptus marginata</i>	>50	5	340907	6259622	
<i>Eucalyptus marginata</i>	>50	5	340943	6259609	
<i>Eucalyptus marginata</i>	>50	5	340969	6259606	
<i>Eucalyptus marginata</i>	>50	5	340969	6259604	
<i>Eucalyptus marginata</i>	>50	5	340916	6259570	
<i>Eucalyptus marginata</i>	>50	5	340909	6259578	
<i>Eucalyptus marginata</i>	>50	5	340908	6259579	
<i>Eucalyptus marginata</i>	>50	5	340894	6259578	
<i>Eucalyptus marginata</i>	>50	5	340869	6259570	
<i>Eucalyptus marginata</i>	>50	5	340838	6259551	
<i>Eucalyptus marginata</i>	>50	5	340814	6259548	
<i>Eucalyptus marginata</i>	>50	5	340810	6259553	
<i>Eucalyptus marginata</i>	>50	5	340804	6259543	
<i>Eucalyptus marginata</i>	>50	5	340793	6259541	
<i>Eucalyptus marginata</i>	>50	5	340784	6259537	
<i>Eucalyptus marginata</i>	>50	5	340780	6259552	
<i>Eucalyptus marginata</i>	>50	5	340769	6259546	
<i>Eucalyptus marginata</i>	>50	5	340761	6259526	
<i>Eucalyptus marginata</i>	>50	5	340755	6259522	
<i>Eucalyptus marginata</i>	>50	5	340757	6259519	
<i>Eucalyptus marginata</i>	>50	5	340772	6259514	Dead
<i>Eucalyptus marginata</i>	>50	5	340811	6259527	
<i>Eucalyptus marginata</i>	>50	5	340819	6259533	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340867	6259522	
<i>Eucalyptus marginata</i>	>50	5	340865	6259520	
<i>Eucalyptus marginata</i>	>50	5	340867	6259517	
<i>Eucalyptus marginata</i>	>50	5	340889	6259537	
<i>Eucalyptus marginata</i>	>50	5	340890	6259539	
<i>Eucalyptus marginata</i>	>50	5	340895	6259541	
<i>Eucalyptus marginata</i>	>50	5	340900	6259547	
<i>Eucalyptus marginata</i>	>50	5	340917	6259551	
<i>Eucalyptus marginata</i>	>50	5	340922	6259551	
<i>Eucalyptus marginata</i>	>50	5	340924	6259551	
<i>Eucalyptus marginata</i>	>50	5	340935	6259547	
<i>Eucalyptus marginata</i>	>50	5	340937	6259543	
<i>Eucalyptus marginata</i>	>50	5	340950	6259538	
<i>Eucalyptus marginata</i>	>50	5	340956	6259517	
<i>Eucalyptus marginata</i>	>50	5	340950	6259508	
<i>Eucalyptus marginata</i>	>50	5	340942	6259510	
<i>Eucalyptus marginata</i>	>50	5	340936	6259499	
<i>Eucalyptus marginata</i>	>50	5	340917	6259503	
<i>Eucalyptus marginata</i>	>50	5	340903	6259505	
<i>Eucalyptus marginata</i>	>50	5	340876	6259493	
<i>Eucalyptus marginata</i>	>50	5	340873	6259492	
<i>Eucalyptus marginata</i>	>50	5	340863	6259494	
<i>Eucalyptus marginata</i>	>50	5	340851	6259483	
<i>Eucalyptus marginata</i>	>50	5	340844	6259484	
<i>Eucalyptus marginata</i>	>50	5	340843	6259484	
<i>Eucalyptus marginata</i>	>50	5	340806	6259468	
<i>Eucalyptus marginata</i>	>50	5	340800	6259466	
<i>Eucalyptus marginata</i>	>50	5	340803	6259462	
<i>Eucalyptus marginata</i>	>50	5	340805	6259458	
<i>Eucalyptus marginata</i>	>50	5	340791	6259473	
<i>Eucalyptus marginata</i>	>50	5	340781	6259476	
<i>Eucalyptus marginata</i>	>50	5	340782	6259489	
<i>Eucalyptus marginata</i>	>50	5	340786	6259490	
<i>Eucalyptus marginata</i>	>50	5	340782	6259496	
<i>Eucalyptus marginata</i>	>50	5	340780	6259461	
<i>Eucalyptus marginata</i>	>50	5	340789	6259446	
<i>Eucalyptus marginata</i>	>50	5	340792	6259430	
<i>Eucalyptus marginata</i>	>50	5	340789	6259427	
<i>Eucalyptus marginata</i>	>50	5	340790	6259426	
<i>Eucalyptus marginata</i>	>50	5	340802	6259418	Dead
<i>Eucalyptus marginata</i>	>50	5	340795	6259414	
<i>Eucalyptus marginata</i>	>50	5	340836	6259448	
<i>Eucalyptus marginata</i>	>50	5	340842	6259453	
<i>Eucalyptus marginata</i>	>50	5	340861	6259474	
<i>Eucalyptus marginata</i>	>50	5	340870	6259487	
<i>Eucalyptus marginata</i>	>50	5	340896	6259501	
<i>Eucalyptus marginata</i>	>50	5	340909	6259498	
<i>Eucalyptus marginata</i>	>50	5	340933	6259495	
<i>Eucalyptus marginata</i>	>50	5	340942	6259488	
<i>Eucalyptus marginata</i>	>50	5	340944	6259490	
<i>Eucalyptus marginata</i>	>50	5	340953	6259471	
<i>Eucalyptus marginata</i>	>50	5	340929	6259463	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340911	6259467	
<i>Eucalyptus marginata</i>	>50	5	340836	6259390	
<i>Eucalyptus marginata</i>	>50	5	340839	6259404	
<i>Eucalyptus marginata</i>	>50	5	340840	6259410	
<i>Eucalyptus marginata</i>	>50	5	340839	6259413	
<i>Eucalyptus marginata</i>	>50	5	340809	6259397	
<i>Eucalyptus marginata</i>	>50	5	340808	6259397	
<i>Eucalyptus marginata</i>	>50	5	340795	6259391	
<i>Eucalyptus marginata</i>	>50	5	340800	6259363	
<i>Eucalyptus marginata</i>	>50	5	340813	6259354	
<i>Eucalyptus marginata</i>	>50	5	340827	6259356	
<i>Eucalyptus marginata</i>	>50	5	340830	6259357	
<i>Eucalyptus marginata</i>	>50	5	340831	6259356	
<i>Eucalyptus marginata</i>	>50	5	340865	6259370	
<i>Eucalyptus marginata</i>	>50	5	340878	6259374	
<i>Eucalyptus marginata</i>	>50	5	340880	6259373	
<i>Eucalyptus marginata</i>	>50	5	340885	6259378	Dead
<i>Eucalyptus marginata</i>	>50	5	340889	6259384	
<i>Eucalyptus marginata</i>	>50	5	340911	6259415	
<i>Eucalyptus marginata</i>	>50	5	340921	6259420	
<i>Eucalyptus marginata</i>	>50	5	340933	6259421	
<i>Eucalyptus marginata</i>	>50	5	340939	6259426	
<i>Eucalyptus marginata</i>	>50	5	340944	6259425	
<i>Eucalyptus marginata</i>	>50	5	340947	6259432	
<i>Eucalyptus marginata</i>	>50	5	340953	6259433	
<i>Eucalyptus marginata</i>	>50	5	340926	6259391	Dead
<i>Eucalyptus marginata</i>	>50	5	340928	6259390	
<i>Eucalyptus marginata</i>	>50	5	340928	6259385	
<i>Eucalyptus marginata</i>	>50	5	340909	6259382	
<i>Eucalyptus marginata</i>	>50	5	340907	6259374	
<i>Eucalyptus marginata</i>	>50	5	340894	6259358	
<i>Eucalyptus marginata</i>	>50	5	340874	6259350	
<i>Eucalyptus marginata</i>	>50	5	340874	6259346	
<i>Eucalyptus marginata</i>	>50	5	340849	6259325	
<i>Eucalyptus marginata</i>	>50	5	340848	6259326	
<i>Eucalyptus marginata</i>	>50	5	340835	6259321	
<i>Eucalyptus marginata</i>	>50	5	340811	6259321	
<i>Eucalyptus marginata</i>	>50	5	340808	6259329	
<i>Eucalyptus marginata</i>	>50	5	340806	6259341	
<i>Eucalyptus marginata</i>	>50	5	340796	6259342	
<i>Eucalyptus marginata</i>	>50	5	340794	6259340	
<i>Eucalyptus marginata</i>	>50	5	340793	6259324	
<i>Eucalyptus marginata</i>	>50	5	340788	6259319	
<i>Eucalyptus marginata</i>	>50	5	340800	6259308	
<i>Eucalyptus marginata</i>	>50	5	340801	6259303	
<i>Eucalyptus marginata</i>	>50	5	340814	6259303	
<i>Eucalyptus marginata</i>	>50	5	340817	6259302	
<i>Eucalyptus marginata</i>	>50	5	340834	6259287	
<i>Eucalyptus marginata</i>	>50	5	340839	6259285	
<i>Eucalyptus marginata</i>	>50	5	340852	6259284	
<i>Eucalyptus marginata</i>	>50	5	340857	6259298	
<i>Eucalyptus marginata</i>	>50	5	340885	6259314	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340892	6259324	
<i>Eucalyptus marginata</i>	>50	5	340908	6259336	
<i>Eucalyptus marginata</i>	>50	5	340921	6259363	
<i>Eucalyptus marginata</i>	>50	5	340931	6259354	
<i>Eucalyptus marginata</i>	>50	5	340933	6259354	
<i>Eucalyptus marginata</i>	>50	5	340938	6259356	
<i>Eucalyptus marginata</i>	>50	5	340960	6259362	
<i>Eucalyptus marginata</i>	>50	5	340972	6259349	
<i>Eucalyptus marginata</i>	>50	5	340952	6259333	
<i>Eucalyptus marginata</i>	>50	5	340936	6259323	
<i>Eucalyptus marginata</i>	>50	5	340940	6259310	
<i>Eucalyptus marginata</i>	>50	5	340898	6259300	
<i>Eucalyptus marginata</i>	>50	5	340889	6259296	
<i>Eucalyptus marginata</i>	>50	5	340844	6259265	
<i>Eucalyptus marginata</i>	>50	5	340845	6259265	
<i>Eucalyptus marginata</i>	>50	5	340840	6259268	
<i>Eucalyptus marginata</i>	>50	5	340823	6259255	
<i>Eucalyptus marginata</i>	>50	5	340833	6259244	
<i>Eucalyptus marginata</i>	>50	5	340864	6259248	
<i>Eucalyptus marginata</i>	>50	5	340873	6259245	
<i>Eucalyptus marginata</i>	>50	5	340897	6259272	
<i>Eucalyptus marginata</i>	>50	5	340938	6259305	
<i>Eucalyptus marginata</i>	>50	5	340934	6259302	
<i>Eucalyptus marginata</i>	>50	5	340931	6259299	
<i>Eucalyptus marginata</i>	>50	5	340940	6259292	
<i>Eucalyptus marginata</i>	>50	5	340942	6259289	
<i>Eucalyptus marginata</i>	>50	5	340953	6259304	
<i>Eucalyptus marginata</i>	>50	5	340967	6259322	
<i>Eucalyptus marginata</i>	>50	5	340973	6259315	
<i>Eucalyptus marginata</i>	>50	5	340955	6259277	
<i>Eucalyptus marginata</i>	>50	5	340952	6259258	
<i>Eucalyptus marginata</i>	>50	5	340935	6259241	
<i>Eucalyptus marginata</i>	>50	5	340920	6259213	
<i>Eucalyptus marginata</i>	>50	5	340915	6259217	
<i>Eucalyptus marginata</i>	>50	5	340904	6259203	
<i>Eucalyptus marginata</i>	>50	5	340904	6259203	
<i>Eucalyptus marginata</i>	>50	5	340893	6259207	
<i>Eucalyptus marginata</i>	>50	5	340883	6259211	
<i>Eucalyptus marginata</i>	>50	5	340873	6259205	
<i>Eucalyptus marginata</i>	>50	5	340878	6259166	
<i>Eucalyptus marginata</i>	>50	5	340906	6259181	
<i>Eucalyptus marginata</i>	>50	5	340930	6259198	
<i>Eucalyptus marginata</i>	>50	5	340962	6259187	
<i>Eucalyptus marginata</i>	>50	5	340959	6259183	
<i>Eucalyptus marginata</i>	>50	5	340938	6259172	
<i>Eucalyptus marginata</i>	>50	5	340926	6259168	
<i>Eucalyptus marginata</i>	>50	5	340917	6259161	
<i>Eucalyptus marginata</i>	>50	5	340916	6259148	
<i>Eucalyptus marginata</i>	>50	5	340891	6259147	
<i>Eucalyptus marginata</i>	>50	5	340936	6259143	
<i>Eucalyptus marginata</i>	>50	5	340964	6259155	
<i>Eucalyptus marginata</i>	>50	5	340960	6259152	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340950	6259155	
<i>Eucalyptus marginata</i>	>50	5	340956	6259167	
<i>Eucalyptus marginata</i>	>50	5	340483	6259634	
<i>Eucalyptus marginata</i>	>50	5	340485	6259642	
<i>Eucalyptus marginata</i>	>50	5	340489	6259640	
<i>Eucalyptus marginata</i>	>50	5	340503	6259631	
<i>Eucalyptus marginata</i>	>50	5	340514	6259639	
<i>Eucalyptus marginata</i>	>50	5	340522	6259635	
<i>Eucalyptus marginata</i>	>50	5	340519	6259626	
<i>Eucalyptus marginata</i>	>50	5	340533	6259628	
<i>Eucalyptus marginata</i>	>50	5	340536	6259621	
<i>Eucalyptus marginata</i>	>50	5	340540	6259609	
<i>Eucalyptus marginata</i>	>50	5	340546	6259604	
<i>Eucalyptus marginata</i>	>50	5	340556	6259615	
<i>Eucalyptus marginata</i>	>50	5	340570	6259602	
<i>Eucalyptus marginata</i>	>50	5	340570	6259601	
<i>Eucalyptus marginata</i>	>50	5	340565	6259581	
<i>Eucalyptus marginata</i>	>50	5	340566	6259574	
<i>Eucalyptus marginata</i>	>50	5	340584	6259556	
<i>Eucalyptus marginata</i>	>50	5	340575	6259553	
<i>Eucalyptus marginata</i>	>50	5	340578	6259516	
<i>Eucalyptus marginata</i>	>50	5	340581	6259514	
<i>Eucalyptus marginata</i>	>50	5	340569	6259499	
<i>Eucalyptus marginata</i>	>50	5	340575	6259476	
<i>Eucalyptus marginata</i>	>50	5	340583	6259462	
<i>Eucalyptus marginata</i>	>50	5	340580	6259456	
<i>Eucalyptus marginata</i>	>50	5	340585	6259450	
<i>Eucalyptus marginata</i>	>50	5	340589	6259446	Dead
<i>Eucalyptus marginata</i>	>50	5	340587	6259434	
<i>Eucalyptus marginata</i>	>50	5	340597	6259434	
<i>Eucalyptus marginata</i>	>50	5	340619	6259430	
<i>Eucalyptus marginata</i>	>50	5	340628	6259404	
<i>Eucalyptus marginata</i>	>50	5	340619	6259384	
<i>Eucalyptus marginata</i>	>50	5	340630	6259368	
<i>Eucalyptus marginata</i>	>50	5	340636	6259367	
<i>Eucalyptus marginata</i>	>50	5	340636	6259369	
<i>Eucalyptus marginata</i>	>50	5	340622	6259334	
<i>Eucalyptus marginata</i>	>50	5	340621	6259321	
<i>Eucalyptus marginata</i>	>50	5	340629	6259295	
<i>Eucalyptus marginata</i>	>50	5	340633	6259292	
<i>Eucalyptus marginata</i>	>50	5	340626	6259284	
<i>Eucalyptus marginata</i>	>50	5	340638	6259271	
<i>Eucalyptus marginata</i>	>50	5	340647	6259266	
<i>Eucalyptus marginata</i>	>50	5	340657	6259255	
<i>Eucalyptus marginata</i>	>50	5	340661	6259243	
<i>Eucalyptus marginata</i>	>50	5	340659	6259240	
<i>Eucalyptus marginata</i>	>50	5	340668	6259223	
<i>Eucalyptus marginata</i>	>50	5	340661	6259221	
<i>Eucalyptus marginata</i>	>50	5	340661	6259203	
<i>Eucalyptus marginata</i>	>50	5	340670	6259209	
<i>Eucalyptus marginata</i>	>50	5	340674	6259194	
<i>Eucalyptus marginata</i>	>50	5	340683	6259175	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340687	6259175	
<i>Eucalyptus marginata</i>	>50	5	340686	6259167	
<i>Eucalyptus marginata</i>	>50	5	340684	6259148	
<i>Eucalyptus marginata</i>	>50	5	340677	6259149	
<i>Eucalyptus marginata</i>	>50	5	340710	6259165	
<i>Eucalyptus marginata</i>	>50	5	340711	6259171	
<i>Eucalyptus marginata</i>	>50	5	340716	6259204	
<i>Eucalyptus marginata</i>	>50	5	340722	6259211	
<i>Eucalyptus marginata</i>	>50	5	340715	6259216	
<i>Eucalyptus marginata</i>	>50	5	340697	6259226	
<i>Eucalyptus marginata</i>	>50	5	340694	6259238	
<i>Eucalyptus marginata</i>	>50	5	340690	6259241	
<i>Eucalyptus marginata</i>	>50	5	340680	6259244	
<i>Eucalyptus marginata</i>	>50	5	340681	6259257	
<i>Eucalyptus marginata</i>	>50	5	340665	6259272	
<i>Eucalyptus marginata</i>	>50	5	340658	6259272	
<i>Eucalyptus marginata</i>	>50	5	340660	6259295	
<i>Eucalyptus marginata</i>	>50	5	340647	6259331	
<i>Eucalyptus marginata</i>	>50	5	340648	6259340	
<i>Eucalyptus marginata</i>	>50	5	340651	6259363	
<i>Eucalyptus marginata</i>	>50	5	340655	6259366	
<i>Eucalyptus marginata</i>	>50	5	340664	6259371	
<i>Eucalyptus marginata</i>	>50	5	340667	6259381	
<i>Eucalyptus marginata</i>	>50	5	340661	6259380	
<i>Eucalyptus marginata</i>	>50	5	340644	6259382	
<i>Eucalyptus marginata</i>	>50	5	340655	6259403	
<i>Eucalyptus marginata</i>	>50	5	340642	6259410	
<i>Eucalyptus marginata</i>	>50	5	340628	6259418	
<i>Eucalyptus marginata</i>	>50	5	340612	6259447	
<i>Eucalyptus marginata</i>	>50	5	340607	6259453	
<i>Eucalyptus marginata</i>	>50	5	340603	6259459	
<i>Eucalyptus marginata</i>	>50	5	340600	6259467	
<i>Eucalyptus marginata</i>	>50	5	340598	6259506	
<i>Eucalyptus marginata</i>	>50	5	340598	6259515	
<i>Eucalyptus marginata</i>	>50	5	340603	6259527	
<i>Eucalyptus marginata</i>	>50	5	340610	6259533	
<i>Eucalyptus marginata</i>	>50	5	340595	6259543	
<i>Eucalyptus marginata</i>	>50	5	340603	6259553	
<i>Eucalyptus marginata</i>	>50	5	340602	6259554	
<i>Eucalyptus marginata</i>	>50	5	340603	6259574	
<i>Eucalyptus marginata</i>	>50	5	340567	6259626	
<i>Eucalyptus marginata</i>	>50	5	340562	6259636	
<i>Eucalyptus marginata</i>	>50	5	340584	6259637	
<i>Eucalyptus marginata</i>	>50	5	340604	6259636	
<i>Eucalyptus marginata</i>	>50	5	340610	6259612	
<i>Eucalyptus marginata</i>	>50	5	340646	6259536	
<i>Eucalyptus marginata</i>	>50	5	340661	6259511	
<i>Eucalyptus marginata</i>	>50	5	340663	6259489	
<i>Eucalyptus marginata</i>	>50	5	340661	6259485	Dead
<i>Eucalyptus marginata</i>	>50	5	340649	6259474	
<i>Eucalyptus marginata</i>	>50	5	340648	6259473	
<i>Eucalyptus marginata</i>	>50	5	340650	6259458	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340650	6259449	
<i>Eucalyptus marginata</i>	>50	5	340651	6259448	
<i>Eucalyptus marginata</i>	>50	5	340640	6259451	
<i>Eucalyptus marginata</i>	>50	5	340634	6259462	
<i>Eucalyptus marginata</i>	>50	5	340670	6259421	
<i>Eucalyptus marginata</i>	>50	5	340662	6259413	
<i>Eucalyptus marginata</i>	>50	5	340666	6259401	
<i>Eucalyptus marginata</i>	>50	5	340672	6259395	
<i>Eucalyptus marginata</i>	>50	5	340682	6259397	
<i>Eucalyptus marginata</i>	>50	5	340686	6259382	
<i>Eucalyptus marginata</i>	>50	5	340685	6259368	
<i>Eucalyptus marginata</i>	>50	5	340697	6259351	
<i>Eucalyptus marginata</i>	>50	5	340701	6259357	
<i>Eucalyptus marginata</i>	>50	5	340701	6259357	
<i>Eucalyptus marginata</i>	>50	5	340697	6259345	
<i>Eucalyptus marginata</i>	>50	5	340685	6259340	
<i>Eucalyptus marginata</i>	>50	5	340679	6259331	
<i>Eucalyptus marginata</i>	>50	5	340676	6259326	
<i>Eucalyptus marginata</i>	>50	5	340687	6259314	
<i>Eucalyptus marginata</i>	>50	5	340691	6259318	
<i>Eucalyptus marginata</i>	>50	5	340693	6259316	
<i>Eucalyptus marginata</i>	>50	5	340697	6259314	
<i>Eucalyptus marginata</i>	>50	5	340707	6259324	
<i>Eucalyptus marginata</i>	>50	5	340715	6259302	
<i>Eucalyptus marginata</i>	>50	5	340704	6259291	
<i>Eucalyptus marginata</i>	>50	5	340700	6259288	
<i>Eucalyptus marginata</i>	>50	5	340693	6259293	
<i>Eucalyptus marginata</i>	>50	5	340689	6259290	
<i>Eucalyptus marginata</i>	>50	5	340696	6259282	
<i>Eucalyptus marginata</i>	>50	5	340698	6259256	
<i>Eucalyptus marginata</i>	>50	5	340709	6259240	
<i>Eucalyptus marginata</i>	>50	5	340710	6259240	
<i>Eucalyptus marginata</i>	>50	5	340714	6259246	
<i>Eucalyptus marginata</i>	>50	5	340721	6259236	
<i>Eucalyptus marginata</i>	>50	5	340738	6259234	
<i>Eucalyptus marginata</i>	>50	5	340745	6259223	
<i>Eucalyptus marginata</i>	>50	5	340746	6259222	
<i>Eucalyptus marginata</i>	>50	5	340748	6259199	
<i>Eucalyptus marginata</i>	>50	5	340748	6259192	
<i>Eucalyptus marginata</i>	>50	5	340746	6259180	
<i>Eucalyptus marginata</i>	>50	5	340757	6259155	
<i>Eucalyptus marginata</i>	>50	5	340797	6259130	
<i>Eucalyptus marginata</i>	>50	5	340793	6259160	
<i>Eucalyptus marginata</i>	>50	5	340775	6259175	
<i>Eucalyptus marginata</i>	>50	5	340751	6259192	
<i>Eucalyptus marginata</i>	>50	5	340749	6259200	
<i>Eucalyptus marginata</i>	>50	5	340749	6259202	
<i>Eucalyptus marginata</i>	>50	5	340762	6259207	
<i>Eucalyptus marginata</i>	>50	5	340763	6259209	
<i>Eucalyptus marginata</i>	>50	5	340761	6259208	
<i>Eucalyptus marginata</i>	>50	5	340772	6259220	
<i>Eucalyptus marginata</i>	>50	5	340773	6259220	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340779	6259225	
<i>Eucalyptus marginata</i>	>50	5	340770	6259242	
<i>Eucalyptus marginata</i>	>50	5	340752	6259240	
<i>Eucalyptus marginata</i>	>50	5	340740	6259249	Dead
<i>Eucalyptus marginata</i>	>50	5	340741	6259253	
<i>Eucalyptus marginata</i>	>50	5	340732	6259256	
<i>Eucalyptus marginata</i>	>50	5	340731	6259253	Dead
<i>Eucalyptus marginata</i>	>50	5	340722	6259263	
<i>Eucalyptus marginata</i>	>50	5	340730	6259266	
<i>Eucalyptus marginata</i>	>50	5	340732	6259269	
<i>Eucalyptus marginata</i>	>50	5	340732	6259274	
<i>Eucalyptus marginata</i>	>50	5	340722	6259274	
<i>Eucalyptus marginata</i>	>50	5	340714	6259280	
<i>Eucalyptus marginata</i>	>50	5	340724	6259295	
<i>Eucalyptus marginata</i>	>50	5	340740	6259291	
<i>Eucalyptus marginata</i>	>50	5	340730	6259313	
<i>Eucalyptus marginata</i>	>50	5	340723	6259318	
<i>Eucalyptus marginata</i>	>50	5	340710	6259348	
<i>Eucalyptus marginata</i>	>50	5	340717	6259351	
<i>Eucalyptus marginata</i>	>50	5	340723	6259361	
<i>Eucalyptus marginata</i>	>50	5	340709	6259376	
<i>Eucalyptus marginata</i>	>50	5	340704	6259378	
<i>Eucalyptus marginata</i>	>50	5	340691	6259380	
<i>Eucalyptus marginata</i>	>50	5	340687	6259393	
<i>Eucalyptus marginata</i>	>50	5	340674	6259417	
<i>Eucalyptus marginata</i>	>50	5	340663	6259452	
<i>Eucalyptus marginata</i>	>50	5	340649	6259468	
<i>Eucalyptus marginata</i>	>50	5	340661	6259481	
<i>Eucalyptus marginata</i>	>50	5	340678	6259497	
<i>Eucalyptus marginata</i>	>50	5	340664	6259509	
<i>Eucalyptus marginata</i>	>50	5	340669	6259531	
<i>Eucalyptus marginata</i>	>50	5	340650	6259559	
<i>Eucalyptus marginata</i>	>50	5	340643	6259575	
<i>Eucalyptus marginata</i>	>50	5	340610	6259606	
<i>Eucalyptus marginata</i>	>50	5	340626	6259631	
<i>Eucalyptus marginata</i>	>50	5	340636	6259630	
<i>Eucalyptus marginata</i>	>50	5	340646	6259609	
<i>Eucalyptus marginata</i>	>50	5	340638	6259600	
<i>Eucalyptus marginata</i>	>50	5	340638	6259600	
<i>Eucalyptus marginata</i>	>50	5	340659	6259567	
<i>Eucalyptus marginata</i>	>50	5	340660	6259568	
<i>Eucalyptus marginata</i>	>50	5	340676	6259557	Dead
<i>Eucalyptus marginata</i>	>50	5	340693	6259555	
<i>Eucalyptus marginata</i>	>50	5	340726	6259518	
<i>Eucalyptus marginata</i>	>50	5	340726	6259504	
<i>Eucalyptus marginata</i>	>50	5	340734	6259505	
<i>Eucalyptus marginata</i>	>50	5	340737	6259500	
<i>Eucalyptus marginata</i>	>50	5	340739	6259478	
<i>Eucalyptus marginata</i>	>50	5	340752	6259467	
<i>Eucalyptus marginata</i>	>50	5	340758	6259463	
<i>Eucalyptus marginata</i>	>50	5	340765	6259449	
<i>Eucalyptus marginata</i>	>50	5	340761	6259442	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340751	6259443	
<i>Eucalyptus marginata</i>	>50	5	340728	6259423	
<i>Eucalyptus marginata</i>	>50	5	340725	6259419	
<i>Eucalyptus marginata</i>	>50	5	340722	6259416	
<i>Eucalyptus marginata</i>	>50	5	340717	6259413	
<i>Eucalyptus marginata</i>	>50	5	340682	6259418	
<i>Eucalyptus marginata</i>	>50	5	340676	6259476	
<i>Eucalyptus marginata</i>	>50	5	340681	6259482	
<i>Eucalyptus marginata</i>	>50	5	340682	6259498	
<i>Eucalyptus marginata</i>	>50	5	340689	6259525	
<i>Eucalyptus marginata</i>	>50	5	340694	6259529	
<i>Eucalyptus marginata</i>	>50	5	340715	6259502	
<i>Eucalyptus marginata</i>	>50	5	340726	6259502	
<i>Eucalyptus marginata</i>	>50	5	340720	6259433	
<i>Eucalyptus marginata</i>	>50	5	340717	6259434	
<i>Eucalyptus marginata</i>	>50	5	340715	6259431	
<i>Eucalyptus marginata</i>	>50	5	340702	6259433	
<i>Eucalyptus marginata</i>	>50	5	340693	6259434	
<i>Eucalyptus marginata</i>	>50	5	340685	6259483	
<i>Eucalyptus marginata</i>	>50	5	340698	6259482	
<i>Eucalyptus marginata</i>	>50	5	340698	6259479	
<i>Eucalyptus marginata</i>	>50	5	340709	6259489	
<i>Eucalyptus marginata</i>	>50	5	340714	6259494	Dead
<i>Eucalyptus marginata</i>	>50	5	340725	6259481	
<i>Eucalyptus marginata</i>	>50	5	340753	6259434	
<i>Eucalyptus marginata</i>	>50	5	340748	6259422	
<i>Eucalyptus marginata</i>	>50	5	340742	6259420	
<i>Eucalyptus marginata</i>	>50	5	340753	6259410	
<i>Eucalyptus marginata</i>	>50	5	340767	6259405	
<i>Eucalyptus marginata</i>	>50	5	340770	6259390	
<i>Eucalyptus marginata</i>	>50	5	340769	6259380	
<i>Eucalyptus marginata</i>	>50	5	340756	6259373	
<i>Eucalyptus marginata</i>	>50	5	340747	6259368	
<i>Eucalyptus marginata</i>	>50	5	340741	6259350	
<i>Eucalyptus marginata</i>	>50	5	340742	6259344	
<i>Eucalyptus marginata</i>	>50	5	340752	6259326	
<i>Eucalyptus marginata</i>	>50	5	340751	6259308	
<i>Eucalyptus marginata</i>	>50	5	340752	6259298	
<i>Eucalyptus marginata</i>	>50	5	340752	6259284	
<i>Eucalyptus marginata</i>	>50	5	340772	6259271	
<i>Eucalyptus marginata</i>	>50	5	340787	6259270	
<i>Eucalyptus marginata</i>	>50	5	340789	6259266	
<i>Eucalyptus marginata</i>	>50	5	340796	6259257	
<i>Eucalyptus marginata</i>	>50	5	340797	6259251	
<i>Eucalyptus marginata</i>	>50	5	340799	6259247	
<i>Eucalyptus marginata</i>	>50	5	340811	6259239	
<i>Eucalyptus marginata</i>	>50	5	340819	6259243	
<i>Eucalyptus marginata</i>	>50	5	340825	6259221	
<i>Eucalyptus marginata</i>	>50	5	340816	6259206	
<i>Eucalyptus marginata</i>	>50	5	340813	6259204	
<i>Eucalyptus marginata</i>	>50	5	340804	6259201	
<i>Eucalyptus marginata</i>	>50	5	340802	6259203	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340801	6259196	
<i>Eucalyptus marginata</i>	>50	5	340806	6259184	
<i>Eucalyptus marginata</i>	>50	5	340810	6259177	
<i>Eucalyptus marginata</i>	>50	5	340835	6259176	
<i>Eucalyptus marginata</i>	>50	5	340875	6259142	
<i>Eucalyptus marginata</i>	>50	5	340845	6259183	
<i>Eucalyptus marginata</i>	>50	5	340839	6259178	
<i>Eucalyptus marginata</i>	>50	5	340839	6259193	
<i>Eucalyptus marginata</i>	>50	5	340829	6259210	
<i>Eucalyptus marginata</i>	>50	5	340822	6259240	
<i>Eucalyptus marginata</i>	>50	5	340820	6259249	
<i>Eucalyptus marginata</i>	>50	5	340793	6259267	
<i>Eucalyptus marginata</i>	>50	5	340791	6259272	
<i>Eucalyptus marginata</i>	>50	5	340787	6259278	
<i>Eucalyptus marginata</i>	>50	5	340788	6259311	
<i>Eucalyptus marginata</i>	>50	5	340781	6259320	
<i>Eucalyptus marginata</i>	>50	5	340775	6259325	
<i>Eucalyptus marginata</i>	>50	5	340761	6259333	
<i>Eucalyptus marginata</i>	>50	5	340771	6259360	
<i>Eucalyptus marginata</i>	>50	5	340774	6259390	
<i>Eucalyptus marginata</i>	>50	5	340765	6259425	
<i>Eucalyptus marginata</i>	>50	5	340758	6259431	
<i>Eucalyptus marginata</i>	>50	5	340774	6259436	
<i>Eucalyptus marginata</i>	>50	5	340777	6259431	
<i>Eucalyptus marginata</i>	>50	5	340783	6259433	
<i>Eucalyptus marginata</i>	>50	5	340768	6259461	
<i>Eucalyptus marginata</i>	>50	5	340767	6259461	Dead
<i>Eucalyptus marginata</i>	>50	5	340768	6259470	
<i>Eucalyptus marginata</i>	>50	5	340760	6259477	
<i>Eucalyptus marginata</i>	>50	5	340741	6259501	
<i>Eucalyptus marginata</i>	>50	5	340745	6259513	
<i>Eucalyptus marginata</i>	>50	5	340745	6259520	
<i>Eucalyptus marginata</i>	>50	5	340744	6259531	
<i>Eucalyptus marginata</i>	>50	5	340698	6259556	
<i>Eucalyptus marginata</i>	>50	5	340661	6259594	
<i>Eucalyptus marginata</i>	>50	5	340648	6259608	
<i>Eucalyptus marginata</i>	>50	5	340673	6259623	
<i>Eucalyptus marginata</i>	>50	5	340675	6259606	
<i>Eucalyptus marginata</i>	>50	5	340683	6259609	
<i>Eucalyptus marginata</i>	>50	5	340710	6259589	
<i>Eucalyptus marginata</i>	>50	5	340713	6259584	
<i>Eucalyptus marginata</i>	>50	5	340731	6259545	
<i>Eucalyptus marginata</i>	>50	5	340761	6259566	Dead
<i>Eucalyptus marginata</i>	>50	5	340760	6259582	
<i>Eucalyptus marginata</i>	>50	5	340756	6259591	
<i>Eucalyptus marginata</i>	>50	5	340753	6259596	
<i>Eucalyptus marginata</i>	>50	5	340721	6259620	
<i>Eucalyptus marginata</i>	>50	5	340720	6259626	
<i>Eucalyptus marginata</i>	>50	5	340731	6259631	
<i>Eucalyptus marginata</i>	>50	5	340732	6259627	
<i>Eucalyptus marginata</i>	>50	5	340736	6259639	
<i>Eucalyptus marginata</i>	>50	5	340704	6259642	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340707	6259639	
<i>Eucalyptus marginata</i>	>50	5	340707	6259637	
<i>Eucalyptus marginata</i>	>50	5	340263	6259639	
<i>Eucalyptus marginata</i>	>50	5	340274	6259629	
<i>Eucalyptus marginata</i>	>50	5	340276	6259634	
<i>Eucalyptus marginata</i>	>50	5	340271	6259642	Dead
<i>Eucalyptus marginata</i>	>50	5	340273	6259612	
<i>Eucalyptus marginata</i>	>50	5	340279	6259606	
<i>Eucalyptus marginata</i>	>50	5	340286	6259602	
<i>Eucalyptus marginata</i>	>50	5	340289	6259589	
<i>Eucalyptus marginata</i>	>50	5	340295	6259597	
<i>Eucalyptus marginata</i>	>50	5	340297	6259588	
<i>Eucalyptus marginata</i>	>50	5	340286	6259585	
<i>Eucalyptus marginata</i>	>50	5	340287	6259582	
<i>Eucalyptus marginata</i>	>50	5	340283	6259579	
<i>Eucalyptus marginata</i>	>50	5	340302	6259553	
<i>Eucalyptus marginata</i>	>50	5	340333	6259536	
<i>Eucalyptus marginata</i>	>50	5	340335	6259543	
<i>Eucalyptus marginata</i>	>50	5	340346	6259521	
<i>Eucalyptus marginata</i>	>50	5	340370	6259515	
<i>Eucalyptus marginata</i>	>50	5	340375	6259512	
<i>Eucalyptus marginata</i>	>50	5	340379	6259498	
<i>Eucalyptus marginata</i>	>50	5	340380	6259496	
<i>Eucalyptus marginata</i>	>50	5	340373	6259467	
<i>Eucalyptus marginata</i>	>50	5	340382	6259463	
<i>Eucalyptus marginata</i>	>50	5	340393	6259443	
<i>Eucalyptus marginata</i>	>50	5	340401	6259430	
<i>Eucalyptus marginata</i>	>50	5	340399	6259429	
<i>Eucalyptus marginata</i>	>50	5	340398	6259426	
<i>Eucalyptus marginata</i>	>50	5	340397	6259388	
<i>Eucalyptus marginata</i>	>50	5	340397	6259386	
<i>Eucalyptus marginata</i>	>50	5	340380	6259370	
<i>Eucalyptus marginata</i>	>50	5	340375	6259359	
<i>Eucalyptus marginata</i>	>50	5	340368	6259357	
<i>Eucalyptus marginata</i>	>50	5	340374	6259349	
<i>Eucalyptus marginata</i>	>50	5	340374	6259344	
<i>Eucalyptus marginata</i>	>50	5	340366	6259337	
<i>Eucalyptus marginata</i>	>50	5	340398	6259273	
<i>Eucalyptus marginata</i>	>50	5	340401	6259275	
<i>Eucalyptus marginata</i>	>50	5	340410	6259270	
<i>Eucalyptus marginata</i>	>50	5	340420	6259244	
<i>Eucalyptus marginata</i>	>50	5	340431	6259245	
<i>Eucalyptus marginata</i>	>50	5	340436	6259243	
<i>Eucalyptus marginata</i>	>50	5	340435	6259217	
<i>Eucalyptus marginata</i>	>50	5	340426	6259211	
<i>Eucalyptus marginata</i>	>50	5	340446	6259203	
<i>Eucalyptus marginata</i>	>50	5	340461	6259181	Dead
<i>Eucalyptus marginata</i>	>50	5	340463	6259177	Dead
<i>Eucalyptus marginata</i>	>50	5	340467	6259161	
<i>Eucalyptus marginata</i>	>50	5	340461	6259156	
<i>Eucalyptus marginata</i>	>50	5	340461	6259153	
<i>Eucalyptus marginata</i>	>50	5	340459	6259146	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340455	6259148	
<i>Eucalyptus marginata</i>	>50	5	340468	6259137	
<i>Eucalyptus marginata</i>	>50	5	340453	6259125	
<i>Eucalyptus marginata</i>	>50	5	340497	6259126	
<i>Eucalyptus marginata</i>	>50	5	340498	6259134	
<i>Eucalyptus marginata</i>	>50	5	340496	6259158	
<i>Eucalyptus marginata</i>	>50	5	340499	6259171	
<i>Eucalyptus marginata</i>	>50	5	340494	6259174	
<i>Eucalyptus marginata</i>	>50	5	340494	6259188	
<i>Eucalyptus marginata</i>	>50	5	340494	6259208	
<i>Eucalyptus marginata</i>	>50	5	340497	6259221	
<i>Eucalyptus marginata</i>	>50	5	340500	6259223	
<i>Eucalyptus marginata</i>	>50	5	340477	6259243	
<i>Eucalyptus marginata</i>	>50	5	340467	6259217	
<i>Eucalyptus marginata</i>	>50	5	340461	6259239	
<i>Eucalyptus marginata</i>	>50	5	340455	6259249	
<i>Eucalyptus marginata</i>	>50	5	340456	6259251	
<i>Eucalyptus marginata</i>	>50	5	340461	6259252	
<i>Eucalyptus marginata</i>	>50	5	340464	6259260	
<i>Eucalyptus marginata</i>	>50	5	340462	6259265	
<i>Eucalyptus marginata</i>	>50	5	340454	6259271	
<i>Eucalyptus marginata</i>	>50	5	340423	6259278	
<i>Eucalyptus marginata</i>	>50	5	340432	6259284	
<i>Eucalyptus marginata</i>	>50	5	340433	6259299	
<i>Eucalyptus marginata</i>	>50	5	340432	6259300	
<i>Eucalyptus marginata</i>	>50	5	340412	6259321	
<i>Eucalyptus marginata</i>	>50	5	340404	6259332	
<i>Eucalyptus marginata</i>	>50	5	340387	6259334	
<i>Eucalyptus marginata</i>	>50	5	340375	6259340	
<i>Eucalyptus marginata</i>	>50	5	340399	6259357	
<i>Eucalyptus marginata</i>	>50	5	340393	6259364	
<i>Eucalyptus marginata</i>	>50	5	340396	6259367	
<i>Eucalyptus marginata</i>	>50	5	340398	6259369	
<i>Eucalyptus marginata</i>	>50	5	340414	6259341	
<i>Eucalyptus marginata</i>	>50	5	340427	6259344	
<i>Eucalyptus marginata</i>	>50	5	340414	6259357	
<i>Eucalyptus marginata</i>	>50	5	340418	6259366	
<i>Eucalyptus marginata</i>	>50	5	340403	6259388	
<i>Eucalyptus marginata</i>	>50	5	340400	6259383	
<i>Eucalyptus marginata</i>	>50	5	340400	6259381	
<i>Eucalyptus marginata</i>	>50	5	340413	6259427	
<i>Eucalyptus marginata</i>	>50	5	340424	6259454	
<i>Eucalyptus marginata</i>	>50	5	340427	6259466	
<i>Eucalyptus marginata</i>	>50	5	340426	6259472	
<i>Eucalyptus marginata</i>	>50	5	340436	6259475	
<i>Eucalyptus marginata</i>	>50	5	340436	6259487	
<i>Eucalyptus marginata</i>	>50	5	340430	6259511	
<i>Eucalyptus marginata</i>	>50	5	340406	6259512	
<i>Eucalyptus marginata</i>	>50	5	340391	6259509	
<i>Eucalyptus marginata</i>	>50	5	340392	6259525	
<i>Eucalyptus marginata</i>	>50	5	340380	6259536	
<i>Eucalyptus marginata</i>	>50	5	340368	6259545	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340366	6259546	
<i>Eucalyptus marginata</i>	>50	5	340358	6259544	
<i>Eucalyptus marginata</i>	>50	5	340352	6259549	
<i>Eucalyptus marginata</i>	>50	5	340346	6259566	
<i>Eucalyptus marginata</i>	>50	5	340348	6259570	
<i>Eucalyptus marginata</i>	>50	5	340344	6259578	
<i>Eucalyptus marginata</i>	>50	5	340345	6259588	
<i>Eucalyptus marginata</i>	>50	5	340331	6259602	
<i>Eucalyptus marginata</i>	>50	5	340314	6259600	
<i>Eucalyptus marginata</i>	>50	5	340318	6259610	
<i>Eucalyptus marginata</i>	>50	5	340305	6259619	
<i>Eucalyptus marginata</i>	>50	5	340340	6259618	
<i>Eucalyptus marginata</i>	>50	5	340370	6259600	
<i>Eucalyptus marginata</i>	>50	5	340375	6259585	
<i>Eucalyptus marginata</i>	>50	5	340380	6259584	
<i>Eucalyptus marginata</i>	>50	5	340373	6259580	
<i>Eucalyptus marginata</i>	>50	5	340365	6259572	
<i>Eucalyptus marginata</i>	>50	5	340380	6259572	Dead
<i>Eucalyptus marginata</i>	>50	5	340378	6259570	
<i>Eucalyptus marginata</i>	>50	5	340384	6259567	
<i>Eucalyptus marginata</i>	>50	5	340386	6259566	
<i>Eucalyptus marginata</i>	>50	5	340378	6259559	
<i>Eucalyptus marginata</i>	>50	5	340375	6259559	
<i>Eucalyptus marginata</i>	>50	5	340380	6259549	
<i>Eucalyptus marginata</i>	>50	5	340392	6259549	
<i>Eucalyptus marginata</i>	>50	5	340395	6259551	
<i>Eucalyptus marginata</i>	>50	5	340396	6259546	
<i>Eucalyptus marginata</i>	>50	5	340407	6259530	
<i>Eucalyptus marginata</i>	>50	5	340425	6259521	
<i>Eucalyptus marginata</i>	>50	5	340456	6259480	
<i>Eucalyptus marginata</i>	>50	5	340470	6259470	
<i>Eucalyptus marginata</i>	>50	5	340463	6259457	
<i>Eucalyptus marginata</i>	>50	5	340467	6259426	
<i>Eucalyptus marginata</i>	>50	5	340454	6259376	
<i>Eucalyptus marginata</i>	>50	5	340446	6259364	
<i>Eucalyptus marginata</i>	>50	5	340459	6259349	
<i>Eucalyptus marginata</i>	>50	5	340449	6259342	
<i>Eucalyptus marginata</i>	>50	5	340455	6259337	
<i>Eucalyptus marginata</i>	>50	5	340471	6259335	
<i>Eucalyptus marginata</i>	>50	5	340474	6259332	
<i>Eucalyptus marginata</i>	>50	5	340466	6259324	
<i>Eucalyptus marginata</i>	>50	5	340461	6259317	
<i>Eucalyptus marginata</i>	>50	5	340477	6259306	
<i>Eucalyptus marginata</i>	>50	5	340471	6259271	
<i>Eucalyptus marginata</i>	>50	5	340484	6259264	
<i>Eucalyptus marginata</i>	>50	5	340495	6259262	
<i>Eucalyptus marginata</i>	>50	5	340498	6259253	
<i>Eucalyptus marginata</i>	>50	5	340504	6259242	
<i>Eucalyptus marginata</i>	>50	5	340507	6259233	
<i>Eucalyptus marginata</i>	>50	5	340519	6259244	
<i>Eucalyptus marginata</i>	>50	5	340519	6259227	
<i>Eucalyptus marginata</i>	>50	5	340527	6259223	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340532	6259217	
<i>Eucalyptus marginata</i>	>50	5	340536	6259215	
<i>Eucalyptus marginata</i>	>50	5	340526	6259210	
<i>Eucalyptus marginata</i>	>50	5	340521	6259213	
<i>Eucalyptus marginata</i>	>50	5	340516	6259215	
<i>Eucalyptus marginata</i>	>50	5	340511	6259205	
<i>Eucalyptus marginata</i>	>50	5	340514	6259197	
<i>Eucalyptus marginata</i>	>50	5	340531	6259198	
<i>Eucalyptus marginata</i>	>50	5	340538	6259190	
<i>Eucalyptus marginata</i>	>50	5	340523	6259177	
<i>Eucalyptus marginata</i>	>50	5	340527	6259173	
<i>Eucalyptus marginata</i>	>50	5	340517	6259165	
<i>Eucalyptus marginata</i>	>50	5	340513	6259159	
<i>Eucalyptus marginata</i>	>50	5	340521	6259151	
<i>Eucalyptus marginata</i>	>50	5	340529	6259142	
<i>Eucalyptus marginata</i>	>50	5	340515	6259141	
<i>Eucalyptus marginata</i>	>50	5	340528	6259133	
<i>Eucalyptus marginata</i>	>50	5	340520	6259132	
<i>Eucalyptus marginata</i>	>50	5	340536	6259123	
<i>Eucalyptus marginata</i>	>50	5	340559	6259133	
<i>Eucalyptus marginata</i>	>50	5	340555	6259149	
<i>Eucalyptus marginata</i>	>50	5	340558	6259155	
<i>Eucalyptus marginata</i>	>50	5	340559	6259159	
<i>Eucalyptus marginata</i>	>50	5	340555	6259166	
<i>Eucalyptus marginata</i>	>50	5	340562	6259174	
<i>Eucalyptus marginata</i>	>50	5	340557	6259192	
<i>Eucalyptus marginata</i>	>50	5	340551	6259200	
<i>Eucalyptus marginata</i>	>50	5	340556	6259211	
<i>Eucalyptus marginata</i>	>50	5	340556	6259213	
<i>Eucalyptus marginata</i>	>50	5	340558	6259215	
<i>Eucalyptus marginata</i>	>50	5	340561	6259219	
<i>Eucalyptus marginata</i>	>50	5	340566	6259227	
<i>Eucalyptus marginata</i>	>50	5	340565	6259243	
<i>Eucalyptus marginata</i>	>50	5	340557	6259254	
<i>Eucalyptus marginata</i>	>50	5	340546	6259251	
<i>Eucalyptus marginata</i>	>50	5	340545	6259249	
<i>Eucalyptus marginata</i>	>50	5	340549	6259264	
<i>Eucalyptus marginata</i>	>50	5	340539	6259264	
<i>Eucalyptus marginata</i>	>50	5	340539	6259266	
<i>Eucalyptus marginata</i>	>50	5	340538	6259270	
<i>Eucalyptus marginata</i>	>50	5	340540	6259276	
<i>Eucalyptus marginata</i>	>50	5	340534	6259283	
<i>Eucalyptus marginata</i>	>50	5	340517	6259291	
<i>Eucalyptus marginata</i>	>50	5	340517	6259293	
<i>Eucalyptus marginata</i>	>50	5	340526	6259294	
<i>Eucalyptus marginata</i>	>50	5	340532	6259306	
<i>Eucalyptus marginata</i>	>50	5	340547	6259308	
<i>Eucalyptus marginata</i>	>50	5	340546	6259311	
<i>Eucalyptus marginata</i>	>50	5	340542	6259317	
<i>Eucalyptus marginata</i>	>50	5	340548	6259321	
<i>Eucalyptus marginata</i>	>50	5	340553	6259325	
<i>Eucalyptus marginata</i>	>50	5	340551	6259332	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340540	6259341	
<i>Eucalyptus marginata</i>	>50	5	340537	6259344	
<i>Eucalyptus marginata</i>	>50	5	340538	6259347	
<i>Eucalyptus marginata</i>	>50	5	340542	6259352	
<i>Eucalyptus marginata</i>	>50	5	340541	6259358	
<i>Eucalyptus marginata</i>	>50	5	340527	6259370	
<i>Eucalyptus marginata</i>	>50	5	340509	6259364	Dead
<i>Eucalyptus marginata</i>	>50	5	340509	6259361	
<i>Eucalyptus marginata</i>	>50	5	340500	6259351	
<i>Eucalyptus marginata</i>	>50	5	340498	6259348	
<i>Eucalyptus marginata</i>	>50	5	340503	6259343	
<i>Eucalyptus marginata</i>	>50	5	340494	6259343	
<i>Eucalyptus marginata</i>	>50	5	340489	6259340	
<i>Eucalyptus marginata</i>	>50	5	340486	6259365	
<i>Eucalyptus marginata</i>	>50	5	340480	6259367	
<i>Eucalyptus marginata</i>	>50	5	340467	6259372	
<i>Eucalyptus marginata</i>	>50	5	340462	6259373	
<i>Eucalyptus marginata</i>	>50	5	340473	6259404	
<i>Eucalyptus marginata</i>	>50	5	340481	6259407	
<i>Eucalyptus marginata</i>	>50	5	340486	6259412	
<i>Eucalyptus marginata</i>	>50	5	340496	6259414	
<i>Eucalyptus marginata</i>	>50	5	340505	6259418	
<i>Eucalyptus marginata</i>	>50	5	340498	6259424	
<i>Eucalyptus marginata</i>	>50	5	340499	6259428	
<i>Eucalyptus marginata</i>	>50	5	340500	6259430	
<i>Eucalyptus marginata</i>	>50	5	340499	6259440	
<i>Eucalyptus marginata</i>	>50	5	340497	6259443	
<i>Eucalyptus marginata</i>	>50	5	340509	6259444	
<i>Eucalyptus marginata</i>	>50	5	340514	6259438	
<i>Eucalyptus marginata</i>	>50	5	340519	6259435	
<i>Eucalyptus marginata</i>	>50	5	340521	6259451	
<i>Eucalyptus marginata</i>	>50	5	340531	6259450	
<i>Eucalyptus marginata</i>	>50	5	340519	6259460	
<i>Eucalyptus marginata</i>	>50	5	340516	6259463	
<i>Eucalyptus marginata</i>	>50	5	340509	6259469	
<i>Eucalyptus marginata</i>	>50	5	340506	6259475	
<i>Eucalyptus marginata</i>	>50	5	340494	6259470	
<i>Eucalyptus marginata</i>	>50	5	340488	6259463	
<i>Eucalyptus marginata</i>	>50	5	340484	6259482	
<i>Eucalyptus marginata</i>	>50	5	340484	6259493	
<i>Eucalyptus marginata</i>	>50	5	340498	6259488	
<i>Eucalyptus marginata</i>	>50	5	340499	6259490	Dead
<i>Eucalyptus marginata</i>	>50	5	340509	6259496	Dead
<i>Eucalyptus marginata</i>	>50	5	340510	6259490	Dead
<i>Eucalyptus marginata</i>	>50	5	340492	6259508	
<i>Eucalyptus marginata</i>	>50	5	340479	6259509	
<i>Eucalyptus marginata</i>	>50	5	340472	6259515	
<i>Eucalyptus marginata</i>	>50	5	340469	6259515	
<i>Eucalyptus marginata</i>	>50	5	340463	6259512	
<i>Eucalyptus marginata</i>	>50	5	340461	6259526	
<i>Eucalyptus marginata</i>	>50	5	340462	6259534	
<i>Eucalyptus marginata</i>	>50	5	340459	6259550	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340452	6259544	
<i>Eucalyptus marginata</i>	>50	5	340442	6259541	
<i>Eucalyptus marginata</i>	>50	5	340443	6259544	
<i>Eucalyptus marginata</i>	>50	5	340436	6259548	
<i>Eucalyptus marginata</i>	>50	5	340422	6259555	
<i>Eucalyptus marginata</i>	>50	5	340430	6259561	
<i>Eucalyptus marginata</i>	>50	5	340440	6259570	
<i>Eucalyptus marginata</i>	>50	5	340436	6259576	
<i>Eucalyptus marginata</i>	>50	5	340425	6259572	
<i>Eucalyptus marginata</i>	>50	5	340422	6259575	
<i>Eucalyptus marginata</i>	>50	5	340420	6259580	
<i>Eucalyptus marginata</i>	>50	5	340411	6259577	
<i>Eucalyptus marginata</i>	>50	5	340407	6259556	
<i>Eucalyptus marginata</i>	>50	5	340409	6259557	
<i>Eucalyptus marginata</i>	>50	5	340390	6259604	
<i>Eucalyptus marginata</i>	>50	5	340383	6259607	
<i>Eucalyptus marginata</i>	>50	5	340380	6259604	
<i>Eucalyptus marginata</i>	>50	5	340383	6259614	
<i>Eucalyptus marginata</i>	>50	5	340376	6259622	
<i>Eucalyptus marginata</i>	>50	5	340376	6259622	
<i>Eucalyptus marginata</i>	>50	5	340379	6259638	
<i>Eucalyptus marginata</i>	>50	5	340393	6259641	Dead
<i>Eucalyptus marginata</i>	>50	5	340393	6259638	
<i>Eucalyptus marginata</i>	>50	5	340397	6259627	
<i>Eucalyptus marginata</i>	>50	5	340402	6259626	
<i>Eucalyptus marginata</i>	>50	5	340404	6259625	
<i>Eucalyptus marginata</i>	>50	5	340408	6259620	
<i>Eucalyptus marginata</i>	>50	5	340412	6259620	
<i>Eucalyptus marginata</i>	>50	5	340417	6259618	
<i>Eucalyptus marginata</i>	>50	5	340414	6259610	
<i>Eucalyptus marginata</i>	>50	5	340417	6259611	
<i>Eucalyptus marginata</i>	>50	5	340425	6259619	
<i>Eucalyptus marginata</i>	>50	5	340419	6259598	
<i>Eucalyptus marginata</i>	>50	5	340419	6259595	
<i>Eucalyptus marginata</i>	>50	5	340430	6259598	
<i>Eucalyptus marginata</i>	>50	5	340430	6259596	
<i>Eucalyptus marginata</i>	>50	5	340437	6259600	
<i>Eucalyptus marginata</i>	>50	5	340439	6259609	
<i>Eucalyptus marginata</i>	>50	5	340439	6259613	
<i>Eucalyptus marginata</i>	>50	5	340439	6259613	
<i>Eucalyptus marginata</i>	>50	5	340455	6259595	
<i>Eucalyptus marginata</i>	>50	5	340466	6259585	
<i>Eucalyptus marginata</i>	>50	5	340463	6259580	
<i>Eucalyptus marginata</i>	>50	5	340462	6259562	
<i>Eucalyptus marginata</i>	>50	5	340473	6259555	
<i>Eucalyptus marginata</i>	>50	5	340475	6259556	
<i>Eucalyptus marginata</i>	>50	5	340482	6259557	Dead
<i>Eucalyptus marginata</i>	>50	5	340482	6259548	
<i>Eucalyptus marginata</i>	>50	5	340474	6259549	
<i>Eucalyptus marginata</i>	>50	5	340507	6259513	
<i>Eucalyptus marginata</i>	>50	5	340516	6259510	
<i>Eucalyptus marginata</i>	>50	5	340521	6259492	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340523	6259486	
<i>Eucalyptus marginata</i>	>50	5	340532	6259492	
<i>Eucalyptus marginata</i>	>50	5	340535	6259493	
<i>Eucalyptus marginata</i>	>50	5	340537	6259483	
<i>Eucalyptus marginata</i>	>50	5	340528	6259474	
<i>Eucalyptus marginata</i>	>50	5	340534	6259471	
<i>Eucalyptus marginata</i>	>50	5	340550	6259463	
<i>Eucalyptus marginata</i>	>50	5	340547	6259463	
<i>Eucalyptus marginata</i>	>50	5	340536	6259428	
<i>Eucalyptus marginata</i>	>50	5	340540	6259422	
<i>Eucalyptus marginata</i>	>50	5	340544	6259421	
<i>Eucalyptus marginata</i>	>50	5	340548	6259425	
<i>Eucalyptus marginata</i>	>50	5	340554	6259421	
<i>Eucalyptus marginata</i>	>50	5	340548	6259414	
<i>Eucalyptus marginata</i>	>50	5	340528	6259410	
<i>Eucalyptus marginata</i>	>50	5	340529	6259408	
<i>Eucalyptus marginata</i>	>50	5	340519	6259398	
<i>Eucalyptus marginata</i>	>50	5	340523	6259390	
<i>Eucalyptus marginata</i>	>50	5	340542	6259390	
<i>Eucalyptus marginata</i>	>50	5	340546	6259392	
<i>Eucalyptus marginata</i>	>50	5	340552	6259392	
<i>Eucalyptus marginata</i>	>50	5	340568	6259385	
<i>Eucalyptus marginata</i>	>50	5	340559	6259372	
<i>Eucalyptus marginata</i>	>50	5	340550	6259355	
<i>Eucalyptus marginata</i>	>50	5	340552	6259338	
<i>Eucalyptus marginata</i>	>50	5	340552	6259337	
<i>Eucalyptus marginata</i>	>50	5	340564	6259329	
<i>Eucalyptus marginata</i>	>50	5	340571	6259327	
<i>Eucalyptus marginata</i>	>50	5	340570	6259322	Dead
<i>Eucalyptus marginata</i>	>50	5	340572	6259318	
<i>Eucalyptus marginata</i>	>50	5	340580	6259295	
<i>Eucalyptus marginata</i>	>50	5	340582	6259293	
<i>Eucalyptus marginata</i>	>50	5	340574	6259290	
<i>Eucalyptus marginata</i>	>50	5	340569	6259285	
<i>Eucalyptus marginata</i>	>50	5	340560	6259281	
<i>Eucalyptus marginata</i>	>50	5	340575	6259269	
<i>Eucalyptus marginata</i>	>50	5	340588	6259253	
<i>Eucalyptus marginata</i>	>50	5	340595	6259246	
<i>Eucalyptus marginata</i>	>50	5	340603	6259238	
<i>Eucalyptus marginata</i>	>50	5	340605	6259230	
<i>Eucalyptus marginata</i>	>50	5	340609	6259221	
<i>Eucalyptus marginata</i>	>50	5	340612	6259213	
<i>Eucalyptus marginata</i>	>50	5	340607	6259210	
<i>Eucalyptus marginata</i>	>50	5	340598	6259208	
<i>Eucalyptus marginata</i>	>50	5	340594	6259203	
<i>Eucalyptus marginata</i>	>50	5	340618	6259187	
<i>Eucalyptus marginata</i>	>50	5	340619	6259186	
<i>Eucalyptus marginata</i>	>50	5	340609	6259177	
<i>Eucalyptus marginata</i>	>50	5	340600	6259184	
<i>Eucalyptus marginata</i>	>50	5	340594	6259174	
<i>Eucalyptus marginata</i>	>50	5	340618	6259160	
<i>Eucalyptus marginata</i>	>50	5	340620	6259159	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340616	6259155	
<i>Eucalyptus marginata</i>	>50	5	340614	6259142	
<i>Eucalyptus marginata</i>	>50	5	340609	6259139	
<i>Eucalyptus marginata</i>	>50	5	340603	6259135	
<i>Eucalyptus marginata</i>	>50	5	340654	6259141	
<i>Eucalyptus marginata</i>	>50	5	340653	6259144	
<i>Eucalyptus marginata</i>	>50	5	340630	6259143	
<i>Eucalyptus marginata</i>	>50	5	340636	6259150	
<i>Eucalyptus marginata</i>	>50	5	340632	6259168	
<i>Eucalyptus marginata</i>	>50	5	340636	6259169	
<i>Eucalyptus marginata</i>	>50	5	340636	6259176	
<i>Eucalyptus marginata</i>	>50	5	340650	6259167	
<i>Eucalyptus marginata</i>	>50	5	340665	6259171	
<i>Eucalyptus marginata</i>	>50	5	340663	6259173	
<i>Eucalyptus marginata</i>	>50	5	340659	6259182	
<i>Eucalyptus marginata</i>	>50	5	340655	6259188	
<i>Eucalyptus marginata</i>	>50	5	340657	6259190	
<i>Eucalyptus marginata</i>	>50	5	340662	6259196	
<i>Eucalyptus marginata</i>	>50	5	340657	6259204	
<i>Eucalyptus marginata</i>	>50	5	340654	6259201	
<i>Eucalyptus marginata</i>	>50	5	340652	6259192	
<i>Eucalyptus marginata</i>	>50	5	340650	6259194	
<i>Eucalyptus marginata</i>	>50	5	340640	6259198	
<i>Eucalyptus marginata</i>	>50	5	340644	6259203	
<i>Eucalyptus marginata</i>	>50	5	340645	6259209	
<i>Eucalyptus marginata</i>	>50	5	340639	6259207	
<i>Eucalyptus marginata</i>	>50	5	340634	6259207	
<i>Eucalyptus marginata</i>	>50	5	340622	6259203	
<i>Eucalyptus marginata</i>	>50	5	340620	6259217	
<i>Eucalyptus marginata</i>	>50	5	340627	6259213	
<i>Eucalyptus marginata</i>	>50	5	340633	6259218	
<i>Eucalyptus marginata</i>	>50	5	340642	6259223	
<i>Eucalyptus marginata</i>	>50	5	340642	6259217	
<i>Eucalyptus marginata</i>	>50	5	340645	6259237	
<i>Eucalyptus marginata</i>	>50	5	340640	6259252	
<i>Eucalyptus marginata</i>	>50	5	340634	6259257	
<i>Eucalyptus marginata</i>	>50	5	340633	6259257	
<i>Eucalyptus marginata</i>	>50	5	340630	6259255	
<i>Eucalyptus marginata</i>	>50	5	340630	6259253	
<i>Eucalyptus marginata</i>	>50	5	340630	6259251	
<i>Eucalyptus marginata</i>	>50	5	340626	6259250	
<i>Eucalyptus marginata</i>	>50	5	340628	6259264	
<i>Eucalyptus marginata</i>	>50	5	340626	6259270	
<i>Eucalyptus marginata</i>	>50	5	340617	6259270	
<i>Eucalyptus marginata</i>	>50	5	340605	6259271	
<i>Eucalyptus marginata</i>	>50	5	340606	6259277	
<i>Eucalyptus marginata</i>	>50	5	340614	6259282	
<i>Eucalyptus marginata</i>	>50	5	340612	6259287	
<i>Eucalyptus marginata</i>	>50	5	340620	6259291	
<i>Eucalyptus marginata</i>	>50	5	340618	6259298	
<i>Eucalyptus marginata</i>	>50	5	340620	6259304	
<i>Eucalyptus marginata</i>	>50	5	340610	6259302	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340601	6259297	
<i>Eucalyptus marginata</i>	>50	5	340596	6259297	
<i>Eucalyptus marginata</i>	>50	5	340599	6259300	
<i>Eucalyptus marginata</i>	>50	5	340592	6259299	
<i>Eucalyptus marginata</i>	>50	5	340594	6259304	
<i>Eucalyptus marginata</i>	>50	5	340596	6259306	
<i>Eucalyptus marginata</i>	>50	5	340598	6259309	
<i>Eucalyptus marginata</i>	>50	5	340607	6259311	
<i>Eucalyptus marginata</i>	>50	5	340600	6259319	
<i>Eucalyptus marginata</i>	>50	5	340597	6259320	
<i>Eucalyptus marginata</i>	>50	5	340591	6259322	
<i>Eucalyptus marginata</i>	>50	5	340577	6259324	
<i>Eucalyptus marginata</i>	>50	5	340574	6259328	
<i>Eucalyptus marginata</i>	>50	5	340585	6259333	Dead
<i>Eucalyptus marginata</i>	>50	5	340581	6259349	
<i>Eucalyptus marginata</i>	>50	5	340575	6259358	
<i>Eucalyptus marginata</i>	>50	5	340576	6259368	
<i>Eucalyptus marginata</i>	>50	5	340594	6259357	
<i>Eucalyptus marginata</i>	>50	5	340600	6259358	
<i>Eucalyptus marginata</i>	>50	5	340598	6259367	
<i>Eucalyptus marginata</i>	>50	5	340604	6259374	Dead
<i>Eucalyptus marginata</i>	>50	5	340602	6259378	Dead
<i>Eucalyptus marginata</i>	>50	5	340601	6259385	
<i>Eucalyptus marginata</i>	>50	5	340595	6259407	
<i>Eucalyptus marginata</i>	>50	5	340594	6259415	
<i>Eucalyptus marginata</i>	>50	5	340590	6259424	
<i>Eucalyptus marginata</i>	>50	5	340584	6259425	
<i>Eucalyptus marginata</i>	>50	5	340581	6259423	
<i>Eucalyptus marginata</i>	>50	5	340570	6259417	
<i>Eucalyptus marginata</i>	>50	5	340567	6259417	
<i>Eucalyptus marginata</i>	>50	5	340568	6259425	
<i>Eucalyptus marginata</i>	>50	5	340573	6259434	
<i>Eucalyptus marginata</i>	>50	5	340568	6259436	
<i>Eucalyptus marginata</i>	>50	5	340565	6259437	
<i>Eucalyptus marginata</i>	>50	5	340563	6259464	Dead
<i>Eucalyptus marginata</i>	>50	5	340558	6259469	
<i>Eucalyptus marginata</i>	>50	5	340571	6259474	
<i>Eucalyptus marginata</i>	>50	5	340566	6259500	
<i>Eucalyptus marginata</i>	>50	5	340559	6259506	
<i>Eucalyptus marginata</i>	>50	5	340558	6259512	
<i>Eucalyptus marginata</i>	>50	5	340553	6259509	
<i>Eucalyptus marginata</i>	>50	5	340546	6259506	
<i>Eucalyptus marginata</i>	>50	5	340537	6259497	
<i>Eucalyptus marginata</i>	>50	5	340532	6259500	
<i>Eucalyptus marginata</i>	>50	5	340534	6259517	
<i>Eucalyptus marginata</i>	>50	5	340544	6259532	
<i>Eucalyptus marginata</i>	>50	5	340542	6259536	
<i>Eucalyptus marginata</i>	>50	5	340542	6259546	
<i>Eucalyptus marginata</i>	>50	5	340556	6259556	Dead
<i>Eucalyptus marginata</i>	>50	5	340560	6259568	
<i>Eucalyptus marginata</i>	>50	5	340560	6259574	
<i>Eucalyptus marginata</i>	>50	5	340550	6259569	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340534	6259561	
<i>Eucalyptus marginata</i>	>50	5	340517	6259554	
<i>Eucalyptus marginata</i>	>50	5	340516	6259547	
<i>Eucalyptus marginata</i>	>50	5	340513	6259540	
<i>Eucalyptus marginata</i>	>50	5	340508	6259543	
<i>Eucalyptus marginata</i>	>50	5	340506	6259550	
<i>Eucalyptus marginata</i>	>50	5	340493	6259571	
<i>Eucalyptus marginata</i>	>50	5	340503	6259577	
<i>Eucalyptus marginata</i>	>50	5	340507	6259575	
<i>Eucalyptus marginata</i>	>50	5	340511	6259570	
<i>Eucalyptus marginata</i>	>50	5	340522	6259578	
<i>Eucalyptus marginata</i>	>50	5	340522	6259587	
<i>Eucalyptus marginata</i>	>50	5	340534	6259590	
<i>Eucalyptus marginata</i>	>50	5	340546	6259597	
<i>Eucalyptus marginata</i>	>50	5	340553	6259609	
<i>Eucalyptus marginata</i>	>50	5	340538	6259603	
<i>Eucalyptus marginata</i>	>50	5	340525	6259599	
<i>Eucalyptus marginata</i>	>50	5	340518	6259602	
<i>Eucalyptus marginata</i>	>50	5	340515	6259601	
<i>Eucalyptus marginata</i>	>50	5	340502	6259592	
<i>Eucalyptus marginata</i>	>50	5	340485	6259584	
<i>Eucalyptus marginata</i>	>50	5	340479	6259589	
<i>Eucalyptus marginata</i>	>50	5	340473	6259594	
<i>Eucalyptus marginata</i>	>50	5	340479	6259606	
<i>Eucalyptus marginata</i>	>50	5	340494	6259606	
<i>Eucalyptus marginata</i>	>50	5	340496	6259606	
<i>Eucalyptus marginata</i>	>50	5	340496	6259613	
<i>Eucalyptus marginata</i>	>50	5	340490	6259614	
<i>Eucalyptus marginata</i>	>50	5	340482	6259624	
<i>Eucalyptus marginata</i>	>50	5	340463	6259626	
<i>Eucalyptus marginata</i>	>50	5	340462	6259626	
<i>Eucalyptus marginata</i>	>50	5	340455	6259630	
<i>Eucalyptus marginata</i>	>50	5	340470	6259632	
<i>Eucalyptus marginata</i>	>50	5	340470	6259638	
<i>Eucalyptus marginata</i>	>50	5	340150	6259614	
<i>Eucalyptus marginata</i>	>50	5	340135	6259597	
<i>Eucalyptus marginata</i>	>50	5	340138	6259622	
<i>Eucalyptus marginata</i>	>50	5	340125	6259619	
<i>Eucalyptus marginata</i>	>50	5	340121	6259620	
<i>Eucalyptus marginata</i>	>50	5	340117	6259610	
<i>Eucalyptus marginata</i>	>50	5	340120	6259604	
<i>Eucalyptus marginata</i>	>50	5	340120	6259602	
<i>Eucalyptus marginata</i>	>50	5	340113	6259599	
<i>Eucalyptus marginata</i>	>50	5	340103	6259604	
<i>Eucalyptus marginata</i>	>50	5	340101	6259593	
<i>Eucalyptus marginata</i>	>50	5	340096	6259592	
<i>Eucalyptus marginata</i>	>50	5	340096	6259587	
<i>Eucalyptus marginata</i>	>50	5	340100	6259582	
<i>Eucalyptus marginata</i>	>50	5	340113	6259575	
<i>Eucalyptus marginata</i>	>50	5	340125	6259576	
<i>Eucalyptus marginata</i>	>50	5	340130	6259585	
<i>Eucalyptus marginata</i>	>50	5	340129	6259588	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340139	6259586	
<i>Eucalyptus marginata</i>	>50	5	340141	6259583	
<i>Eucalyptus marginata</i>	>50	5	340173	6259552	
<i>Eucalyptus marginata</i>	>50	5	340149	6259544	
<i>Eucalyptus marginata</i>	>50	5	340139	6259530	
<i>Eucalyptus marginata</i>	>50	5	340140	6259523	
<i>Eucalyptus marginata</i>	>50	5	340151	6259520	Dead
<i>Eucalyptus marginata</i>	>50	5	340151	6259517	
<i>Eucalyptus marginata</i>	>50	5	340159	6259512	
<i>Eucalyptus marginata</i>	>50	5	340164	6259520	
<i>Eucalyptus marginata</i>	>50	5	340171	6259518	
<i>Eucalyptus marginata</i>	>50	5	340170	6259515	
<i>Eucalyptus marginata</i>	>50	5	340163	6259508	
<i>Eucalyptus marginata</i>	>50	5	340180	6259507	
<i>Eucalyptus marginata</i>	>50	5	340180	6259504	
<i>Eucalyptus marginata</i>	>50	5	340185	6259499	
<i>Eucalyptus marginata</i>	>50	5	340194	6259499	
<i>Eucalyptus marginata</i>	>50	5	340197	6259477	
<i>Eucalyptus marginata</i>	>50	5	340201	6259465	
<i>Eucalyptus marginata</i>	>50	5	340209	6259472	
<i>Eucalyptus marginata</i>	>50	5	340221	6259473	
<i>Eucalyptus marginata</i>	>50	5	340229	6259463	
<i>Eucalyptus marginata</i>	>50	5	340240	6259454	Dead
<i>Eucalyptus marginata</i>	>50	5	340239	6259451	
<i>Eucalyptus marginata</i>	>50	5	340243	6259447	
<i>Eucalyptus marginata</i>	>50	5	340232	6259438	
<i>Eucalyptus marginata</i>	>50	5	340243	6259435	
<i>Eucalyptus marginata</i>	>50	5	340243	6259434	
<i>Eucalyptus marginata</i>	>50	5	340235	6259426	
<i>Eucalyptus marginata</i>	>50	5	340230	6259423	
<i>Eucalyptus marginata</i>	>50	5	340234	6259413	
<i>Eucalyptus marginata</i>	>50	5	340239	6259388	
<i>Eucalyptus marginata</i>	>50	5	340251	6259373	
<i>Eucalyptus marginata</i>	>50	5	340250	6259368	
<i>Eucalyptus marginata</i>	>50	5	340247	6259330	
<i>Eucalyptus marginata</i>	>50	5	340229	6259325	
<i>Eucalyptus marginata</i>	>50	5	340225	6259289	
<i>Eucalyptus marginata</i>	>50	5	340233	6259285	
<i>Eucalyptus marginata</i>	>50	5	340245	6259284	
<i>Eucalyptus marginata</i>	>50	5	340247	6259268	
<i>Eucalyptus marginata</i>	>50	5	340247	6259242	
<i>Eucalyptus marginata</i>	>50	5	340245	6259224	
<i>Eucalyptus marginata</i>	>50	5	340260	6259215	
<i>Eucalyptus marginata</i>	>50	5	340258	6259214	
<i>Eucalyptus marginata</i>	>50	5	340263	6259208	
<i>Eucalyptus marginata</i>	>50	5	340273	6259193	
<i>Eucalyptus marginata</i>	>50	5	340280	6259185	
<i>Eucalyptus marginata</i>	>50	5	340282	6259160	
<i>Eucalyptus marginata</i>	>50	5	340283	6259141	
<i>Eucalyptus marginata</i>	>50	5	340288	6259136	Dead
<i>Eucalyptus marginata</i>	>50	5	340293	6259142	
<i>Eucalyptus marginata</i>	>50	5	340320	6259136	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340327	6259139	
<i>Eucalyptus marginata</i>	>50	5	340321	6259144	
<i>Eucalyptus marginata</i>	>50	5	340326	6259143	
<i>Eucalyptus marginata</i>	>50	5	340325	6259168	
<i>Eucalyptus marginata</i>	>50	5	340330	6259174	
<i>Eucalyptus marginata</i>	>50	5	340334	6259179	
<i>Eucalyptus marginata</i>	>50	5	340328	6259192	
<i>Eucalyptus marginata</i>	>50	5	340331	6259197	
<i>Eucalyptus marginata</i>	>50	5	340320	6259200	
<i>Eucalyptus marginata</i>	>50	5	340319	6259201	
<i>Eucalyptus marginata</i>	>50	5	340309	6259197	
<i>Eucalyptus marginata</i>	>50	5	340305	6259196	
<i>Eucalyptus marginata</i>	>50	5	340301	6259204	
<i>Eucalyptus marginata</i>	>50	5	340299	6259210	
<i>Eucalyptus marginata</i>	>50	5	340291	6259218	
<i>Eucalyptus marginata</i>	>50	5	340291	6259226	
<i>Eucalyptus marginata</i>	>50	5	340297	6259229	
<i>Eucalyptus marginata</i>	>50	5	340291	6259237	
<i>Eucalyptus marginata</i>	>50	5	340295	6259247	
<i>Eucalyptus marginata</i>	>50	5	340298	6259250	
<i>Eucalyptus marginata</i>	>50	5	340287	6259252	
<i>Eucalyptus marginata</i>	>50	5	340282	6259251	
<i>Eucalyptus marginata</i>	>50	5	340278	6259248	
<i>Eucalyptus marginata</i>	>50	5	340285	6259243	
<i>Eucalyptus marginata</i>	>50	5	340271	6259259	
<i>Eucalyptus marginata</i>	>50	5	340278	6259265	
<i>Eucalyptus marginata</i>	>50	5	340276	6259278	
<i>Eucalyptus marginata</i>	>50	5	340270	6259289	Dead
<i>Eucalyptus marginata</i>	>50	5	340258	6259287	
<i>Eucalyptus marginata</i>	>50	5	340266	6259299	
<i>Eucalyptus marginata</i>	>50	5	340268	6259306	
<i>Eucalyptus marginata</i>	>50	5	340267	6259328	
<i>Eucalyptus marginata</i>	>50	5	340275	6259327	
<i>Eucalyptus marginata</i>	>50	5	340276	6259331	
<i>Eucalyptus marginata</i>	>50	5	340278	6259339	
<i>Eucalyptus marginata</i>	>50	5	340274	6259346	
<i>Eucalyptus marginata</i>	>50	5	340279	6259357	
<i>Eucalyptus marginata</i>	>50	5	340276	6259363	
<i>Eucalyptus marginata</i>	>50	5	340268	6259370	
<i>Eucalyptus marginata</i>	>50	5	340271	6259391	
<i>Eucalyptus marginata</i>	>50	5	340258	6259385	
<i>Eucalyptus marginata</i>	>50	5	340264	6259400	
<i>Eucalyptus marginata</i>	>50	5	340266	6259399	
<i>Eucalyptus marginata</i>	>50	5	340264	6259408	
<i>Eucalyptus marginata</i>	>50	5	340262	6259407	
<i>Eucalyptus marginata</i>	>50	5	340250	6259430	
<i>Eucalyptus marginata</i>	>50	5	340253	6259437	
<i>Eucalyptus marginata</i>	>50	5	340266	6259437	
<i>Eucalyptus marginata</i>	>50	5	340248	6259464	
<i>Eucalyptus marginata</i>	>50	5	340247	6259470	
<i>Eucalyptus marginata</i>	>50	5	340240	6259490	
<i>Eucalyptus marginata</i>	>50	5	340239	6259500	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340237	6259504	
<i>Eucalyptus marginata</i>	>50	5	340241	6259509	
<i>Eucalyptus marginata</i>	>50	5	340220	6259495	
<i>Eucalyptus marginata</i>	>50	5	340190	6259513	
<i>Eucalyptus marginata</i>	>50	5	340193	6259526	
<i>Eucalyptus marginata</i>	>50	5	340196	6259529	
<i>Eucalyptus marginata</i>	>50	5	340201	6259531	
<i>Eucalyptus marginata</i>	>50	5	340197	6259547	
<i>Eucalyptus marginata</i>	>50	5	340180	6259543	
<i>Eucalyptus marginata</i>	>50	5	340181	6259539	
<i>Eucalyptus marginata</i>	>50	5	340175	6259539	
<i>Eucalyptus marginata</i>	>50	5	340180	6259569	
<i>Eucalyptus marginata</i>	>50	5	340182	6259574	
<i>Eucalyptus marginata</i>	>50	5	340184	6259577	Dead
<i>Eucalyptus marginata</i>	>50	5	340171	6259587	
<i>Eucalyptus marginata</i>	>50	5	340167	6259589	
<i>Eucalyptus marginata</i>	>50	5	340174	6259592	
<i>Eucalyptus marginata</i>	>50	5	340178	6259645	
<i>Eucalyptus marginata</i>	>50	5	340160	6259637	Dead
<i>Eucalyptus marginata</i>	>50	5	340169	6259632	Dead
<i>Eucalyptus marginata</i>	>50	5	340172	6259617	
<i>Eucalyptus marginata</i>	>50	5	340185	6259611	
<i>Eucalyptus marginata</i>	>50	5	340189	6259609	
<i>Eucalyptus marginata</i>	>50	5	340185	6259600	
<i>Eucalyptus marginata</i>	>50	5	340185	6259593	
<i>Eucalyptus marginata</i>	>50	5	340203	6259566	
<i>Eucalyptus marginata</i>	>50	5	340205	6259563	
<i>Eucalyptus marginata</i>	>50	5	340199	6259556	
<i>Eucalyptus marginata</i>	>50	5	340213	6259559	
<i>Eucalyptus marginata</i>	>50	5	340216	6259555	
<i>Eucalyptus marginata</i>	>50	5	340223	6259549	
<i>Eucalyptus marginata</i>	>50	5	340241	6259529	Dead
<i>Eucalyptus marginata</i>	>50	5	340236	6259523	
<i>Eucalyptus marginata</i>	>50	5	340243	6259520	
<i>Eucalyptus marginata</i>	>50	5	340248	6259517	
<i>Eucalyptus marginata</i>	>50	5	340254	6259502	
<i>Eucalyptus marginata</i>	>50	5	340267	6259492	
<i>Eucalyptus marginata</i>	>50	5	340271	6259484	
<i>Eucalyptus marginata</i>	>50	5	340274	6259482	
<i>Eucalyptus marginata</i>	>50	5	340282	6259477	
<i>Eucalyptus marginata</i>	>50	5	340286	6259471	
<i>Eucalyptus marginata</i>	>50	5	340285	6259463	
<i>Eucalyptus marginata</i>	>50	5	340287	6259461	
<i>Eucalyptus marginata</i>	>50	5	340282	6259447	
<i>Eucalyptus marginata</i>	>50	5	340286	6259447	
<i>Eucalyptus marginata</i>	>50	5	340292	6259449	
<i>Eucalyptus marginata</i>	>50	5	340301	6259440	
<i>Eucalyptus marginata</i>	>50	5	340302	6259435	
<i>Eucalyptus marginata</i>	>50	5	340296	6259433	
<i>Eucalyptus marginata</i>	>50	5	340297	6259384	
<i>Eucalyptus marginata</i>	>50	5	340284	6259379	
<i>Eucalyptus marginata</i>	>50	5	340286	6259376	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340287	6259372	
<i>Eucalyptus marginata</i>	>50	5	340292	6259360	
<i>Eucalyptus marginata</i>	>50	5	340295	6259358	
<i>Eucalyptus marginata</i>	>50	5	340291	6259360	
<i>Eucalyptus marginata</i>	>50	5	340285	6259351	
<i>Eucalyptus marginata</i>	>50	5	340287	6259346	
<i>Eucalyptus marginata</i>	>50	5	340292	6259345	
<i>Eucalyptus marginata</i>	>50	5	340300	6259338	
<i>Eucalyptus marginata</i>	>50	5	340298	6259335	
<i>Eucalyptus marginata</i>	>50	5	340297	6259313	
<i>Eucalyptus marginata</i>	>50	5	340300	6259310	
<i>Eucalyptus marginata</i>	>50	5	340299	6259308	
<i>Eucalyptus marginata</i>	>50	5	340301	6259302	
<i>Eucalyptus marginata</i>	>50	5	340293	6259300	
<i>Eucalyptus marginata</i>	>50	5	340285	6259301	
<i>Eucalyptus marginata</i>	>50	5	340282	6259293	
<i>Eucalyptus marginata</i>	>50	5	340290	6259292	
<i>Eucalyptus marginata</i>	>50	5	340295	6259285	
<i>Eucalyptus marginata</i>	>50	5	340293	6259276	
<i>Eucalyptus marginata</i>	>50	5	340294	6259275	
<i>Eucalyptus marginata</i>	>50	5	340287	6259271	
<i>Eucalyptus marginata</i>	>50	5	340294	6259265	
<i>Eucalyptus marginata</i>	>50	5	340305	6259260	
<i>Eucalyptus marginata</i>	>50	5	340308	6259264	
<i>Eucalyptus marginata</i>	>50	5	340309	6259270	
<i>Eucalyptus marginata</i>	>50	5	340317	6259256	
<i>Eucalyptus marginata</i>	>50	5	340311	6259231	
<i>Eucalyptus marginata</i>	>50	5	340311	6259232	
<i>Eucalyptus marginata</i>	>50	5	340309	6259229	
<i>Eucalyptus marginata</i>	>50	5	340305	6259226	
<i>Eucalyptus marginata</i>	>50	5	340315	6259228	
<i>Eucalyptus marginata</i>	>50	5	340318	6259230	
<i>Eucalyptus marginata</i>	>50	5	340325	6259222	
<i>Eucalyptus marginata</i>	>50	5	340329	6259228	
<i>Eucalyptus marginata</i>	>50	5	340334	6259221	
<i>Eucalyptus marginata</i>	>50	5	340338	6259216	
<i>Eucalyptus marginata</i>	>50	5	340332	6259211	
<i>Eucalyptus marginata</i>	>50	5	340333	6259205	
<i>Eucalyptus marginata</i>	>50	5	340347	6259204	
<i>Eucalyptus marginata</i>	>50	5	340356	6259186	
<i>Eucalyptus marginata</i>	>50	5	340354	6259176	
<i>Eucalyptus marginata</i>	>50	5	340360	6259173	
<i>Eucalyptus marginata</i>	>50	5	340349	6259173	
<i>Eucalyptus marginata</i>	>50	5	340355	6259155	
<i>Eucalyptus marginata</i>	>50	5	340356	6259151	
<i>Eucalyptus marginata</i>	>50	5	340356	6259137	
<i>Eucalyptus marginata</i>	>50	5	340356	6259132	
<i>Eucalyptus marginata</i>	>50	5	340295	6259504	
<i>Eucalyptus marginata</i>	>50	5	340246	6259540	Dead
<i>Eucalyptus marginata</i>	>50	5	340254	6259545	
<i>Eucalyptus marginata</i>	>50	5	340256	6259541	
<i>Eucalyptus marginata</i>	>50	5	340247	6259562	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340245	6259568	
<i>Eucalyptus marginata</i>	>50	5	340245	6259576	
<i>Eucalyptus marginata</i>	>50	5	340243	6259577	
<i>Eucalyptus marginata</i>	>50	5	340240	6259577	
<i>Eucalyptus marginata</i>	>50	5	340239	6259586	
<i>Eucalyptus marginata</i>	>50	5	340237	6259586	
<i>Eucalyptus marginata</i>	>50	5	340235	6259589	
<i>Eucalyptus marginata</i>	>50	5	340229	6259570	
<i>Eucalyptus marginata</i>	>50	5	340225	6259562	
<i>Eucalyptus marginata</i>	>50	5	340224	6259572	
<i>Eucalyptus marginata</i>	>50	5	340221	6259583	
<i>Eucalyptus marginata</i>	>50	5	340220	6259600	
<i>Eucalyptus marginata</i>	>50	5	340209	6259605	
<i>Eucalyptus marginata</i>	>50	5	340194	6259616	Dead
<i>Eucalyptus marginata</i>	>50	5	340195	6259623	
<i>Eucalyptus marginata</i>	>50	5	340198	6259625	
<i>Eucalyptus marginata</i>	>50	5	340206	6259625	
<i>Eucalyptus marginata</i>	>50	5	340200	6259641	Dead
<i>Eucalyptus marginata</i>	>50	5	340194	6259642	
<i>Eucalyptus marginata</i>	>50	5	339978	6259591	
<i>Eucalyptus marginata</i>	>50	5	339984	6259594	
<i>Eucalyptus marginata</i>	>50	5	339992	6259605	
<i>Eucalyptus marginata</i>	>50	5	339992	6259603	
<i>Eucalyptus marginata</i>	>50	5	339984	6259515	
<i>Eucalyptus marginata</i>	>50	5	339986	6259516	
<i>Eucalyptus marginata</i>	>50	5	339988	6259500	
<i>Eucalyptus marginata</i>	>50	5	340002	6259490	
<i>Eucalyptus marginata</i>	>50	5	340013	6259598	
<i>Eucalyptus marginata</i>	>50	5	340016	6259593	
<i>Eucalyptus marginata</i>	>50	5	340020	6259585	
<i>Eucalyptus marginata</i>	>50	5	340024	6259574	
<i>Eucalyptus marginata</i>	>50	5	340024	6259571	
<i>Eucalyptus marginata</i>	>50	5	340037	6259530	
<i>Eucalyptus marginata</i>	>50	5	340028	6259533	
<i>Eucalyptus marginata</i>	>50	5	340047	6259509	
<i>Eucalyptus marginata</i>	>50	5	340039	6259488	
<i>Eucalyptus marginata</i>	>50	5	340047	6259483	
<i>Eucalyptus marginata</i>	>50	5	340055	6259471	
<i>Eucalyptus marginata</i>	>50	5	340039	6259463	
<i>Eucalyptus marginata</i>	>50	5	340066	6259463	
<i>Eucalyptus marginata</i>	>50	5	340093	6259407	
<i>Eucalyptus marginata</i>	>50	5	340088	6259410	
<i>Eucalyptus marginata</i>	>50	5	340106	6259418	
<i>Eucalyptus marginata</i>	>50	5	340108	6259415	
<i>Eucalyptus marginata</i>	>50	5	340120	6259416	Termites
<i>Eucalyptus marginata</i>	>50	5	340124	6259415	
<i>Eucalyptus marginata</i>	>50	5	340121	6259405	
<i>Eucalyptus marginata</i>	>50	5	340111	6259396	
<i>Eucalyptus marginata</i>	>50	5	340108	6259397	
<i>Eucalyptus marginata</i>	>50	5	340103	6259399	
<i>Eucalyptus marginata</i>	>50	5	340096	6259402	
<i>Eucalyptus marginata</i>	>50	5	340110	6259384	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340125	6259370	
<i>Eucalyptus marginata</i>	>50	5	340127	6259380	
<i>Eucalyptus marginata</i>	>50	5	340144	6259386	
<i>Eucalyptus marginata</i>	>50	5	340140	6259393	
<i>Eucalyptus marginata</i>	>50	5	340162	6259372	
<i>Eucalyptus marginata</i>	>50	5	340157	6259364	
<i>Eucalyptus marginata</i>	>50	5	340133	6259346	
<i>Eucalyptus marginata</i>	>50	5	340126	6259343	
<i>Eucalyptus marginata</i>	>50	5	340154	6259329	
<i>Eucalyptus marginata</i>	>50	5	340133	6259309	
<i>Eucalyptus marginata</i>	>50	5	340127	6259304	
<i>Eucalyptus marginata</i>	>50	5	340133	6259280	Dead
<i>Eucalyptus marginata</i>	>50	5	340131	6259258	
<i>Eucalyptus marginata</i>	>50	5	340120	6259258	
<i>Eucalyptus marginata</i>	>50	5	340140	6259241	
<i>Eucalyptus marginata</i>	>50	5	340144	6259235	
<i>Eucalyptus marginata</i>	>50	5	340153	6259236	Dead
<i>Eucalyptus marginata</i>	>50	5	340151	6259226	
<i>Eucalyptus marginata</i>	>50	5	340134	6259222	
<i>Eucalyptus marginata</i>	>50	5	340122	6259228	
<i>Eucalyptus marginata</i>	>50	5	340150	6259211	
<i>Eucalyptus marginata</i>	>50	5	340150	6259202	Dead
<i>Eucalyptus marginata</i>	>50	5	340164	6259196	
<i>Eucalyptus marginata</i>	>50	5	340173	6259199	
<i>Eucalyptus marginata</i>	>50	5	340176	6259186	
<i>Eucalyptus marginata</i>	>50	5	340189	6259191	
<i>Eucalyptus marginata</i>	>50	5	340191	6259193	
<i>Eucalyptus marginata</i>	>50	5	340204	6259189	
<i>Eucalyptus marginata</i>	>50	5	340200	6259185	
<i>Eucalyptus marginata</i>	>50	5	340199	6259184	
<i>Eucalyptus marginata</i>	>50	5	340200	6259171	
<i>Eucalyptus marginata</i>	>50	5	340190	6259166	
<i>Eucalyptus marginata</i>	>50	5	340186	6259150	
<i>Eucalyptus marginata</i>	>50	5	340185	6259147	
<i>Eucalyptus marginata</i>	>50	5	340191	6259127	
<i>Eucalyptus marginata</i>	>50	5	340163	6259125	
<i>Eucalyptus marginata</i>	>50	5	340201	6259139	
<i>Eucalyptus marginata</i>	>50	5	340206	6259145	
<i>Eucalyptus marginata</i>	>50	5	340211	6259135	
<i>Eucalyptus marginata</i>	>50	5	340202	6259148	
<i>Eucalyptus marginata</i>	>50	5	340201	6259150	
<i>Eucalyptus marginata</i>	>50	5	340162	6259208	
<i>Eucalyptus marginata</i>	>50	5	340153	6259223	
<i>Eucalyptus marginata</i>	>50	5	340159	6259239	
<i>Eucalyptus marginata</i>	>50	5	340170	6259238	
<i>Eucalyptus marginata</i>	>50	5	340183	6259247	
<i>Eucalyptus marginata</i>	>50	5	340172	6259241	
<i>Eucalyptus marginata</i>	>50	5	340162	6259252	Dead
<i>Eucalyptus marginata</i>	>50	5	340152	6259262	Dead
<i>Eucalyptus marginata</i>	>50	5	340149	6259268	
<i>Eucalyptus marginata</i>	>50	5	340157	6259269	Dead
<i>Eucalyptus marginata</i>	>50	5	340162	6259293	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340172	6259308	Dead
<i>Eucalyptus marginata</i>	>50	5	340160	6259322	
<i>Eucalyptus marginata</i>	>50	5	340165	6259327	Dead
<i>Eucalyptus marginata</i>	>50	5	340172	6259351	Dead
<i>Eucalyptus marginata</i>	>50	5	340173	6259350	
<i>Eucalyptus marginata</i>	>50	5	340197	6259352	
<i>Eucalyptus marginata</i>	>50	5	340189	6259368	
<i>Eucalyptus marginata</i>	>50	5	340174	6259369	
<i>Eucalyptus marginata</i>	>50	5	340150	6259384	
<i>Eucalyptus marginata</i>	>50	5	340155	6259403	
<i>Eucalyptus marginata</i>	>50	5	340148	6259413	
<i>Eucalyptus marginata</i>	>50	5	340145	6259419	
<i>Eucalyptus marginata</i>	>50	5	340156	6259414	Dead
<i>Eucalyptus marginata</i>	>50	5	340161	6259415	
<i>Eucalyptus marginata</i>	>50	5	340158	6259420	
<i>Eucalyptus marginata</i>	>50	5	340155	6259422	
<i>Eucalyptus marginata</i>	>50	5	340158	6259425	
<i>Eucalyptus marginata</i>	>50	5	340145	6259432	Dead
<i>Eucalyptus marginata</i>	>50	5	340142	6259433	
<i>Eucalyptus marginata</i>	>50	5	340122	6259424	
<i>Eucalyptus marginata</i>	>50	5	340113	6259433	Dead
<i>Eucalyptus marginata</i>	>50	5	340104	6259436	
<i>Eucalyptus marginata</i>	>50	5	340101	6259434	
<i>Eucalyptus marginata</i>	>50	5	340091	6259453	
<i>Eucalyptus marginata</i>	>50	5	340072	6259481	
<i>Eucalyptus marginata</i>	>50	5	340066	6259486	
<i>Eucalyptus marginata</i>	>50	5	340055	6259495	
<i>Eucalyptus marginata</i>	>50	5	340053	6259510	
<i>Eucalyptus marginata</i>	>50	5	340051	6259523	
<i>Eucalyptus marginata</i>	>50	5	340032	6259579	Dead
<i>Eucalyptus marginata</i>	>50	5	340043	6259592	
<i>Eucalyptus marginata</i>	>50	5	340043	6259599	Dead
<i>Eucalyptus marginata</i>	>50	5	340044	6259606	
<i>Eucalyptus marginata</i>	>50	5	340037	6259611	
<i>Eucalyptus marginata</i>	>50	5	340029	6259610	
<i>Eucalyptus marginata</i>	>50	5	340054	6259624	
<i>Eucalyptus marginata</i>	>50	5	340052	6259621	
<i>Eucalyptus marginata</i>	>50	5	340048	6259618	
<i>Eucalyptus marginata</i>	>50	5	340049	6259577	
<i>Eucalyptus marginata</i>	>50	5	340051	6259572	
<i>Eucalyptus marginata</i>	>50	5	340043	6259570	
<i>Eucalyptus marginata</i>	>50	5	340052	6259566	
<i>Eucalyptus marginata</i>	>50	5	340055	6259567	Dead
<i>Eucalyptus marginata</i>	>50	5	340059	6259559	
<i>Eucalyptus marginata</i>	>50	5	340059	6259545	
<i>Eucalyptus marginata</i>	>50	5	340067	6259515	Dead
<i>Eucalyptus marginata</i>	>50	5	340079	6259509	
<i>Eucalyptus marginata</i>	>50	5	340072	6259509	
<i>Eucalyptus marginata</i>	>50	5	340091	6259499	
<i>Eucalyptus marginata</i>	>50	5	340095	6259494	
<i>Eucalyptus marginata</i>	>50	5	340104	6259493	
<i>Eucalyptus marginata</i>	>50	5	340110	6259467	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340114	6259462	
<i>Eucalyptus marginata</i>	>50	5	340113	6259456	
<i>Eucalyptus marginata</i>	>50	5	340162	6259459	
<i>Eucalyptus marginata</i>	>50	5	340142	6259468	
<i>Eucalyptus marginata</i>	>50	5	340131	6259469	
<i>Eucalyptus marginata</i>	>50	5	340120	6259481	
<i>Eucalyptus marginata</i>	>50	5	340116	6259488	
<i>Eucalyptus marginata</i>	>50	5	340113	6259498	
<i>Eucalyptus marginata</i>	>50	5	340115	6259502	
<i>Eucalyptus marginata</i>	>50	5	340117	6259500	
<i>Eucalyptus marginata</i>	>50	5	340097	6259506	
<i>Eucalyptus marginata</i>	>50	5	340087	6259516	
<i>Eucalyptus marginata</i>	>50	5	340088	6259524	
<i>Eucalyptus marginata</i>	>50	5	340080	6259530	Dead
<i>Eucalyptus marginata</i>	>50	5	340078	6259561	
<i>Eucalyptus marginata</i>	>50	5	340085	6259555	
<i>Eucalyptus marginata</i>	>50	5	340088	6259561	
<i>Eucalyptus marginata</i>	>50	5	340079	6259565	
<i>Eucalyptus marginata</i>	>50	5	340059	6259582	
<i>Eucalyptus marginata</i>	>50	5	340071	6259603	
<i>Eucalyptus marginata</i>	>50	5	340074	6259603	
<i>Eucalyptus marginata</i>	>50	5	340074	6259617	
<i>Eucalyptus marginata</i>	>50	5	340072	6259620	
<i>Eucalyptus marginata</i>	>50	5	340073	6259623	Dead
<i>Eucalyptus marginata</i>	>50	5	340079	6259634	
<i>Eucalyptus marginata</i>	>50	5	340094	6259632	
<i>Eucalyptus marginata</i>	>50	5	340084	6259629	
<i>Eucalyptus marginata</i>	>50	5	340082	6259629	
<i>Eucalyptus marginata</i>	>50	5	340081	6259621	
<i>Eucalyptus marginata</i>	>50	5	340082	6259614	
<i>Eucalyptus marginata</i>	>50	5	340089	6259613	
<i>Eucalyptus marginata</i>	>50	5	340069	6259591	Dead
<i>Eucalyptus marginata</i>	>50	5	340104	6259554	
<i>Eucalyptus marginata</i>	>50	5	340112	6259537	
<i>Eucalyptus marginata</i>	>50	5	340135	6259504	
<i>Eucalyptus marginata</i>	>50	5	340126	6259497	
<i>Eucalyptus marginata</i>	>50	5	340134	6259498	
<i>Eucalyptus marginata</i>	>50	5	340132	6259487	
<i>Eucalyptus marginata</i>	>50	5	340137	6259488	
<i>Eucalyptus marginata</i>	>50	5	340139	6259484	
<i>Eucalyptus marginata</i>	>50	5	340141	6259491	
<i>Eucalyptus marginata</i>	>50	5	340156	6259486	
<i>Eucalyptus marginata</i>	>50	5	340152	6259481	Dead
<i>Eucalyptus marginata</i>	>50	5	340178	6259427	
<i>Eucalyptus marginata</i>	>50	5	340166	6259422	
<i>Eucalyptus marginata</i>	>50	5	340170	6259416	
<i>Eucalyptus marginata</i>	>50	5	340184	6259402	
<i>Eucalyptus marginata</i>	>50	5	340187	6259385	
<i>Eucalyptus marginata</i>	>50	5	340192	6259381	
<i>Eucalyptus marginata</i>	>50	5	340198	6259376	
<i>Eucalyptus marginata</i>	>50	5	340198	6259329	
<i>Eucalyptus marginata</i>	>50	5	340186	6259272	Dead

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340228	6259122	
<i>Eucalyptus marginata</i>	>50	5	340279	6259128	
<i>Eucalyptus marginata</i>	>50	5	340258	6259134	
<i>Eucalyptus marginata</i>	>50	5	340243	6259132	
<i>Eucalyptus marginata</i>	>50	5	340240	6259149	
<i>Eucalyptus marginata</i>	>50	5	340250	6259150	
<i>Eucalyptus marginata</i>	>50	5	340255	6259155	
<i>Eucalyptus marginata</i>	>50	5	340251	6259168	
<i>Eucalyptus marginata</i>	>50	5	340259	6259169	
<i>Eucalyptus marginata</i>	>50	5	340252	6259179	
<i>Eucalyptus marginata</i>	>50	5	340245	6259175	
<i>Eucalyptus marginata</i>	>50	5	340234	6259159	
<i>Eucalyptus marginata</i>	>50	5	340203	6259168	
<i>Eucalyptus marginata</i>	>50	5	340223	6259190	
<i>Eucalyptus marginata</i>	>50	5	340233	6259189	
<i>Eucalyptus marginata</i>	>50	5	340230	6259196	
<i>Eucalyptus marginata</i>	>50	5	340230	6259199	
<i>Eucalyptus marginata</i>	>50	5	340231	6259207	
<i>Eucalyptus marginata</i>	>50	5	340228	6259209	Dead
<i>Eucalyptus marginata</i>	>50	5	340225	6259220	
<i>Eucalyptus marginata</i>	>50	5	340217	6259226	
<i>Eucalyptus marginata</i>	>50	5	340212	6259220	
<i>Eucalyptus marginata</i>	>50	5	340205	6259216	
<i>Eucalyptus marginata</i>	>50	5	340204	6259208	
<i>Eucalyptus marginata</i>	>50	5	340206	6259206	
<i>Eucalyptus marginata</i>	>50	5	340205	6259224	
<i>Eucalyptus marginata</i>	>50	5	340206	6259231	
<i>Eucalyptus marginata</i>	>50	5	340225	6259248	
<i>Eucalyptus marginata</i>	>50	5	340223	6259261	
<i>Eucalyptus marginata</i>	>50	5	340215	6259250	
<i>Eucalyptus marginata</i>	>50	5	340210	6259258	
<i>Eucalyptus marginata</i>	>50	5	340192	6259264	
<i>Eucalyptus marginata</i>	>50	5	340188	6259252	
<i>Eucalyptus marginata</i>	>50	5	340191	6259251	
<i>Eucalyptus marginata</i>	>50	5	340196	6259264	
<i>Eucalyptus marginata</i>	>50	5	340194	6259272	
<i>Eucalyptus marginata</i>	>50	5	340202	6259280	
<i>Eucalyptus marginata</i>	>50	5	340206	6259282	
<i>Eucalyptus marginata</i>	>50	5	340200	6259294	
<i>Eucalyptus marginata</i>	>50	5	340205	6259298	
<i>Eucalyptus marginata</i>	>50	5	340209	6259299	
<i>Eucalyptus marginata</i>	>50	5	340206	6259304	
<i>Eucalyptus marginata</i>	>50	5	340203	6259310	
<i>Eucalyptus marginata</i>	>50	5	340206	6259329	
<i>Eucalyptus marginata</i>	>50	5	340204	6259349	
<i>Eucalyptus marginata</i>	>50	5	340216	6259349	
<i>Eucalyptus marginata</i>	>50	5	340222	6259348	
<i>Eucalyptus marginata</i>	>50	5	340221	6259346	
<i>Eucalyptus marginata</i>	>50	5	340215	6259358	
<i>Eucalyptus marginata</i>	>50	5	340223	6259360	
<i>Eucalyptus marginata</i>	>50	5	340227	6259357	
<i>Eucalyptus marginata</i>	>50	5	340232	6259361	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340230	6259367	
<i>Eucalyptus marginata</i>	>50	5	340226	6259374	
<i>Eucalyptus marginata</i>	>50	5	340230	6259385	
<i>Eucalyptus marginata</i>	>50	5	340227	6259394	
<i>Eucalyptus marginata</i>	>50	5	340216	6259403	
<i>Eucalyptus marginata</i>	>50	5	340212	6259391	
<i>Eucalyptus marginata</i>	>50	5	340202	6259401	
<i>Eucalyptus marginata</i>	>50	5	340198	6259404	
<i>Eucalyptus marginata</i>	>50	5	340201	6259410	
<i>Eucalyptus marginata</i>	>50	5	340205	6259416	
<i>Eucalyptus marginata</i>	>50	5	340213	6259429	
<i>Eucalyptus marginata</i>	>50	5	340215	6259440	
<i>Eucalyptus marginata</i>	>50	5	340225	6259445	
<i>Eucalyptus marginata</i>	>50	5	340182	6259451	
<i>Eucalyptus marginata</i>	>50	5	340181	6259433	
<i>Eucalyptus marginata</i>	>50	5	340176	6259443	
<i>Eucalyptus marginata</i>	>50	5	340161	6259460	
<i>Eucalyptus marginata</i>	>50	5	340172	6259470	
<i>Eucalyptus marginata</i>	>50	5	340182	6259478	
<i>Eucalyptus marginata</i>	>50	5	340165	6259485	
<i>Eucalyptus marginata</i>	>50	5	340154	6259499	
<i>Eucalyptus marginata</i>	>50	5	340146	6259499	
<i>Eucalyptus marginata</i>	>50	5	340140	6259509	
<i>Eucalyptus marginata</i>	>50	5	340138	6259509	
<i>Eucalyptus marginata</i>	>50	5	340132	6259509	
<i>Eucalyptus marginata</i>	>50	5	340127	6259518	
<i>Eucalyptus marginata</i>	>50	5	340126	6259519	
<i>Eucalyptus marginata</i>	>50	5	340128	6259536	
<i>Eucalyptus marginata</i>	>50	5	340119	6259560	
<i>Eucalyptus marginata</i>	>50	5	340122	6259562	
<i>Eucalyptus marginata</i>	>50	5	340121	6259565	
<i>Eucalyptus marginata</i>	>50	5	340108	6259568	
<i>Eucalyptus marginata</i>	>50	5	340094	6259565	
<i>Eucalyptus marginata</i>	>50	5	340083	6259572	
<i>Eucalyptus marginata</i>	>50	5	340078	6259592	
<i>Eucalyptus marginata</i>	>50	5	340079	6259596	
<i>Eucalyptus marginata</i>	>50	5	340090	6259602	
<i>Eucalyptus marginata</i>	>50	5	340113	6259628	
<i>Eucalyptus marginata</i>	>50	5	340115	6259625	
<i>Eucalyptus marginata</i>	>50	5	339819	6259621	Dead
<i>Eucalyptus marginata</i>	>50	5	339826	6259604	
<i>Eucalyptus marginata</i>	>50	5	339840	6259587	Dead
<i>Eucalyptus marginata</i>	>50	5	339837	6259576	
<i>Eucalyptus marginata</i>	>50	5	339851	6259569	
<i>Eucalyptus marginata</i>	>50	5	339860	6259552	
<i>Eucalyptus marginata</i>	>50	5	339876	6259519	
<i>Eucalyptus marginata</i>	>50	5	339868	6259517	
<i>Eucalyptus marginata</i>	>50	5	339902	6259498	
<i>Eucalyptus marginata</i>	>50	5	339913	6259477	
<i>Eucalyptus marginata</i>	>50	5	339938	6259462	
<i>Eucalyptus marginata</i>	>50	5	339947	6259471	
<i>Eucalyptus marginata</i>	>50	5	339948	6259458	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339964	6259442	
<i>Eucalyptus marginata</i>	>50	5	339968	6259425	
<i>Eucalyptus marginata</i>	>50	5	339966	6259413	
<i>Eucalyptus marginata</i>	>50	5	339962	6259406	
<i>Eucalyptus marginata</i>	>50	5	339967	6259397	
<i>Eucalyptus marginata</i>	>50	5	339964	6259396	
<i>Eucalyptus marginata</i>	>50	5	339971	6259398	
<i>Eucalyptus marginata</i>	>50	5	339971	6259392	
<i>Eucalyptus marginata</i>	>50	5	339973	6259387	
<i>Eucalyptus marginata</i>	>50	5	339978	6259391	
<i>Eucalyptus marginata</i>	>50	5	339981	6259380	
<i>Eucalyptus marginata</i>	>50	5	339977	6259378	
<i>Eucalyptus marginata</i>	>50	5	339974	6259377	
<i>Eucalyptus marginata</i>	>50	5	339969	6259380	
<i>Eucalyptus marginata</i>	>50	5	339968	6259378	
<i>Eucalyptus marginata</i>	>50	5	339977	6259365	
<i>Eucalyptus marginata</i>	>50	5	339979	6259362	
<i>Eucalyptus marginata</i>	>50	5	339977	6259352	
<i>Eucalyptus marginata</i>	>50	5	339977	6259350	
<i>Eucalyptus marginata</i>	>50	5	339954	6259340	
<i>Eucalyptus marginata</i>	>50	5	339960	6259330	
<i>Eucalyptus marginata</i>	>50	5	339963	6259325	
<i>Eucalyptus marginata</i>	>50	5	339972	6259321	
<i>Eucalyptus marginata</i>	>50	5	339978	6259320	
<i>Eucalyptus marginata</i>	>50	5	339981	6259323	
<i>Eucalyptus marginata</i>	>50	5	339985	6259338	
<i>Eucalyptus marginata</i>	>50	5	340003	6259323	
<i>Eucalyptus marginata</i>	>50	5	340000	6259329	
<i>Eucalyptus marginata</i>	>50	5	340003	6259339	
<i>Eucalyptus marginata</i>	>50	5	340002	6259323	
<i>Eucalyptus marginata</i>	>50	5	340008	6259312	
<i>Eucalyptus marginata</i>	>50	5	340013	6259313	
<i>Eucalyptus marginata</i>	>50	5	340016	6259318	
<i>Eucalyptus marginata</i>	>50	5	340027	6259290	
<i>Eucalyptus marginata</i>	>50	5	340029	6259281	
<i>Eucalyptus marginata</i>	>50	5	340038	6259273	
<i>Eucalyptus marginata</i>	>50	5	340038	6259272	
<i>Eucalyptus marginata</i>	>50	5	340040	6259274	
<i>Eucalyptus marginata</i>	>50	5	340032	6259258	
<i>Eucalyptus marginata</i>	>50	5	340030	6259237	
<i>Eucalyptus marginata</i>	>50	5	340034	6259227	Dead
<i>Eucalyptus marginata</i>	>50	5	340036	6259215	
<i>Eucalyptus marginata</i>	>50	5	340043	6259210	
<i>Eucalyptus marginata</i>	>50	5	340041	6259195	
<i>Eucalyptus marginata</i>	>50	5	340037	6259193	
<i>Eucalyptus marginata</i>	>50	5	340052	6259175	
<i>Eucalyptus marginata</i>	>50	5	340056	6259163	
<i>Eucalyptus marginata</i>	>50	5	340037	6259145	
<i>Eucalyptus marginata</i>	>50	5	340040	6259136	
<i>Eucalyptus marginata</i>	>50	5	340070	6259147	
<i>Eucalyptus marginata</i>	>50	5	340071	6259148	
<i>Eucalyptus marginata</i>	>50	5	340085	6259134	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340075	6259120	
<i>Eucalyptus marginata</i>	>50	5	340064	6259119	
<i>Eucalyptus marginata</i>	>50	5	340093	6259120	
<i>Eucalyptus marginata</i>	>50	5	340091	6259125	
<i>Eucalyptus marginata</i>	>50	5	340100	6259119	
<i>Eucalyptus marginata</i>	>50	5	340115	6259142	
<i>Eucalyptus marginata</i>	>50	5	340105	6259143	
<i>Eucalyptus marginata</i>	>50	5	340090	6259171	
<i>Eucalyptus marginata</i>	>50	5	340078	6259200	
<i>Eucalyptus marginata</i>	>50	5	340081	6259202	
<i>Eucalyptus marginata</i>	>50	5	340069	6259222	Dead
<i>Eucalyptus marginata</i>	>50	5	340062	6259230	
<i>Eucalyptus marginata</i>	>50	5	340057	6259260	
<i>Eucalyptus marginata</i>	>50	5	340057	6259260	
<i>Eucalyptus marginata</i>	>50	5	340060	6259264	
<i>Eucalyptus marginata</i>	>50	5	340060	6259280	
<i>Eucalyptus marginata</i>	>50	5	340051	6259277	
<i>Eucalyptus marginata</i>	>50	5	340048	6259292	
<i>Eucalyptus marginata</i>	>50	5	340050	6259303	
<i>Eucalyptus marginata</i>	>50	5	340044	6259311	
<i>Eucalyptus marginata</i>	>50	5	340043	6259315	
<i>Eucalyptus marginata</i>	>50	5	340035	6259311	
<i>Eucalyptus marginata</i>	>50	5	340040	6259326	
<i>Eucalyptus marginata</i>	>50	5	340041	6259331	
<i>Eucalyptus marginata</i>	>50	5	340049	6259331	
<i>Eucalyptus marginata</i>	>50	5	340046	6259339	
<i>Eucalyptus marginata</i>	>50	5	340033	6259336	
<i>Eucalyptus marginata</i>	>50	5	340036	6259355	
<i>Eucalyptus marginata</i>	>50	5	340037	6259368	
<i>Eucalyptus marginata</i>	>50	5	339997	6259367	
<i>Eucalyptus marginata</i>	>50	5	339988	6259368	
<i>Eucalyptus marginata</i>	>50	5	339992	6259383	
<i>Eucalyptus marginata</i>	>50	5	340000	6259379	
<i>Eucalyptus marginata</i>	>50	5	340007	6259373	
<i>Eucalyptus marginata</i>	>50	5	340014	6259389	
<i>Eucalyptus marginata</i>	>50	5	340017	6259387	
<i>Eucalyptus marginata</i>	>50	5	340029	6259392	
<i>Eucalyptus marginata</i>	>50	5	340033	6259398	
<i>Eucalyptus marginata</i>	>50	5	340025	6259396	
<i>Eucalyptus marginata</i>	>50	5	340009	6259393	
<i>Eucalyptus marginata</i>	>50	5	340003	6259397	
<i>Eucalyptus marginata</i>	>50	5	339993	6259388	
<i>Eucalyptus marginata</i>	>50	5	339983	6259393	
<i>Eucalyptus marginata</i>	>50	5	339981	6259403	
<i>Eucalyptus marginata</i>	>50	5	339988	6259406	
<i>Eucalyptus marginata</i>	>50	5	339984	6259420	
<i>Eucalyptus marginata</i>	>50	5	339994	6259434	
<i>Eucalyptus marginata</i>	>50	5	339992	6259455	
<i>Eucalyptus marginata</i>	>50	5	340004	6259431	
<i>Eucalyptus marginata</i>	>50	5	340008	6259420	
<i>Eucalyptus marginata</i>	>50	5	340012	6259413	
<i>Eucalyptus marginata</i>	>50	5	339979	6259460	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339973	6259473	
<i>Eucalyptus marginata</i>	>50	5	339974	6259479	
<i>Eucalyptus marginata</i>	>50	5	339953	6259484	
<i>Eucalyptus marginata</i>	>50	5	339926	6259492	
<i>Eucalyptus marginata</i>	>50	5	339927	6259486	
<i>Eucalyptus marginata</i>	>50	5	339929	6259486	
<i>Eucalyptus marginata</i>	>50	5	339930	6259510	
<i>Eucalyptus marginata</i>	>50	5	339929	6259517	
<i>Eucalyptus marginata</i>	>50	5	339924	6259523	
<i>Eucalyptus marginata</i>	>50	5	339908	6259520	
<i>Eucalyptus marginata</i>	>50	5	339876	6259557	
<i>Eucalyptus marginata</i>	>50	5	339876	6259565	
<i>Eucalyptus marginata</i>	>50	5	339864	6259551	
<i>Eucalyptus marginata</i>	>50	5	339855	6259577	
<i>Eucalyptus marginata</i>	>50	5	339844	6259588	
<i>Eucalyptus marginata</i>	>50	5	339843	6259595	
<i>Eucalyptus marginata</i>	>50	5	339838	6259619	
<i>Eucalyptus marginata</i>	>50	5	339840	6259614	
<i>Eucalyptus marginata</i>	>50	5	339845	6259620	
<i>Eucalyptus marginata</i>	>50	5	339850	6259621	
<i>Eucalyptus marginata</i>	>50	5	339858	6259611	
<i>Eucalyptus marginata</i>	>50	5	339871	6259594	
<i>Eucalyptus marginata</i>	>50	5	339878	6259589	
<i>Eucalyptus marginata</i>	>50	5	339877	6259585	
<i>Eucalyptus marginata</i>	>50	5	339889	6259573	
<i>Eucalyptus marginata</i>	>50	5	339911	6259557	
<i>Eucalyptus marginata</i>	>50	5	339863	6259624	
<i>Eucalyptus marginata</i>	>50	5	339884	6259624	
<i>Eucalyptus marginata</i>	>50	5	339883	6259616	
<i>Eucalyptus marginata</i>	>50	5	339879	6259598	
<i>Eucalyptus marginata</i>	>50	5	339883	6259602	
<i>Eucalyptus marginata</i>	>50	5	339906	6259581	
<i>Eucalyptus marginata</i>	>50	5	339912	6259577	
<i>Eucalyptus marginata</i>	>50	5	339926	6259562	
<i>Eucalyptus marginata</i>	>50	5	339925	6259559	
<i>Eucalyptus marginata</i>	>50	5	339942	6259561	Dead
<i>Eucalyptus marginata</i>	>50	5	339941	6259555	
<i>Eucalyptus marginata</i>	>50	5	339938	6259543	
<i>Eucalyptus marginata</i>	>50	5	339950	6259552	
<i>Eucalyptus marginata</i>	>50	5	339955	6259535	
<i>Eucalyptus marginata</i>	>50	5	339955	6259529	
<i>Eucalyptus marginata</i>	>50	5	339965	6259517	
<i>Eucalyptus marginata</i>	>50	5	339970	6259517	
<i>Eucalyptus marginata</i>	>50	5	339970	6259514	
<i>Eucalyptus marginata</i>	>50	5	339991	6259473	
<i>Eucalyptus marginata</i>	>50	5	340000	6259462	
<i>Eucalyptus marginata</i>	>50	5	340007	6259461	
<i>Eucalyptus marginata</i>	>50	5	340009	6259456	
<i>Eucalyptus marginata</i>	>50	5	340016	6259440	
<i>Eucalyptus marginata</i>	>50	5	340020	6259426	
<i>Eucalyptus marginata</i>	>50	5	340020	6259424	
<i>Eucalyptus marginata</i>	>50	5	340022	6259422	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340030	6259415	
<i>Eucalyptus marginata</i>	>50	5	340044	6259404	
<i>Eucalyptus marginata</i>	>50	5	340052	6259387	
<i>Eucalyptus marginata</i>	>50	5	340056	6259375	
<i>Eucalyptus marginata</i>	>50	5	340059	6259373	
<i>Eucalyptus marginata</i>	>50	5	340061	6259365	
<i>Eucalyptus marginata</i>	>50	5	340065	6259357	
<i>Eucalyptus marginata</i>	>50	5	340075	6259318	
<i>Eucalyptus marginata</i>	>50	5	340069	6259306	
<i>Eucalyptus marginata</i>	>50	5	340064	6259302	
<i>Eucalyptus marginata</i>	>50	5	340073	6259265	
<i>Eucalyptus marginata</i>	>50	5	340073	6259261	Dead
<i>Eucalyptus marginata</i>	>50	5	340074	6259251	
<i>Eucalyptus marginata</i>	>50	5	340084	6259209	
<i>Eucalyptus marginata</i>	>50	5	340099	6259192	
<i>Eucalyptus marginata</i>	>50	5	340112	6259166	
<i>Eucalyptus marginata</i>	>50	5	340112	6259161	
<i>Eucalyptus marginata</i>	>50	5	340119	6259158	
<i>Eucalyptus marginata</i>	>50	5	340123	6259148	
<i>Eucalyptus marginata</i>	>50	5	340126	6259138	
<i>Eucalyptus marginata</i>	>50	5	340149	6259136	
<i>Eucalyptus marginata</i>	>50	5	340147	6259142	
<i>Eucalyptus marginata</i>	>50	5	340155	6259152	
<i>Eucalyptus marginata</i>	>50	5	340162	6259159	
<i>Eucalyptus marginata</i>	>50	5	340164	6259166	
<i>Eucalyptus marginata</i>	>50	5	340167	6259171	
<i>Eucalyptus marginata</i>	>50	5	340157	6259182	
<i>Eucalyptus marginata</i>	>50	5	340144	6259182	
<i>Eucalyptus marginata</i>	>50	5	340145	6259178	
<i>Eucalyptus marginata</i>	>50	5	340127	6259191	
<i>Eucalyptus marginata</i>	>50	5	340125	6259198	
<i>Eucalyptus marginata</i>	>50	5	340125	6259202	
<i>Eucalyptus marginata</i>	>50	5	340113	6259215	
<i>Eucalyptus marginata</i>	>50	5	340099	6259212	
<i>Eucalyptus marginata</i>	>50	5	340097	6259223	
<i>Eucalyptus marginata</i>	>50	5	340116	6259242	
<i>Eucalyptus marginata</i>	>50	5	340113	6259256	
<i>Eucalyptus marginata</i>	>50	5	340113	6259258	
<i>Eucalyptus marginata</i>	>50	5	340105	6259266	
<i>Eucalyptus marginata</i>	>50	5	340106	6259268	
<i>Eucalyptus marginata</i>	>50	5	340107	6259297	
<i>Eucalyptus marginata</i>	>50	5	340105	6259308	
<i>Eucalyptus marginata</i>	>50	5	340109	6259311	
<i>Eucalyptus marginata</i>	>50	5	340107	6259316	
<i>Eucalyptus marginata</i>	>50	5	340102	6259350	
<i>Eucalyptus marginata</i>	>50	5	340105	6259359	
<i>Eucalyptus marginata</i>	>50	5	340095	6259374	
<i>Eucalyptus marginata</i>	>50	5	340091	6259380	
<i>Eucalyptus marginata</i>	>50	5	340094	6259381	
<i>Eucalyptus marginata</i>	>50	5	340092	6259385	
<i>Eucalyptus marginata</i>	>50	5	340080	6259401	
<i>Eucalyptus marginata</i>	>50	5	340075	6259406	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	340068	6259417	
<i>Eucalyptus marginata</i>	>50	5	340069	6259427	
<i>Eucalyptus marginata</i>	>50	5	340067	6259426	
<i>Eucalyptus marginata</i>	>50	5	340065	6259431	
<i>Eucalyptus marginata</i>	>50	5	340050	6259445	
<i>Eucalyptus marginata</i>	>50	5	340047	6259451	
<i>Eucalyptus marginata</i>	>50	5	340042	6259451	
<i>Eucalyptus marginata</i>	>50	5	340028	6259454	
<i>Eucalyptus marginata</i>	>50	5	340026	6259475	
<i>Eucalyptus marginata</i>	>50	5	340027	6259477	
<i>Eucalyptus marginata</i>	>50	5	340028	6259480	
<i>Eucalyptus marginata</i>	>50	5	340028	6259492	
<i>Eucalyptus marginata</i>	>50	5	340020	6259495	
<i>Eucalyptus marginata</i>	>50	5	340019	6259497	
<i>Eucalyptus marginata</i>	>50	5	340019	6259503	
<i>Eucalyptus marginata</i>	>50	5	340016	6259504	
<i>Eucalyptus marginata</i>	>50	5	340012	6259519	
<i>Eucalyptus marginata</i>	>50	5	340017	6259522	
<i>Eucalyptus marginata</i>	>50	5	340011	6259532	
<i>Eucalyptus marginata</i>	>50	5	340008	6259537	
<i>Eucalyptus marginata</i>	>50	5	340013	6259545	
<i>Eucalyptus marginata</i>	>50	5	340009	6259552	
<i>Eucalyptus marginata</i>	>50	5	340002	6259566	
<i>Eucalyptus marginata</i>	>50	5	340005	6259573	
<i>Eucalyptus marginata</i>	>50	5	340003	6259579	
<i>Eucalyptus marginata</i>	>50	5	339998	6259577	
<i>Eucalyptus marginata</i>	>50	5	339995	6259573	
<i>Eucalyptus marginata</i>	>50	5	339982	6259578	
<i>Eucalyptus marginata</i>	>50	5	339973	6259579	
<i>Eucalyptus marginata</i>	>50	5	339971	6259556	
<i>Eucalyptus marginata</i>	>50	5	339974	6259554	
<i>Eucalyptus marginata</i>	>50	5	339978	6259555	
<i>Eucalyptus marginata</i>	>50	5	339980	6259563	
<i>Eucalyptus marginata</i>	>50	5	339979	6259572	
<i>Eucalyptus marginata</i>	>50	5	339955	6259583	
<i>Eucalyptus marginata</i>	>50	5	339961	6259589	
<i>Eucalyptus marginata</i>	>50	5	339960	6259600	
<i>Eucalyptus marginata</i>	>50	5	339957	6259599	
<i>Eucalyptus marginata</i>	>50	5	339938	6259583	
<i>Eucalyptus marginata</i>	>50	5	339932	6259584	
<i>Eucalyptus marginata</i>	>50	5	339926	6259587	
<i>Eucalyptus marginata</i>	>50	5	339930	6259593	
<i>Eucalyptus marginata</i>	>50	5	339940	6259615	
<i>Eucalyptus marginata</i>	>50	5	339943	6259617	
<i>Eucalyptus marginata</i>	>50	5	339968	6259616	
<i>Eucalyptus marginata</i>	>50	5	339922	6259627	
<i>Eucalyptus marginata</i>	>50	5	339919	6259630	
<i>Eucalyptus marginata</i>	>50	5	339917	6259634	
<i>Eucalyptus marginata</i>	>50	5	339913	6259620	
<i>Eucalyptus marginata</i>	>50	5	339901	6259628	
<i>Eucalyptus marginata</i>	>50	5	339955	6259631	
<i>Eucalyptus marginata</i>	>50	5	339969	6259633	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339982	6259630	
<i>Eucalyptus marginata</i>	>50	5	339992	6259638	
<i>Eucalyptus marginata</i>	>50	5	339993	6259622	
<i>Eucalyptus marginata</i>	>50	5	340005	6259608	
<i>Eucalyptus marginata</i>	>50	5	340014	6259631	
<i>Eucalyptus marginata</i>	>50	5	340014	6259635	
<i>Eucalyptus marginata</i>	>50	5	340027	6259630	
<i>Eucalyptus marginata</i>	>50	5	340032	6259624	
<i>Eucalyptus marginata</i>	>50	5	340041	6259640	
<i>Eucalyptus marginata</i>	>50	5	340051	6259630	
<i>Eucalyptus marginata</i>	>50	5	340095	6259636	
<i>Eucalyptus marginata</i>	>50	5	340216	6259630	
<i>Eucalyptus marginata</i>	>50	5	340225	6259634	
<i>Eucalyptus marginata</i>	>50	5	340244	6259593	
<i>Eucalyptus marginata</i>	59	5	340277	6259557	
<i>Eucalyptus marginata</i>	>50	5	340302	6259549	
<i>Eucalyptus marginata</i>	>50	5	340295	6259528	
<i>Eucalyptus marginata</i>	>50	5	340338	6259443	
<i>Eucalyptus marginata</i>	>50	5	340337	6259442	
<i>Eucalyptus marginata</i>	>50	5	340341	6259431	
<i>Eucalyptus marginata</i>	>50	5	340347	6259405	
<i>Eucalyptus marginata</i>	>50	5	340339	6259368	
<i>Eucalyptus marginata</i>	>50	5	340341	6259366	
<i>Eucalyptus marginata</i>	>50	5	340322	6259338	
<i>Eucalyptus marginata</i>	>50	5	340330	6259327	
<i>Eucalyptus marginata</i>	>50	5	340351	6259270	
<i>Eucalyptus marginata</i>	>50	5	340360	6259252	
<i>Eucalyptus marginata</i>	>50	5	340380	6259203	
<i>Eucalyptus marginata</i>	>50	5	340396	6259189	
<i>Eucalyptus marginata</i>	>50	5	340401	6259177	
<i>Eucalyptus marginata</i>	>50	5	340237	6259645	
<i>Eucalyptus marginata</i>	>50	5	340230	6259627	
<i>Eucalyptus marginata</i>	>50	5	340256	6259613	
<i>Eucalyptus marginata</i>	>50	5	340322	6259557	
<i>Eucalyptus marginata</i>	>50	5	340340	6259510	
<i>Eucalyptus marginata</i>	>50	5	340351	6259472	
<i>Eucalyptus marginata</i>	>50	5	340367	6259451	
<i>Eucalyptus marginata</i>	>50	5	340357	6259439	
<i>Eucalyptus marginata</i>	>50	5	340355	6259416	
<i>Eucalyptus marginata</i>	>50	5	340363	6259393	
<i>Eucalyptus marginata</i>	>50	5	340376	6259405	
<i>Eucalyptus marginata</i>	>50	5	340380	6259419	
<i>Eucalyptus marginata</i>	>50	5	340378	6259425	
<i>Eucalyptus marginata</i>	>50	5	340366	6259397	
<i>Eucalyptus marginata</i>	51	5	340368	6259379	
<i>Eucalyptus marginata</i>	>50	5	340357	6259367	
<i>Eucalyptus marginata</i>	>50	5	340355	6259331	Hollow at 9m
<i>Eucalyptus marginata</i>	>50	5	340369	6259296	
<i>Eucalyptus marginata</i>	>50	5	340386	6259267	
<i>Eucalyptus marginata</i>	>50	5	340406	6259235	
<i>Eucalyptus marginata</i>	>50	5	340408	6259237	
<i>Eucalyptus marginata</i>	58	5	340436	6259164	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	59	5	340437	6259164	
<i>Eucalyptus marginata</i>	>50	5	339714	6259553	
<i>Eucalyptus marginata</i>	>50	5	339714	6259551	
<i>Eucalyptus marginata</i>	>50	5	339728	6259544	
<i>Eucalyptus marginata</i>	>50	5	339754	6259469	Dead
<i>Eucalyptus marginata</i>	>50	5	339763	6259440	
<i>Eucalyptus marginata</i>	>50	5	339769	6259444	
<i>Eucalyptus marginata</i>	>50	5	339769	6259435	
<i>Eucalyptus marginata</i>	107	5	339769	6259428	Hollow at 8m
<i>Eucalyptus marginata</i>	>50	5	339775	6259410	
<i>Eucalyptus marginata</i>	>50	5	339780	6259395	
<i>Eucalyptus marginata</i>	>50	5	339781	6259396	
<i>Eucalyptus marginata</i>	>50	5	339792	6259376	
<i>Eucalyptus marginata</i>	>50	5	339807	6259370	
<i>Eucalyptus marginata</i>	>50	5	339810	6259359	
<i>Eucalyptus marginata</i>	>50	5	339807	6259349	
<i>Eucalyptus marginata</i>	>50	5	339821	6259317	
<i>Eucalyptus marginata</i>	>50	5	339821	6259295	
<i>Eucalyptus marginata</i>	>50	5	339839	6259283	
<i>Eucalyptus marginata</i>	>50	5	339841	6259270	
<i>Eucalyptus marginata</i>	>50	5	339848	6259264	
<i>Eucalyptus marginata</i>	>50	5	339842	6259258	
<i>Eucalyptus marginata</i>	>50	5	339844	6259258	
<i>Eucalyptus marginata</i>	>50	5	339858	6259255	
<i>Eucalyptus marginata</i>	>50	5	339863	6259256	
<i>Eucalyptus marginata</i>	>50	5	339865	6259244	
<i>Eucalyptus marginata</i>	>50	5	339862	6259237	
<i>Eucalyptus marginata</i>	>50	5	339870	6259228	
<i>Eucalyptus marginata</i>	>50	5	339866	6259218	
<i>Eucalyptus marginata</i>	>50	5	339866	6259217	
<i>Eucalyptus marginata</i>	>50	5	339862	6259214	
<i>Eucalyptus marginata</i>	>50	5	339876	6259213	
<i>Eucalyptus marginata</i>	>50	5	339882	6259209	Dead
<i>Eucalyptus marginata</i>	>50	5	339888	6259204	
<i>Eucalyptus marginata</i>	>50	5	339891	6259203	
<i>Eucalyptus marginata</i>	>50	5	339878	6259198	
<i>Eucalyptus marginata</i>	>50	5	339877	6259174	
<i>Eucalyptus marginata</i>	>50	5	339884	6259147	
<i>Eucalyptus marginata</i>	>50	5	339883	6259146	
<i>Eucalyptus marginata</i>	>50	5	339894	6259118	
<i>Eucalyptus marginata</i>	>50	5	339907	6259119	
<i>Eucalyptus marginata</i>	>50	5	339910	6259117	
<i>Eucalyptus marginata</i>	>50	5	339916	6259120	
<i>Eucalyptus marginata</i>	>50	5	339920	6259122	
<i>Eucalyptus marginata</i>	>50	5	339939	6259119	
<i>Eucalyptus marginata</i>	>50	5	339944	6259120	
<i>Eucalyptus marginata</i>	>50	5	339949	6259121	
<i>Eucalyptus marginata</i>	>50	5	339941	6259129	
<i>Eucalyptus marginata</i>	>50	5	339921	6259136	
<i>Eucalyptus marginata</i>	>50	5	339916	6259136	
<i>Eucalyptus marginata</i>	>50	5	339921	6259143	
<i>Eucalyptus marginata</i>	>50	5	339916	6259158	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339914	6259171	
<i>Eucalyptus marginata</i>	>50	5	339904	6259179	
<i>Eucalyptus marginata</i>	>50	5	339911	6259187	
<i>Eucalyptus marginata</i>	>50	5	339905	6259187	
<i>Eucalyptus marginata</i>	>50	5	339898	6259196	
<i>Eucalyptus marginata</i>	>50	5	339896	6259208	
<i>Eucalyptus marginata</i>	>50	5	339875	6259278	
<i>Eucalyptus marginata</i>	>50	5	339865	6259275	
<i>Eucalyptus marginata</i>	>50	5	339853	6259285	
<i>Eucalyptus marginata</i>	>50	5	339854	6259298	
<i>Eucalyptus marginata</i>	>50	5	339850	6259300	
<i>Eucalyptus marginata</i>	>50	5	339840	6259307	
<i>Eucalyptus marginata</i>	>50	5	339849	6259322	
<i>Eucalyptus marginata</i>	>50	5	339835	6259336	
<i>Eucalyptus marginata</i>	>50	5	339821	6259356	Dead
<i>Eucalyptus marginata</i>	>50	5	339819	6259370	
<i>Eucalyptus marginata</i>	>50	5	339826	6259373	
<i>Eucalyptus marginata</i>	>50	5	339818	6259379	
<i>Eucalyptus marginata</i>	>50	5	339811	6259384	
<i>Eucalyptus marginata</i>	>50	5	339811	6259392	
<i>Eucalyptus marginata</i>	>50	5	339811	6259427	
<i>Eucalyptus marginata</i>	>50	5	339810	6259428	
<i>Eucalyptus marginata</i>	>50	5	339811	6259436	
<i>Eucalyptus marginata</i>	>50	5	339793	6259430	
<i>Eucalyptus marginata</i>	>50	5	339780	6259442	
<i>Eucalyptus marginata</i>	>50	5	339780	6259449	
<i>Eucalyptus marginata</i>	>50	5	339806	6259449	
<i>Eucalyptus marginata</i>	>50	5	339792	6259477	
<i>Eucalyptus marginata</i>	>50	5	339762	6259487	
<i>Eucalyptus marginata</i>	>50	5	339761	6259496	
<i>Eucalyptus marginata</i>	>50	5	339762	6259503	
<i>Eucalyptus marginata</i>	>50	5	339762	6259511	
<i>Eucalyptus marginata</i>	>50	5	339764	6259530	
<i>Eucalyptus marginata</i>	>50	5	339753	6259545	
<i>Eucalyptus marginata</i>	>50	5	339746	6259565	
<i>Eucalyptus marginata</i>	>50	5	339762	6259570	Dead
<i>Eucalyptus marginata</i>	>50	5	339783	6259565	
<i>Eucalyptus marginata</i>	>50	5	339775	6259533	
<i>Eucalyptus marginata</i>	>50	5	339782	6259529	
<i>Eucalyptus marginata</i>	>50	5	339783	6259508	
<i>Eucalyptus marginata</i>	>50	5	339795	6259512	
<i>Eucalyptus marginata</i>	>50	5	339799	6259500	Dead
<i>Eucalyptus marginata</i>	>50	5	339816	6259476	
<i>Eucalyptus marginata</i>	>50	5	339816	6259451	
<i>Eucalyptus marginata</i>	>50	5	339817	6259446	
<i>Eucalyptus marginata</i>	>50	5	339813	6259442	
<i>Eucalyptus marginata</i>	>50	5	339837	6259401	Dead
<i>Eucalyptus marginata</i>	>50	5	339849	6259372	
<i>Eucalyptus marginata</i>	>50	5	339838	6259373	
<i>Eucalyptus marginata</i>	>50	5	339833	6259370	
<i>Eucalyptus marginata</i>	>50	5	339846	6259364	
<i>Eucalyptus marginata</i>	>50	5	339852	6259357	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339852	6259356	
<i>Eucalyptus marginata</i>	>50	5	339859	6259347	
<i>Eucalyptus marginata</i>	>50	5	339861	6259326	
<i>Eucalyptus marginata</i>	>50	5	339866	6259319	
<i>Eucalyptus marginata</i>	>50	5	339868	6259316	
<i>Eucalyptus marginata</i>	>50	5	339872	6259306	
<i>Eucalyptus marginata</i>	>50	5	339900	6259286	
<i>Eucalyptus marginata</i>	>50	5	339922	6259266	
<i>Eucalyptus marginata</i>	>50	5	339932	6259253	
<i>Eucalyptus marginata</i>	>50	5	339944	6259246	
<i>Eucalyptus marginata</i>	>50	5	339949	6259248	
<i>Eucalyptus marginata</i>	>50	5	339957	6259233	
<i>Eucalyptus marginata</i>	>50	5	339950	6259229	
<i>Eucalyptus marginata</i>	>50	5	339936	6259223	
<i>Eucalyptus marginata</i>	>50	5	339927	6259216	
<i>Eucalyptus marginata</i>	>50	5	339921	6259221	
<i>Eucalyptus marginata</i>	>50	5	339910	6259221	
<i>Eucalyptus marginata</i>	>50	5	339903	6259242	
<i>Eucalyptus marginata</i>	>50	5	339915	6259238	
<i>Eucalyptus marginata</i>	>50	5	339924	6259238	
<i>Eucalyptus marginata</i>	>50	5	339940	6259221	
<i>Eucalyptus marginata</i>	>50	5	339951	6259167	
<i>Eucalyptus marginata</i>	>50	5	339949	6259157	
<i>Eucalyptus marginata</i>	>50	5	339936	6259145	
<i>Eucalyptus marginata</i>	>50	5	339932	6259146	
<i>Eucalyptus marginata</i>	>50	5	339927	6259148	
<i>Eucalyptus marginata</i>	>50	5	339922	6259159	
<i>Eucalyptus marginata</i>	>50	5	339965	6259117	
<i>Eucalyptus marginata</i>	>50	5	339959	6259117	
<i>Eucalyptus marginata</i>	>50	5	339953	6259115	
<i>Eucalyptus marginata</i>	>50	5	339965	6259142	
<i>Eucalyptus marginata</i>	>50	5	339968	6259152	
<i>Eucalyptus marginata</i>	>50	5	339963	6259167	
<i>Eucalyptus marginata</i>	>50	5	339948	6259179	
<i>Eucalyptus marginata</i>	>50	5	339928	6259237	
<i>Eucalyptus marginata</i>	>50	5	339922	6259271	
<i>Eucalyptus marginata</i>	>50	5	339923	6259278	
<i>Eucalyptus marginata</i>	>50	5	339913	6259278	
<i>Eucalyptus marginata</i>	>50	5	339883	6259314	
<i>Eucalyptus marginata</i>	>50	5	339870	6259330	
<i>Eucalyptus marginata</i>	>50	5	339880	6259338	
<i>Eucalyptus marginata</i>	>50	5	339862	6259364	Dead
<i>Eucalyptus marginata</i>	>50	5	339860	6259370	
<i>Eucalyptus marginata</i>	>50	5	339861	6259375	
<i>Eucalyptus marginata</i>	>50	5	339855	6259382	
<i>Eucalyptus marginata</i>	>50	5	339845	6259388	
<i>Eucalyptus marginata</i>	>50	5	339841	6259402	
<i>Eucalyptus marginata</i>	>50	5	339847	6259423	
<i>Eucalyptus marginata</i>	>50	5	339836	6259440	
<i>Eucalyptus marginata</i>	>50	5	339845	6259440	
<i>Eucalyptus marginata</i>	>50	5	339847	6259442	
<i>Eucalyptus marginata</i>	>50	5	339854	6259447	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339827	6259464	
<i>Eucalyptus marginata</i>	>50	5	339827	6259487	
<i>Eucalyptus marginata</i>	>50	5	339830	6259504	
<i>Eucalyptus marginata</i>	>50	5	339821	6259507	
<i>Eucalyptus marginata</i>	>50	5	339819	6259499	
<i>Eucalyptus marginata</i>	>50	5	339809	6259511	
<i>Eucalyptus marginata</i>	>50	5	339799	6259518	
<i>Eucalyptus marginata</i>	>50	5	339785	6259532	
<i>Eucalyptus marginata</i>	>50	5	339789	6259537	
<i>Eucalyptus marginata</i>	>50	5	339787	6259544	
<i>Eucalyptus marginata</i>	>50	5	339779	6259588	
<i>Eucalyptus marginata</i>	>50	5	339770	6259588	
<i>Eucalyptus marginata</i>	>50	5	339766	6259608	
<i>Eucalyptus marginata</i>	>50	5	339808	6259558	
<i>Eucalyptus marginata</i>	>50	5	339812	6259556	
<i>Eucalyptus marginata</i>	>50	5	339820	6259544	
<i>Eucalyptus marginata</i>	>50	5	339826	6259536	
<i>Eucalyptus marginata</i>	>50	5	339825	6259515	
<i>Eucalyptus marginata</i>	>50	5	339828	6259506	
<i>Eucalyptus marginata</i>	>50	5	339857	6259510	
<i>Eucalyptus marginata</i>	>50	5	339850	6259502	
<i>Eucalyptus marginata</i>	>50	5	339858	6259472	
<i>Eucalyptus marginata</i>	>50	5	339884	6259441	
<i>Eucalyptus marginata</i>	>50	5	339875	6259434	
<i>Eucalyptus marginata</i>	>50	5	339888	6259424	
<i>Eucalyptus marginata</i>	>50	5	339895	6259429	
<i>Eucalyptus marginata</i>	>50	5	339909	6259405	
<i>Eucalyptus marginata</i>	>50	5	339907	6259396	
<i>Eucalyptus marginata</i>	>50	5	339920	6259390	
<i>Eucalyptus marginata</i>	>50	5	339919	6259385	
<i>Eucalyptus marginata</i>	>50	5	339916	6259384	
<i>Eucalyptus marginata</i>	>50	5	339914	6259382	
<i>Eucalyptus marginata</i>	>50	5	339909	6259376	
<i>Eucalyptus marginata</i>	>50	5	339898	6259378	
<i>Eucalyptus marginata</i>	>50	5	339891	6259385	
<i>Eucalyptus marginata</i>	>50	5	339877	6259398	
<i>Eucalyptus marginata</i>	>50	5	339868	6259416	
<i>Eucalyptus marginata</i>	>50	5	339894	6259380	
<i>Eucalyptus marginata</i>	>50	5	339889	6259360	
<i>Eucalyptus marginata</i>	>50	5	339884	6259354	
<i>Eucalyptus marginata</i>	>50	5	339904	6259342	
<i>Eucalyptus marginata</i>	>50	5	339914	6259330	
<i>Eucalyptus marginata</i>	>50	5	339922	6259308	
<i>Eucalyptus marginata</i>	>50	5	339934	6259302	
<i>Eucalyptus marginata</i>	>50	5	339940	6259288	
<i>Eucalyptus marginata</i>	>50	5	339943	6259282	
<i>Eucalyptus marginata</i>	>50	5	339949	6259281	
<i>Eucalyptus marginata</i>	>50	5	339964	6259279	
<i>Eucalyptus marginata</i>	>50	5	339960	6259282	
<i>Eucalyptus marginata</i>	>50	5	339978	6259274	
<i>Eucalyptus marginata</i>	>50	5	339974	6259256	
<i>Eucalyptus marginata</i>	>50	5	339990	6259228	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339991	6259221	
<i>Eucalyptus marginata</i>	>50	5	339989	6259218	
<i>Eucalyptus marginata</i>	>50	5	339994	6259220	
<i>Eucalyptus marginata</i>	>50	5	339997	6259207	
<i>Eucalyptus marginata</i>	>50	5	339971	6259212	
<i>Eucalyptus marginata</i>	>50	5	339969	6259207	
<i>Eucalyptus marginata</i>	>50	5	339965	6259204	
<i>Eucalyptus marginata</i>	>50	5	339968	6259200	
<i>Eucalyptus marginata</i>	>50	5	339975	6259197	
<i>Eucalyptus marginata</i>	>50	5	339988	6259182	
<i>Eucalyptus marginata</i>	>50	5	339991	6259182	
<i>Eucalyptus marginata</i>	>50	5	339994	6259176	
<i>Eucalyptus marginata</i>	>50	5	339994	6259176	
<i>Eucalyptus marginata</i>	>50	5	339994	6259174	
<i>Eucalyptus marginata</i>	>50	5	339988	6259164	
<i>Eucalyptus marginata</i>	>50	5	339995	6259157	
<i>Eucalyptus marginata</i>	>50	5	340001	6259151	
<i>Eucalyptus marginata</i>	>50	5	339996	6259148	
<i>Eucalyptus marginata</i>	>50	5	340002	6259145	
<i>Eucalyptus marginata</i>	>50	5	340010	6259131	
<i>Eucalyptus marginata</i>	>50	5	340029	6259124	
<i>Eucalyptus marginata</i>	>50	5	340044	6259134	
<i>Eucalyptus marginata</i>	>50	5	340029	6259137	
<i>Eucalyptus marginata</i>	>50	5	340025	6259152	
<i>Eucalyptus marginata</i>	>50	5	340017	6259153	
<i>Eucalyptus marginata</i>	>50	5	340018	6259165	
<i>Eucalyptus marginata</i>	>50	5	340020	6259174	
<i>Eucalyptus marginata</i>	>50	5	340033	6259172	
<i>Eucalyptus marginata</i>	>50	5	340044	6259171	
<i>Eucalyptus marginata</i>	>50	5	340024	6259197	
<i>Eucalyptus marginata</i>	>50	5	340018	6259203	
<i>Eucalyptus marginata</i>	>50	5	340019	6259217	
<i>Eucalyptus marginata</i>	>50	5	340027	6259234	
<i>Eucalyptus marginata</i>	>50	5	340008	6259262	
<i>Eucalyptus marginata</i>	>50	5	340017	6259272	
<i>Eucalyptus marginata</i>	>50	5	339993	6259290	
<i>Eucalyptus marginata</i>	>50	5	339991	6259294	
<i>Eucalyptus marginata</i>	>50	5	339992	6259304	
<i>Eucalyptus marginata</i>	>50	5	339990	6259310	
<i>Eucalyptus marginata</i>	>50	5	339980	6259308	
<i>Eucalyptus marginata</i>	>50	5	339980	6259310	
<i>Eucalyptus marginata</i>	>50	5	339976	6259300	
<i>Eucalyptus marginata</i>	>50	5	339981	6259298	
<i>Eucalyptus marginata</i>	>50	5	339960	6259310	
<i>Eucalyptus marginata</i>	>50	5	339952	6259311	
<i>Eucalyptus marginata</i>	>50	5	339955	6259315	
<i>Eucalyptus marginata</i>	>50	5	339953	6259321	
<i>Eucalyptus marginata</i>	>50	5	339946	6259322	
<i>Eucalyptus marginata</i>	>50	5	339928	6259335	
<i>Eucalyptus marginata</i>	>50	5	339947	6259366	
<i>Eucalyptus marginata</i>	>50	5	339960	6259373	
<i>Eucalyptus marginata</i>	>50	5	339950	6259383	

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
<i>Eucalyptus marginata</i>	>50	5	339939	6259405	
<i>Eucalyptus marginata</i>	>50	5	339936	6259406	
<i>Eucalyptus marginata</i>	>50	5	339940	6259417	
<i>Eucalyptus marginata</i>	>50	5	339932	6259431	
<i>Eucalyptus marginata</i>	>50	5	339911	6259464	
<i>Eucalyptus marginata</i>	>50	5	339905	6259475	
<i>Eucalyptus marginata</i>	>50	5	339895	6259468	
<i>Eucalyptus marginata</i>	>50	5	339888	6259479	
<i>Eucalyptus marginata</i>	>50	5	339885	6259479	
<i>Eucalyptus marginata</i>	>50	5	339893	6259485	
<i>Eucalyptus marginata</i>	>50	5	339862	6259535	
<i>Eucalyptus marginata</i>	>50	5	339856	6259538	
<i>Eucalyptus marginata</i>	>50	5	339855	6259542	
<i>Eucalyptus marginata</i>	>50	5	339845	6259549	
<i>Eucalyptus marginata</i>	>50	5	339829	6259564	
<i>Eucalyptus marginata</i>	>50	5	339829	6259569	
<i>Eucalyptus marginata</i>	>50	5	339826	6259578	
<i>Eucalyptus patens</i>	>50	5	340275	6259551	
<i>Eucalyptus patens</i>	>50	5	340296	6259555	
Stag	>50	5	340747	6259642	Dead
Stag	>50	5	340911	6259505	Dead
Stag	>50	5	340886	6259424	Dead
Stag	>50	5	340958	6259345	Dead
Stag	>50	5	340926	6259216	Dead
Stag	>50	5	340615	6259419	Dead
Stag	>50	5	340714	6259186	Dead
Stag	>50	5	340654	6259287	Dead
Stag	>50	5	340641	6259385	Dead
Stag	>50	5	340667	6259408	Dead
Stag	>50	5	340784	6259160	Dead
Stag	>50	5	340673	6259405	Dead
Stag	>50	5	340659	6259478	Dead
Stag	>50	5	340671	6259519	Dead
Stag	>50	5	340763	6259460	Dead
Stag	>50	5	340742	6259442	Dead
Stag	>50	5	340782	6259320	Dead
Stag	>50	5	340311	6259540	Dead
Stag	>50	5	340446	6259497	Dead
Stag	>50	5	340314	6259626	Dead
Stag	>50	5	340454	6259384	Dead
Stag	>50	5	340423	6259607	Dead
Stag	>50	5	340607	6259167	Dead
Stag	>50	5	340611	6259160	Dead
Stag	>50	5	340653	6259182	Dead
Stag	>50	5	340602	6259376	Dead
Stag	>50	5	340585	6259395	Dead
Stag	>50	5	340568	6259475	Dead
Stag	>50	5	340501	6259558	Dead
Stag	>50	5	340531	6259585	Dead
Stag	>50	5	340495	6259617	Dead
Stag	>50	5	340144	6259543	Dead
Stag	>50	5	340201	6259472	Dead

Species	Diameter at Breast Height (DBH)	Rank	GDA2020 MGA zone 50		Comments
			Easting (mE)	Northing (mN)	
Stag	>50	5	340169	6259592	Dead
Stag	>50	5	340153	6259612	Dead
Stag	>50	5	340033	6259513	Dead
Stag	>50	5	340070	6259444	Dead
Stag	>50	5	340111	6259361	Dead
Stag	>50	5	340144	6259315	Dead
Stag	>50	5	340141	6259318	Dead
Stag	>50	5	340132	6259314	Dead
Stag	>50	5	340140	6259218	Dead
Stag	>50	5	340163	6259290	Dead
Stag	>50	5	340059	6259526	Dead
Stag	>50	5	340133	6259500	Dead
Stag	>50	5	340238	6259135	Dead
Stag	>50	5	340237	6259141	Dead
Stag	>50	5	340196	6259210	Dead
Stag	>50	5	340195	6259261	Dead
Stag	>50	5	340204	6259332	Dead
Stag	>50	5	340125	6259541	Dead
Stag	>50	5	340075	6259182	Dead
Stag	>50	5	340072	6259329	Dead
Stag	>50	5	340161	6259144	Dead
Stag	>50	5	340107	6259270	Dead
Stag	>50	5	340109	6259292	Dead
Stag	>50	5	340102	6259331	Dead
Stag	>50	5	340098	6259357	Dead
Stag	>50	5	339962	6259566	
<i>Eucalyptus marginata</i>	>50	2	340554	6259430	Hollow 3 at 8m and 9m Hollow 2 at 14m
<i>Eucalyptus marginata</i>	132	2	339900	6259543	Hollows at 13m and 15m & Hollow at 12m
<i>Eucalyptus marginata</i>	78	3	339939	6259210	3 rank at 13m. 4 rank at 9m (Obstructed)
<i>Corymbia calophylla</i>	>50	x	340404	6259582	Hollow at 10m. Bees
<i>Corymbia calophylla</i>	157	x	340174	6259422	Bees
<i>Corymbia calophylla</i>	75	x	340043	6259191	Hollow at 11m
<i>Corymbia calophylla</i>	62	x	339960	6259580	Hollow at 13m
<i>Corymbia calophylla</i>	114	x	340058	6259639	Hollow at 14m

Basic and Targeted Fauna Survey

Lot 2628 Jacka Road, Boallia

MAY 2022



Version control

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Statement of limitations

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Common terms/acronyms

BC Act	WA <i>Biodiversity Conservation Act 2016</i>
DAWE	Federal Department of Agriculture, Water and the Environment
DBCA	WA Department of Biodiversity, Conservation and Attractions
DBH	Diameter at Breast Height in centimetres
DWER	WA Department of Water and Environmental Regulation
EP Act	WA <i>Environmental Protection Act 1986</i>
EPBC Act	Federal <i>Environment Protection and Biodiversity Conservation Act 1999</i>
FRTBC	Forest Red-tailed Black Cockatoo (<i>Calyptorhynchus banksii subsp. Naso</i>)
Locality	A 10 km buffer around the Study area
Project	The proposed action
Study area	Lot 2628 Jacka Road, Boallia
Suitable DBH tree	Tree of a suitable size to develop large hollows (>50cm DBH most trees in the southwest or >75cm for Karri).
WA	Western Australia
WRP	Western Ringtail Possum (<i>Pseudocheirus occidentalis</i>)

Executive summary

Main Roads WA (Main Roads) sought further information in relation to fauna and fauna habitat within the 65.5 ha, Lot 2628 Jacka Road, Boallia (the study area), to identify the Lot's suitability as an environmental offset for Main Roads' projects. It was thought that the study area may provide breeding and foraging habitat for the threatened fauna including State and Commonwealth listed black cockatoos¹, and Western Ringtail Possum (WRP) (*Pseudochirus occidentalis*).

SW Environmental was commissioned to carry out a basic survey comprising of habitat assessment and likelihood of occurrence assessment of conservation significant fauna, along with a targeted black cockatoo and Western Ringtail Possum surveys. Black cockatoos collectively refers to:

- Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii subsp. naso*) (Vulnerable)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*) (Endangered)
- Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (Endangered)

Field work consisted of a reconnaissance visit and targeted WRP surveys on 29th March 2022, and nocturnal surveys on 29th and 31st March 2022. The diurnal survey included a survey higher effort along the two drainage lines, to assess habitat quality and to identify the presence or absence of habitat features such as dreys and hollows. Perimeter tracks and fire trails were assessed by slow moving vehicle. Scat searches were undertaken broadly but focused on higher visibility areas including bare ground, on logs and at the base of hollow trees. The two nights of nocturnal surveys included spotlighting from accessible tracks and firebreaks, and the second night included a random meander through the two drainage lines, with closer inspection of other areas where WRP were more likely to occur. This methodology aimed to maximise survey effort to confirm presence or absence of WRP.

Black cockatoo surveys were limited to recording species presence or absence based on direct sightings, calls, evidence of foraging, roosting, and a general assessment of breeding habitat from structural vegetation types. Due to the large study area and abundance of large trees and hollows, trees >50 centimetre (cm) diameter at breast height (DBH) were not recorded.

The study area consisted of mostly intact native vegetation in an Excellent to Pristine condition (Keighery 1994). There are five habitat types (61.36 ha) mapped within the 65.46 ha study area, all associated with remnant native vegetation. The remaining 4.10 ha was disturbed - clearings, tracks and fire trails. Fauna habitat quality was Good (defined in Table 2-3; SW Environmental, undated):

- 1 Jarrah, Marri open forest with brown loam with *Taxandria linearifolia* in the drainage lines (shallow broad valley).
- 2 Jarrah, Marri, *Allocasurina fraseriana* open forest with orange lateritic gravelly loam (uplands).

¹ Black cockatoos collectively refers to

- Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii subsp. naso*) (Vulnerable)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*) (Endangered)
- Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (Endangered)

3 Jarrah, *Allocasurina fraseriana*, *Banksia attenuata* low open forest with grey sandy soils (upper slopes).

4 Jarrah, *Allocasurina fraseriana*, *Corymbia haematoxyn* low open forest on grey loam sandy soil (upper slopes).

5 Jarrah, *Allocasurina fraseriana* low open forest on orange sandy soils (mid slopes).

C Cleared

Two drainage lines cross the study area within Habitat Type 1; one a seasonal tributary of Buanyup River, the second smaller drainage line or depression occurs parallel but further to the west. Neither were flowing at the time of the survey.

Twenty-five species of fauna were recorded from the 241 that may occur based on desktop assessment. This included 17 birds and five mammals (two of which are introduced), two reptiles and one frog. Four target species were recorded (all three black cockatoos and Quenda) from the 16 terrestrial vertebrate fauna of conservation significance that may occur locally.

Targeted black cockatoo surveys identified the following values:

- The study area occurs within the breeding range of all three black cockatoo species (SEWPAC 2012).
- Numerous large Jarrah and Marri trees (>50cm DBH) with a range of hollow sizes occur within the study area. All habitat types contained Jarrah as a key structural component, with Marri being common in Habitat types 1 and 2 (approximately 73% of the study area). Both tree species are important feed and breeding species for black cockatoos.
- Numerous hollows were observed in a range of sizes, some of which appeared to be chewed, particularly in Habitat types 1 and 2. None were confirmed black cockatoo breeding hollows, though there were numerous potential hollows observed with suitable attributes for breeding.
- No roost trees were identified during the field work.
- Baudin's Cockatoo was observed foraging, and Carnaby's Cockatoo and older Forest Red-Tailed Black Cockatoo, chewed Marri nut residue were also observed broadly over the study area. All fauna habitat types (1-5) (61.36 ha) mapped within the study area are consistent with 'high quality' black cockatoo foraging habitat (SEWPAC 2012).

Targeted surveys for WRP were conducted however no evidence of this species was found. Broadly, the habitat types appeared to be suitable for WRP. The lack of mid storey in some areas could be a contributing factor to the lack of WRP records. If any WRP were present, they would be at the edge of the species mapped range and would have to be at very low densities not to have been observed.

Quenda diggings were observed throughout the study area. Chuditch, Southern Brush-tailed Phascogale, Western Brush Wallaby, Water Rat and Western False Pipistrelle were not recorded however have been recorded locally and may also occur within the study area. The study area may provide supporting habitat for Peregrine Falcon and Masked Owl (southern sub sp), given suitable habitat occurs and connected to significant larger areas of remnant vegetation to the north and south.

In a local context, there is approximately 14,800 ha of remnant native vegetation mapped (42%) remaining within 10 km of the study area (35,000 ha) (Government of Western Australia 2022). The study area occurs adjacent to an extensive tract of Blackwood State Forest, with other significant Department

of Biodiversity Conservation and Attractions (DBCA) lands within 10 km including North East Margaret River State Forest and Rapids Conservation Park. Approximately 9,050 ha of lands within the locality are DBCA tenure. The majority of the study area (north and south) is surrounded by remnant vegetation which buffers the site from edge effects.

The study area is located within two mapped South West Regional Ecological Linkages buffers (Molloy et al 2009), *a: with an edge touching or < 100m from a linkage and 1b: with an edge touching or < 100m from a natural area selected in 1a* (Molloy et al 2009). The study area has high value in terms of fauna habitat connectivity, linkage and corridor importance at the patch and landscape scales (Molloy et al 2009).

The site is an excellent candidate for an offset for general fauna values associated with Jarrah Marri Forest habitats, but also potentially fauna habitat associated with *Allocasurina fraseriana* and *Banksia attenuata*.

The site would be a high value offset for all three black cockatoo species for foraging and breeding habitat, and also for Quenda. The site may have values as an offset for Chuditch, Southern Brush-tailed Phascogale, Western Brush Wallaby, Water Rat and Western False Pipistrelle, and potentially Peregrine Falcon and Masked Owl. The site is unlikely to have any significant value as an offset for WRP.

1 Introduction

1.1 Background

Main Roads WA (Main Roads) sought further information in relation to the presence of fauna and fauna habitat within the 65.5 ha, Lot 2628 Jacka Road, Boallia (the study area), to identify the Lot's suitability as an environmental offset for future Main Roads' projects. It was thought that the study area may provide breeding and foraging habitat for the threatened fauna including State and Commonwealth listed black cockatoos², and in particular, Western Ringtail Possum (WRP) (*Pseudocheirus occidentalis*).

A Basic and Targeted Fauna Survey Report was required to support any decisions around offset suitability or offset proposal documentation. The study area is shown in Figure A.1 (Appendix A). The locality, a 10 km buffer around the Lot 2628, is shown in Appendix A.2 (Appendix A).

1.2 Scope of work

SW Environmental was commissioned to carry out a Basic and Targeted fauna survey in accordance with the EPA Technical Guidance (EPA, 2020) and other relevant State and Commonwealth guidelines. The broad objective of the basic survey component is to map and describe habitats, identify general faunal assemblages present and whether any fauna of conservation significance are likely to occur within the survey area. Fauna Matters of National Environmental Significance, afforded protection under the federal *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act), were also considered.

The fauna survey was restricted to terrestrial vertebrate fauna. Threatened aquatic fauna and invertebrates were considered through desktop assessment only. Targeted survey components were included for WRP, including two nights of nocturnal surveys. Black cockatoo surveys were limited to recording species presence or absence based on direct sightings, calls, evidence of foraging, roosting, and a general assessment of breeding habitat from structural vegetation types (described per Commonwealth guidelines, 2012). Individual trees were not mapped unless they were observed to contain actual breeding hollows. A statement of habitat quality for WRP and black cockatoos was to be made to assist Main Roads in determining the suitability of the study area as an environmental offset for these species.

This survey report is based on a desktop assessment, field validation and habitat assessment, and reporting (consultation, reporting, mapping and recommendations).

² Black cockatoos collectively refers to

- Forest Red-tailed Black-Cockatoo (*Calyptorhynchus banksii subsp. naso*) (Vulnerable)
- Baudin's Cockatoo (*Calyptorhynchus baudinii*) (Endangered)
- Carnaby's Black Cockatoo (*Calyptorhynchus latirostris*) (Endangered)

1.3 Regulatory context

1.3.1 Key legislation

Key environmental legislation that may be relevant to the fauna survey is outlined in Table 1-1. Refer to Appendix B for further detail and conservation code descriptions.

Table 1-1 Environmental legislation that may be relevant to the Project

Legislation	Government Department	Aspect
<i>Federal Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act)</i>	Federal Department of Agriculture, Water, and the Environment (DAWE)	Matters of National Environmental Significance including threatened fauna.
<i>Biodiversity Conservation Act 2016 (BC Act)</i>	Western Australian (WA) Department of Biodiversity, Conservation and Attractions (DBCA)	Threatened species habitats, threatening processes, environmental pests and weeds.
<i>Biosecurity and Agricultural Management Act 2007 (BAM Act)</i>	WA Department of Primary Industries and Regional Development	Weeds, feral animals and other pests.
<i>Environmental Protection Act 1986 (EP Act)</i>	Environmental Protection Authority or DWER	Environmental impact assessment and management and offsets.

Fauna in WA may be afforded protection under the WA BC Act and or federal EPBC Act. Species listed as threatened or migratory are referred to collectively in this document as being 'conservation significant' or 'target' species. These terms include species under the DBCA Priority lists.

1.3.2 Guidelines

The survey methodologies were developed with consideration of:

- Environmental Protection Authority (2020) Technical Guidance – Terrestrial Guidance for Fauna Surveys for Environmental Impact Assessment. Perth, Western Australia
- Terrestrial Biological Surveys as an Element of Biodiversity Protection. Position Statement No. 3, EPA (2002).
- Commonwealth Matters of National Environmental Significance – *Significant impact guidelines 1.1 Environmental Protection and Biodiversity Conservation Act 1999*, Department of the Environment, Water, Heritage and the Arts (DEWHA), (2009).
- Commonwealth of Australia (2017) Revised draft referral guideline for three threatened black cockatoo species: Carnaby's Cockatoo, Baudin's Cockatoo and the Forest Red-tailed Black Cockatoo.
- Department of Sustainability, Environment, Water, Population and Communities (SEWPAC) (2012) *Commonwealth EPBC Act referral guidelines for three threatened black cockatoo species: Carnaby's cockatoo (endangered), Calyptorhynchus latirostris, Baudin's cockatoo (vulnerable), Calyptorhynchus baudinii, and Forest red-tailed black cockatoo (vulnerable) Calyptorhynchus banksii naso*.

2 Methods

2.1 Desktop study

A desktop study of fauna within 10 km of the study area was undertaken. A key aim of the study was to determine the likelihood of any species of conservation significance (target species) occurring within Lot 2628 and the importance of the study area to them. Common (non-target) species are also considered more generally.

Database searches were conducted within the locality (10 km) (Appendix C.1):

- Atlas of Living Australia (2022),
- BirdLife Australia's Atlas and Birddata datasets (2022),
- Protected Matters Search Tool (DAWE) (2022) (Appendix C.2)
- DBCA's Species and Communities Branch (Threatened and Priority fauna) (2022)

Index of Biodiversity Surveys for Assessment (IBSA, 2022) and WA Museum Nature Map were unavailable at the time of the assessment. Aerial photography (Landgate, 2022), data from the Government of WA's Shared Land Information Platform (SLIP, 2022) was also viewed along with management plans, recovery plans, books, scientific journals and other publications, previous survey reports and expert consultation as required.

Vegetation mapping from a survey undertaken in August 2015, by Andrew Webb (DBCA) was used to inform vegetation types and boundaries. It was supplemented by soil mapping from Tille and Lantzke (1990), and mapped vegetation associations and complexes (SLIP 2022), to identify habitat types occurring within and near the study area.

A brief review of the ecology, habitat and range of target species were used in an evaluation matrix to determine the likelihood of occurrence of conservation significant fauna (Appendix D). Fauna of conservation significance that may occur locally are listed in Sections 3.3.2 and 4.3.

2.2 Field surveys

2.2.1 Study area, timing, and personnel

The 'study area' included 65.5 ha, Lot 2628 Jacka Road, Boallia. Field work consisted of a reconnaissance visit on 29th March 2022 by SW Environmental Principal, Shane Priddle. The field visit was undertaken to validate the desktop study and ground truth fauna habitat. Fauna habitat type was documented based on structural vegetation and soil mapping where significant changes occurred and was broadly based on the DBCA vegetation mapping. Evidence of fauna (e.g., scat searches, diggings or feed residue) and fauna sightings were also noted.

Fauna habitat quality was based on Tables 2-1 to 2-3.

Targeted searches for WRP and black cockatoos are described below.

Table 2-1 Vegetation structure (Keighery 1994).

Life Form/Height Class	Canopy cover			
	100% to 70%	70% to 30%	30% to 10%	10% to 2%
Trees over 30 m	Tall Closed Forest	Tall Open Forest	Tall Woodland Woodland	Tall Open Woodland
Trees 10-30 m	Closed Forest	Open Forest		Open Woodland
Trees under 10 m	Low erased Forest	Low Open Forest	Low Woodland	Low Open Woodland ..
Mallee over 8 m (Tree Mallee)	Closed Tree Mallee	Tree Mallee	Open Tree Mallee	Very Open Tree. Mallee
Mallee under 8 m (Shrub Mallee)	Closed Shrub Mallee	Shrub Mallee	Open Shrub Mallee	Very Open Shrub
Shrubs over 2 m	Closed Tall Scrub	Tall Open Scrub	Tall Shrubland Shrubland	Tall Open Shrubland
Shrubs 1-2 m	Closed Heath	Open Heath	Low Shrubland	Open Shrubland
Shrubs under 1 m	Closed Low Heath	Open Low Heath		Very Open Shrubland
Grasses	Closed Grassland	Grassland	Open Grassland	Very Open Grassland
Herbs	Closed Hermland	Hermland	Open Hermland	Very Open Hermland
Sedges	Closed Sedgeland	Sedgeland	Open Sedgeland.	Very Open Sedgeland

Table 2-2 Vegetation condition scale (EPA 2016).

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

Table 2-3 Fauna habitat quality categories and descriptions (SW Environmental, undated).

Quality	Description
Good	<ul style="list-style-type: none"> Native vegetation with intact and diverse habitat structure. Different vegetation age classes present at most stratum levels (ground, understorey, midstorey, canopy). Forest/woodland: abundant hollow-bearing trees, including those with or likely to develop large hollows. Mature trees offer more foraging resources (nectar/seed). Presence of shelter/refuges at ground level (dense understorey plants, tussock, rocky outcrop, hollow logs). High habitat complexity (ecotones between vegetation types or habitat mosaic). This increases the range of foraging and shelter opportunities within a habitat. Presence of key foraging and microhabitat components for target species. Little to no obvious weed invasion or evidence of grazing. May be large patch and/or connected to other areas of native vegetation.
Moderate	<ul style="list-style-type: none"> Native flora species dominant with moderate habitat structure complexity appropriate to vegetation type. Ground litter intact or slightly disturbed. More than one age class present. Forest/woodland: low to moderate abundance of hollow-bearing trees or trees likely to develop hollows. Some shelter and refuge present for ground dwelling fauna. Some habitat complexity (ecotones between vegetation types or areas forming a habitat mosaic). Marginal presence of key microhabitat components for target species. May be small or large in scale, and isolated or well connected.
Poor	<ul style="list-style-type: none"> Habitat highly disturbed and simplified with low structural complexity. Ground litter layer absent or highly modified. Complexity reduced by only one age class present. Little or no shelter and refuge for ground dwelling fauna. Forest/woodland: not likely to support hollow-bearing trees. Lack of key foraging and microhabitat components for target species. May have evidence of weed invasion or grazing. May be narrow or small area and substantially influenced by edge effects, isolated from other areas of native vegetation.

2.3 Western Ringtail Possum targeted assessment

Western Ringtail Possum targeted surveys included diurnal surveys on 29th March 2022 and nocturnal surveys on 29th and 31st March 2022.

Diurnal surveys included approximately 10 km of transects, with higher effort along the two drainage lines, to assess habitat quality and to identify the presence or absence of habitat features such as dreys and hollows. Perimeter tracks and fire trails were assessed by slow moving vehicle. Scat searches were undertaken broadly at locations such as bare ground, on logs and at the base of hollow trees. Photos were taken within all habitat types.

The two nights of nocturnal surveys were conducted by Shane Priddle and an experienced field assistant, covering a total of approximately 6.2 km on Night 1 and 11 km on Night 2. On advice from Kim Williams, (DBCA Blackwood) the first night included spotlighting from accessible tracks and firebreaks, and the second night included a random meander through the two drainage lines dissecting Lot 2628, with closer inspection of other areas that WRP may have been found on the first night, or areas where WRP are more likely to occur. This methodology aimed to maximise survey effort to confirm presence or absence of WRP.

2.4 Black cockatoo habitat assessment

Black cockatoo surveys were limited to recording species presence or absence based on direct sightings, calls, evidence of foraging, roosting, and a general assessment of breeding habitat from structural vegetation types (described per Commonwealth guidelines, 2012). Habitat values and species profiles (Section 3.4) are based on literature review and consultation with Tony Kirby, a recognised black cockatoo expert. Individual trees were not mapped unless they were observed to contain actual breeding hollows.

2.5 Survey method considerations

Publications

Publications consulted for general distribution of fauna included, but was not limited to:

- A Complete Guide to Reptiles of Australia (Wilson and Swan, 2017)
- A Field Guide to the Mammals of Australia (Menkhurst and Knight, 2013)
- Field guide to frogs of Western Australia (Doughty and Tyler, 2009)
- Frogs of Western Australia (Thomson-Dans and Wardell-Johnson, 2002)
- Handbook Western Australian Birds Vol I (Johnstone and Storr, 1998)
- Michael Morcombe's Birds of Australia eGuide, (Michael Morcombe, 2011)
- Reptiles and Frogs in the Bush: Southwestern Australia (Bush et al., 2007)
- Scats, Tracks and Other Traces: A field guide to Australian mammals (Triggs, 2008)
- The Field Guide to the Birds of Australia (Pizzey and Knight, 2012)
- Numerous online publications, journal articles and other general species references (see References section).

Taxonomy and nomenclature

The taxonomy and nomenclature used in this report follows several sources, depending on the faunal group. It primarily follows Naturemap (2021) but also the following:

- Amphibians: Bush et al. (2007)
- Aves: Pizzey and Knight (2007)
- Mammals: Menkhurst and Knight (2013)
- Reptiles: Wilson and Swan (2017)

Animal ethics

The survey conformed to Section 4 of the *Australian code of practice for the care and use of animals for scientific purposes* (National Health and Medical Research Council 2004). No animals were captured or collected during the survey.

2.6 Limitations

In accordance with relevant *Technical Guidance* (EPA 2020) survey limitations are shown below.

Table 2-4 Assessment of survey limitations

Aspect	Constraint	Comment
Competency / experience of the survey team	No	Suitably qualified individuals carried out the work. Shane Priddle (BSc Science; CEnvP No. 310) has over 20 years' experience conducting fauna surveys throughout NSW and WA. Shane supervised an experienced field assistant during the nocturnal surveys.
Scope, e.g. where faunal groups were excluded from the survey	No	The scope is adequate to provide information required to support a offset proposal. Fish and invertebrates were not sampled in the field but were considered in the desktop assessment.
Adequacy of the survey intensity and proportion of survey achieved	No	Suitable survey effort has been adopted to identify the fauna values of target fauna with the study area. A precautionary approach has also been adopted.
The proportion of the task achieved and further work	No	The surveys were completed adequately, to a sufficient level with respect to the scope.
Timing/weather/season	No	The surveys were completed in Autumn 2022. The survey timing and weather conditions were suitable to detect most target species. Breeding black cockatoos may not have been present, however older hollow chews and feed residue would still have been present and observable.
Disturbances that may have affected results of survey	No	There were no disturbances that affected the survey.
Intensity	No	The survey intensity is considered adequate to meet the project scope.
Completeness	Negligible	All representative habitat types were surveyed, with higher effort conducted in key habitat areas for WRP.
Resources	No	The surveys were completed adequately.
Access problems	No	The study area was on private land and accessible.

3 Desktop study

3.1 Local and regional context

3.1.1 Land use

The study area consists of mostly intact native vegetation, with a small, cleared area along the western boundary of the Lot. Cleared fire trails are present around the perimeter several intersect the site. There is a small cleared gravel pit in the centre of the site which has not been used for some time and is weed free. The study area has been subject to historical timber harvesting, but not to an extent that has adversely impacted vegetation structure.

3.1.2 Interim Biogeographic Regionalisation of Australia (IBRA) values

The Interim Biogeographic Regionalisation for Australia (IBRA) classifies Australia's landscapes into 89 large geographically distinct bioregions based on common climate, geology, landform, native vegetation and species information. IBRA also provides a planning framework for the systematic development of a comprehensive, adequate and representative National Reserve System, endorsed by all levels of government as a key tool for identifying land for conservation under Commonwealth's Australia's Strategy for the National Reserve System 2009-2030 (DE, 2017).

The Project occurs in the transition between the Swan Coastal Plain Sub-region (SWA02) of the Swan Coastal Plain IBRA region, to the north, and the Southern Jarrah Forest (JAF02) to the south.

The SWA02 bioregion consists of a low lying coastal plain, mainly covered with woodland. Woodlands are dominated by Banksia or Tuart on sandy soils, *Casuarina obesa* on outwash plains, and paperbark in swampy areas. In the east, the plain rises to duricrusted Mesozoic sediments dominated by Jarrah woodland. Three phases of marine sand dune development provide relief. The outwash plains, once dominated by *C. obesa*-Marri woodlands and Melaleuca shrublands, are extensive only in the south (Mitchell et al 2002) (Williams et al 2002).

The Jarrah Forest IBRA (JAF02) sub-region is characterised by duricrusted plateau of Yilgarn Craton characterised by Jarrah-Marri Forest on laterite gravels and, in the eastern part, by Wandoo - Marri woodlands on clayey soils. Eluvial and alluvial deposits support Agonis shrublands (Hearn et al 2002).

3.1.3 DBCA managed lands

The study area occurs adjacent to the north of an extensive tract of Blackwood State Forest, with other significant DBCA lands within 10 km including North East Margaret River State Forest and Rapids Conservation Park. Approximately 9050 ha of lands within the locality are DBCA tenure. The majority of the study area is surrounded by remnant vegetation which buffers the site from edge effects.

3.1.4 Habitat connectivity, linkage, or corridor values

In a local context there is approximately 14,800 ha of remnant native vegetation mapped (42%) remaining within 10 km of the study area (35,000 ha) (Government of Western Australia 2022).

The South West Regional Ecological Linkages (SWREL) project identifies regional scale ecological linkages and aims to respond to the issues of fragmentation and climate change through land use planning policy and procedures. It also seeks to retain native vegetation and fauna habitat and reduce the loss of biodiversity and ecological function in the South West. The SWREL axis lines can be summarised as a series of vegetation patches which due to their proximity, act as habitat stepping stones thereby facilitating ecological processes and movement of organisms within and across the landscape (i.e. at the landscape scale) (Molloy et al 2009).

The study area is located within two mapped SWREL buffers (Molloy et al 2009), *a: with an edge touching or < 100m from a linkage* and *1b: with an edge touching or < 100m from a natural area selected in 1a* (Molloy et al 2009). The study area has relatively high value in terms of habitat connectivity, linkage and corridor importance at the patch and landscape scales.

3.2 Environmental values of the study area

3.2.1 Climate, landform and soils

The southwest of WA has a moderate Mediterranean climate with mild wet winters and hot dry summers. The following summary is based on data from the nearest data station, Busselton Aero. The temperature ranges from an average maximum of 29.3 °C in the hottest months of January and February to an average minimum of 8°C in July with an average annual rainfall of around 672 mm, with most of the rain falling between May and July (Weatherzone, 2022).

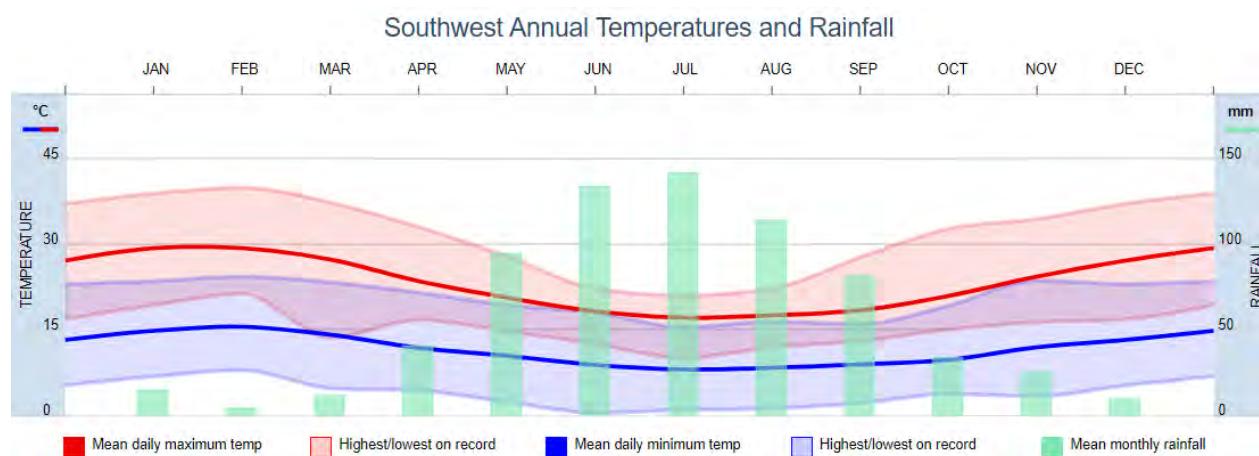


Figure 1 Annual temperatures and rainfall near the study area (Busselton Aero) (Weatherzone 2022)

The study area occurs over low rolling topography and passes through three soil units, characterized by sandy soils (gravels and loams) (Tille and Lantzke 1990):

- 214WsYL1 Yelverton flats: Phase Raised flats. Duplex sandy gravels, semi-wet soils, yellow deep sands and sandy earths and loamy gravels.
- 214WsYLF Yelverton fertile flats: Phase Occurs on floors of major valleys cutting through the shelf. Soils are brown deep sands and brown loamy earths.
- 214WsYL2 Yelverton very gentle slopes: Phase Undulating terrain. Duplex sandy gravels, semi-wet soils, yellow deep sands and sandy earths and loamy gravels.

3.2.2 Wetlands and watercourses

The term 'wetlands' refers to damplands, estuary-peripheral and water body, floodplains, palusplain and sumplands. Wetlands and watercourses provide a range of fauna habitat for aquatic fauna, as riparian habitat and corridors, and directly for drinking.

One unnamed incised, seasonal drainage line, which is a main tributary of the Buayanyup River, dissects the site. A second smaller drainage line or depression occurs parallel approximately 150m west of the drainage line previously described. Neither were flowing at the time of the survey. The study area does not contain any mapped wetlands, nor wetlands listed under the Directory of Important Wetlands in Australia or RAMSAR (List of Wetlands of International Importance) (Government of Western Australia, 2022).

3.2.3 Vegetation

Vegetation Associations are mapped at a high level by Beard (1981) as *Chapman 1181 Medium woodland, Jarrah & Eucalyptus haematoxylon* (Whicher Range) and *Chapman 1000 Mosaic of medium forest, jarrah-marri / Low woodland, banksia / Low forest, teatree (Melaleuca spp.)* through the drainage lines.

DBCA (Andrew Webb) undertook a detailed vegetation inspection of the site in August 2015, summarised below (DBCA 2015). These communities (Table 3-1) have been used to inform the fauna habitat mapping.

Table 3-1 Vegetation communities and descriptions (DBCA 2015)

Community	Vegetation description
Community 1	<p>Shallow broad valley with a Jarrah, Marri open forest and occasional <i>Allocasuarina fraseriana</i>, over <i>Dasygopon hookeri</i>, <i>Kingia australis</i> shrubland, over <i>Hibbertia hypericoides</i>, <i>Xanthorrhoea gracilis</i> open low heath, over <i>Mesomelaena tetragona</i> sedges and <i>Patersonia umbrosa</i>, <i>Lomandra sonderi</i> herbs. The soils are a brown loam. This community was in Excellent condition.</p> <p>Two drainage lines are found in this community,</p> <ul style="list-style-type: none">• Drainage line A was dry at the time of inspection and was only differentiated from the surrounding vegetation by the presence <i>Taxandria linearifolia</i>. It is likely that this tributary will only flow in times of high rainfall/flood.• Drainage line B is a main tributary of the Buayanyup River and is deeply incised with a reasonable water flow at the time of vegetation inspection (winter). The creekline

Community	Vegetation description
	supported a range of wetland dependent species such as <i>Lepidosperma effusum</i> , <i>Baumea vaginalis</i> , <i>Meeboldina</i> sp., <i>T.linearifolia</i> , <i>Villarsia</i> sp. and <i>Hypocalymma cordifolium</i> .
Community 2	Uplands with orange lateritic gravelly loam with large rock outcrops in places. The vegetation is a Jarrah, Marri, <i>A. fraseriana</i> open forest, over <i>Banksia grandis</i> , <i>Persoonia longifolia</i> low woodland, over <i>Dasypogon hookeri</i> , <i>Podocarpus drouyianus</i> shrubland, over <i>Hibbertia hypericoides</i> , <i>Adenanthes barbigera</i> , <i>Hibbertia glomerata</i> open low heath, over <i>Patersonia umbrosa</i> , <i>Lomandra sonderi</i> herbs. <i>Kingia australis</i> is absent to very rare in this community. This community while heavily grazed by kangaroos was still of an Excellent condition.
Community 3	Is an upper slope area with free draining grey sand soils, the sand is likely to overlay laterite at depth. The vegetation is a Jarrah, <i>A.fraseriana</i> , <i>Banksia attenuata</i> low open forest, over <i>Taxandria parviceps</i> , <i>Podocarpus drouyianus</i> open heath, over <i>Hibbertia hypericoides</i> , <i>Adenanthes meisneri</i> , <i>Stirlingia latifolia</i> open low heath, over <i>Anarthria prolifera</i> sedges and <i>Phlebocarya ciliata</i> , <i>Dasypogon bromelifolius</i> herbs. This community does not support <i>Kingia australis</i> . This community was of an Excellent condition.
Community 4	Upper slopes with loamy grey sand soil. The vegetation is a Jarrah, <i>A.fraseriana</i> , <i>Corymbia haematoxyn</i> low open forest, over <i>Taxandria parviceps</i> , <i>Podocarpus drouyianus</i> , <i>Xanthorrhoea preissii</i> open heath with emergent <i>Kingia australis</i> , over <i>Hibbertia hypericoides</i> , <i>Dasypogon hookerii</i> open low heath, over <i>Anarthria prolifera</i> sedges and <i>Phlebocarya ciliata</i> , <i>Dasypogon bromelifolius</i> herbs. This is a transition between communities 2 and 3 where the sandy soils appear to be poorly drained. The vegetation here is very dense and of Excellent to Pristine condition.
Community 5	Mid slope with orange sand soils most likely overlying laterite at depth. The vegetation is a Jarrah, <i>A.fraseriana</i> low open forest, over <i>Hakea ruscifolia</i> , <i>Podocarpus drouyianus</i> shrubland, over <i>Hibbertia hypericoides</i> , <i>Dasypogon hookerii</i> , <i>Stirlingia latifolia</i> open low heath, over <i>Cyathochaeta equitans</i> open sedges. The vegetation here Excellent condition.

3.3 Fauna records

3.3.1 Fauna recorded locally

The south west has generally been well surveyed for fauna. Index of Biodiversity Surveys for Assessment (2022) and Naturemap (2022) records were unavailable at the time of the survey. A species list was derived from desktop searches (ALA, Birddata and DBCA, 2022) within 10 km of the study area, supplemented with known distributions from literature. This yielded 241 vertebrate terrestrial fauna species (Appendix C.1):

- 29 mammals: 23 non-volant, 6 volant (bats),
- 163 birds,
- 31 reptiles, and
- 11 amphibians.

Ten fauna species are introduced or naturalised species. Invertebrates, marine or aquatic dependant species (fish) are not included. Some near coastal or wetland taxa may be included in the list even though they may not occur within the study area.

3.3.2 Fauna of conservation significance

Based on the evaluation in Appendix D, there are 16 terrestrial vertebrate fauna of conservation significance that may occur locally, though not necessarily within the study area. An additional 12 birds are listed as Migratory though these generally would not occur at the study area (PMST 2022). Five fish and four invertebrate of conservation significance may also potentially occur locally.

The study area occurs within the breeding range of all three black cockatoo species (SEWPaC 2012). Detailed species profiles are provided below.

3.4 Black cockatoo species profiles

The black cockatoo species profiles and breeding requirements are provided to provide context around the assessment results.

3.4.1 Black cockatoo profiles

Baudin's cockatoo (*Calyptorhynchus baudinii*)

EN (EPBC Act), EN (BC Act)

Baudin's cockatoo is a large, iconic forest cockatoo endemic to the south west corner of WA. The species is likely to breed locally (SEWPaC 2012). It has suffered a substantial decline in number in the past 50 years. Direct causes of this decline include large numbers shot by orchardists, fragmentation of habitat and the impact of hollow competitors (Johnstone and Kirkby 2008). Depending on their region of origin, Baudin's cockatoo is a resident, a post nuptial nomad or migrant with the bulk of the population vacating the coldest parts of their range (i.e. the Karri forest block) in the autumn and migrating northwards during the non-breeding season. Small numbers also appear resident in a few places including Leeuwin – Naturaliste Ridge and Manjimup (Johnstone and Kirkby 2008). Flock sizes vary from small family groups to large aggregations at roosting sites. Breeding mainly takes place in forested areas from August to November (egg laying dates) (Tony Kirkby pers comm).

In the non-breeding season, Baudin's cockatoo is mainly an inhabitant of the Jarrah Marri Forest but is also frequently seen in farmland and orchards. It feeds on a variety of foods including nectar and seeds from hakeas and banksia spp. Also apples, persimmons, and macadamias. Overall, its main food is Marri from which it takes seeds, grubs, and nectar. Its long bill is adapted to removing seeds from Marri fruit capsules.

Roost sites are usually in smooth barked eucalypts (occasionally rough barked eucalypts, i.e. Marri, Jarrah and Blackbutt) including Wandoo, Flooded Gum, Bullich and smooth barked exotic eucalypts including plantations (Johnstone and Kirkby 2008).

Carnaby's cockatoo (*Calyptorhynchus latirostris*)

EN (EPBC Act), EN (BC Act)

The species has been recorded breeding locally (SEWPaC 2012) (SLIP 2021). It is a postnuptial nomad, tending to move west after breeding. Carnaby's cockatoo mainly occurs in or near eucalypt woodlands, especially those dominated by Wandoo or Salmon Gum, and sometimes reported in forests of Marri, Jarrah, Karri and Tuart.

Nesting hollows may be located anywhere over two metres from ground, mainly in the Wheatbelt (Cale 2003, SPRAT 2019, WA Museum 2010).

It is known to forage in native shrubland, kwongan heathland and woodland dominated by proteaceous plant species such as Banksia spp. Hakea spp. And Grevillea spp. It forages in pine plantations, eucalypt woodland and forest that contains foraging species, individual trees and small stands of these species (SEWPAC 2012).

This species is currently expanding its breeding range westward and south into the Jarrah Marri Forests of the Darling Scarp and into the Tuart forests of the Swan Coastal Plain. This may be due to climate change. Breeding occurs mainly from early July to mid-December. Breeding success is largely dependent on suitable feeding habitat adjacent to the nest site to provide the necessary food for the survival of the chick, for example adjacent pine forest or remnant vegetation (Johnstone and Kirkby, Undated). Carnaby's cockatoo is also known to breed in Karri Forest at Porongurup, Walpole, Albany, Denmark and Mount Manypeaks.

Carnaby's cockatoos are known to roost in Jarrah, Marri, Blackbutt, Bullich, exotic eucalypt species and pines.

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

VU (EPBC Act), VU (BC Act)

The FRTBC is a large, iconic forest cockatoo, endemic to the south-west corner of Western Australia. The species may breed locally (SEWPAC 2012). Formerly common, but now rare to uncommon and patchily distributed, it has disappeared from about 30% of its former range. It has suffered a marked decline in numbers over the past 60 years. The main reasons for this decline include the destruction and fragmentation of habitat (especially Jarrah Marri Forest), the apparent decline in Marri along the eastern side of the Darling Scarp, logging, the impact of hollow competitors, fire and possibly climate change (Johnstone, Kirkby and Sarti 2013a, b). FRTBC occurs throughout the Jarrah Marri Karri forested areas but in recent years has been foraging out on to the Swan Coastal Plain feeding on the seeds of Cape Lilac. Group sizes vary from small family groups and pairs to larger gatherings at roost sites.

FRTBC nest in hollows Jarrah, Marri, Blackbutt, Bullich and Wandoo. Hollows have been recorded from 6.5 – 33 m above ground (Johnstone Kirkby and Sarti 2015). FRTBC have been recorded breeding in all months but with peaks in Spring and Autumn. There are also years when very little if any breeding takes place i.e. 2008 and 2009 (Johnstone and Kirkby unpublished data).

FRTBC feed mainly on the seeds of Jarrah and Marri but also Blackbutt, Albany Blackbutt, Sheoak, Snottygobble and introduced native and non-native species such as Lemon-scented Gum, Spotted Gum, Ilyarrie and Cape Lilac (SPRAT 2019).

FRTBC are known to roost in Jarrah, Marri, Blackbutt, Bullich and introduced eucalypt species.

3.4.2 Black cockatoo breeding requirements

All three black cockatoos rely on large hollows for breeding, typically >20 cm in diameter. Hollows take many years to form. The onset of hollow-formation is dependent on damage to the tree, from fire, animals (vertebrates or invertebrates), or dropping branches. Young and healthy trees can quickly heal after damage and subsequently trees less than 100 years old are unlikely to contain hollows.

SW Environmental and Kirkby (2019) note that for nesting, black cockatoos show a preference for:

- large senescent trees,
- hollows not angled more than 45 degrees,
- entrances of at least 12 cm but usually much larger (20-30 cm),

- deep or well sheltered hollows in main trunk or large branches which are able to provide a floor space of at least 30cm diameter or more.

All three species of black cockatoo are of similar size and utilise similar types of tree hollows when breeding. The actual species of tree is probably unimportant to each individual species, for example Carnaby's cockatoo use Marri, when in the Marri Forest and Wandoo when in the Wheatbelt. All three species are known to use the same individual hollows when not occupied in the breeding season by another black cockatoo species (Kirkby pers comm, 2019). Hollows suitable for use by black cockatoos are usually in trees at least 150 years old (Koch 2009).

Marri and Jarrah are considered by Commonwealth of Australia (2017) to be large enough to develop hollows once they are >50 cm DBH (Suitable DBH trees). Wheatbelt species such as Wandoo and Salmon Gum may develop hollows at 30 cm DBH. Multi-stemmed or exotic tree species are much less likely to develop hollows at these sizes.

While breeding, black cockatoos will generally forage within a 6–12 km radius of their nesting site. Following breeding, birds assemble into flocks and move through the landscape searching for food, usually foraging within six kilometres of a night roost (Commonwealth of Australia 2012).

4 Results

4.1 Fauna habitat

4.1.1 General fauna habitat

Key fauna habitat types are listed in Table 4-1 and mapped in Figure A.3 (Appendix A). There are five habitat types (61.36 ha) within the study area, all associated with remnant native vegetation. The remaining 4.10 ha of the 65.46 ha study area has been cleared. Fauna habitat quality was Good across the entire site due to the intact native vegetation, and diverse structural and species diversity.

- 1 Jarrah, Marri open forest with brown loam with *Taxandria linearifolia* in the drainage lines (shallow broad valley).
 - 2 Jarrah, Marri, *Allocasurina fraseriana* open forest with orange lateritic gravelly loam (uplands).
 - 3 Jarrah, *Allocasurina fraseriana*, *Banksia attenuata* low open forest with grey sandy soils (upper slopes).
 - 4 Jarrah, *Allocasurina fraseriana*, *Corymbia haematoxyn* low open forest on grey loam sandy soil (upper slopes).
 - 5 Jarrah, *Allocasurina fraseriana* low open forest on orange sandy soils (mid slopes).
- C Cleared.

Table 4-1 Fauna habitat types over the study area

Code	Fauna habitat type	Structural vegetation description	Fauna habitat quality	Area (ha)	Photos
1	Jarrah, Marri open forest with brown loam with <i>Taxandria linearifolia</i> in the drainage lines (shallow broad valley)	Shallow broad valley with Jarrah, Marri open forest and occasional <i>Allocasuarina fraseriana</i> , over <i>Dasypogon hookeri</i> , <i>Kingia australis</i> shrubland, over open low heath, sedges with <i>Taxandria linearifolia</i> in the drainage lines.	Good	16.25	

1	Drainage lines	Drainage line 1 (western)	Good	
1		Drainage line 2 (eastern)	Good	

2	Jarrah, Marri, <i>Allocasurina fraseriana</i> open forest with orange lateritic gravelly loam (uplands).	Uplands with orange lateritic gravelly loam with large rock outcrops in places. Jarrah, Marri, <i>A. fraseriana</i> open forest, over <i>Banksia grandis</i> , <i>Persoonia</i> <i>longifolia</i> low woodland, over shrubland, open low heath, herbs.	Good	29.48	
3	Jarrah, <i>Allocasurina</i> <i>fraseriana</i> , <i>Banksia</i> <i>attenuata</i> low open forest with grey sandy soils (upper slopes).	Upper slope with free draining grey sand soils. Jarrah, <i>A.</i> <i>fraseriana</i> , <i>Banksia attenuata</i> low open forest, over open heath, open low heath, sedges and herbs.	Good	4.03	

4	Jarrah, <i>Allocasurina fraseriana</i> , <i>Corymbia haematoxyn</i> low open forest on grey loam sandy soil (upper slopes).	Upper slopes with loamy grey sand soil. Jarrah, <i>A. fraseriana</i> , <i>Corymbia haematoxyn</i> low open forest, over <i>Taxandria parviceps</i> , <i>Podocarpus drouyanus</i> , <i>Xanthorrhoea preissii</i> open heath, over low heath, sedges and herbs.	Good	10.33	
5	Jarrah, <i>Allocasurina fraseriana</i> low open forest on orange sandy soils (mid slopes).	Mid slope with orange sand soils. Jarrah, <i>A. fraseriana</i> low open forest, over <i>Hakea ruscifolia</i> , <i>Podocarpus drouyanus</i> shrubland, over open low heath, open sedges.	Good	1.30	

C	Cleared
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Cleared, fire trails and tracks Poor 4.10



4.1.2 Suitable DBH trees and hollows

The study area contained numerous large, mature Jarrah and Marri trees throughout. Both species are considered Suitable DBH trees (likely to develop large hollows >50cm DBH). Suitable DBH trees with and without hollows occur extensively within the study area. Numerous hollows were observed, some of which appeared to be chewed, particularly in Habitat types 1 and 2. Examples of hollow bearing trees within the study area are provided below. DBH trees were not mapped (outside of scope).



4.2 Fauna recorded

Twenty-five species of fauna were recorded within the study area (Table 4-2). The fauna recorded included 17 birds and five mammals (two of which are introduced*), two reptiles and one frog. Four were target species (all three black cockatoos and Quenda).

Other faunal groups are likely to occur but are more cryptic, nocturnal or would not have been detected during the brief diurnal reconnaissance visit (such as bats, many reptiles – lizards and snakes, and frogs which may not have been calling). In addition, numerous species may use the study area as a part of a larger area of occupancy, such as other birds.

Western Ringtail Possum were not recorded during the targeted surveys.

Table 4-2 Fauna recorded within the study area

Class	Family	Scientific Name	Vernacular Name
AMPHIBIA	LIMNODYNASTIDAE	<i>Heleioporus eyrei</i>	Moaning Frog
AVES	ACANTHIZIDAE	<i>Acanthiza chrysorrhoa</i>	Yellow-Rumped Thornbill
		<i>Acanthiza inornata</i>	Western Thornbill
	ALCEDINIDAE	<i>Dacelo novaeguineae</i>	Kookaburra*
	ARTAMIDAE	<i>Cracticus tibicen</i>	Australian Magpie
	CACATUIDAE	<i>Calyptorhynchus banksii naso</i>	Forest Red-Tailed Black Cockatoo
		<i>Calyptorhynchus baudinii</i>	Baudin's Cockatoo
		<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo
	CORVIDAE	<i>Corvus coronoides</i>	Australian Raven
	MALURIDAE	<i>Malurus splendens</i>	Splendid Fairy-Wren
	MELIPHAGIDAE	<i>Anthochaera carunculata</i>	Red Wattlebird
	PACHYCEPHALIDAE	<i>Colluricincla harmonica</i>	Grey Shrike-Thrush
		<i>Pachycephala pectoralis</i>	Golden Whistler
	PARDALOTIDAE	<i>Pardalotus striatus</i>	Striated Pardalote
	PETROICIDAE	<i>Eopsaltria griseogularis</i>	Western Yellow Robin
	PODARGIDAE	<i>Podargus strigoides</i>	Tawny Frogmouth
	PSITTACIDAE	<i>Barnardius zonarius</i>	Australian Ringneck
	RHIPIDURIDAE	<i>Rhipidura albiscapa</i>	Grey Fantail
MAMMALIA	CANIDAE	<i>Vulpes vulpes</i>	Fox*
	LEPORIDAE	<i>Oryctolagus cuniculus</i>	Rabbit*
	MACROPODIDAE	<i>Macropus fuliginosus</i>	Western Grey Kangaroo
	PERAMELIDAE	<i>Isoodon fusciventer</i>	Southern Brown Bandicoot
	PHALANGERIDAE	<i>Trichosurus vulpecula</i>	Common Brushtail Possum
REPTILIA	SCINCIDAE	<i>Menetia greyii</i>	Common Dwarf Skink
	VARANIDAE	<i>Varanus rosenbergi</i>	Heath Monitor

4.3 Nocturnal survey results (WRP)

The nocturnal surveys identified nine Common Brushtail Possums on 29th and eight Common Brushtail Possums on 31st March 2022 (Appendix A.4). There was no evidence of WRP was observed either during the diurnal surveys (scats or dreys) or nocturnal surveys.

Local records of WRP are all north or west of the study area (Naturemap 2021). Broadly, habitat appeared to be suitable based on vegetation types, particularly through the drainage lines, where if they were to occur, they would be in higher densities. The lack of mid storey in some areas however

could be a contributing factor to the lack of WRP records. If any WRP were present, they would be at the edge of the species mapped range and would have to be at very low densities not to have been observed.

4.4 Fauna of conservation significance

4.4.1 Local records

The desktop assessment identified 20 fauna species of conservation significance, recorded or likely to occur within 10 km of the study area (see Appendix C.2). A threatened fauna evaluation table was prepared for conservation significant fauna based on the desktop assessment and site reconnaissance (Appendix D). It excludes marine, marine migratory and regionally extinct species and has been updated with other records where the species may occur.

Eleven fauna taxa of conservation significance may possibly occur or were recorded within the study area. They are summarised in Table 4-3. Taxa that may occur within the study area are considered further in Section 4.3.2.

Table 4-3 Conservation significant fauna that may occur within the study area, based on habitat suitability.

Family Genus species	Vernacular	Status Federal	Stat. WA	Presence of habitat	Likelihood of occurrence
CACATUIDAE <i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black Cockatoo	VU	VU	Present - core	Present
<i>Calyptorhynchus baudinii</i>	Baudin's Cockatoo	EN	EN	Present - core	Present
<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo	EN	EN	Present - core	Present
FALCONIDAE <i>Falco peregrinus</i>	Peregrine Falcon	-	OS	Present – supporting	Possible
STRIGIDAE <i>Tyto novaehollandiae</i> subsp. <i>novaehollandiae</i>	Masked Owl (southern sub sp)	-	P3	Present – supporting	Possible
DASYURIDAE <i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	VU	VU	Present - core	Possible
<i>Phascogale tapoatafa</i>	Southern Brush-tailed Phascogale	-	S	Present - core	Possible
MACROPODIDAE <i>Notamacropus irma</i>	Western Brush Wallaby		P4	Present - core	Possible
MURIDAE <i>Hydromys chrysogaster</i>	Water Rat	-	P4	Present - core	Possible
PERAMELIDAE <i>Isoodon obesulus fusciventer</i>	Southern Brown Bandicoot	-	P4	Present - core	Present
VESPERTILIONIDAE <i>Falsistrellus mackenziei</i>	Western False Pipistrelle	-	P4	Present - core	Possible

4.4.2 Species profiles and study area values

The following sections considers the value of the study area to fauna of conservation significance that possibly occur or were encountered within the study area. The study area is likely to provide core and/or supporting habitat for target fauna, as defined below.

- *Present - core: Potential or known habitat present within the study area. Consists of "habitat critical to the survival of a species" which refers to core areas that are necessary for activities such as foraging, breeding, roosting, or dispersal, necessary for the long-term maintenance of the species to maintain genetic diversity and long term evolutionary development (Department of the Environment 2013) or habitat types recognised in recovery plans or guidelines.*
- *Present - supporting: Likely to provide dispersal, transitory or supporting habitat that may support core / critical habitat areas, such as small areas of lesser quality habitat where an animal has a large home range.*

Black cockatoos

Refer to black cockatoo species' profiles in Section 3.4.

BREEDING HABITAT AND ROOST SITES

The study area falls within the known and or predicted breeding range of all three black cockatoo species (Commonwealth of Australia 2017). Numerous large, mature trees of species known to develop large hollows utilised by black cockatoo for breeding were observed during the field visit.

Jarrah was structurally dominant in all habitat types and Marri, a tree preferred by black cockatoo for nesting due to the large hollows it can develop, occurred through Habitat types 1 and 2 (approximately 73% of the study area in total).

Numerous actual large hollows were observed, some of which appeared to be chewed, particularly in Habitat types 1 and 2. None were confirmed black cockatoo breeding hollows, though there were numerous potential hollows observed with suitable attributes for breeding.

No roost trees were identified during the field work.

FORAGING HABITAT

A small flock of Baudin's Cockatoo (approximately six) were observed foraging on Marri trees over the site. Carnaby's Cockatoo and older Forest Red-Tailed Black Cockatoo chewed Marri nut residue were also observed broadly over the site. All fauna habitat types (1-5) (61.36 ha) mapped within the study area are consistent with 'high quality' black cockatoo foraging habitat.

Peregrine Falcon (*Falco peregrinus*) OS

Peregrine Falcons occur in woodland, plains, gorges, wetlands but tend to breed either in stick-nests in trees or nest on cliff ledges, hollows or large abandoned nests of other birds may also be used. Where good habitat occurs, and the density of Peregrine Falcons is high, active nests may occur within 2.5km of each other. The diet of the Peregrine Falcon includes wood duck, pigeons and doves, galahs, rosellas and cockatoo, starlings and larks (Olsen et al. 2006).

Peregrine Falcons are wide ranging, with abundant habitat locally. They were not observed during the site visit but given to good habitat available and broader area of occupancy (supporting habitat) the species may utilise the site.

Masked Owl (southern sub sp) (*Tyto novaehollandiae* subsp. *novaehollandiae*) P3

Inhabits forests, open woodlands and farmlands with large trees, including timber watercourses paperbark woodlands. Widespread but very sparse, they breed any time of the year when conditions are favourable with a nesting period of about three months (Pizzey and Knight 2007).

Not recorded locally in database searches but with suitable habitat within the study area and adjacent in State Forest (foraging and breeding habitat), this species may utilise the site.

Chuditch, Western Quoll (*Dasyurus geoffroii*) VU, VU

Quolls may occupy a range of habitats including forest, woodland and desert, though in the SW they are largely restricted to Jarrah forest or scattered through the southern and eastern wheat belt (DEC 2010). Habitat critical to Quoll are large areas of undisturbed habitat which a sufficient variety of key food and other resources such as large hollow logs, burrows or small caves at ground level for denning. To be suitable as den sites, logs must have a diameter of at least 30 cm but usually greater than 50 cm, a hollow diameter of 7–20 cm and generally 1m long (Orell & Morris 1994). Annually, an adult female Chuditch will utilise an estimated average of 66 logs and 110 burrows within her home range. A large amount of den sites is required for both sexes. They occupy relatively large home ranges, with males utilizing over 15 km² and females, 3-4 km² (Orell & Morris 1994).

Chuditch was recorded in the State Forest block immediately south in 2017 (Naturemap 2021). As the study area is well connected to large tracts of remnant vegetation offsite, with excellent denning habitat (fallen and hollow logs), this species is likely to occur within the site, or at least as part of a larger patch.

Southern Brush-tailed Phascogale (*Phascogale tapoatafa*) -, S

This arboreal species is found in a variety of forest types. Ideal habitat for this species consists of dry sclerophyll forest and open woodland (Jarrah, Marri, and mixed Jarrah Karri) that contain hollow bearing trees and sparse ground cover. Their many nesting sites include hollow tree limbs, rotten stumps and even birds' nests. Lactating females prefer a large tree cavity with a small entrance with a nest made of bark, feathers and fur. A female's home range covers 20 to 70 hectares, a male's home ranges over laps females and increases during breeding season. It is predominantly carnivorous, foraging on arthropods, invertebrates, small vertebrates and nectar (Strahan 1995).

Not recorded locally in database searches but with excellent habitat within the study area and adjacent in State Forest, this species may utilise the site.

Western Brush Wallaby (*Notamacropus irma*) P4

Optimum habitat for the Western Brush Wallaby includes open Jarrah forest or woodland and seasonally wet flats with low grasses and scrubby thickets, but also areas of mallee and heathland. Common dietary flora includes *Carpobrotus edulis*, *Cynodon dactylon* and *Nuytsia floribunda* (Strahan 1995).

Western Brush Wallaby was recorded in the State Forest block immediately south in 2014 (Naturemap 2021). As the study area is well connected to large tracts of suitable habitat offsite, this species is likely to occur within the site, or at least as part of a larger patch.

Water Rat (*Hydromys chrysogaster*) -, P4

The Water rat is usually found in permanent fresh or brackish water but can be found in marine environments. Fresh water habitats include swamps, lakes, dams even urban drainage swamps. Typically forages close to the shoreline, restricting its movements to shallow water (up to 2 m in depth) (CSIRO, 2004).

Several nearby records (Naturemap 2021). No evidence was found (middens or tracks) but given there is a drainage line crossing the site and good quality habitat present, the species may occur.

Quenda, Southern Brown Bandicoot (*Isoodon obesulus fusciventer*) - P4

Bandicoot habitat consists of dense scrubby, often swampy vegetation with a dense cover up to one metre high particularly near watercourses/wetlands. It often feeds in adjacent forest (Jarrah and Wandoo) and woodlands that are burnt on a regular basis. Nests can be concealed next to or under old logs, shrubs or piles of debris and are made up of ground litter piled up over a shallow depression providing internal chambers. Home ranges vary with population density and range from 5-8.6 ha for males and 1-6 ha for females (DEC 2010). Feed on a variety of ground-dwelling invertebrates and the fruit-bodies of hypogeous fungi. Their searches for food often create distinctive conical holes in the soil (DECC 2010). Several nearby records (Naturemap 2021).

Quenda diggings were observed throughout the site, particularly in the lower areas. The species occurs within the study area.

Western False Pipistrelle (*Falsistrellus mackenziei*) -, P4

Western False Pipistrelle occurs in wet sclerophyll forest dominated by Karri, and in the high rainfall zones of the Jarrah and Tuart forests. It has also been recorded in mixed Tuart-Jarrah tall woodlands on the adjacent coastal plain. Marri, Sheoak and Peppermint trees are often co-dominant at its collection localities. This species roosts in tree hollows (Phillips & Inwards 1985) in colonies of 5 to 30 bats. The species feed on flying insects between below the forest canopy.

Western False Pipistrelle has been recorded in the forest block immediately south (Naturemap 2021) and with similar habitat likely to occur within the study area, the species may also occur.

5 Conclusions and Recommendations

The following points summarise the fauna values of the study area:

- The study area consists of intact native vegetation in an Excellent to Pristine condition, with Good fauna habitat quality. There are areas of minor clearing, tracks and fire trails.
- There are five habitat types (61.36 ha) within the 65.46 ha study area, all associated with remnant native vegetation. The remaining 4.10 ha has been cleared. Fauna habitat quality was Good:
 - 1 Jarrah, Marri open forest with brown loam with *Taxandria linearifolia* in the drainage lines (shallow broad valley).
 - 2 Jarrah, Marri, *Allocasurina fraseriana* open forest with orange lateritic gravelly loam (uplands).
 - 3 Jarrah, *Allocasurina fraseriana*, *Banksia attenuata* low open forest with grey sandy soils (upper slopes).
 - 4 Jarrah, *Allocasurina fraseriana*, *Corymbia haematoxyn* low open forest on grey loam sandy soil (upper slopes).
 - 5 Jarrah, *Allocasurina fraseriana* low open forest on orange sandy soils (mid slopes).
- Cleared
 - There are two drainage lines within Habitat Type 1, one a seasonal tributary of Buayanyup River, the second smaller drainage line or depression occurs parallel but further to the west. Neither were flowing at the time of the survey (March).
 - Twenty-five species of fauna were recorded from the 241 that may occur based on desktop assessment. This included 17 birds and five mammals (two of which are introduced), two reptiles and one frog. Four target species were recorded (all three black cockatoos and Quenda) from the 16 terrestrial vertebrate fauna of conservation significance that may occur locally.
 - Targeted black cockatoo surveys identified the following
 - The study area occurs within the breeding range of all three black cockatoo species (SEWPaC 2012).
 - Numerous large Jarrah and Marri trees (>50cm DBH) with a range of hollow sizes were observed within the study area. All habitat types contained Jarrah as a key structural component, with Marri being common in Habitat types 1 and 2 (approximately 73% of the study area).
 - Numerous actual large hollows were observed, some of which appeared to be chewed, particularly in Habitat types 1 and 2. None were confirmed black cockatoo breeding hollows, though there were numerous potential hollows observed with suitable attributes for breeding.
 - No roost trees were identified during the field work.
 - Baudin's Cockatoo was observed foraging, and Carnaby's Cockatoo and older Forest Red-Tailed Black Cockatoo chewed Marri nut residue were also observed broadly over the study area. All fauna habitat types (1-5) (61.36 ha) mapped

within the study area are consistent with 'high quality' black cockatoo foraging habitat (SEWPAC 2012).

- Targeted surveys for WRP were conducted however no evidence of this species was observed. Broadly, habitat appeared to be suitable. The lack of mid storey in some areas however could be a contributing factor to the lack of WRP records. If any WRP were present, they would be at the edge of the species mapped range and would have to be at very low densities not to have been observed.
- Quenda diggings were observed throughout the study area.
- Chuditch, Southern Brush-tailed Phascogale, Western Brush Wallaby, Water Rat and Western False Pipistrelle were not recorded however have been recorded locally and may also occur within the study area (*Core habitat*).
- The study area may provide *Supporting habitat* for Peregrine Falcon and Masked Owl (southern sub sp), given suitable habitat occurs and connected to significant larger areas of remnant vegetation to the north and south.
- In a local context there is approximately 14,800 ha of remnant native vegetation mapped (42%) remaining within 10 km of the study area (35,000 ha) (Government of Western Australia 2022).
- The study area occurs adjacent to an extensive tract of Blackwood State Forest, with other significant DBCA lands within 10 km including North East Margaret River State Forest and Rapids Conservation Park. Approximately 9,050 ha of lands within the locality are DBCA tenure. The majority of the study area (north and south) is surrounded by remnant vegetation which buffers the site from edge effects.
- The study area is located within two mapped SWREL buffers (Molloy et al 2009), *a: with and edge touching or <100m from a linkage* and *1b: with an edge touching or <100m from a natural area selected in 1a* (Molloy et al 2009). The study area has high value in terms of habitat connectivity, linkage and corridor importance at the patch and landscape scales (Molloy et al 2009).
- The site is an excellent candidate for an offset for general fauna values associated with Jarrah Marri Forest habitats but also potentially for losses of habitats associated with *Allocasurina fraseriana* and *Banksia attenuata*.
 - The site is a high value offset for all three black cockatoo species for foraging and breeding habitat, and also for Quenda.
 - The site may have values as an offset for Chuditch, Southern Brush-tailed Phascogale, Western Brush Wallaby, Water Rat and Western False Pipistrelle, and potentially Peregrine Falcon and Masked Owl.
 - The site is unlikely to have any significant value as an offset for WRP.

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Appendix A Figures

Figure A.1 Study area

Figure A.2 Locality

Figure A.3 Fauna habitats

Figure A.4 Nocturnal survey results



FIGURE A.1 STUDY AREA

LOT 2628 JACKA ROAD, BOALLIA

Ref: SW389
Date: 19/05/2022 Author: SP

- Study area
- Road
- Major watercourse
- - - Minor drainage line

Source: Base map © Esri and its data suppliers. SLIP Landgate (2022)



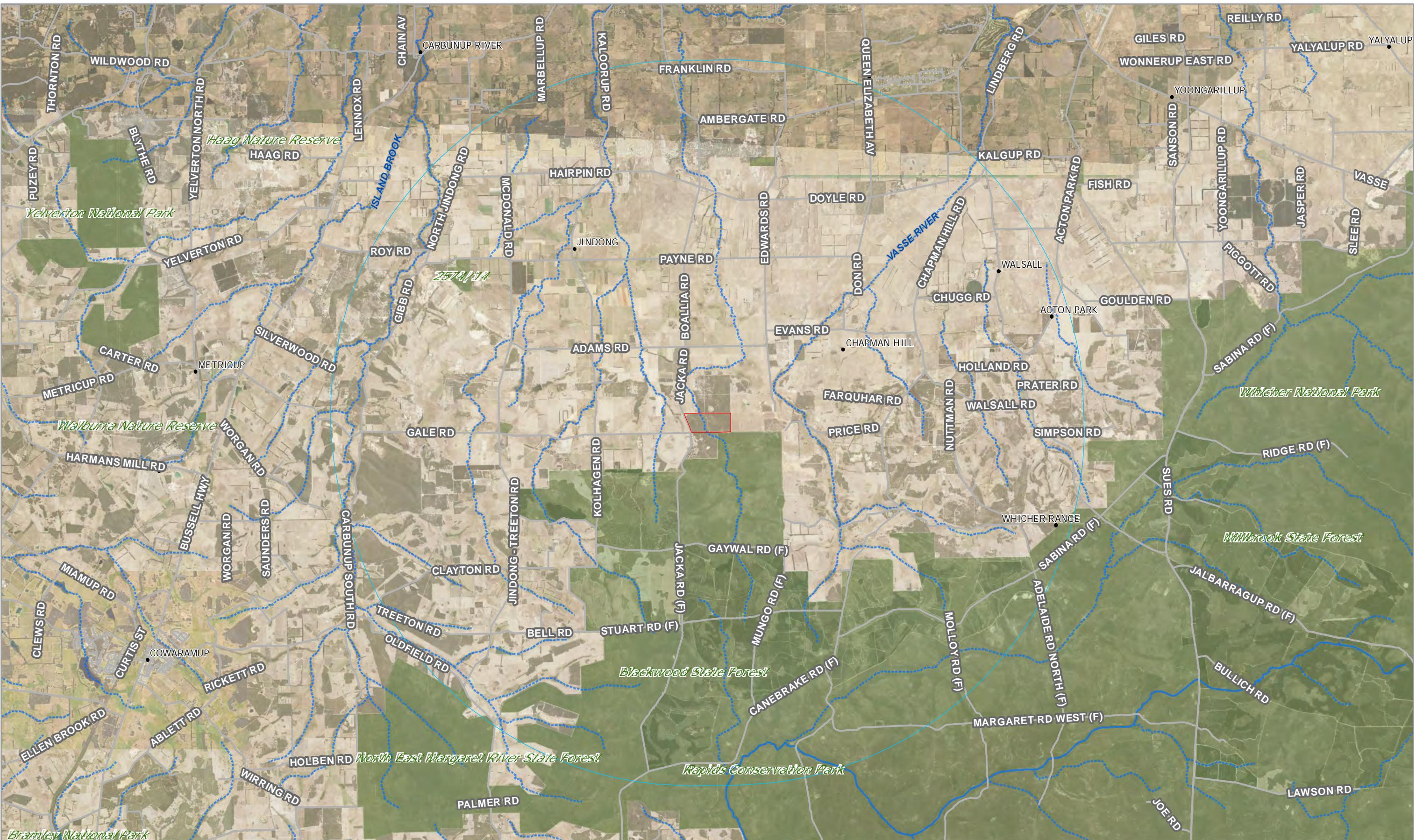


FIGURE A.2 LOCALITY

LOT 2628 JACKA ROAD, BOALLIA

- Study area
 - Locality (10 km)
 - Road
 - Major watercourse
 - Minor drainage line
 - DBCA managed land

Source: Base map © Esri and its data suppliers. SLIP Landgate (2022)

A3 @ 1:100000

0 0.5 1 2 km

GRID: GDA zone 50





FIGURE A.3 FAUNA HABITATS

LOT 2628 JACKA ROAD, BOALLIA

- Study
- Road
- Major
- Minor drainage

Fauna

1. Jarrah, Marri open forest with brown loam with *Taxandria linearifolia* in the drainage lines (shallow broad valley)
2. Jarrah, Marri, *A. fraseriana* open forest with orange lateritic gravelly loam (uplands)

3. Jarrah, *A. fraseriana*, *Banksia attenuata* low open forest with grey sandy soils (upper slopes)

4. Jarrah, *A. fraseriana*, *Corymbia haematoxylon* low open forest on grey loam sandy soil (upper slopes)

5. Jarrah, *A. fraseriana* low open forest on orange sandy soils (mid slopes)

C.

DBCA managed

Source: Base map © Esri and its data suppliers. SLIP Landgate (2022)



A3 @ 1:4000

0 25 50 100 m

GRID: GDA zone 50



FIGURE A.4 NOCTURNAL SURVEY RESULTS

LOT 2628 JACKA ROAD, BOALLA

Ref: SW389
Date: 19/05/2022 Author: SP

Taxon, abundance	— Transect 29/03/2022	Fauna habitat	5.
● <i>Trichosurus vulpecula</i> , 1	— Transect 31/03/2022	1.	
● <i>Trichosurus vulpecula</i> , 2	— Study area	2.	
— Road	— Minor drainage line	3.	
		4.	
		DBCA managed land	

Source: Base map © Esri and its data suppliers. SLIP Landgate (2022)



0 25 50 100 m

GRID: GDA zone 50

Appendix B Conservation codes

Fauna in WA may be afforded protection under the WA BC Act and or federal EPBC Act. Species listed as threatened or migratory under the above legislation are referred to collectively in this document as being 'conservation significant' or 'target' species. These terms include species and communities listed under the DBCA Priority lists.

BC Act

The WA BC Act and associated Regulations provide for the licensing and management of activities that affect biodiversity. The BC Act provides for the listing of threatened native animals (fauna) that need protection as critically endangered, endangered or vulnerable species because they are under identifiable threat of extinction (species).

The *Wildlife Conservation (Specially Protected Fauna) Notice 2018* and the *Wildlife Conservation (Rare Flora) Notice 2018* under regulations 170, 171 and 172 of the *Biodiversity Conservation Regulations 2018* contain the lists of Threatened, Extinct and Specially Protected species under Part 2 of the BC Act. These are described below.

Threatened species and communities

- PD: Presumed totally destroyed (TECs only)
- CR: Critically endangered species
- EN: Endangered species
- VU: Vulnerable species

Extinct species

- EX: Extinct species
- EW: Extinct in the wild species

Specially protected species

- MI: Migratory species
- CD: Species of special conservation interest (conservation dependent fauna)
- OS: Other specially protected species

Priority species and communities

- Priority 1: Poorly-known species
- Priority 2: Poorly-known species
- Priority 3: Poorly-known species
- Priority 4: Rare, Near Threatened and other species in need of monitoring
- Priority Ecological Community (PEC): Where communities are considered rare but not (currently) threatened or there is insufficient information available for the community to be considered a TEC, communities can be listed as priority ecological communities (PECs).

A full description of conservation codes is provided in Appendix B.

EPBC Act

In accordance with Commonwealth legislation, the EPBC Act provides a list of 'Matters of National Environmental Significance' (NES), which includes significant fauna. Under the EPBC Act fauna matters of NES may be listed in any one of the following categories as defined in *Section 179* of the Act:

- Extinct,
- *Extinct in the wild,
- *Critically endangered,
- *Endangered,
- *Vulnerable,
- Conservation dependent.

*Only these categories are matters of NES under the Act.

The EPBC Act also lists migratory species that are recognized under international treaties including the Japan Australia Migratory Bird Agreement (JAMBA), the China Australia Migratory Bird Agreement (CAMBA) and the Bonn Convention (The Convention on the conservation of Migratory Species of Wild Animals). The EPBC Act is regulated by the DAWE.

IUCN Red List

The IUCN Red List is an inventory of the global conservation status of species and used to assist DBCA and other agencies in attributing a given threatened species status. It does not have any statutory authority and is not considered in detail in this assessment.



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).

Appendix C Potential fauna list and fauna recorded

Appendix C.1 Fauna within 10 km ALA (2022), DBCA threatened fauna data (provided by Main Roads 2022), and Bird Data (Birdlife Australia 2022).

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AMPHIBIA	HYLIDAE	<i>Litoria adelaidensis</i>	Slender Tree Frog		x					
AMPHIBIA	HYLIDAE	<i>Litoria moorei</i>	Moore's Frog		x					
AMPHIBIA	LIMNODYNASTIDAE	<i>Heleioporus eyrei</i>	Moaning Frog	x	x					
AMPHIBIA	LIMNODYNASTIDAE	<i>Limnodynastes dorsalis</i>	Sand Frog		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Crinia georgiana</i>	Quacking Froglet		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Crinia glauerti</i>	Glauert's Froglet		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Crinia insignifera</i>	Squelching Froglet		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Crinia pseudinsignifera</i>	False Western Froglet		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Geocrinia leai</i>	Ticking Frog		x					
AMPHIBIA	MYOBATRACHIDAE	<i>Metacrinia nicholssi</i>	Nicholl's Toadlet							
AMPHIBIA	MYOBATRACHIDAE	<i>Pseudophryne guentheri</i>	Gunther's Toadlet		x					
AVES	ACANTHIZIDAE	<i>Acanthiza apicalis</i>	Inland Thornbill		x		x			
AVES	ACANTHIZIDAE	<i>Acanthiza chrysorrhoa</i>	Yellow-Rumped Thornbill	x	x		x			
AVES	ACANTHIZIDAE	<i>Acanthiza inornata</i>	Western Thornbill	x	x		x			
AVES	ACANTHIZIDAE	<i>Gerygone fusca</i>	Western Gerygone		x		x			
AVES	ACANTHIZIDAE	<i>Sericornis frontalis</i>	White-Browed Scrubwren		x		x			
AVES	ACANTHIZIDAE	<i>Smicrornis brevirostris</i>	Weebill		x		x			
AVES	ACCIPITRIDAE	<i>Accipiter cirrocephalus</i>	Collared Sparrowhawk		x		x			
AVES	ACCIPITRIDAE	<i>Accipiter fasciatus</i>	Brown Goshawk		x		x			
AVES	ACCIPITRIDAE	<i>Aquila audax</i>	Wedge-Tailed Eagle		x		x			
AVES	ACCIPITRIDAE	<i>Circus approximans</i>	Swamp Harrier				x			
AVES	ACCIPITRIDAE	<i>Elanus axillaris</i>	Black-Shouldered Kite		x		x			
AVES	ACCIPITRIDAE	<i>Haliastur sphenurus</i>	Whistling Kite		x		x			
AVES	ACCIPITRIDAE	<i>Hamirostra isura</i>	Square-Tailed Kite		x		x			
AVES	ACCIPITRIDAE	<i>Hieraetus morphnoides</i>	Little Eagle		x		x			
AVES	ACROCEPHALIDAE	<i>Acrocephalus australis</i>	Australian Reed Warbler							
AVES	AEGOTHELIDAE	<i>Aegotheles cristatus</i>	Australian Owlet-Nightjar		x		x			
AVES	ALCEDINIDAE	<i>Dacelo novaeguineae</i>	Kookaburra*	x	x					
AVES	ALCEDINIDAE	<i>Todiramphus sanctus</i>	Sacred Kingfisher		x		x			
AVES	ANATIDAE	<i>Anas castanea</i>	Chestnut Teal							
AVES	ANATIDAE	<i>Anas gracilis</i>	Grey Teal		x		x			
AVES	ANATIDAE	<i>Anas platyrhynchos</i>	Mallard Duck							
AVES	ANATIDAE	<i>Anas rhynchos</i>	Australian Shoveler		x		x			

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AVES	ANATIDAE	<i>Anas superciliosa</i>	Pacific Black Duck		x		x			
AVES	ANATIDAE	<i>Aythya australis</i>	Hardhead		x		x			
AVES	ANATIDAE	<i>Biziura lobata</i>	Musk Duck		x		x			
AVES	ANATIDAE	<i>Chenonetta jubata</i>	Australian Wood Duck		x		x			
AVES	ANATIDAE	<i>Cygnus atratus</i>	Black Swan		x		x			
AVES	ANATIDAE	<i>Malacorhynchus membranaceus</i>	Pink-Eared Duck		x		x			
AVES	ANATIDAE	<i>Oxyura australis</i>	Blue-Billed Duck							
AVES	ANATIDAE	<i>Stictonetta naevosa</i>	Freckled Duck							
AVES	ANATIDAE	<i>Tadorna tadornoides</i>	Australian Shelduck		x		x			
AVES	ANHINGIDAE	<i>Anhinga novaehollandiae</i>	Australasian Darter							
AVES	ARDEIDAE	<i>Ardea ibis</i>	Cattle Egret							
AVES	ARDEIDAE	<i>Ardea modesta</i>	Eastern Great Egret				x			
AVES	ARDEIDAE	<i>Ardea novaehollandiae</i>	White-Faced Heron		x		x			
AVES	ARDEIDAE	<i>Ardea pacifica</i>	White-Necked Heron		x		x			
AVES	ARDEIDAE	<i>Botaurus poiciloptilus</i>	Australasian Bittern			x		T	EN	EN
AVES	ARDEIDAE	<i>Egretta garzetta</i>	Little Egret							
AVES	ARDEIDAE	<i>Egretta sacra</i>	Eastern Reef Egret							
AVES	ARDEIDAE	<i>Ixobrychus flavicollis</i>	Black Bittern		x			P2		
AVES	ARDEIDAE	<i>Nycticorax caledonicus</i>	Nankeen Night-Heron		x					
AVES	ARTAMIDAE	<i>Artamus cinereus</i>	Black-Faced Woodswallow		x		x			
AVES	ARTAMIDAE	<i>Artamus cyanopterus</i>	Dusky Woodswallow		x		x			
AVES	ARTAMIDAE	<i>Cracticus nigrogularis</i>	Pied Butcherbird							
AVES	ARTAMIDAE	<i>Cracticus tibicen</i>	Australian Magpie	Call	x		x			
AVES	ARTAMIDAE	<i>Cracticus torquatus</i>	Grey Butcherbird		x		x			
AVES	ARTAMIDAE	<i>Strepera versicolor</i>	Grey Currawong		x		x			
AVES	CACATUIDAE	<i>Cacatua pastinator</i>	Western Corella							
AVES	CACATUIDAE	<i>Cacatua roseicapilla</i>	Galah		x		x			
AVES	CACATUIDAE	<i>Cacatua sanguinea</i>	Little Corella		x		x			
AVES	CACATUIDAE	<i>Calyptorhynchus banksii naso</i>	Forest Red-Tailed Black Cockatoo	Feed residue	x	x	x	T	VU	VU
AVES	CACATUIDAE	<i>Calyptorhynchus baudinii</i>	Baudin's Cockatoo	x	x	x	x	T	EN	EN
AVES	CACATUIDAE	<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo	Feed residue	x	x	x	T	EN	EN
AVES	CAMPEPHAGIDAE	<i>Coracina maxima</i>	Ground Cuckoo-shrike							

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AVES	CAMPEPHAGIDAE	<i>Coracina novaehollandiae</i>	Black-Faced Cuckoo-Shrike		x		x			
AVES	CAMPEPHAGIDAE	<i>Lalage sueurii</i>	White-Winged Triller		x		x			
AVES	CAPRIMULGIDAE	<i>Eurostopodus argus</i>	Spotted Nightjar							
AVES	CASUARIIDAE	<i>Dromaius novaehollandiae</i>	Emu		x		x			
AVES	CHARADRIIDAE	<i>Charadrius ruficapillus</i>	Red-capped Dotterel		x					
AVES	CHARADRIIDAE	<i>Elseyornis melanops</i>	Black-fronted Dotterel		x		x			
AVES	CHARADRIIDAE	<i>Thinornis cucullatus</i>	Hooded Plover							
AVES	CHARADRIIDAE	<i>Vanellus miles</i>	Masked Lapwing		x		x			
AVES	CHARADRIIDAE	<i>Vanellus tricolor</i>	Banded Lapwing		x		x			
AVES	CLIMACTERIDAE	<i>Climacteris rufus</i>	Rufous Treecreeper		x		x			
AVES	COLUMBIDAE	<i>Columba livia</i>	Rock Pigeon							
AVES	COLUMBIDAE	<i>Ocyphaps lophotes</i>	Crested Pigeon		x		x			
AVES	COLUMBIDAE	<i>Phaps chalcoptera</i>	Common Bronzewing		x		x			
AVES	COLUMBIDAE	<i>Phaps elegans</i>	Brush Bronzewing		x		x			
AVES	COLUMBIDAE	<i>Streptopelia chinensis</i>	Spotted Dove		x					
AVES	COLUMBIDAE	<i>Streptopelia senegalensis</i>	Laughing Turtle-Dove*		x		x			
AVES	CORVIDAE	<i>Corvus bennetti</i>	Little Crow							
AVES	CORVIDAE	<i>Corvus coronoides</i>	Australian Raven	Call	x		x			
AVES	CUCULIDAE	<i>Cacomantis flabelliformis</i>	Fan-Tailed Cuckoo		x		x			
AVES	CUCULIDAE	<i>Cacomantis pallidus</i>	Pallid Cuckoo		x		x			
AVES	CUCULIDAE	<i>Chrysococcyx basalis</i>	Horsfield's Bronze-Cuckoo		x		x			
AVES	CUCULIDAE	<i>Chrysococcyx lucidus</i>	Shining Bronze-Cuckoo		x		x			
AVES	ESTRILDIDAE	<i>Stagonopleura oculata</i>	Red-Eared Firetail		x		x			
AVES	FALCONIDAE	<i>Falco berigora</i>	Brown Falcon				x			
AVES	FALCONIDAE	<i>Falco cenchroides</i>	Nankeen Kestrel		x		x			
AVES	FALCONIDAE	<i>Falco longipennis</i>	Little Falcon							
AVES	FALCONIDAE	<i>Falco peregrinus</i>	Peregrine Falcon				x	OS		
AVES	HIRUNDINIDAE	<i>Hirundo neoxena</i>	Welcome Swallow		x		x			
AVES	HIRUNDINIDAE	<i>Petrochelidon ariel</i>	Fairy Martin							
AVES	HIRUNDINIDAE	<i>Petrochelidon nigricans</i>	Tree Martin		x		x			
AVES	MALURIDAE	<i>Malurus elegans</i>	Red-Winged Fairy-Wren		x		x			
AVES	MALURIDAE	<i>Malurus lamberti</i>	Variegated Fairy-Wren							
AVES	MALURIDAE	<i>Malurus splendens</i>	Splendid Fairy-Wren	x	x		x			

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AVES	MALURIDAE	<i>Stipiturus malachurus</i>	Southern Emu-Wren		x		x			
AVES	MEGALURIDAE	<i>Cincloramphus cruralis</i>	Brown Songlark							
AVES	MEGALURIDAE	<i>Cincloramphus mathewsi</i>	Rufous Songlark		x		x			
AVES	MEGALURIDAE	<i>Megalurus gramineus</i>	Little Grassbird							
AVES	MELIPHAGIDAE	<i>Acanthorhynchus superciliosus</i>	Western Spinebill		x		x			
AVES	MELIPHAGIDAE	<i>Anthochaera carunculata</i>	Red Wattlebird	Call	x		x			
AVES	MELIPHAGIDAE	<i>Anthochaera lunulata</i>	Western Wattlebird		x		x			
AVES	MELIPHAGIDAE	<i>Epthianura albifrons</i>	White-Fronted Chat		x		x			
AVES	MELIPHAGIDAE	<i>Gavicalis virescens</i>	Singing Honeyeater		x		x			
AVES	MELIPHAGIDAE	<i>Gliciphila melanops</i>	Tawny-Crowned Honeyeater							
AVES	MELIPHAGIDAE	<i>Lichmera indistincta</i>	Brown Honeyeater		x		x			
AVES	MELIPHAGIDAE	<i>Melithreptus brevirostris</i>	Brown-Headed Honeyeater							
AVES	MELIPHAGIDAE	<i>Melithreptus chloropsis</i>	Gilbert's Honeyeater							
AVES	MELIPHAGIDAE	<i>Melithreptus lunatus</i>	White-Naped Honeyeater				x			
AVES	MELIPHAGIDAE	<i>Phylidonyris niger</i>	White-Cheeked Honeyeater		x					
AVES	MELIPHAGIDAE	<i>Phylidonyris novaehollandiae</i>	New Holland Honeyeater		x		x			
AVES	MEROPIDAE	<i>Merops ornatus</i>	Rainbow Bee-Eater					x		
AVES	MONARCHIDAE	<i>Grallina cyanoleuca</i>	Magpie-Lark		x		x			
AVES	MONARCHIDAE	<i>Myiagra inquieta</i>	Restless Flycatcher		x					
AVES	MOTACILLIDAE	<i>Anthus australis</i>	Australian Pipit		x		x			
AVES	NECTARINIIDAE	<i>Dicaeum hirundinaceum</i>	Mistletoebird							
AVES	NEOSITTIDAE	<i>Daphoenositta chrysoptera</i>	Varied Sittella		x		x			
AVES	PACHYCEPHALIDAE	<i>Colluricinclla harmonica</i>	Grey Shrike-Thrush	x	x		x			
AVES	PACHYCEPHALIDAE	<i>Falcunculus frontatus</i>	Crested Shrike-Tit							
AVES	PACHYCEPHALIDAE	<i>Pachycephala occidentalis</i>	Western Whistler		x					
AVES	PACHYCEPHALIDAE	<i>Pachycephala pectoralis</i>	Golden Whistler	Call	x		x			
AVES	PACHYCEPHALIDAE	<i>Pachycephala rufiventris</i>	Rufous Whistler		x		x			
AVES	PARDALOTIDAE	<i>Pardalotus punctatus</i>	Spotted Pardalote		x		x			
AVES	PARDALOTIDAE	<i>Pardalotus striatus</i>	Striated Pardalote	Call	x		x			
AVES	PETROICIDAE	<i>Eopsaltria georgiana</i>	White-Breasted Robin		x		x			
AVES	PETROICIDAE	<i>Eopsaltria griseogularis</i>	Western Yellow Robin	x	x		x			
AVES	PETROICIDAE	<i>Melanodryas cucullata</i>	Hooded Robin							
AVES	PETROICIDAE	<i>Microeca fascinans</i>	Jacky Winter							

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AVES	PETROICIDAE	<i>Petroica boodang</i>	Scarlet Robin		x		x			
AVES	PETROICIDAE	<i>Petroica goodenovii</i>	Red-Capped Robin							
AVES	PHALACROCORACI DAE	<i>Microcarbo melanoleucos</i>	Little Pied Cormorant		x		x			
AVES	PHALACROCORACI DAE	<i>Phalacrocorax carbo</i>	Great Cormorant		x					
AVES	PHALACROCORACI DAE	<i>Phalacrocorax sulcirostris</i>	Little Black Cormorant		x		x			
AVES	PHALACROCORACI DAE	<i>Phalacrocorax varius</i>	Pied Cormorant		x					
AVES	PHASIANIDAE	<i>Coturnix pectoralis</i>	Stubble Quail		x		x			
AVES	PHASIANIDAE	<i>Coturnix ypsilonphora</i>	Brown Quail							
AVES	PODARGIDAE	<i>Podargus strigoides</i>	Tawny Frogmouth	x	x		x			
AVES	PODICIPEDIDAE	<i>Podiceps cristatus</i>	Great Crested Grebe							
AVES	PODICIPEDIDAE	<i>Poliocephalus poliocephalus</i>	Hoary-Headed Grebe		x		x			
AVES	PODICIPEDIDAE	<i>Tachybaptus novaehollandiae</i>	Australasian Grebe		x		x			
AVES	PSITTACIDAE	<i>Barnardius zonarius</i>	Australian Ringneck	x	x		x			
AVES	PSITTACIDAE	<i>Neophema elegans</i>	Elegant Parrot		x		x			
AVES	PSITTACIDAE	<i>Neophema petrophila</i>	Rock Parrot							
AVES	PSITTACIDAE	<i>Parvipsitta porphyrocephala</i>	Purple-Crowned Lorikeet		x		x			
AVES	PSITTACIDAE	<i>Platycercus icterotis</i>	Western Rosella		x		x			
AVES	PSITTACIDAE	<i>Platycercus spurius</i>	Red-Capped Parrot		x		x			
AVES	PSITTACIDAE	<i>Polytelis anthopeplus</i>	Regent Parrot		x		x			
AVES	RALLIDAE	<i>Fulica atra</i>	Eurasian Coot		x		x			
AVES	RALLIDAE	<i>Gallinula tenebrosa</i>	Dusky Moorhen		x					
AVES	RALLIDAE	<i>Gallirallus philippensis</i>	Banded Rail		x					
AVES	RALLIDAE	<i>Porphyrio melanotus</i>	Australasian Swamphen							
AVES	RALLIDAE	<i>Porphyrio porphyrio</i>	Purple Swamphen		x		x			
AVES	RALLIDAE	<i>Porzana fluminea</i>	Australian Spotted Crake							
AVES	RALLIDAE	<i>Porzana tabuensis</i>	Spotless Crake		x		x			
AVES	RALLIDAE	<i>Tribonyx ventralis</i>	Black-Tailed Native-Hen		x					
AVES	RECURVIROSTRIDAE	<i>Himantopus himantopus</i>	Pied Stilt		x					
AVES	RECURVIROSTRIDAE	<i>Recurvirostra novaehollandiae</i>	Red-necked Avocet							
AVES	RHIPIDURIDAE	<i>Rhipidura albiscapa</i>	Grey Fantail	x	x		x			

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
AVES	RHIPIDURIDAE	<i>Rhipidura leucophrys</i>	Willie Wagtail		x		x			
AVES	STRIGIDAE	<i>Ninox novaeseelandiae</i>	Southern Boobook		x		x			
AVES	THRESKIORNITHIDAE	<i>Platalea flavipes</i>	Yellow-Billed Spoonbill		x		x			
AVES	THRESKIORNITHIDAE	<i>Platalea regia</i>	Royal Spoonbill							
AVES	THRESKIORNITHIDAE	<i>Plegadis falcinellus</i>	Glossy Ibis							
AVES	THRESKIORNITHIDAE	<i>Threskiornis molucca</i>	Australian White Ibis		x		x			
AVES	THRESKIORNITHIDAE	<i>Threskiornis spinicollis</i>	Straw-Necked Ibis		x		x			
AVES	TIMALIIDAE	<i>Zosterops lateralis</i>	Silvereye		x		x			
AVES	TURNICIDAE	<i>Turnix varius</i>	Painted Button-Quail		x		x			
AVES	TYTONIDAE	<i>Tyto alba</i>	Barn Owl		x		x			
AVES	TYTONIDAE	<i>Tyto novaehollandiae</i>	Masked Owl					P3		
FISH	GALAXIIDAE	<i>Galaxiella munda</i>	Mud Minnow		x			T	VU	
FISH	PERCICHYTHIDAE	<i>Nannatherina balstoni</i>	Balston's Pygmy Perch			x		T	VU	VU
INVERTEBRATE	HYRIIDAE	<i>Westralunio carteri</i>	Carter's Freshwater Mussel		x	x		T	VU	VU
INVERTEBRATE	PARASTACIDAE	<i>Cherax cainii</i>	Marron							
INVERTEBRATE	PARASTACIDAE	<i>Cherax destructor</i>	Yabby*							
INVERTEBRATE	PARASTACIDAE	<i>Cherax quinquecarinatus</i>	Gilgie							
INVERTEBRATE	PARASTACIDAE	<i>Cherax tenuimanus</i>	Margaret River Hairy Marron			x		T	CR	CR
INVERTEBRATE	PARASTACIDAE	<i>Engaewa reducta</i>	Dunsborough Burrowing Crayfish			x		T	CR	CR
MAMMALIA	BOVIDAE	<i>Bos taurus</i>	Cattle *							
MAMMALIA	BURRAMYIDAE	<i>Cercartetus concinnus</i>	Western Pygmy-Possum		x					
MAMMALIA	CANIDAE	<i>Vulpes vulpes</i>	Fox*	Tracks						
MAMMALIA	DASYURIDAE	<i>Antechinus flavipes</i> subsp. <i>leucogaster</i>	Yellow-footed Antechinus		x					
MAMMALIA	DASYURIDAE	<i>Dasyurus geoffroii</i>	Chuditch			x		T	VU	VU
MAMMALIA	DASYURIDAE	<i>Phascogale tapoatafa</i>	Brush-Tailed Phascogale					CD		
MAMMALIA	DASYURIDAE	<i>Sminthopsis fuliginosus</i>	Dusky Dunnart							

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
MAMMALIA	DASYURIDAE	<i>Sminthopsis gilberti</i>	Gilbert's Dunnart							
MAMMALIA	DASYURIDAE	<i>Sminthopsis griseoventer</i>	Grey-Bellied Dunnart							
MAMMALIA	FELIDAE	<i>Felis catus</i>	Cat *							
MAMMALIA	LEPORIDAE	<i>Oryctolagus cuniculus</i>	Rabbit*	Diggings	x					
MAMMALIA	MACROPODIDAE	<i>Macropus fuliginosus</i>	Western Grey Kangaroo	x	x					
MAMMALIA	MACROPODIDAE	<i>Notamacropus irma</i>	Western Brush Wallaby					P4		
MAMMALIA	MACROPODIDAE	<i>Setonix brachyurus</i>	Quokka			x		T	VU	VU
MAMMALIA	MURIDAE	<i>Hydromys chrysogaster</i>	Water-Rat					P4		
MAMMALIA	MURIDAE	<i>Mus musculus</i>	House Mouse*		x					
MAMMALIA	MURIDAE	<i>Rattus fuscipes</i>	Western Bush Rat		x					
MAMMALIA	MURIDAE	<i>Rattus rattus</i>	Black Rat*		x					
MAMMALIA	PERAMELIDAE	<i>Isoodon fusciventer</i>	Southern Brown Bandicoot	Diggings	x			P4		
MAMMALIA	PHALANGERIDAE	<i>Trichosurus vulpecula</i>	Common Brushtail Possum	Scat						
MAMMALIA	PSEUDOCHIRIDAE	<i>Pseudocheirus occidentalis</i>	Western Ringtail Possum		x	x		T	CR	CR
MAMMALIA	SUIDAE	<i>Sus scrofa</i>	Pig*							
MAMMALIA	TARSIPEDIDAE	<i>Tarsipes rostratus</i>	Honey Possum							
MAMMALIA	VESPERTILIONIDAE	<i>Falsistrellus mackenziei</i>	Western False Pipistrelle					P4		
MAMMALIA	VESPERTILIONIDAE	<i>Nyctophilus geoffroyi</i>	Lesser Long-eared Bat							
MAMMALIA	VESPERTILIONIDAE	<i>Nyctophilus gouldii</i>	Gould's Wattled Bat		x					
MAMMALIA	VESPERTILIONIDAE	<i>Nyctophilus major</i>	Greater Long-eared Bat							
MAMMALIA	VESPERTILIONIDAE	<i>Nyctophilus morio</i>	Chocolate Wattled Bat							
MAMMALIA	VESPERTILIONIDAE	<i>Vespadelus regulus</i>	Southern Forest Bat							
REPTILIA	AGAMIDAE	<i>Pogona minor</i>	Western Bearded Dragon							
REPTILIA	CHELIDAE	<i>Chelodina colliei</i>	Oblong Turtle							
REPTILIA	ELAPIDAE	<i>Echiopsis curta</i>	Bardick							
REPTILIA	ELAPIDAE	<i>Elapognathus coronatus</i>	Western Crowned Snake							
REPTILIA	ELAPIDAE	<i>Notechis scutatus</i>	Tiger Snake							
REPTILIA	ELAPIDAE	<i>Parasuta gouldii</i>	Gould's hooded Snake							
REPTILIA	ELAPIDAE	<i>Parasuta nigriceps</i>	Mitchell's Short-Tailed Snake		x					
REPTILIA	ELAPIDAE	<i>Pseudonaja affinis</i>	Dugite		x					
REPTILIA	ELAPIDAE	<i>Simoselaps bertholdi</i>	Jan's Banded Snake							
REPTILIA	GEKKONIDAE	<i>Christinus marmoratus</i>	Marbled Gecko		x					
REPTILIA	PYGOPODIDAE	<i>Pygopus lepidopodus</i>	Common Scaly-Foot							

Class	Family	Scientific Name	Vernacular Name	Observed	ALA 2022	EPBC PMST 2022	Bird data 2022	Status	WA Status	EPBC Status
REPTILIA	SCINCIDAE	<i>Acratoscincus trilineatus</i>	Western Three-Lined Skink		x					
REPTILIA	SCINCIDAE	<i>Cryptoblepharus buchananii</i>	Buchanans Snake-Eyed Skink		x					
REPTILIA	SCINCIDAE	<i>Ctenotus catenifer</i>	Chain-striped South-west Ctenotus							
REPTILIA	SCINCIDAE	<i>Ctenotus impar</i>	Odd-Striped Ctenotus							
REPTILIA	SCINCIDAE	<i>Ctenotus labillardieri</i>	Common South-West Ctenotus		x					
REPTILIA	SCINCIDAE	<i>Egernia kingii</i>	King's Skink		x					
REPTILIA	SCINCIDAE	<i>Egernia napoleonis</i>	South-Western Crevice-Skink		x					
REPTILIA	SCINCIDAE	<i>Hemiergis gracilipes</i>	South-Western Mulch-Skink							
REPTILIA	SCINCIDAE	<i>Hemiergis peronii</i>	Lowlands Earless Skink							
REPTILIA	SCINCIDAE	<i>Hemiergis quadrilineata</i>	Two-Toed Earless Skink							
REPTILIA	SCINCIDAE	<i>Lerista distinguenda</i>	South-Western Orange-Tailed Slider							
REPTILIA	SCINCIDAE	<i>Lerista elegans</i>	Elegant Slider							
REPTILIA	SCINCIDAE	<i>Lerista microtis</i>	South-Western Slider							
REPTILIA	SCINCIDAE	<i>Lissolepis luctuosa</i>	Western Mourning Skink							
REPTILIA	SCINCIDAE	<i>Menetia greyii</i>	Common Dwarf Skink	x	x					
REPTILIA	SCINCIDAE	<i>Morethia lineoocellata</i>	West Coast Morethia Skink							
REPTILIA	SCINCIDAE	<i>Tiliqua rugosa</i>	Bobtail		x					
REPTILIA	TYPHLOPIDAE	<i>Anilios australis</i>	Southern Blind Snake		x					
REPTILIA	TYPHLOPIDAE	<i>Anilios pinguis</i>	Rotund Blind Snake							
REPTILIA	VARANIDAE	<i>Varanus rosenbergi</i>	Heath Monitor	Diggings, Tracks	x					

Appendix C.2 PMST database results



EPBC Act Protected Matters Report

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

Report created: 24-Mar-2022

[Summary](#)

[Details](#)

[Matters of NES](#)

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

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

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

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar	1
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	4
Listed Threatened Species:	42
Listed Migratory Species:	12

Other Matters Protected by the EPBC Act

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

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

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

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	14
Whales and Other Cetaceans:	None
Critical Habitats:	None
Commonwealth Reserves Terrestrial:	None
Australian Marine Parks:	None
Habitat Critical to the Survival of Marine Turtles:	None

Extra Information

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

State and Territory Reserves:	4
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	8
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	None
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

Wetlands of International Importance (Ramsar Wetlands)		[Resource Information]
Ramsar Site Name Vasse-wonnerup system	Proximity Within 10km of Ramsar site	Buffer Status In feature area

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

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

Community Name	Threatened Category	Presence Text	Buffer Status
Banksia Woodlands of the Swan Coastal Plain ecological community	Endangered	Community likely to occur within area	In feature area
Clay Pans of the Swan Coastal Plain	Critically Endangered	Community likely to occur within area	In buffer area only
Shrublands on southern Swan Coastal Plain ironstones	Endangered	Community likely to occur within area	In feature area
Tuart (<i>Eucalyptus gomphocephala</i>) Woodlands and Forests of the Swan Coastal Plain ecological community	Critically Endangered	Community may occur within area	In feature area

Listed Threatened Species	[Resource Information]
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Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD Botaurus poiciloptilus			
Australasian Bittern [1001]	Endangered	Species or species habitat likely to occur within area	In feature area
Calidris canutus			
Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In buffer area only
Calidris ferruginea			
Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Calyptorhynchus banksii naso</u>			
Forest Red-tailed Black-Cockatoo, Karrak [67034]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Charadrius leschenaultii</u>			
Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Falco hypoleucus</u>			
Grey Falcon [929]	Vulnerable	Species or species habitat may occur within area	In feature area
<u>Numenius madagascariensis</u>			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Sternula nereis nereis</u>			
Australian Fairy Tern [82950]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Zanda baudinii listed as Calyptorhynchus baudinii</u>			
Baudin's Black-Cockatoo, Long-billed Black-cockatoo [87736]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Zanda latirostris listed as Calyptorhynchus latirostris</u>			
Carnaby's Black Cockatoo, Short-billed Black-cockatoo [87737]	Endangered	Species or species habitat known to occur within area	In feature area
CRUSTACEAN			
<u>Cherax tenuimanus</u>			
Hairy Marron, Margaret River Hairy Marron, Margaret River Marron [78931]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Engaewa reducta</u>			
Dunsborough Burrowing Crayfish [82675]	Critically Endangered	Species or species habitat known to occur within area	In buffer area only
FISH			
<u>Nannatherina balstoni</u>			
Balston's Pygmy Perch [66698]	Vulnerable	Species or species habitat known to occur within area	In feature area
MAMMAL			
<u>Dasyurus geoffroii</u>			
Chuditch, Western Quoll [330]	Vulnerable	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Pseudocheirus occidentalis</u> Western Ringtail Possum, Ngwayir, Womp, Woder, Ngoor, Ngoolangit [25911]	Critically Endangered	Species or species habitat known to occur within area	In feature area
<u>Setonix brachyurus</u> Quokka [229]	Vulnerable	Species or species habitat may occur within area	In buffer area only
OTHER			
<u>Westralunio carteri</u> Carter's Freshwater Mussel, Freshwater Mussel [86266]	Vulnerable	Species or species habitat known to occur within area	In feature area
PLANT			
<u>Banksia mimica</u> Summer Honeypot [82765]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Banksia nivea subsp. uliginosa</u> Swamp Honeypot [82766]	Endangered	Species or species habitat known to occur within area	In feature area
<u>Banksia squarrosa subsp. argillacea</u> Whicher Range Dryandra [82769]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u>Brachysciás verecundus</u> Ironstone Brachysciás [81321]	Critically Endangered	Species or species habitat likely to occur within area	In feature area
<u>Caladenia busselliana</u> Bussell's Spider-orchid [24369]	Endangered	Species or species habitat likely to occur within area	In buffer area only
<u>Caladenia hoffmannii</u> Hoffman's Spider-orchid [56719]	Endangered	Species or species habitat likely to occur within area	In feature area
<u>Caladenia huegelii</u> King Spider-orchid, Grand Spider-orchid, Rusty Spider-orchid [7309]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Caladenia procera</u> Carbungup King Spider Orchid [68679]	Critically Endangered	Species or species habitat likely to occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u><i>Chamelaucium</i> sp. S coastal plain (R.D.Royce 4872)</u>			
Royce's Waxflower [87814]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u><i>Daviesia elongata</i> subsp. <i>elongata</i></u>			
Long-leaved Daviesia [64883]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u><i>Diuris micrantha</i></u>			
Dwarf Bee-orchid [55082]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
<u><i>Drakaea elastica</i></u>			
Glossy-leaved Hammer Orchid, Glossy-leaved Hammer Orchid, Warty Hammer Orchid [16753]	Endangered	Species or species habitat likely to occur within area	In feature area
<u><i>Drakaea micrantha</i></u>			
Dwarf Hammer-orchid [56755]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u><i>Eucalyptus x phylacis</i></u>			
Meelup Mallee [87817]	Endangered	Species or species habitat may occur within area	In feature area
<u><i>Gastrolobium modestum</i></u>			
Broad-leaved Gastrolobium [78361]	Vulnerable	Species or species habitat known to occur within area	In feature area
<u><i>Gastrolobium papilio</i></u>			
Butterfly-leaved Gastrolobium [78415]	Endangered	Species or species habitat may occur within area	In feature area
<u><i>Grevillea brachystylis</i> subsp. <i>grandis</i></u>			
Large-flowered Short-styled Grevillea [85001]	Critically Endangered	Species or species habitat known to occur within area	In feature area
<u><i>Lambertia echinata</i> subsp. <i>occidentalis</i></u>			
Western Prickly Honeysuckle [64528]	Endangered	Species or species habitat likely to occur within area	In feature area
<u><i>Petrophile latericola</i></u>			
Laterite Petrophile [64532]	Endangered	Species or species habitat likely to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Synaphea sp. Fairbridge Farm (D. Papenfus 696)</u>			
Selena's Synaphea [82881]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
<u>Tetraria australiensis</u>			
Southern Tetraria [10137]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
<u>Verticordia densiflora var. pedunculata</u>			
Long-stalked Featherflower [55689]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Verticordia plumosa var. ananeotes</u>			
Tufted Plumed Featherflower [23871]	Endangered	Species or species habitat known to occur within area	In buffer area only
<u>Verticordia plumosa var. vassensis</u>			
Vasse Featherflower [55804]	Endangered	Species or species habitat known to occur within area	In buffer area only

SHARK

Pristis pristis

Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
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Listed Migratory Species		[Resource Information]	
Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
<u>Apus pacificus</u>			
Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area

Migratory Marine Species

Pristis pristis

Freshwater Sawfish, Largetooth Sawfish, River Sawfish, Leichhardt's Sawfish, Northern Sawfish [60756]	Vulnerable	Species or species habitat may occur within area	In buffer area only
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Migratory Terrestrial Species

Motacilla cinerea

Grey Wagtail [642]		Species or species habitat may occur within area	In feature area
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Migratory Wetlands Species

Actitis hypoleucus

Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
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Scientific Name	Threatened Category	Presence Text	Buffer Status
<u>Calidris acuminata</u> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<u>Calidris canutus</u> Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area	In buffer area only
<u>Calidris ferruginea</u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Calidris melanotos</u> Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
<u>Charadrius leschenaultii</u> Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u>Numenius madagascariensis</u> Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u>Pandion haliaetus</u> Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
<u>Tringa nebularia</u> Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species	[Resource Information]		
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
<u>Actitis hypoleucus</u> Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u><i>Apus pacificus</i></u> Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
<u><i>Bubulcus ibis</i> as <i>Ardea ibis</i></u> Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
<u><i>Calidris acuminata</i></u> Sharp-tailed Sandpiper [874]		Species or species habitat may occur within area	In feature area
<u><i>Calidris canutus</i></u> Red Knot, Knot [855]	Endangered	Species or species habitat may occur within area overfly marine area	In buffer area only
<u><i>Calidris ferruginea</i></u> Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
<u><i>Calidris melanotos</i></u> Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
<u><i>Charadrius leschenaultii</i></u> Greater Sand Plover, Large Sand Plover [877]	Vulnerable	Species or species habitat may occur within area	In buffer area only
<u><i>Haliaeetus leucogaster</i></u> White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
<u><i>Merops ornatus</i></u> Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
<u><i>Motacilla cinerea</i></u> Grey Wagtail [642]		Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
<u><i>Numenius madagascariensis</i></u>			
Eastern Curlew, Far Eastern Curlew [847]	Critically Endangered	Species or species habitat may occur within area	In feature area
<u><i>Pandion haliaetus</i></u>			
Osprey [952]		Species or species habitat likely to occur within area	In buffer area only
<u><i>Tringa nebularia</i></u>			
Common Greenshank, Greenshank [832]		Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves			[Resource Information]
Protected Area Name	Reserve Type	State	Buffer Status
NTWA Bushland covenant (0069)	Conservation Covenant	WA	In feature area
Rapids	Conservation Park	WA	In buffer area only
Sussex Location 2561	NRS Addition - Gazettal in Progress	WA	In buffer area only
Unnamed WA45533	Nature Reserve	WA	In buffer area only

Regional Forest Agreements			[Resource Information]
RFA Name	State	Buffer Status	
<u>South West WA RFA</u>	Western Australia	In feature area	

EPBC Act Referrals			[Resource Information]	
Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
Controlled action				
<u>Yarragadee Water Supply Development</u>	2005/2073	Controlled Action	Completed	In buffer area only
Not controlled action				
<u>Busselton to Margaret River Transmission Line</u>	2008/3964	Not Controlled Action	Completed	In buffer area only
<u>Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia</u>	2015/7522	Not Controlled Action	Completed	In feature area
<u>INDIGO Central Submarine Telecommunications Cable</u>	2017/8127	Not Controlled Action	Completed	In feature area

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
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Not controlled action <u>Nuttman Road, Busselton Gravel Extraction, WA</u>	2017/8086	Not Controlled Action	Completed	In buffer area only
Not controlled action (particular manner) <u>INDIGO Marine Cable Route Survey (INDIGO)</u>	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
<u>Locations 2629, 2699 & 2991 - Jamisons Road</u>	2002/771	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only
<u>Waterloo to Busselton 132kV Transmission Line</u>	2002/816	Not Controlled Action (Particular Manner)	Post-Approval	In buffer area only

Caveat

1 PURPOSE

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

The report contains the mapped locations of:

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

2 DISCLAIMER

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

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

3 DATA SOURCES

Threatened ecological communities

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

Threatened, migratory and marine species

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

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

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

4 LIMITATIONS

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

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

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

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

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

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

Acknowledgements

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

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

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

Please feel free to provide feedback via the [Contact Us](#) page.

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Appendix D Threatened Fauna Evaluation

Table E.1 provides an evaluation of the presence of habitat and the likelihood of occurrence for conservation significant (target) fauna species. The species list was derived from database searches (ALA, Bird Data, Main Roads data, and PMST reporting tool, 2022 and Naturemap 2021), literature review, expert consultation, and assessed against habitat observed within the study area. The presence of habitat is broken into four categories:

- **Present - core:** Potential or known habitat present within the study area. Consists of "habitat critical to the survival of a species" which refers to core areas that are necessary for activities such as foraging, breeding, roosting, or dispersal, necessary for the long-term maintenance of the species to maintain genetic diversity and long term evolutionary development (Department of the Environment 2013) or habitat types recognised in recovery plans or guidelines.
- **Present - supporting:** Likely to provide dispersal, transitory or supporting habitat that may support core / critical habitat areas, such as small areas of lesser quality habitat where an animal has a large home range.
- **Marginal:** Habitat present is not typical but may be suitable, or habitat is typical, but condition and microhabitat requirements of species are not present.
- **Absent:** No potential or known habitat is present within the project area.

There are four categories for likelihood of occurrence:

- **Nil:** Species known or predicted to occur within the locality but no suitable habitat within the project area.
- **Unlikely:** Species known or predicted within the locality. Suitable habitat may be present in the project area, but the proximity of nearest records suggests it is unlikely to occur.
- **Possible:** Suitable habitat present and the species could occur in the project area based on the proximity of nearest records.
- **Present:** Species was recorded during the field investigations.

Some fauna have been excluded as they are not relevant to the proposal or would not be impacted:

- Marine (e.g. seals, dolphins, whales, penguins).
- Marine migratory species (e.g. Albatrosses) or where breeding is in the northern hemisphere, e.g. those from the family Scolopacidae: Shorebirds and waders, e.g. *Charadrius leschenaultia* (Greater Sand Plover).
- Species considered regionally extinct (e.g. Malleefowl, Woylie, Noisy Scrub-bird, Heath Mouse).
- Aquatic (Blue-billed Duck) where there are no large waterbodies.

Conservation status is as per the (federal) EPBC Act and (WA) DBCA Parks and Wildlife Service's Threatened and Priority Fauna List last updated 10/04/2019, under the *Wildlife Conservation (Specially Protected Fauna) Notice 2018* made by the Minister for Environment under section 14(4) Part 2 of *Biodiversity Conservation Regulations 2018*. Refer to Appendix B for Conservation Codes.

Table E.1 Evaluation of the presence of habitat and the likelihood of occurrence for conservation significant fauna within the study area

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
AVES	ARDEIDAE <i>Botaurus poiciloptilus</i>	Australasian Bittern	EN	EN	The Australasian Bittern occurs in terrestrial freshwater wetlands and, rarely, estuarine habitats. In the south-west it is found in beds of tall rush mixed with, or near, short fine sedge or open pools. The species also occurs around swamps, lakes, pools, rivers and channels fringed with lignum (<i>Muehlenbeckia</i> sp.), canegrass (<i>Eragrostis</i> sp.) or other dense vegetation. The species occasionally ventures into areas of open water or onto banks. In the SW WA, it is confined to a relatively small number of regularly occupied locations. These locations probably number less than 70, including: less than five north of Perth; less than 10 in the greater Perth metropolitan area; less than 10 south to Busselton; less than 10 in the Lake Muir district; less than 10 from Augusta to Walpole; less than 10 around Albany; and less than 10 around Esperance and Cape Arid. Most of these sites are discrete basin/sumpland wetlands with local catchments, and many depend on the surface expression of groundwater (SPRAT 2017). There are no records within 10 km (ALA 2022).	Marginal	Unlikely
	<i>Ixobrychus flavicollis</i>	Black Bittern		P2	Found in both terrestrial and estuarine wetlands, generally in areas of permanent water and dense vegetation, e.g. shadowy leafy waterside trees: casurinas, eucalypts, paperbarks, tidal creeks and mudflats. In the case that permanent water is present, the species may also occur in flooded grassland or adjacent forest and woodland. It nests on a sheltered horizontal branch over water (Pizzey and Knight 2007).	Marginal	Unlikely
	CACATUIDAE <i>Calyptorhynchus banksii naso</i>	Forest Red-tailed Black Cockatoo	VU	VU	The Forest Red-tailed Black Cockatoo inhabits the dense Jarrah, Karri and Marri forests receiving more than 600 mm rainfall annually (SPRAT 2018). The FRTBC occurs within the same habitat as the Baudin's Cockatoo. FRTBC nest in Jarrah, Karri, Marri and Wandoo favouring large top entry hollows with	Present - core	Present

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
					<p>entrances ranging over 12 cm in diameter and hollow depth one to five metres (SEWPaC, 2012) (Johnson and Kirkby, Undated). It breeds between February to December with a peak between October and December, also a peak in some years in April–May, probably every two years. On the Swan Coastal Plain breeding has been recorded in November–December (Johnson and Kirkby, Undated). The species predominately feeds on seeds from Marri and Jarrah fruits and Blackbutt, Albany Blackbutt, Forest Sheoak, Snottygobble and the non-indigenous native Spotted Gum and Cape Lilac within its home range of about 116-187 ha (SPRAT 2018).</p>		
	<i>Calyptorhynchus baudinii</i>	Baudin's Cockatoo	EN	EN	<p>Baudin's Cockatoo is mainly found in eucalypt forests, especially Jarrah-Marri Forest, Karri Forest, and less frequently in woodlands of Wandoo, Blackbutt, Flooded Gum. Yate, partly cleared farmlands including roadside trees and gardens. It forages at all levels of the forest from the canopy to the ground, often feeding in the understorey on proteaceous trees and shrubs, especially Banksia, and in orchards both in trees (Johnson and Kirkby, Undated).</p> <p>Preferred roosts are in areas with a dense canopy close to permanent sources of water (SPRAT 2018). The range of the species during the non-breeding season (breeds in August though to late December) may be determined by the distribution of Marri, and nesting might be confined to areas in which Karri occurs (SPRAT 2018). It is known to nest in hollows of Eucalypts usually at some height (Pizzey and Knight 2007), often 30-50m above ground (Jupp 2000). Tree hollows usually have an entrance of 30-40cm, >30cm deep and are mostly vertical (SPRAT 2018) (Johnson and Kirkby, Undated).</p>	Present - core	Present
	<i>Calyptorhynchus latirostris</i>	Carnaby's Cockatoo	EN	EN	This species is a postnuptial nomad, moving west after breeding. Carnaby's Cockatoo mainly occurs in or near eucalypt woodlands, especially those dominated by Wandoo or Salmon Gum, and sometimes reported in forests of Marri, Jarrah, Karri	Present - core	Present

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence	
					<p>and Tuart. Nesting hollows may be located anywhere from over 2 m from ground, mainly in the Wheatbelt (Cale 2003, SPRAT 2009, WA Museum 2010).</p> <p>It is known to forage in native shrubland, kwongan heathland and woodland dominated by proteaceous plant species such as Banksia spp. (including Dryandra spp.), Hakea spp. and Grevillea spp. Forages in pine plantations, eucalypt woodland and forest that contains foraging species. Also individual trees and small stands of these species (SEWPAC 2012).</p> <p>This species is currently expanding its breeding range westward and south into the Jarrah-Marri forests of the Darling Scarp and into the Tuart forests of the Swan Coastal Plain, due to climate change. Breeding occurs mainly from early July to mid-December. Breeding success is largely dependent on suitable feeding habitat adjacent to the nest site to provide the necessary food for the survival of the chick, e.g. adjacent pine forest or remnant vegetation (Johnson and Kirkby, Undated).</p>			
	FALCONIDAE <i>Falco peregrinus</i>	Peregrine Falcon	-	OS	Peregrine Falcons occur in woodland, plains, gorges, wetlands but tend to breed either in stick-nests in trees or nest on cliff ledges. It appears that hollows and large abandoned nests of other birds may be used where cliff ledges are limited. Breeds Aug-Dec. Where good habitat occurs, and the density of Peregrine Falcons is high, active nests may occur within 2.5km of each other. The diet of the Peregrine Falcon includes wood duck, pigeons and doves, galahs, rosellas and cockatoo, starlings and larks (Olsen et al. 2006).	Present – supporting	Possible	
	STRIGIDAE <i>Tyto novaehollandiae</i> subsp. <i>novaehollandiae</i>	Masked Owl (southern sub sp)	-	P3	Inhabits forests, open woodlands and farmlands with large trees, including timber watercourses paperbark woodlands. Widespread but very sparse, they breed any time of the year when conditions are favourable with a nesting period of about three months (Pizzey and Knight 2007).	Present – supporting	Possible	

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
MAMMALS	DASYURIDAE <i>Dasyurus geoffroii</i>	Chuditch, Western Quoll	VU	VU	Quolls may occupy a range of habitats including forest, woodland and desert, though in the SW they are largely restricted to Jarrah forest or scattered through the southern and eastern wheat belt (DEC 2010). Habitat critical to Quoll are large areas of undisturbed habitat which a sufficient variety of key food and other resources such as large hollow logs, burrows or small caves at ground level for denning. To be suitable as den sites, logs must have a diameter of at least 30 cm but usually greater than 50 cm, a hollow diameter of 7–20 cm and generally 1m long (Orell & Morris 1994). Annually, an adult female Chuditch will utilise an estimated average of 66 logs and 110 burrows within her home range. A large amount of den sites is required for both sexes. They occupy relatively large home ranges, with males utilizing over 15 km ² and females, 3-4 km ² (Orell & Morris 1994). 2017 record in the forest block immediately south (Naturemap 2021).	Present - core	Possible
	<i>Phascogale tapoatafa</i>	Southern Brush-tailed Phascogale	-	S	This arboreal species is found in a variety of forest types. Ideal habitat for this species consists of dry sclerophyll forest and open woodland (Jarrah, Marri, and mixed Jarrah Karri) that contain hollow bearing trees and sparse ground cover. Their many nesting sites include hollow tree limbs, rotten stumps and even birds' nests. Lactating females prefer a large tree cavity with a small entrance with a nest made of bark, feathers and fur. A female's home range covers 20 to 70 hectares, a male's home ranges over laps females and increases during breeding season. It is predominantly carnivorous, foraging on arthropods, invertebrates, small vertebrates and nectar (Strahan 1995).	Present - core	Possible
	MACROPODIDAE <i>Notamacropus irma</i>	Western Brush Wallaby		P4	Optimum habitat for the Western Brush Wallaby includes open Jarrah forest or woodland and seasonally wet flats with low grasses and scrubby thickets, but also areas of mallee and heathland. Common dietary flora includes <i>Carpobrotus edulis</i> ,	Present - core	Possible

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
					<i>Cynodon dactylon</i> and <i>Nuytsia floribunda</i> . 2014 record in the forest block immediately south (Naturemap 2021).		
	<i>Setonix brachyurus</i>	Quokka	VU	VU	The understorey structure of the habitats currently used by Quokka consist of dense, low vegetation that provides refuge from predation (Hayward 2002). The mainland habitats include dense riparian vegetation (Hayward et al. 2005). No nearby records.	Marginal	Unlikely
	MURIDAE <i>Hydromys chrysogaster</i>	Water Rat	-	P4	The Water rat is usually found in permanent fresh or brackish water but can be found in marine environments. Fresh water habitats include swamps, lakes, dams even urban drainage swamps. Typically forages close to the shoreline, restricting its movements to shallow water (up to 2 m in depth) (CSIRO, 2004). Several nearby records (Naturemap 2021)	Present - core	Possible
	PERAMELIDAE <i>Isoodon obesulus fusciventer</i>	Southern Brown Bandicoot	-	P4	Bandicoot habitat consists of dense scrubby, often swampy vegetation with a dense cover up to one metre high particularly near watercourses/wetlands. It often feeds in adjacent forest (Jarrah and Wandoo) and woodlands that are burnt on a regular basis. Nests can be concealed next to or under old logs, shrubs or piles of debris and are made up of ground litter piled up over a shallow depression providing internal chambers. Home ranges vary with population density and range from 5-8.6 ha for males and 1-6 ha for females (DEC 2010). Feed on a variety of ground-dwelling invertebrates and the fruit-bodies of hypogeous fungi. Their searches for food often create distinctive conical holes in the soil (DECC 2010). Several nearby records (Naturemap 2021). Diggings observed.	Present - core	Present
	PSEUDOCHIRIDAE	Western Ringtail Possum	CR	CR	In dense, coastal Peppermint forest, home ranges are about 0.5 hectares to 1.5 ha and in eucalypt forests about 2.5 ha. In the northern jarrah forests, home ranges are larger and have been	Present – supporting	Unlikely

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
	<i>Pseudochirus occidentalis</i>				recorded to at least 5.6 ha. Peppermint leaves form the basis of the WRP diet in coastal areas (between 79-100% based on a study of WRP near Busselton by Jones et al. 1994), but when unavailable, the dominant myrtaceous species are preferred. In the inland forest, Jarrah and Marri the main food source. Garden plant varieties are also exploited in urban areas. WRP use a range of nest and shelter sites to avoid predators and exposure to the weather. Dreys are constructed in the canopy if hollows are not available. Adequate nest and shelter sites are necessary components of good quality habitat (Jones 1994, Shedley and Williams 2014). Local records are all north or west (Naturemap 2021). No scats or evidence observed during spotlighting.		
	VESPERTILIONIDAE <i>Falsistrellus mackenziei</i>	Western False Pipistrelle	-	P4	It occurs in wet sclerophyll forest dominated by Karri, and in the high rainfall zones of the Jarrah and Tuart forests. It has also been recorded in mixed Tuart-Jarrah tall woodlands on the adjacent coastal plain. Marri, Sheoak and Peppermint trees are often co-dominant at its collection localities (DotEE, 2018). This species roosts in tree hollows (Phillips & Inwards 1985) in colonies of 5 to 30 bats. The species feed on flying insects between below the forest canopy. Recorded in the forest block immediately south (Naturemap 2021).	Present - core	Possible
FISH	GALAXIIDAE <i>Galaxiella munda</i>	Mud minnow, Western dwarf galaxias	-	VU	Occur in slow-running, tea-coloured streams usually in sandy areas. Also found in swamps, small ponds and roadside ditches. Also lives in the vegetated shallows of some freshwater lakes. Water is typically acidic (pH 4.5-6.5) and darkly tannin-stained. An inhabitant of temporary waters, capable of aestivating in damp bottom sediments over summer (Allen et al 2002) (Smith et al 2002). Drainage line habitat appears suitable but it is outside of the mapped area likely to be found by DWER (2022).	Present – supporting	Unlikely
	PERCICHTHYIDAE	Balston's Pygmy Perch	VU	VU	Balston's Pygmy Perch is a small freshwater fish that grows to a maximum length of around 90 mm (commonly 60 mm). This	Marginal	Unlikely

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
	<i>Nannatherina balstoni</i>				species is brownish dorsally and silver below, usually with a prominent brown mid-lateral stripe and a series of vertical brown bars on sides giving a cross-hatched pattern Balston's Pygmy Perch inhabits acidic, tannin-stained freshwater pools, streams and lakes in peat flats within 30 km of the coast of south-west WA, preferring shallow water, and commonly associated with tall sedge thickets and inundated riparian vegetation (SPRAT 2018) (Bray et al. 2018). Associated with slow-flowing, low salinity, acidic and tannin-stained waters, and complex instream habitat – not recorded locally (DWER 2022).		
INVERTEBRATES	HYRIIDAE <i>Westralunio carteri</i>	Carters Freshwater Mussel	VU	VU	Carters Freshwater Mussel is the only freshwater mussel found in southwest WA. It is found in freshwater streams, rivers, ponds, wetlands and lakes inland from the coast mostly areas with muddy, silty and sandy bottoms and flowing permanent water. Tracks can be seen along banks and sandy/muddy patches of stream bed where they are present. Native fish are critical to the Mussel's lifecycle. Larval mussels attach to native fish to develop into juvenile mussels. Unlike their marine and estuarine cousins, they do not attach to structures. This allows them to move with receding water levels and position themselves to the best feeding spots (Murdoch University, 2010). Not recorded locally (DWER 2022).	Marginal	Unlikely
	PARASTACIDAE <i>Cherax tenuimanus</i>	Margaret River hairy marron	CR	CR	The Hairy Marron only occurs in the Margaret River and upper headwaters in the SW of WA. Prefers fresh, highly oxygenated, clear-water habitats of the Margaret River, with complex shelter including large woody debris which it also utilises as a food source. It is omnivorous, feeding on both plant and animal matter (DWER 2022). Modelled as not being found in the catchment (DWER 2022).	Nil	Unlikely
	<i>Engaewa pseudoreducta</i>	Margaret River Burrowing Crayfish	CR	CR	The Margaret River Burrowing Crayfish is endemic to southwest WA and occurs in two subpopulations, Treeton and Payne Road.	Nil	Unlikely

Class	Family Genus species	Vernacular	Status Federal	Stat. WA	Requirements	Presence of habitat	Likelihood of occurrence
					At Treeton, it occurs in and adjoining State Forest No. 62 (Burnham 2014), in swampy headwaters of a tributary of the Margaret River, Osmington, (Naturemap 2020). A burrow was found in the Bramley National Park. It is known from two sites in the area with individuals collected in 2003 and 2007 (Burnham et al. 2012). At Payne Road, the species occurs in Carburnup River catchment (south-east of Dunsborough), 16 km north of the Treeton Reserve sites (Burnham et al. 2012). No characteristic chimneys were observed though the species' cryptic, burrowing nature, the difficulty seeing and accessing burrows in often dense vegetation make it difficult to survey for.		Extremely restricted range.
	<i>Engaewa reducta</i>	Dunsborough Burrowing Crayfish	CR	CR	The Dunsborough Burrowing Crayfish uses a variety of habitats that provide moist sandy/loamy soils and an accessible water table. These include vegetated seepages, swamp plains and swampy headwaters of streams (CALM 2008) (Burnham et al 2012). There are several local records 8km east in a different catchment (DBCA database 2021).	Nil	Unlikely Extremely restricted range.

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