

**A reconnaissance level
vegetation and flora survey
of a section of the
Bailey Road easement
in the
Shire of Merredin**

Prepared for

The Shire of Merredin

by

**Malcolm Trudgen
Consultant Botanist
M.E. Trudgen and Associates**

With assistance in the field by Mr D. Copeland

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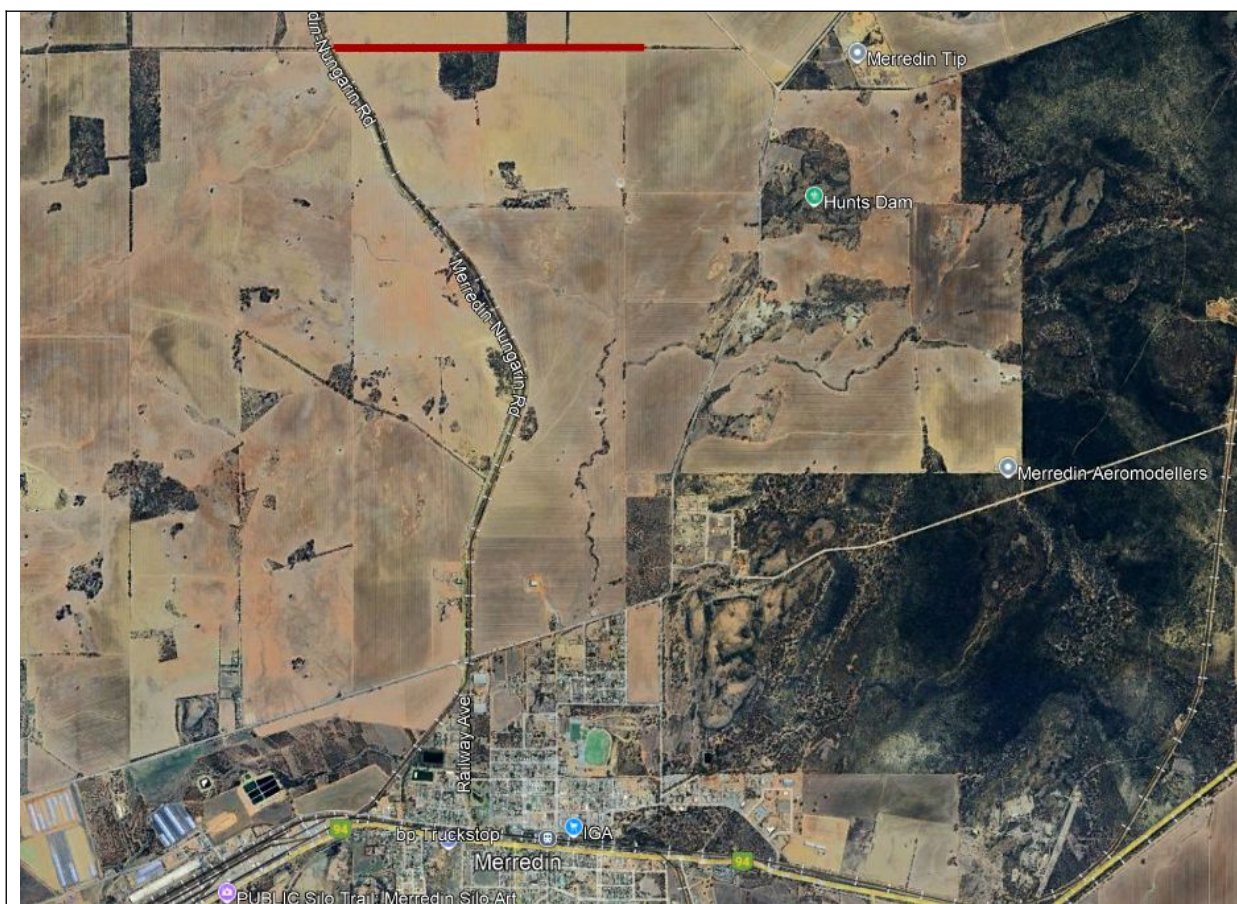
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1.0 INTRODUCTION

1.1 Survey area and purpose of the survey

The survey area is some 235 kilometres east-north-east of Perth and six kilometres north of the town of Merredin, which lies on Great Eastern Highway. It is part of a road easement (the Bailey Road easement) that has not been developed. The section of the easement surveyed joins the Merredin - Nungarin Road at its West end. Past the surveyed section the easement continues to the East to join the Old Nukarni Road.

Due to the purpose of the Bailey Road easement, the survey area is a narrow strip between farm paddocks and remnants of native vegetation. It is ca. 2,400 metres long and 21 metres wide, the easement continues past the survey area for about 720 metres to the Old Nukarni Road.



Map 1. Location of the survey area (the red line) six kilometres north of Merredin.

The purpose of the survey is to describe the vegetation of the survey area and document the flora that occurs in it to as standard suitable for assessing a proposal to allow development of a track or minor road in the easement. A particular aim was to ascertain if any declared rare or priority flora occurs in the survey area.

Given the above details, a reconnaissance level survey was considered suitable for the survey, with particular attention to the presence of any conservation significant flora species.

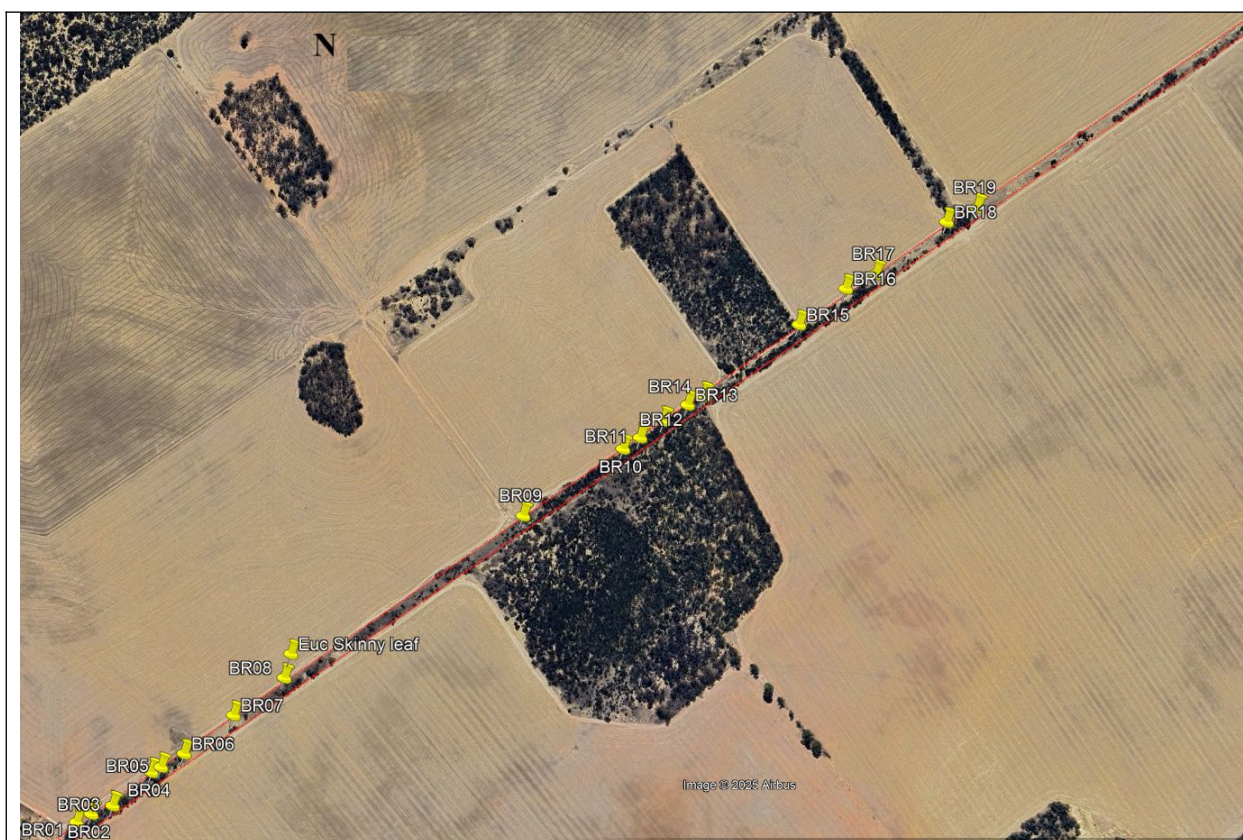
1.2 Project area physical attributes

The survey area is located on the Yilgarn Plateau (the surface expression of the Yilgarn Craton), a very large, very old land surface with limited relief. The survey area is located on a part of the Yilgarn Plateau that has only slight relief, being either flat or with slight to gentle slopes. There is slope to the east in the eastern part of the survey area. The soils were mainly yellow sandy loams, sometimes with a setting surface and occasionally hard setting.

2.0 METHODS AND LIMITATIONS OF THE FLORA AND VEGETATION SURVEY

2.1 Vegetation and flora survey methods

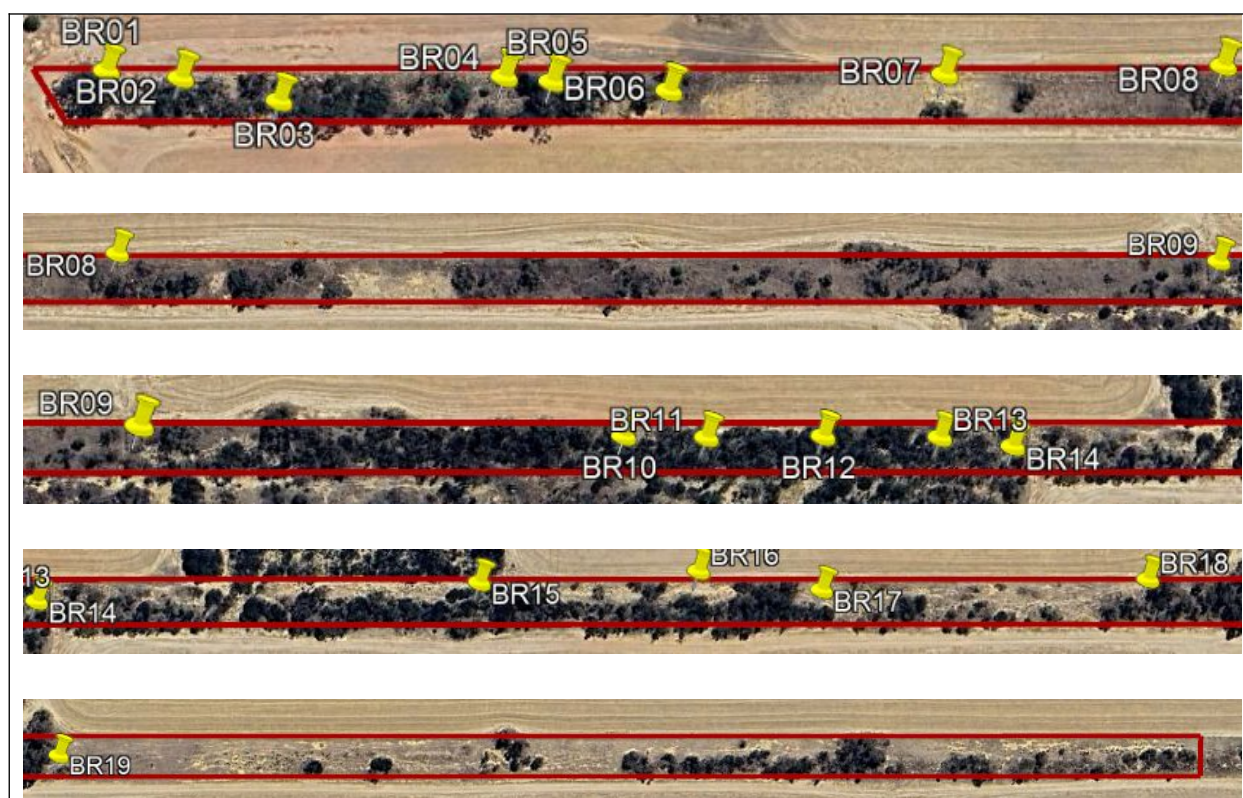
Examination of Google Earth satellite imagery prior to the field survey indicated that the survey area was a mixture of very degraded areas and small to moderate sized areas of remnant native vegetation. No clear clear vegetation boundaries were apparent in the satellite imagery (apart from cleared or not cleared). Therefore no draft interpretation of vegetation types was carried out prior to the field work, with vegetation boundaries identified during the field work on October 12th 2024.



Map 2. Survey area sections recorded indicated by points at the section beginning.
Note. See Map 3 for more detail.

Given the very narrow shape of the survey area, a transect was walked along it recording boundaries, recording vegetation a descriptions and listing flora. The transect was not a straight line, but was modified as necessary to properly sample the vegetation and flora of the differnet sections of the survey area.

The vegetation was described for nineteen sections of the survey area, with the length of the sections (see figures 1 and 2) determined by changes in vegetation type. The beginning of each section is marked on Map 2, with more detail shown on Map 3.



Map 3. Survey area sections indicated by points at the section beginnings.

For each of the nineteen sections of the survey area a vegetation description was recorded and a flora list recorded. All native flora species observed in a section were recorded. The more abundant weeds in a section were recorded, with the others recorded frequently enough to make a list of the weeds for the survey area

Flora species well known to the author were recorded without collecting, if there was any doubt or a species was not known a specimen was collected, pressed and dried. Flora specimens were identified using keys, comparison to previously identified specimens, reference to books and taxonomic papers and use of online resources.

A database search of declared rare and priority flora for an area within 20 kilometres of the survey area was obtained to enable any such species known for the general area to be identified in the field (see Appendix 4).

2.3 Limitations of the vegetation survey

Given the length and width of the survey area and the degree of degradation of much of the vegetation, the nineteen vegetation recording sections indicate a quite detailed vegetation survey.

The level of accuracy of cover assessments used in the vegetation descriptions made by visual assessment is somewhat notoriously limited (partly as the observer is looking across the vegetation, and not down on it).

2.4 Limitations of the flora survey

All native species observed were recorded and it is thought that virtually all native flora present in the survey area was recorded.

Some cryptophytes (those that emerge late in the season) may not have emerged, others may have died off. Due to the timing of the survey, annual flora was available and was in flower or fruit, it is thought that all or nearly all annual flora present in the survey area were recorded.

3.0 FLORA SURVEY OF THE BAILEY ROAD SURVEY AREA

3.1 Flora recorded

Seventy-four (74) native angiosperm species and twelve (12) angiosperm weed species were recorded in the Bailey Road survey area. Given the size of the survey area, the fairly low diversity of most of the vegetation stands recorded, and the level of degradation of the survey area the number of native species seems neither high nor low. The flora recorded is listed in Table 1 (see below).

The family with the most native species recorded was Myrtaceae (Gum Tree, Melaleuca family), with thirteen species present. Of these eight were *Eucalyptus* species and three were *Melaleuca* species. Next was the Fabaceae (Pea and Wattle family) with eight species recorded, six of these were *Acacia* (Wattle) species, with one *Jacksonia* and one *Gastrolobium*. The Poaceae (Grass) and Asteraceae (Daisy) families each had seven species recorded, in both cases scattered through various genera. The Proteaceae (*Banksia* family), usually a prominent part of the flora of parts of the South-west of Western Australia, had only five species; three *Grevillea*, one *Hakea* and one *Persoonia* species.

Eight of the twelve weed species recorded are grasses (Poaceae), which is not surprising given the number of species of this family that have been introduced into South-west of Western Australia. Two were Asteraceae (Daisy family) and the other two the Iceplant (**Mesembryanthemum crystallinum*, Aizoaceae) and **Brassica tournefortii* (Brassicaceae).

Table 1. Flora recorded in the Bailey Road survey area

Notes: In the table heading “# sites” means the number of sections a taxon was recorded in of the 19 sections of the survey area recorded. The introduced (weed) species recorded are given first then the native flora in alphabetical order

Taxon	# Sites	Taxon	# Sites
* <i>Arctotheca calendula</i>	11	<i>Eucalyptus myriadena</i>	1
* <i>Avena barbata</i>	11	<i>Eucalyptus</i> sp.	2
* <i>Brassica tournefortii</i>	3	<i>Gastrolobium floribundum</i>	1
* <i>Bromus diandrus</i>	6	<i>Goodenia cynopotamica</i>	1
* <i>Bromus rubens</i>	2	<i>Grevillea didymobotrya</i> subsp. <i>didymobotrya</i>	1
* <i>Ehrharta longiflora</i>	10	<i>Grevillea excelsior</i>	2
* <i>Hypochaeris glabra</i>	2	<i>Grevillea paradoxa</i>	5
* <i>Lolium</i> sp.	5	<i>Hakea invaginata</i>	3
* <i>Mesembryanthemum crystallinum</i>	3	<i>Hibbertia rostellata</i>	4
* <i>Pentameris airoides</i> subsp. <i>airoides</i>	7	<i>Isoetopsis graminifolia</i>	1
* <i>Ursinia anthemoides</i> subsp. <i>anthemoides</i>	1	<i>Jacksonia nematoclada</i>	1
* <i>Vulpia myuros</i>	9	<i>Lepidosperma sanguinolentum</i>	3
<i>Acacia assimilis</i> subsp. <i>assimilis</i>	1	<i>Lobelia</i> sp.	1

<i>Acacia beauverdiana</i>	1	<i>Maireana brevifolia</i>	1
<i>Acacia enervia</i> subsp. <i>enervia</i>	1	<i>Melaleuca cordata</i>	3
<i>Acacia longispinea</i>	3	<i>Melaleuca hamata</i>	7
<i>Acacia neurophylla</i> subsp. <i>erugata</i>	1	<i>Melaleuca radula</i>	1
<i>Acacia ramulosa</i> subsp. <i>ramulosa</i>	1	<i>Mesomelaena preissii</i>	1
<i>Allocasuarina acutivalvis</i> subsp. <i>acutivalvis</i>	7	<i>Monachather paradoxa</i>	3
<i>Allocasuarina campestris</i>	11	<i>Neurachne alopecuroidea</i>	1
<i>Allocasuarina corniculata</i>	2	<i>Persoonia coriacea</i>	1
<i>Amphipogon caricinus</i>	6	<i>Phebalium tuberculosum</i>	3
<i>Austrostipa elegantissima</i>	9	<i>Platysace maxwellii</i>	1
<i>Austrostipa hemipogon</i>	6	<i>Podotheca gnaphalioides</i>	2
<i>Beyeria sulcata</i> var. <i>sulcata</i>	1	<i>Psammomoya choretroides</i>	1
<i>Borya sphaerocephala</i>	1	<i>Ptilotus holosericeus</i>	1
<i>Caesia micrantha</i>	1	<i>Ptilotus polystachyus</i>	3
<i>Caesia</i> sp. ?	1	<i>Rhagodia drummondii</i>	1
<i>Calandrinia calyptrata</i>	1	<i>Rhodanthe laevis</i>	2
<i>Calocephalus multiflorus</i>	1	<i>Rytidosperma caespitosa</i>	1
<i>Calothamnus gilesii</i>	1	<i>Santalum acuminatum</i>	8
<i>Chthonocephalus pseudevax</i>	8	<i>Schoenus hexandrus</i>	1
<i>Crassula colorata</i> var. <i>acuminata</i>	2	<i>Siemssenia capillaris</i>	2
<i>Dianella revoluta</i> var. <i>divaricata</i>	2	<i>Solanum hoplopetalum</i>	1
<i>Dodonaea bursariifolia</i>	1	<i>Spartochloa cyperoidea</i>	1
<i>Ecdeiocollea monostachya</i>	4	<i>Tetrapora tenuiramea</i>	1
<i>Enchylaena tomentosa</i>	5	<i>Thysanotus patersonii?</i>	1
<i>Eucalyptus rigidula</i>	4	<i>Trachymene cyanopetala</i>	1
<i>Eucalyptus burracoppinensis</i>	4	<i>Trachymene ornata</i>	2
<i>Eucalyptus capillosa</i>	1	<i>Waitzia acuminata</i> var. <i>acuminata</i>	11
<i>Eucalyptus erythronema</i> subsp. <i>erythronema</i>	1	<i>Westringia cephalantha</i>	2
<i>Eucalyptus horistes</i>	6	<i>Xanthorrhoea nana</i>	1
<i>Eucalyptus leptopoda</i> subsp. <i>leptopoda</i>	3	<i>Xanthorrhoea</i> sp. aff. <i>nana</i>	1

3.2 No declared rare flora species were recorded

No declared rare flora species were recorded in the Bailey Road survey area.

3.3 No Priority flora species were recorded

No priority flora species were recorded in the Bailey Road Survey area.

4.0 VEGETATION OF THE BAILEY ROAD SURVEY AREA

4.1 Introduction to the vegetation survey

The vegetation of nineteen sections of the Bailey Road survey area has been described with the descriptions in Appendix 1 and the sections shown on Maps 2 and 3. The vegetation of many of the sections is either in Completely Degraded condition or Very Poor to Poor or Poor condition (see Appendix 3 for condition scale). There is little point assigning the vegetation of the latter sections to a vegetation classification as either there is extremely little or little left of the original vegetation and what is left is rather random survivors over weeds (often the *Eucalyptus* species because they are long lived). Therefore, this section will only describe the vegetation of the sections of the survey area briefly, with those with better condition vegetation in more detail. For the other sections a statement will just be made of the condition of the vegetation with other relevant notes. As there is no significant repetition of types it is practical just to go through the sections. Appendix 1 has the full description for each section and the photographs shown.

Prior to the description of the vegetation types, it is worth noting that the presence of eight *Eucalyptus* species in the survey area implies that prior to the area being disturbed there was a quite diverse native vegetation. The vegetation descriptions are based on the nomenclature of Aplin (1979, see Appendix 2).

4.2 Description of the vegetation of the Bailey Road survey area

The vegetation of the Bailey Road survey area has two main types; those dominated by various *Eucalyptus* species and those dominated by *Allocasuarina* species. There are also some that are intermediate, but these have shrub or tall shrub species rather than the tall shrub/low tree species *Allocasuarina acutivalvis* subsp. *acutivalvis*. The shrub *Allocasuarina* are two forms of *Allocasuarina campestris*, these are not currently recognised taxonomically.

The vegetation of the sections is described briefly below, the flora lists for each section is given in Appendix 1.

Section 1. *Eucalyptus capillosa* woodland over scattered shrubs over **Lolium* sp., **Ehrharta longiflora* open annual grassland. Condition Very Poor with a patch of *Eucalyptus capillosa* trees over part of it. Flora very reduced in diversity and cover. Only five native species were recorded in the section.

Section 2. *Allocasuarina acutivalvis* subsp. *acutivalvis* open scrub to low closed woodland over *Grevillea paradoxa* scattered shrubs over *Waitzia acuminata* var. *acuminata* annual herbland

Condition Very Good with thirteen native species recorded. The absence of low shrubs is typical for *Allocasuarina* vegetation. Thirteen native species recorded in the section, the dense nature of *Allocasuarina* woodlands has restricted degradation significantly.



Photograph 1. Section 1, *Eucalyptus capillosa* woodland over scattered shrubs over **Lolium* sp., **Ehrharta longiflora* open annual grassland. The vegetation in the background is the beginning of Section 2.



Photograph 2. Section 2. *Allocasuarina acutivalvis* subsp. *acutivalvis* open scrub to low closed woodland over *Grevillea paradoxa* scattered shrubs over *Waitzia acuminata* var. *acuminata* annual herbland

Section 3. *Eucalyptus myriadena* large mallees and trees over weeds. Condition Very Poor to Poor. There were only four native species present.



Photograph 3. Section 3, *Eucalyptus myriadena* over weeds.



Photograph 4. Section 4, *Eucalyptus burracoppinensis* over weeds.

Section 4. A stand of *Eucalyptus burracoppinensis* mallees over weeds. Very Poor to Poor condition. There were only four native species present.

Section 5. *Allocasuarina acutivalvis* subsp. *acutivalvis* scattered low trees over weeds. Very Poor condition. There were only eight native species present.



Photograph 5. Section 5, *Allocasuarina acutivalvis* subsp. *acutivalvis* over weeds



Photograph 6. Section 6, *Avena barbata* grassland with patches of *Arctotheca calendula* low herbland

Section 6. *Avena barbata* grassland with patches of *Arctotheca calendula* low herbland. Condition Completely Degraded. There were six native species in the section, one of which is a weed outside its normal habitat! Those native species present were in small numbers with the exception of *Chthonocephalus pseudevax*, a tiny (1 centimetre tall, a couple of centimetres across) that favours areas of very thin soil.

Section 7. *Eucalyptus leptopoda* subsp. *leptopoda*, *Eucalyptus horistes* scattered mallees over *Avena barbata* grassland patches; *Arctotheca calendula* patches; and *Bromus diandrus* patches (with *Avena barbata* over them). Condition Very Poor, some parts completely degraded. Only four native species were recorded in this section.



Photograph 7. Section 7, *Eucalyptus leptopoda* subsp. *leptopoda*, *Eucalyptus horistes* scattered mallees over *Avena barbata* grassland patches; *Arctotheca calendula* patches; and *Bromus diandrus* patches (with *Avena barbata* over them)



Photograph 8. Section 8, *Eucalyptus burracoppinensis*, *Eucalyptus leptopoda* subsp. *leptopoda*, scattered mallees and low trees over *Avena barbata* (*Bromus diandrus*) dense annual grassland with patches of *Arctotheca calendula* dense low herbland.

Section 8. *Eucalyptus burracoppinensis*, *Eucalyptus leptopoda* subsp. *leptopoda*, scattered mallees and low trees over **Avena barbata* (**Bromus diandrus*) dense annual grassland with patches of **Arctotheca calendula* dense low herbland. Condition Mostly Completely Degraded, some parts Very Poor. In spite of the very degraded condition of this section, it had eight native species present, but mostly in low numbers. For example, there was one plant of *Psammomoya choretroides*, the only one seen in the survey area. Seven weed species were recorded in this section.

Section 9. *Eucalyptus horistes* scattered trees over *Eucalyptus leptopoda* subsp. *leptopoda* scattered mallees over *Santalum acuminatum* scattered tall shrubs over *Austrostipa elegantissima*, *Ecdeiocolea monostachya* (patchy) very open grass/sedgeland with **Avena barbata* dense annual grassland. Parts in Good condition, remainder in Poor condition. Seven native species were recorded in this section.



Photograph 9. Section 9. *Eucalyptus horistes* scattered trees over *Eucalyptus leptopoda* subsp. *leptopoda* scattered mallees over *Santalum acuminatum* scattered tall shrubs over *Austrostipa elegantissima*, *Ecdeiocolea monostachya* (patchy) very open grass/sedgeland with **Avena barbata* dense annual grassland



Photograph 10. Section 10. *Allocasuarina campestris*, *Santalum acuminatum* scattered tall shrubs over *Grevillea didymobotrya* subsp. *didymobotrya*, *Grevillea paradoxa*, *Hakea invaginata*, *Allocasuarina campestris* scattered shrubs over *Amphipogon caricinus* open tussock grassland

Section 10. *Allocasuarina campestris*, *Santalum acuminatum* scattered tall shrubs over *Grevillea didymobotrya* subsp. *didymobotrya*, *Grevillea paradoxa*, *Hakea invaginata*, *Allocasuarina campestris* scattered shrubs over *Amphipogon caricinus* open tussock grassland. Condition Good to Very Good, has better structure (layers) and lower weed invasion than most other sections. This section had sixteen native species, including two forms of *Allocasuarina campestris*.

Section 11. Condition Very Good. *Eucalyptus* aff. *rigidula* scattered trees over *Melaleuca hamata* high shrubland to open scrub over *Austrostipa elegantissima*, *Amphipogon caricinus*

open tussock grassland over patches of *Waitzia acuminata* var. *acuminata*, *Chthonocephalus pseudevax* open herbland. Eleven native species were recorded in this section.

Section 12. *Allocasuarina acutivalvis* subsp. *acutivalvis* scattered tall shrubs to high open shrubland over *Acacia longispinea*, *Melaleuca hamata* scattered tall shrubs over *Allocasuarina campestris*, *Grevillea paradoxa*, *Beyeria sulcata* var. *sulcata* scattered shrubs to open shrubland (with patches of *Phebalium tuberosum* shrubland) over *Austrostipa elegantissima* scattered tussocks over patches of *Waitzia acuminata* var. *acuminata* open herbland. Condition Good to Very Good. Twelve native species were recorded in this section.

Section 13. *Eucalyptus* aff. *rigidula* open mallee woodland over *Melaleuca hamata* high shrubland to open scrub over *Phebalium tuberosum* open shrubland over *Austrostipa elegantissima* scattered tussocks over *Waitzia acuminata* var. *acuminata* annual herbland. Condition Good to Very Good. Eleven native species were recorded in this section.



Photograph 11. Section 11. *Eucalyptus* aff. *rigidula* scattered trees over *Melaleuca hamata* high shrubland to open scrub over *Austrostipa elegantissima*, *Amphipogon caricinus* open tussock grassland over patches of *Waitzia acuminata* var. *acuminata*, *Chthonocephalus pseudevax* open herbland



Photograph 12. Section 13. *Eucalyptus* aff. *rigidula* open mallee woodland over *Melaleuca hamata* high shrubland to open scrub over *Phebalium tuberosum* open shrubland over *Austrostipa elegantissima* scattered tussocks over *Waitzia acuminata* var. *acuminata* annual herbland

Section 14. *Eucalyptus horistes* scattered mallees over *Allocasuarina campestris* scattered tall shrubs to open scrub over *Ecdeiocolea monostachya* tussock grassland (with *Amphipogon caricinus* in patches) over *Waitzia acuminata* var. *acuminata* annual herbland. Condition variable, near west end of section Good to Very Good, some Poor to Good where weedy then Good to Very Good in east part of section. Eleven native species were recorded in this section.

Section 15. *Allocasuarina acutivalvis* subsp. *acutivalvis* scattered low trees over *Allocasuarina campestris* scattered shrubs over *Amphipogon caricinus* scattered tussocks (more in small patches) with *Ecdeiocolea monostachya* scattered tussocks in patches over introduced annual grassland, with some *Waitzia acuminata* var. *acuminata*. Condition Poor to Good. Ten native species were recorded in this section.

Section 16. *Eucalyptus horistes*, *Allocasuarina acutivalvis* subsp. *acutivalvis* low (mallee) woodland over **Lolium* sp., **Avena barbata*, **Bromus diandrus*, **Ehrharta longiflora* annual grassland. Condition Very Poor. Nine native species were recorded in this section.



Photograph 13. Section 14. *Eucalyptus horistes* scattered mallees over *Allocasuarina campestris* scattered tall shrubs to open scrub over *Ecdeiocolea monostachya* tussock grassland (with *Amphipogon caricinus* in patches) over *Waitzia acuminata* var. *acuminata* annual herbland



Photograph 14. Section 16. *Eucalyptus horistes*, *Allocasuarina acutivalvis* subsp. *acutivalvis* low (mallee) woodland over **Lolium* sp., **Avena barbata*, **Bromus diandrus*, **Ehrharta longiflora* annual grassland

Section 17. *Allocasuarina campestris* scattered tall shrubs to open scrub over *Austrostipa hemipogon*, *Amphipogon caricinus* (*Ecdeiocolea monostachya*) open grassland over *Waitzia acuminata* var. *acuminata* open annual herbland and patches of **Avena barbata* annual grassland. First part of section Good Condition, the rest Poor, or Very Poor in open areas. Twelve native species were recorded in this section.

Section 18. *Eucalyptus burracoppinensis* mallee woodland over *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Ehrharta longiflora*, **Lolium* sp. annual grassland. Condition Very Poor to Completely Degraded. Three native species were recorded in this section.



Photograph 15. Section 17. *Allocasuarina campestris* scattered tall shrubs to open scrub over *Austrostipa hemipogon*, *Amphipogon caricinus* (*Ecdeiocolea monostachya*) open grassland over *Waitzia acuminata* var. *acuminata* open annual herbland and patches of **Avena barbata* annual grassland.



Photograph 16. Section 18. *Eucalyptus burracoppinensis* mallee woodland over *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Ehrharta longiflora*, **Lolium* sp. annual grassland.



Photograph 17. Section 19. *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Lolium* sp., **Avena barbata* annual grassland

Section 19. *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Lolium* sp., **Avena barbata* annual grassland. Condition Completely Degraded. Eleven native species were recorded in this section.

The small populations of *Xanthorrhoea nana* (three plants) and *Xanthorrhoea* aff. *nana* (one plant) in this section are significant. The former being a range extension (for the type form).

4.3 Condition of the vegetation of the Bailey Road survey area

The vegetation of the Bailey Road survey area sections varied from Completely Degraded to Good to Very Good. Most sections were in Poor or Very Poor to Poor condition. Some sections had obviously been cleared in the past, while others had parts cleared or apparently had not been cleared at all.

The level of weed invasion has undoubtedly reduced species diversity in sections where there is native vegetation remaining. This is probably why there are very few small shrubs and undoubtedly why there are few native annual species remaining in the survey area.

5.0 CONSERVATION ASSESSMENT

Any native vegetation in the Western Australian Wheat Belt has conservation value due to the high level of clearing of that area. However, the narrow shape of the Bailey Road survey area and the level of disturbance there must reduce this to a quite low, but not insignificant, level in a regional context.

On the other hand, the vegetation of the Bailey Road survey area has a quite significant local conservation significance due to its role as a corridor connecting areas of remnant bushland and in the maintenance of native flora species populations. Any clearing in the Bailey Road survey area should be minimised to maintain these functions at as high a level as possible.

6.0 REFERENCES

Aplin, T.E.H. (1979) 'The Flora' In: *Environment and Science*, B.J. O'Brien (ed.). University of WA Press, Perth.


French, Malcolm (2012). *Eucalypts of Western Australia's Wheatbelt*. Published by Malcolm French.


7.0 ACKNOWLEDGEMENTS

Mr Dylan Copeland assisted in the field, organised the declared rare and priority flora database search and took the photograph of site BR09. Mr G. Cockerton gave advice on the naming of some of the native flora specimens.


8.0 APPENDICES


APPENDIX 1. Releve descriptions and their flora lists

Bailey Rd BR 01		12 th October 2024	MET & DC
Location geocode:	WGS84 50J	619821	6522305
<u>Habitat</u> : Gentle mid-slope, undulating landscape.			
<u>Soil</u> : Pale cream-grey coloured setting silty, clay loam, some sand.			
<u>Vegetation</u> : Eucalyptus capillosa woodland over scattered shrubs and *Lolium sp., *Ehrharta longiflora open annual grassland			
			
<u>Condition</u> : Very poor. Only a very small area.			
<u>Notes</u> : The stand had five trees of Eucalyptus capillosa over grassland of mainly introduced grasses with a few individuals of shrubs.			
Eucalyptus capillosa	-	> 20%	One plant.
Allocasuarina campestris	3.5 m	+	
Enchylaena tomentosa	-	+	
*Ehrharta longiflora	-	+	
Rytidosperma caespitosa	-	+	
*Mesembryanthemum crystallinum	-	+	
Austrostipa elegantissima	-	+	

Bailey Rd BR 02			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	619841	6522302
		To:	619886	6522293
<u>Habitat:</u> Slight slope.				
<u>Soil:</u> pale grey-brown silty sand				
<u>Vegetation:</u> Allocasuarina acutivalvis subsp. acutivalvis open scrub to low closed woodland over Grevillea paradoxa scattered shrubs over Waitzia acuminata var. acuminata annual herbland				
				
<u>Condition:</u> Very Good.				
Allocasuarina acutivalvis subsp. acutivalvis				
Grevillea paradoxa				
Austrostipa elegantissima				
*Avena barbata				
Allocasuarina campestris				
Thysanotus patersonii?				
Acacia assimilis subsp. assimilis	1.7	+	Two plants.	
Acacia neurophylla subsp. erugata				
Monachather paradoxa				
Santalum acuminatum				
Lobelia sp.			Not collected as only one small individual seen.	
Dianella revoluta var.				

divaricata			
Enchylaena tomentosa			
Waitzia acuminata var. acuminata			

Bailey Rd BR 03			12 th October 2024	MET & DC
Location geocode:	WGS84 50J	From:	619886	6522293
		To:	619971	6522301
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Light brown silty sand				
<u>Vegetation:</u> Eucalyptus myriadena forest over *Mesembryanthemum crystallinum herbland				
				
<u>Notes:</u> The understorey was mostly weeds.				
<u>Condition:</u> Very Poor to Poor.				
Eucalyptus myriadena	8-13 m	> 50%		
Eucalyptus sp.			No collection, could not reach. Bark smooth, dull.	
Rhagodia drummondii	-	+	One plant	
Enchylaena tomentosa	-	+		
*Mesembryanthemum crystallinum	-	+	Occurred in small patches.	
*Lolium sp.	-	+		

Bailey Rd BR 04			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	619971	6522301
		To:	619989	6522299
<u>Habitat:</u> Slight slope.				
<u>Soil:</u> Pale brown silty sand				
<u>Vegetation:</u> Eucalyptus burracoppinensis mallee woodland over *Mesembryanthemum crystallinum and *Ehrharta longiflora, *Lolium sp herb/grassland				
				
<u>Condition:</u> Very Poor to Poor				
Eucalyptus burracoppinensis	-	> 10%	Bark white, big fruit	
Eucalyptus erythronema subsp. erythronema				
*Ehrharta longiflora	-	-		
*Lolium sp.	-	-		
*Mesembryanthemum crystallinum	-	+		
Austrostipa elegantissima	-	+		
Enchylaena tomentosa	-	+		
*Arctotheca calendula	-	+		
*Brassica tournefortii	-	+	Dying.	
The taxa below at the change from BR 04 to BR 05				
Caesia micrantha	-	+		
Rhodanthe laevis	-	+		

Bailey Rd BR 05			12 th October 2024	MET & DC
Location geocode:	WGS84 50J	From:	619989	6522299
		To:	620033	6522295

Habitat: Slight slope.

Soil: Brown silty fine sand


Vegetation: Allocasuarina acutivalvis subsp. acutivalvis scattered low trees over Santalum acuminatum scattered tall shrubs over *Avena barbata annual grassland and patches of *Arctotheca calendula low herbland





Notes: There was some regeneration of the Allocasuarina and the Santalum. The vegetation was recorded at 0620013 6522298.

Condition: Very Poor.

Allocasuarina acutivalvis subsp. acutivalvis	-	< 2%	Low trees.
*Avena barbata	-	+	
*Ehrharta longiflora	-	+	
*Arctotheca calendula	-	> 5%	Some patches with > 35% cover.
Austrostipa elegantissima	-	+	-
Calothamnus gilesii			
Rhodanthe laevis	-	+	
Chthonocephalus pseudevax	-	+	
Ptilotus polystachyus	-	+	
Crassula colorata var. acuminata	-	+	
Santalum acuminatum	-	+	

Bailey Rd BR 06			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	620033	6522295
		To:	6120137	6522300
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Light yellow-brown sand, setting.				
<u>Vegetation:</u> *Avena barbata grassland with patches of *Arctotheca calendula low herbland				
				
<u>Notes:</u> Cleared of original vegetation.				
<u>Condition:</u> Completely Degraded				
*Avena barbata	-	> 15%		
*Arctotheca calendula	-	< 2-60%		
Austrostipa hemipogon	-	+		
*Bromus diandrus	-	+		
*Vulpia myuros	-	+		
*Bromus rubens	-	+		
Chthonocephalus pseudevax	1 cm	+		
Eucalyptus sp.	-	+		
Monachather paradoxa	-	+		
Solanum hoplopetalum	-	+		Native, but can be a weed out of natural habitat.
Ptilotus holosericeus	-	+		

Bailey Rd BR 07			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	620137	6522300
		To:	620242	6522302
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Yellow fine to coarse silty sand, setting, some gravel.				
<u>Vegetation:</u> Eucalyptus leptopoda subsp. leptopoda, Eucalyptus horistes scattered mallees over *Avena barbata grassland patches; *Arctotheca calendula patches; and *Bromus diandrus patches (with *Avena barbata over them)				
				
<u>Notes:</u> There were old warrens and rabbit droppings.				
<u>Condition:</u> Very Poor, some parts completely degraded.				
Eucalyptus leptopoda subsp. leptopoda	-	< 1%		
Eucalyptus horistes	-	< 1%		
*Avena barbata	-	1-70%	In some patches had 70% cover.	
Arctotheca calendula	-	-		
*Bromus diandrus	-	-		
Ptilotus polystachyus	-	-		
*Brassica tournefortii	-	-		
*Hypochaeris glabra	-	-		
*Pentameris airoides subsp. airoides	-	-		
*Vulpia myuros	-			

Bailey Rd BR 08			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	620242	6522302
		To:	620722	6522293
<u>Habitat:</u> Gentle mid- lower slope.				
<u>Soil:</u> Yellow sand				
<u>Vegetation:</u> Eucalyptus burracoppinensis, Eucalyptus leptopoda subsp. leptopoda, scattered mallees and low trees over *Avena barbata (*Bromus diandrus) dense annual grassland with patches of *Arctotheca calendula dense low herbland				
				
<u>Notes:</u> Similar to Site 07, but with different Eucalyptus species combination.				
<u>Condition:</u> Mostly Completely Degraded some parts Very Poor. Some old metal rubbish. The area mainly had *Avena grassland with cover to 80%.				
Eucalyptus burracoppinensis	-	< 1%		
Eucalyptus leptopoda subsp. leptopoda	-	< 2%		
*Avena barbata	-	< 10-80%		
*Bromus diandrus	-	-		
*Brassica tournefortii	-	-		
*Ehrharta longiflora	-	-		
*Vulpia myuros	-	-		
*Bromus rubens	-	-		
Ptilotus polystachyus	-	-		
*Arctotheca calendula	-	-	Occurred in patches with up to 60% cover, with few grasses.	
Chthonocephalus	-	-	Occurred in bare areas (hard soil?).	

pseudevax			
Allocasuarina campestris		+	A form with smaller fruit than usual.
Maireana brevifolia	-	-	
Santalum acuminatum	-	-	One small group of shrubs.
Psammomoya choretroides	-	-	One plant.
Allocasuarina corniculata	2 m	+	Spreading shrubs. At 620722 65422293
Monachather paradoxa			

Bailey Rd BR 09			12 th October 2024	MET & DC
Location geocode:	WGS84 50J	From:	620722	6522293
		To:	620922	6522288

Habitat: Slight slope.

Soil: Yellow sand.

Vegetation: Eucalyptus horistes scattered trees over Eucalyptus leptopoda subsp. leptopoda scattered mallees over Santalum acuminatum scattered tall shrubs over Austrostipa elegantissima, Ecdeiocolea monostachya (patchy) very open grass/sedgeland with *Avena barbata dense annual grassland





Notes: Varies to patches with Allocasuarina campestris high open shrubland

Condition: Variable. Good, parts Poor

Eucalyptus horistes	-	< 2%	
Eucalyptus leptopoda subsp. leptopoda	-	< 2%	
Eucalyptus aff. rigidula	-	+	
Allocasuarina campestris	2.5 m	+ - > 10%	But in patches most with < 10% cover, but high cover in a small area.

*Avena barbata		-	
Ecdeiocolea monostachya	-	< 2%	
Santalum acuminatum	-	+ - > 2%	Patchy distribution.
Austrostipa elegantissima	-	+ - > 2%	Patchy distribution.
*Ehrharta longiflora	-	+	
*Ursinia anthemoides subsp. anthemoides	-	+	
Acacia enervia subsp. enervia	-	+	
Acacia beauverdiana	-	+	
Allocasuarina acutivalvis subsp. acutivalvis	-	+	
Allocasuarina corniculata		+	
Dianella revoluta var. divaricata	-	+	
Dodonaea bursariifolia	-	+	
Gastrolobium floribundum	-	+	
Amphipogon caricinus	-	+	
Grevillea excelsior	-	+	
Grevillea paradoxa	-	+	
Hibbertia rostellata	-	+	Two plants GPS in notebook.
Lepidosperma sanguinolentum	-	+	28 plants. GPS location in notebooks.
Platysace maxwellii	-	+	
Melaleuca hamata	-	+	
Melaleuca cordata	-	+	
Persoonia coriacea	-	+	One plant.
*Vulpia myuros	-	+	
Waitzia acuminata var. acuminata	-	+	
Westringia cephalantha	-	+	
Calocephalus multiflorus		+	
Caesia sp. ?	-	+	One plant seen. Material inadequate.

Bailey Rd BR 10		12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS 84 50J	620922	6522288
		620956	6522287
<u>Habitat:</u> Gentle slope.	<u>Soil:</u> Hard setting yellow, silty, fine sand		
<u>Vegetation:</u> Allocasuarina campestris, Santalum acuminatum scattered tall shrubs over Grevillea didymobotrya subsp. didymobotrya, Grevillea paradoxa, Hakea invaginata, Allocasuarina campestris scattered shrubs over Amphipogon caricinus open tussock grassland			
			
<u>Condition:</u> Good to Very Good, has structure (layers) and low weed invasion.			
Allocasuarina campestris	6 m	< 1%	
Santalum acuminatum	5 m	< 1%	
Amphipogon caricinus	-	+	
Acacia longispinea	-	+	
Allocasuarina campestris	-	+	Flowers small, white.
Tetrapora tenuiramea	-	+	
Grevillea paradoxa,	-	> 10%	
Grevillea didymobotrya subsp. didymobotrya	-	+	Flowers small, white.
Hakea invaginata	-	+	One plant at 620936 E 6522294 N
Hibbertia rostellata	-	+	10 plants at 620936 E 6522294 N
Jacksonia nematoclada	4 m	+	
Schoenus hexandrus	-	+	
Melaleuca hamata	1 m	+	At 620936 E 6522294 N
Phebalium tuberosum	-	+	
Trachymene ornata	-	+	
*Vulpia myuros	-	+	

Waitzia acuminata var. acuminata		-	> 1%	
Bailey Rd BR 11			12 th October 2024	MET & DC
Location geocode:	WGS84 50J	From:	620956	6522287
		To:	621004	6522287
<u>Habitat:</u> Slight slope, almost flat.				
<u>Soil:</u> Light brown sand over yellow sand, not setting.				
<u>Vegetation:</u> Eucalyptus aff. rigidula scattered trees over Melaleuca hamata high shrubland to open scrub over Austrostipa elegantissima, Amphipogon caricinus open tussock grassland over patches of Waitzia acuminata var. acuminata, Chthonocephalus pseudevax open herbland				
				
<u>Condition:</u> Very Good.				
Eucalyptus aff. rigidula	-	< 2%		
Melaleuca hamata	-	> 30%		
Allocasuarina acutivalvis subsp. acutivalvis	-	+		
Santalum acuminatum	-	+		
Waitzia acuminata var. acuminata	-	+		
Chthonocephalus pseudevax	-	+		
Hibbertia rostellata	-	+	One plant at 620999 E 6522282 N	
Enchylaena tomentosa	-	+		
Melaleuca radula	-	+		
Waitzia acuminata var. acuminata	-	+		
Lepidosperma sanguinolentum	-	+	Five plants near beginning of section.	
*Pentameris airoides subsp.	?	+		

airoides				
Bailey Rd BR 12			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621004	6522287
		To:	621052	6522286
<u>Habitat:</u> Slight slope.				
<u>Soil:</u> Light brown sand over yellow sand, not setting.				
<u>Vegetation:</u> Allocasuarina acutivalvis subsp. acutivalvis scattered tall shrubs to high open shrubland over Acacia longispinea, Melaleuca hamata scattered tall shrubs over Allocasuarina campestris, Grevillea paradoxa, Beyeria sulcata var. sulcata scattered shrubs to open shrubland (with patches of Phebalium tuberosum shrubland) over Austrostipa elegantissima, scattered tussocks over patches of Waitzia acuminata var. acuminata open herbland				
[There is no photograph for this site.]				
<u>Condition:</u> Good to Very Good				
Allocasuarina acutivalvis subsp. acutivalvis	-	< to > 2%		
Acacia longispinea	-	≤ 1%		
Melaleuca hamata	-	≤ 1%		
Allocasuarina campestris	-	≤ 1%		
Grevillea paradoxa	-	≤ 1%		
Beyeria sulcata var. sulcata	-	≤ 1%		Had red bark at base.
Austrostipa elegantissima	-	< 2%		
Waitzia acuminata var. acuminata	-	+		
*Vulpia myuros	-	+		
Trachymene ornata	-	+		
Chthonocephalus pseudevax	-	+		Same as 10/11
Hibbertia rostellata	-	+		
Eucalyptus aff. rigidula	-	+		
Phebalium tuberosum	-	+		
*Pentameris airoides subsp. airoides	-	+		

Bailey Rd BR 13			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621052	6522286
		To:	621082	6522282
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Not recorded.				
<u>Vegetation:</u> Eucalyptus aff. rigidula open mallee woodland over Melaleuca hamata high shrubland to open scrub over Phebalium tuberosum open shrubland over Austrostipa elegantissima scattered tussocks over Waitzia acuminata var. acuminata annual herbland				



Condition: Good to Very Good.

<i>Eucalyptus</i> aff. <i>rigidula</i>	-	> 10%	
<i>Melaleuca hamata</i>	-	> 20 to > 30%	
<i>Phebalium tuberosum</i>	-	> 2 < 10%	
<i>Amphipogon caricinus</i>	-	+	
<i>Austrostipa elegantissima</i>	-		
* <i>Pentameris airoides</i> subsp. <i>airoides</i>	-	+	
* <i>Vulpia myuros</i>	-	+	
<i>Calandrinia calyptrata</i>	-	+	
<i>Westringia cephalantha</i>	-	+	
<i>Spartochloa cyperoidea</i>	-	+	
<i>Hakea invaginata</i>	-	+	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	-	+	
<i>Podothea gnaphalioides</i>	-	+	

Bailey Rd BR 14			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621082	6522282
		To:	621280	6522288
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Yellow sand.				
<u>Vegetation:</u> <i>Eucalyptus horistes</i> scattered mallees over <i>Allocasuarina campestris</i> scattered tall shrubs to open scrub over <i>Ecdeiocolea monostachya</i> tussock grassland (with <i>Amphipogon caricinus</i> in patches) over <i>Waitzia acuminata</i> var. <i>acuminata</i> annual herbland				



Varies to open areas with remnant *Santalum acuminatum* (large shrubs) over weeds and *Waitzia acuminata* var. *acuminata* and *Borya sphaerocephala*. Some *Neurachne alopecuroidea* in this part of the section. A small part cleared near north side fence (more weedy there).

Condition: Variable, near west end of section Good to Very Good, some Poor to Good where weedy then Good to Very Good in east part of section.

<i>Eucalyptus horistes</i>	-	< 2%	
<i>Allocasuarina campestris</i>	-	< 2% to > 30%	Very patchy distribution.
<i>Ecdeiocolea monostachya</i>	-	> 2%	
<i>Amphipogon caricinus</i>	-	+	
<i>Podotheca gnaphalioides</i>	-	+	
<i>Trachymene cyanopetala</i>	-	+	
* <i>Pentameris airoides</i> subsp. <i>airoides</i>	-	+	
* <i>Vulpia myuros</i>	-	+	Higher cover in cleared patch.
<i>Santalum acuminatum</i>	-	+	
* <i>Ehrharta longiflora</i>	-	+	
* <i>Avena barbata</i>	-	+	
<i>Borya sphaerocephala</i>	-		
<i>Neurachne alopecuroidea</i>	-	+	
* <i>Arctotheca calendula</i>			In cleared area.
<i>Lepidosperma sanguinolentum</i>	-	+	
<i>Chthonocephalus pseudevax</i>			

Bailey Rd BR 15			12 th October 2024	MET & DC
<u>Location geocode:</u>	W G S 84 50 J	From:	621280	6522288
		To:	621378	6522292
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Light yellow sand with a setting surface.				
<u>Vegetation:</u> Allocasuarina acutivalvis subsp. acutivalvis scattered low trees over Allocasuarina campestris scattered shrubs over Amphipogon caricinus scattered tussocks (more in small patches) with Ecdeiocolea monostachya scattered tussocks in patches over introduced annual grassland, with some Waitzia acuminata var. acuminata				
[There is no photograph for this site.]				
<u>Condition:</u> Poor to Good.				
Allocasuarina acutivalvis subsp. acutivalvis	-	< 2%		
Allocasuarina campestris	-			
Amphipogon caricinus	-	< 2%		
Waitzia acuminata var. acuminata	-	+		
Ecdeiocolea monostachya	-	+		
Hakea invaginata	-	+		
Grevillea paradoxa	-	+		
*Ehrharta longiflora	-	+		
*Arctotheca calendula	-	+		
*Avena barbata	-	+		
Eucalyptus horistes	-	+		
Austrostipa hemipogon	-	+		
Melaleuca hamata	-	+		


Bailey Rd BR 16			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621378	6522292
		To:	621433	6522283
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Creamy-tan coloured fine silty sand, hard setting.				
<u>Vegetation:</u> Eucalyptus horistes, Allocasuarina acutivalvis subsp. acutivalvis low (mallee) woodland over *Lolium sp., *Avena barbata, *Bromus diandrus, *Ehrharta longiflora annual grassland				



Notes: The introduced annual grasses to total cover $\geq 65\%$ (dying off).

Condition: Very Poor.

Eucalyptus horistes	-	$\geq 5\%$	
Allocasuarina acutivalvis subsp. acutivalvis	-	$\geq 5\%$	
Acacia ramulosa subsp. ramulosa	2 m	+	Shrub, 2 plants.
*Lolium sp.	-	+	
*Avena barbata	-	+	
*Bromus diandrus	-	+	
*Ehrharta longiflora	-	+	
Melaleuca hamata	-	+	
Waitzia acuminata var. acuminata	-	+	
Austrostipa elegantissima	-	+	
*Pentameris airoides subsp. airoides	-	+	
*Vulpia myuros	-	+	
*Arctotheca calendula	-	+	
Austrostipa hemipogon	-	+	
Isoetopsis graminifolia	-	+	
Chthonocephalus pseudevax	-	+	

Bailey Rd BR 17		12 th October 2024	MET & DC
Location geocode:	From:	621433	6522283
	To:	621579	6522286
<u>Habitat:</u> Gentle slope.			
<u>Soil:</u> Yellow silty sand, with a hard setting surface.			
<u>Vegetation:</u> Allocasuarina campestris scattered tall shrubs to open scrub over Austrostipa hemipogon, Amphipogon caricinus (Ecdeiocolea monostachya) open grassland over Waitzia acuminata var. acuminata open annual herbland and patches of *Avena barbata annual grassland			
			
Varies to scattered Allocasuarina campestris and Santalum acuminatum over introduced annual Poaceae species.			
<u>Notes.</u> The small populations of <i>Xanthorrhoea nana</i> (three plants) and <i>Xanthorrhoea</i> aff. <i>nana</i> (one plant) are significant. The former being a range extension.			
<u>Condition:</u> First part of section Good, the rest Poor, or Very Poor in open areas.			
Allocasuarina campestris	-	< 2% to > 30%	
Austrostipa hemipogon	-	> 2%	
Amphipogon caricinus	-	< 5% to > 15%	
Ecdeiocolea monostachya	-	1%	
Chthonocephalus pseudevax	-	+	
*Hypochaeris glabra	-	+	
Siemssenia capillaris	-	+	
Melaleuca cordata	-	+	
*Ehrharta longiflora	-	+	
*Avena barbata	-	+	
Melaleuca cordata	-	+	
Santalum acuminatum	-	+	
Austrostipa elegantissima	-	+	
*Arctotheca calendula	-	+	

<i>Goodenia cycnopotamica</i>	-	+	
* <i>Pentameris airoides</i> subsp. <i>airoides</i>	-	+	
<i>Crassula colorata</i> var. <i>acuminata</i>	-	+	
<i>Waitzia acuminata</i> var. <i>acuminata</i>	-	< 10%	

Bailey Rd BR 18			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621579	6522286
		To:	621634	6522276

Habitat: Gentle mid-slope.

Soil: Light brown sand.


Vegetation: *Eucalyptus burracoppinensis* mallee woodland over *Allocasuarina campestris* scattered tall shrubs over **Bromus diandrus*, **Ehrharta longiflora*, **Lolium* sp. annual grassland



Notes: East side of the site, a strip somewhat similar to Site 01.

Condition: Very Poor to Degraded.

Eucalyptus burracoppinensis		> 10%	
Allocasuarina campestris		< 2%	
*Bromus diandrus			
*Ehrharta longiflora			
*Lolium sp.			
Austrostipa hemipogon		+	
*Arctotheca calendula		+	

Bailey Rd BR 19			12 th October 2024	MET & DC
<u>Location geocode:</u>	WGS84 50J	From:	621634	6522276
		To:		v
<u>Habitat:</u> Gentle slope.				
<u>Soil:</u> Light brown silty/clayey sand, hard setting.				
<u>Vegetation:</u> Allocasuarina campestris scattered tall shrubs over *Bromus diandrus, *Lolium sp., *Avena barbata annual grassland				
				
<u>Condition:</u> Degraded.				
Allocasuarina campestris		< 2%		
*Bromus diandrus		+		
*Lolium sp.		+		
*Avena barbata		+		

<i>Austrostipa hemipogon</i>		+	
<i>Waitzia acuminata</i> var. <i>acuminata</i>		+	
* <i>Arctotheca calendula</i>		+	
<i>Xanthorrhoea nana</i>		+	
<i>Xanthorrhoea</i> sp. aff. <i>nana</i>		+	
<i>Mesomelaena preissii</i>		+	About 40 plants growing with weeds.
<i>Eucalyptus horistes</i>		+	A few plants at the east end of the section.
<i>Grevillea excelsior</i>	4 m	+	
<i>Acacia longispinea</i>		+	
<i>Eucalyptus burracoppinensis</i>		+	
<i>Siemssenia capillaris</i>			

APPENDIX 2. Vegetation structural table of Specht as modified by Aplin (1979)

Life form and height of tallest stratum	Projective foliage cover of tallest stratum as %	Description
Trees over 30 metres 30 -70 High open forest 10 - 30 high woodland 2 -10 high open woodland under 2 Scattered tall trees	70 -100	High closed forest
Trees 10 - 30 metres 30 -70 Open forest 10 - 30 Woodland 2 -10 Open woodland under 2 Scattered trees	70 -100	Closed forest
Trees under 10 metres 30 - 70 Low open forest 10 - 30 Low woodland 2 -10 Low open woodland under 2 Scattered low trees	70 -100	Low closed forest
Shrubs over 2 metres 30 - 70 Open scrub 10 - 30 High shrubland 2 -10 High open shrubland under 2 Scattered tall shrubs	70 - 100	Closed scrub
Shrubs 1 - 2 metres 30 - 70 Open heath 10 - 30 Shrubland 2 -10 Open shrubland under 2 Scattered shrubs	70 - 100	Closed heath
Shrubs under 1 metre 30 - 70 low open heath 10 - 30 low shrubland 2 -10 Low open shrubland under 2 Low scattered shrubs	70 - 100	low closed heath
Herbs/Sedges/Grasses 30 - 70 Herb, sedge, grassland 10 - 30 Open herb, sedge, grassland 2 -10 Very open herb, sedge, g'land under 2 Scattered herbs sedges, grasses	70 - 100	Closed herb, sedge, grassland

Grasslands then divided into:

Tussock grasslands (perennial tussock species, e.g. *Eragrostis* species);

Hummock grasslands (*Triodia* and *Plectrachne* species that form hummocks)

Curly spinifex grassland (*Plectrachne pungens*, which does not form hummocks)

Annual tussock grassland (e.g. annual *Sorghum* species).

The "curly spinifex grassland " division follows J.S. Beard.

APPENDIX 3. Condition scale of Trudgen (1988)

A modified version of this scale has been published in Bush Forever.

E = Excellent. Pristine or nearly so, no obvious signs of damage caused by the activities of European man.

VG = Very good. Some relatively slight signs of damage caused by the activities of European man. E.g. some signs of damage to tree trunks caused by repeated fire and the presence of some relatively non-aggressive weeds such as Ursinia anthemoides or Briza spp., or occasional vehicle tracks.

G = Good. More obvious signs of damage caused by the activities of European man, including some obvious impact on the vegetation structure such as caused by low levels of grazing or by selective logging. Weeds as above, possibly plus some more aggressive ones.

P = Poor. Still retains basic vegetation structure or ability to regenerate to it after very obvious impacts of activities of European man such as grazing or partial clearing (chaining) or very frequent fires. Weeds as above, probably plus some more aggressive ones such as *Ehrharta* spp.

VP = Very poor. Severely impacted by grazing, fire, clearing or a combination of these activities. Scope for some regeneration but, not to a state approaching good condition without intensive management. Usually with a number of weed species including aggressive species.

D = Completely degraded. Areas that are completely or almost completely without native species in the structure of their vegetation. I.e. areas that are cleared or "parkland cleared" with their flora comprising weed or crop species with isolated native trees or shrubs.

APPENDIX 4. Declared Rare and Priority Flora database search

The table is a synopsis of the results of a DBCA Declared Rare and Priority flora database search for an area surrounding the Bailey Road survey area.

Taxon	Conservation Status	WA Rank
<i>Acacia ancistrophylla</i> var. <i>perarcuata</i>	3	
<i>Acacia lirellata</i> subsp. <i>compressa</i>	2	
<i>Acacia sclerophylla</i> var. <i>teretiuscula</i>	1	
<i>Banksia shanklandiorum</i>	4	
<i>Boronia adamsiana</i>	T	VU
<i>Conostylis albescens</i>	2	
<i>Eremophila resinosa</i>	T	EN
<i>Eucalyptus crucis</i> subsp. <i>crucis</i>	T	EN
<i>Hibbertia glabriuscula</i>	3	
<i>Lepidium genistoides</i>	3	
<i>Myriophyllum petraeum</i>	4	
<i>Rinzia torquata</i>	3	
<i>Scaevola tortuosa</i>	1	
<i>Stylidium merrallii</i>	4	
<i>Thysanotus tenuis</i>	3	
<i>Verticordia gracilis</i>	3	
<i>Verticordia mitodes</i>	3	
<i>Verticordia multiflora</i> subsp. <i>solox</i>	2	
<i>Xanthoparmelia subimitatrix</i>	3	