Black Cockatoo Habitat Assessment

Old Vasse Road

(SLK 0.57 – SLK 2.013)

CPS 11064/1

Shire of Manjimup

October 2025

Version 1

On behalf of:
Shire of Manjimup
PO Box 1
MANJIMUP WA 6321

Prepared by:

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SUMMARY

This report details the results of a habitat tree assessment carried out over sections of the Old Coast Road in the Shire of Manjimup (the Shire).

The Shire has applied for a permit to clear about 0.61 hectares (ha) including 27 trees from within a section of the Old Vasse Road reserve (CPS 11064/1).

Upon review the Department of Water and Environmental Regulation (DWER) have advised the Shire that in order to determine the impacts to black cockatoos, a habitat assessment of the permit area was required (DWER 2025). This report details the results of an assessment carried out to satisfy this request.

Primary Findings

None of the trees 27 tree inspected were identified as containing hollows suitable for black cockatoos to use for nesting purposes, with most appearing not to contain hollows of any size. Hollows that were present were all assessed as being unsuitable for black cockatoos to use for breeding purposes primary due to be too small/shallow.

Black cockatoo foraging habitat within the permit area has a very limited extent and has been assessed as being of low quality, given the absence of favoured foraging species. This conclusion was supported by the lack of any foraging evidence observed.

1. INTRODUCTION

This report details the results of a black cockatoo habitat assessment carried out along a section of the Old Vasse Road in the Shire of Manjimup (the Shire).

The Shire has applied for a permit to clear about 0.61 hectares (ha) including 27 trees from within a section of the Old Vasse Road reserve (CPS 11064/1) (Figure 1).

Upon review the Department of Water and Environmental Regulation (DWER) have advised the Shire that in order to determine the impacts to black cockatoos, a habitat assessment of the permit area was required (DWER 2025). This report details the results of an assessment carried out to satisfy this request.

2. SCOPE OF WORKS

DWER (2025) have defined the scope of works as:

a) identify all trees that have a diameter, measured at 1.5 metres from the base of the tree, of 50 centimetres or greater that contain a hollow(s) that may be suitable for breeding by Carnaby's cockatoo, Baudin's cockatoo, and forest red-tailed black cockatoo.

b) map and quantify the extent and quality of black cockatoo foraging habitat within the application area, including the documentation of any evidence of foraging observed during the survey. Evidence may include feeding signs or feeding debris, sightings of the birds and observations of their behaviour, the presence of black cockatoo droppings or feathers, presence of 'chewed' *Banksia* cones or marri nuts, broken or scattered flowers.

The survey must document:

- the date(s) of the survey.
- the GPS locations (i.e. eastings and northings or decimal degrees) of all trees identified as containing hollows which may be suitable for black cockatoos.
- the methodology for determining the evidence of use of each hollow, and
- a description/photo of the evidence of use.

All surveys must be submitted in accordance with the EPA's Instructions for the preparation of data packages for the Index of Biodiversity Surveys for Assessments (IBSA).

Legend

- CPS 11064/1
- Tree (numbered 1 to 27 north to south)

0 100 200

Metres

Fauna Survey

Drawn: G Harewood	
Date: October 2025	
Scale: 1:5,000	
Coordinate System: UTM Z50/GDA 2020	Figure 1

Old Vasse Road
(SLK 0.57 – SLK 2.013)
CPS 11064/1
Shire of Manjimup

Permit Area & Trees Inspected

3. METHODS

The field survey was undertaken by Greg Harewood (Zoologist with 22 years' experience) on the 18 October 2025.

3.1 Habitat Tree Assessment

The 27 previously identified trees (marked by the Shire with paint) were located in the field and examined from ground level using binoculars for hollows.

A drone (DJI Mavic Mini) was also available to examined and photographed any observed hollow (or possible hollow) whenever considered warranted and feasible. Details on location, tree species, DBH (diameter at breast height) and other relevant details were recorded in each instance.

3.2 Foraging Habitat Assessment

During the field survey the extent and quality of black cockatoo foraging habitat within the application area was noted. Evidence of black cockatoo foraging activity was recorded.

4. SURVEY CONSTRAINTS

No seasonal sampling has been carried out as part of this fauna assessment. The conclusions presented are based upon field data and the environmental monitoring and/or testing carried out over a limited period of time and are therefore merely indicative of the environmental condition of the site at the time of the field assessments. It should also be recognised that site conditions can change with time.

During the survey trees with hollows were searched for. It should be noted that identifying hollows suitable for fauna species from ground level has limitations. Generally, the full characteristics of any hollow seen are not fully evident (e.g. internal dimensions). It is also difficult to locate all hollows within all trees as some are not observable from ground level, though to a certain extent some of these limitations can be overcome by using a drone or pole camera to examine possible hollows in more detail (where considered warranted and feasible).

5. RESULTS

5.1 Habitat Tree Assessment

None of the trees identified as likely to require clearing were identified as harbouring hollows suitable for black cockatoo to use for nesting purposes. Three trees contained cavities/possible hollows but after closer inspection using binoculars and/or a drone, none were assessed as being suitable, primarily due to their small size and/or lack of depth.

A summary of observations made are provided in Table 1 below.

Additional details of each tree can be found in Appendix A.

Table 1: Summary of Tree Observations

Tree ID	Number of Possible Hollows	Status	Comments
1	0	No hollows observed	>50cm DBH karri tree.
2	2	No suitable hollows observed	>50cm DBH karri tree, with snapped off trunk. Cavity in snap off ~hollow but shallow/too small. Snapped off side branch also with cavity that is small in size and unsuitable.
3	0	No hollows observed	>50cm DBH karri tree.
4	0	No hollows observed	>50cm DBH karri tree
5	0	No hollows observed	>50cm DBH karri tree
6	0	No hollows observed	>50cm DBH karri tree
7	0	No hollows observed	>50cm DBH karri tree
8	0	No hollows observed	>50cm DBH karri tree
9	0	No hollows observed	>50cm DBH karri tree
10	1	No suitable hollows observed	>50cm DBH karri tree, potential large chimney type hollow checked with drone – no depth - unsuitable.
11	0	No hollows observed	>50cm DBH karri tree
12	0	No hollows observed	>50cm DBH karri tree
13	0	No hollows observed	<50cm DBH sheoak
14	0	No hollows observed	<50cm DBH sheoak
15	0	No hollows observed	<50cm DBH sheoak
16	0	No hollows observed	>50cm DBH karri tree
17	0	No hollows observed	<50cm DBH karri tree
18	0	No hollows observed	>50cm DBH karri tree
19	0	No hollows observed	>50cm DBH karri tree
20	1	No suitable hollows observed	>50 cm DBH marri tree. Contains one small spout type hollow. Other suspect hollow checked with drone – non-existent.
21	0	No hollows observed	<50cm DBH karri tree
22	0	No hollows observed	<50cm DBH karri tree

Tree ID	Number of Possible Hollows	Status	Comments
23	0	No hollows observed	<50cm DBH karri tree
24	0	No hollows observed	<50cm DBH marri tree
25	0	No hollows observed	<50cm DBH sheoak tree
26	0	No hollows observed	>50cm DBH karri tree
27	0	No hollows observed	<50cm DBH karri tree

5.2 Foraging Habitat Assessment

Karri (21 specimens), sheoak (four specimens) and marri (two specimens) make up most of the vegetation subject to clearing (27 trees in total). All these species represent potential foraging habitat though as karri is a small fruited species it is typically not targeted as a food source to a significant degree, with marri being favoured by all black cockatoo species. Some other, less significant plants are present but no species documented as foraging habitat for black cockatoos were noted.

No evidence of black cockatoos foraging with the area surveyed was observed.

The permit area has an extent of about 0.61 ha and contains what can be regarded as low quality foraging habitat given the paucity of favoured species. To put this area of vegetation in perspective there is about 40,000 ha of native vegetation within 12 kilometres of the permit area (DPIRB 2025) much of which is likely to represent black cockatoo foraging habitat of some type.

6. CONCLUSION

The assessment reported on here was undertaken to identify any trees with hollows or possible hollows likely to be suitable for use by black cockatoos and to quantify the extent and quality of black cockatoo foraging habitat.

None of the 27 trees inspected were identified as containing hollows suitable for black cockatoos to use for nesting purposes, with most appearing not to contain hollows of any size. Hollows that were present were all assessed as being unsuitable for black cockatoos to use for breeding purposes primary due to be too small/shallow.

Black cockatoo foraging habitat within the permit area has a very limited extent and has been assessed as being of low quality, given the absence of favoured foraging species. This conclusion was supported by the lack of any foraging evidence observed.

7. REFERENCES

Department of Primary Industries and Regional Development (DPIRD) Geographic Information Services (2025). Native Vegetation Extent (DPIRD-005) (Western Australia) Shapefile - https://catalogue.data.wa.gov.au/dataset/native-vegetation-extent.

Department of Water and Environmental Regulation (DWER) (2025). Application to clear native vegetation under the *Environment Protection Act 1986* – Request for Further Information. Letter to Shire of Manjimup dated 9 October 2025 - Ref CPS 11064/1

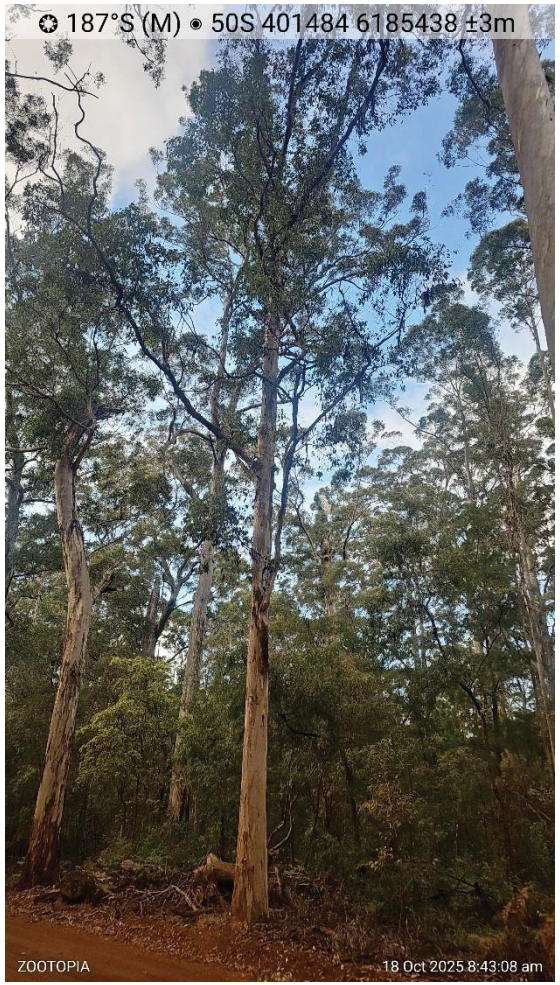
APPENDIX A

Details of Trees Inspected

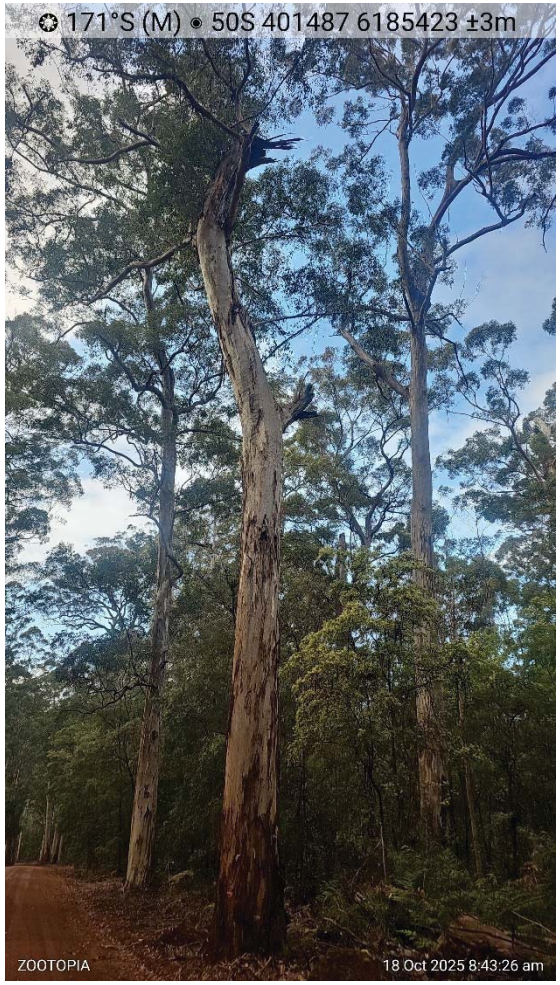
Trees Inspected
Datum GDA 2020
Entrance Size Ranges - Small = >5cm, Medium = 5 to 10cm, Large = >10cm

Waypoint Number	Zone	mE	mN	Side of Road	SLK	Tree Species	Tree Height (m)	DBH (cm)	Number of Hollows	Estimated Hollow Entrance Size	Comments	Occupancy	Chew Marks	Potential Cockatoo Nest Hollow
1	50H	401482	6185423	S	0.75	Karri	15-20	>50	0					
2	50H	401489	6185410	S	0.76	Karri	15-20	>50	2+	Medium	Snapped off crown - hollows too small	No signs	No Signs	No
3	50H	401591	6185236	N	0.96	Karri	15-20	>50	0					
4	50H	401617	6185189	N	1.02	Karri	20+	>50	0					
5	50H	401639	6185144	N	1.07	Karri	20+	>50	0					
6	50H	401640	6185144	N	1.07	Karri	15-20	>50	0					
7	50H	401824	6185022	N	1.3	Karri	20+	>50	0					
8	50H	401853	6185009	N	1.33	Karri	15-20	>50	0					
9	50H	402013	6184933	S	1.55	Karri	20+	>50	0					
10	50H	402063	6184918	S	1.56	Karri	20+	>50	1	Large	Checked with drone - no suitable hollows	No Signs	No Signs	No
11	50H	402150	6184883	S	1.16	Karri	15-20	>50	0					
12	50H	402243	6184770	S	1.8	Karri	15-20	>50	0					
13	50H	402274	6184743	N	1.84	Sheoak	10-15	<50cm	0					
14	50H	402278	6184738	N	1.84	Sheoak	10-15	<50cm	0					
15	50H	402280	6184735	N	1.85	Sheoak	10-15	<50cm	0					
16	50H	402282	6184732	N	1.85	Karri	20+	>50	0					
17	50H	402293	6184717	N	1.87	Karri	15-20	<50cm	0					
18	50H	402298	6184708	N	1.88	Karri	20+	>50	0					
19	50H	402301	6184703	N	1.89	Karri	20+	>50	0					
20	50H	402297	6184698	S	1.89	Marri	15-20	>50	1	Small	Checked with drone - no suitable hollows	No Signs	No Signs	No
21	50H	402316	6184683	N	1.91	Karri	10-15	<50cm	0					
22	50H	402317	6184681	N	1.92	Karri	10-15	<50cm	0					
23	50H	402312	6184672	S	1.92	Karri	15-20	<50cm	0					
24	50H	402326	6184652	S	1.94	Marri	10-15	<50cm	0					
25	50H	402341	6184648	N	1.96	Sheoak	10-15	<50cm	0					
26	50H	402349	6184636	N	1.97	Karri	15-20	>50	0					
27	50H	402361	6184603	S	2.01	Karri	10-15	<50cm	0					

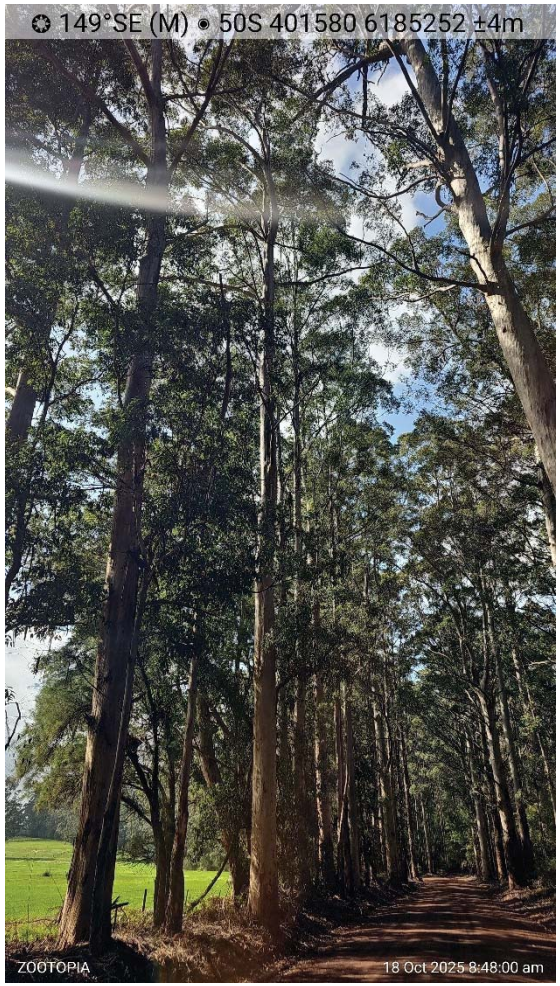
ID	Coordinates (MGA 94/Z50)	401482 mE	6185423 mN	Tree Species	Karri	Survey Date	18/10/2025
1	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



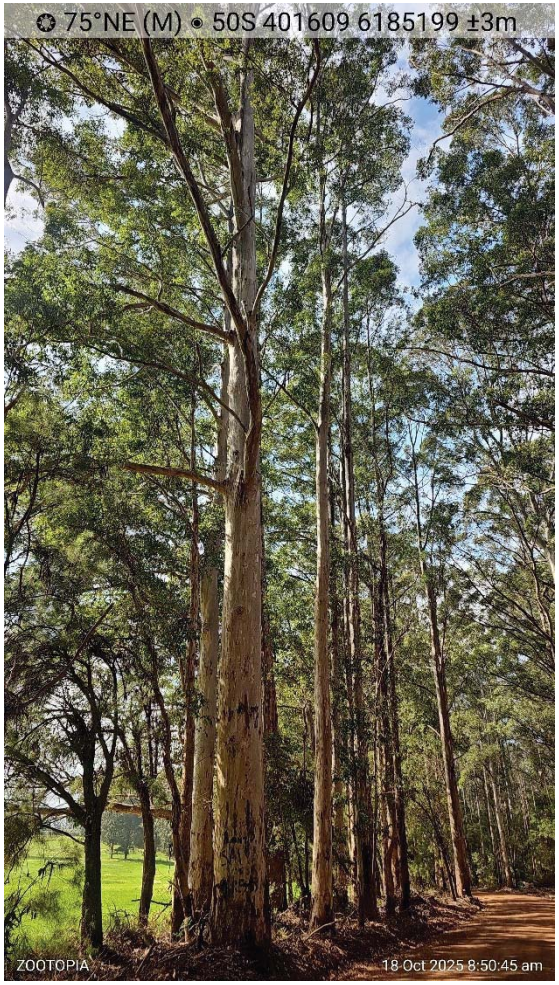
WPT	Coordinates (MGA 94/Z50)	401489 mE	6185410 mN	Tree Species	Karri	Survey Date	18/10/2025
2	**Comments**	>50cm DBH karri tree, with snapped off trunk. Cavity in snap off ~hollow but shallow/too small(pictured right). Snapped off side branch also with cavity that is small in size and unsuitable.				**Classification**	No Suitable Hollows.



WPT	Coordinates (MGA 94/Z50)	401591 mE	6185236 mN	Tree Species	Karri	Survey Date	18/10/2025
3	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

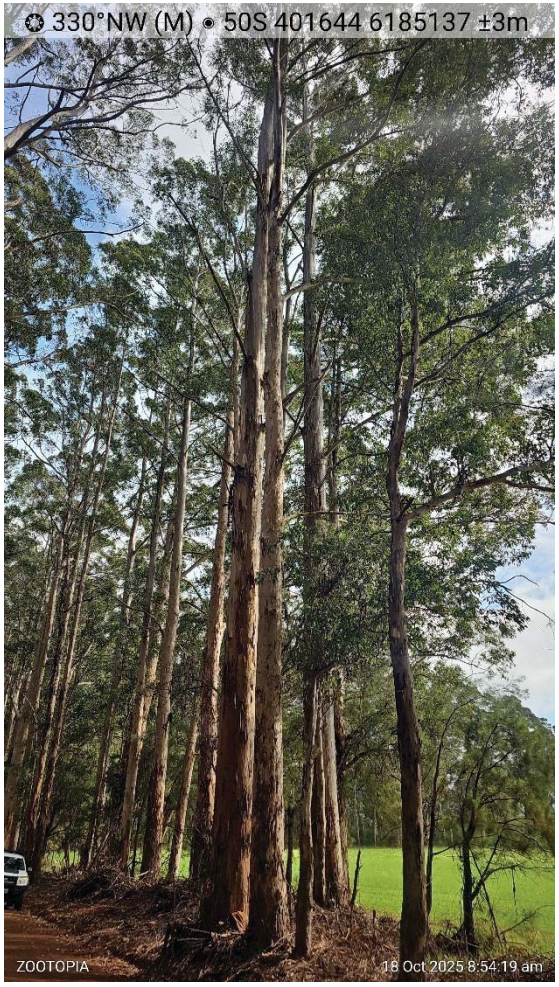


WPT	Coordinates (MGA 94/Z50)	401617 mE	6185189 mN	Tree Species	Karri	Survey Date	18/10/2025
4	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

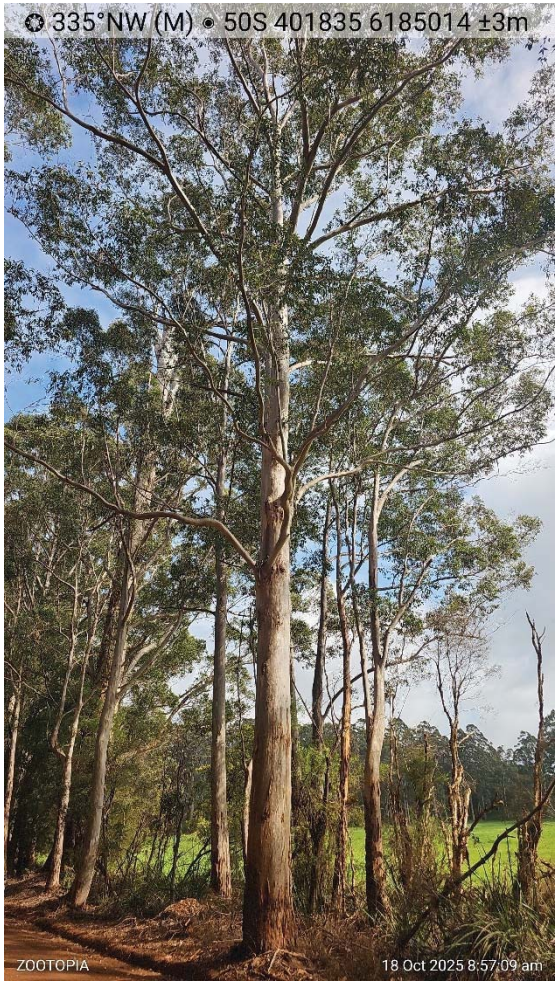


WPT	Coordinates (MGA 94/Z50)	401639 mE	6185144 mN	Tree Species	Karri	Survey Date	18/10/2025
5	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	401640 mE	6185144 mN	Tree Species	Karri	Survey Date	18/10/2025
6	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



WPT	Coordinates (MGA 94/Z50)	401824 mE	6185022 mN	Tree Species	Karri	Survey Date	18/10/2025
7	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

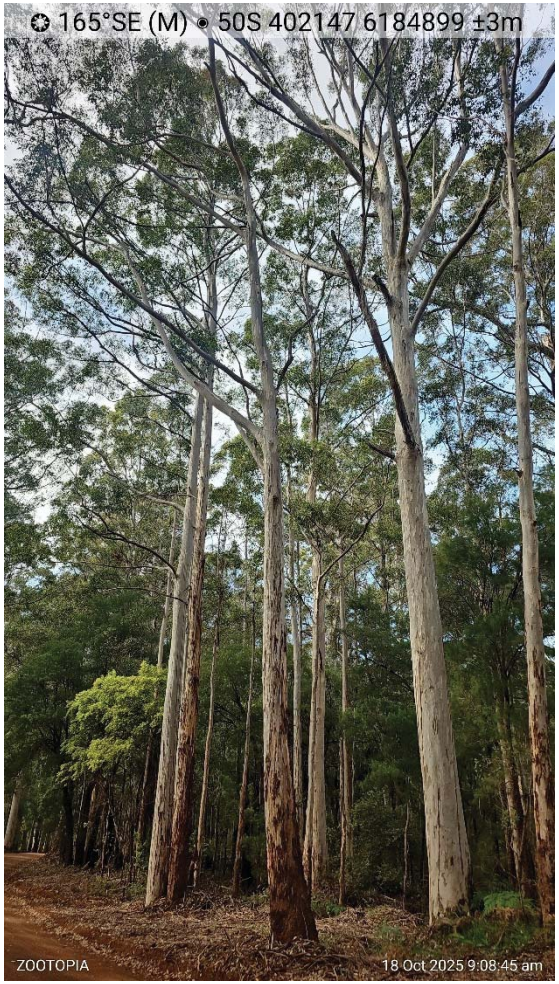


WPT	Coordinates (MGA 94/Z50)	401853 mE	6185009 mN	Tree Species	Karri	Survey Date	18/10/2025
8	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

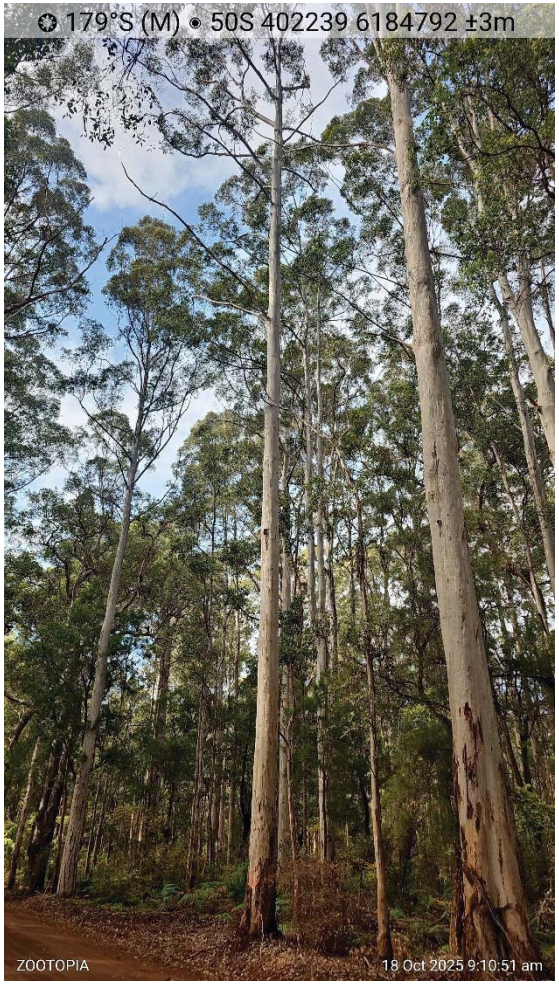
WPT	Coordinates (MGA 94/Z50)	402013 mE	6184933 mN	Tree Species	Karri	Survey Date	18/10/2025
9	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

ID	Coordinates (MGA 94/Z50)	402063 mE	6184918 mN	Tree Species	Karri	Survey Date	18/10/2025
10	**Comments**	>50cm DBH karri tree, potential large chimney type hollow checked with drone – no depth (pictured below) - unsuitable.				**Classification**	No Suitable Hollows.

WPT	Coordinates (MGA 94/Z50)	402150mE	6184883 mN	Tree Species	Karri	Survey Date	18/10/2025
11	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



WPT	Coordinates (MGA 94/Z50)	402243 mE	6184770 mN	Tree Species	Karri	Survey Date	18/10/2025
12	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



WPT	Coordinates (MGA 94/Z50)	402274 mE	6184743 mN	Tree Species	Sheoak	Survey Date	18/10/2025
13	**Comments**	<50cm DBH sheoak, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402278 mE	6184738 mN	Tree Species	Sheoak	Survey Date	18/10/2025
14	**Comments**	<50cm DBH sheoak, no hollows observed.				**Classification**	No Hollows.

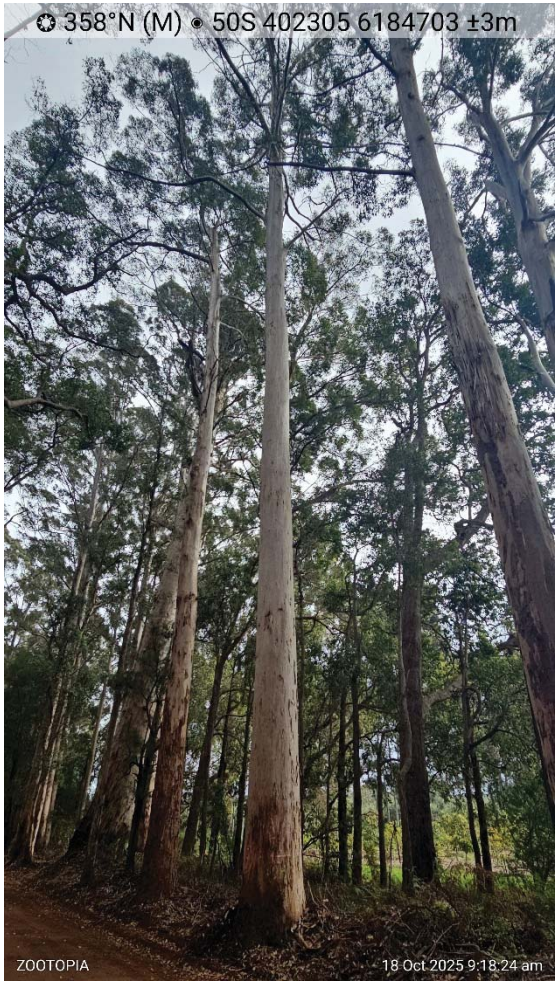
WPT	Coordinates (MGA 94/Z50)	402280 mE	6184735 mN	Tree Species	Sheoak	Survey Date	18/10/2025
15	**Comments**	<50cm DBH sheoak, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402282 mE	6184732 mN	Tree Species	Karri	Survey Date	18/10/2025
16	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402293 mE	6184717 mN	Tree Species	Karri	Survey Date	18/10/2025
17	**Comments**	<50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402298 mE	6184708 mN	Tree Species	Karri	Survey Date	18/10/2025
18	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

ID	Coordinates (MGA 94/Z50)	402301 mE	6184703 mN	Tree Species	Karri	Survey Date	18/10/2025
19	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



WPT	Coordinates (MGA 94/Z50)	402297 mE	6184698 mN	Tree Species	Marri	Survey Date	18/10/2025
20	**Comments**	>50 cm DBH marri tree. Contains one small spout type hollow. Other suspect hollow checked with drone – non-existent.				**Classification**	No Suitable Hollows.

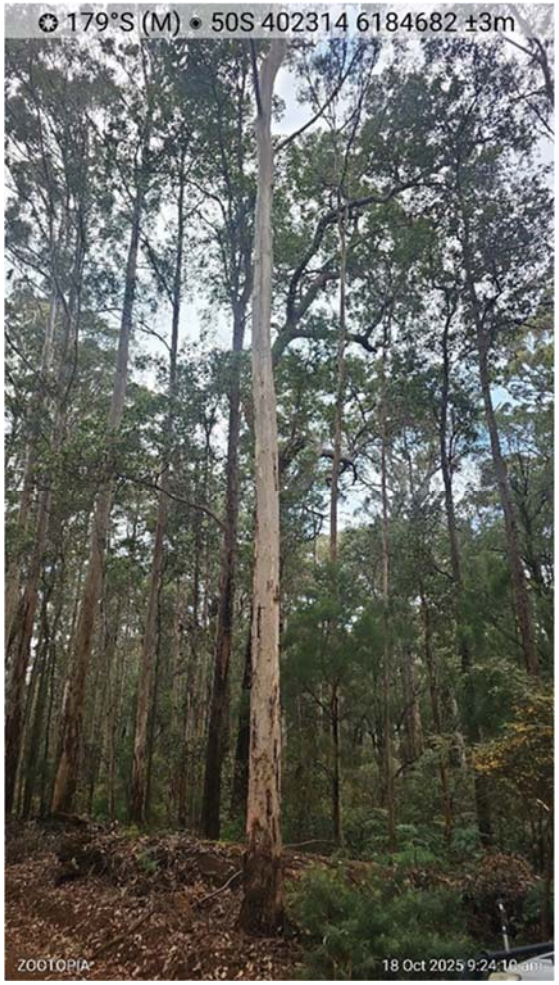
WPT	Coordinates (MGA 94/Z50)	402316 mE	6184683 mN	Tree Species	Karri	Survey Date	18/10/2025
21	**Comments**	<50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

No Picture

WPT	Coordinates (MGA 94/Z50)	402317 mE	6184681 mN	Tree Species	Karri	Survey Date	18/10/2025
22	**Comments**	<50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

No Picture

WPT	Coordinates (MGA 94/Z50)	402312 mE	6184672 mN	Tree Species	Karri	Survey Date	18/10/2025
23	**Comments**	<50cm DBH karri tree, no hollows observed. (right of centre in picture below)				**Classification**	No Hollows.



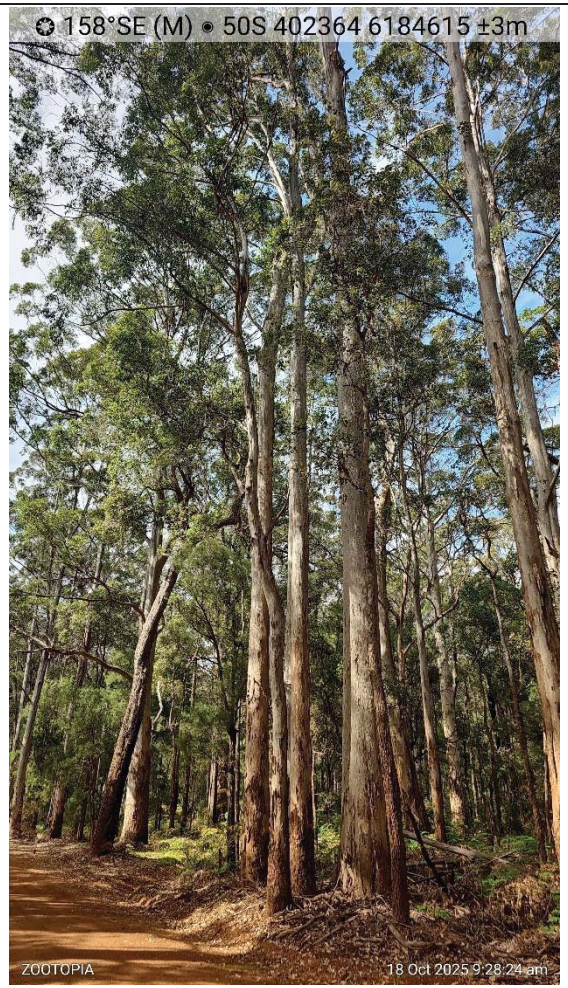
WPT	Coordinates (MGA 94/Z50)	402326 mE	6184652 mN	Tree Species	Marri	Survey Date	18/10/2025
24	**Comments**	<50cm DBH marri, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402341 mE	6184648 mN	Tree Species	Sheoak	Survey Date	18/10/2025
25	**Comments**	<50cm DBH sheoak, no hollows observed.				**Classification**	No Hollows.

WPT	Coordinates (MGA 94/Z50)	402349 mE	6184636 mN	Tree Species	Karri	Survey Date	18/10/2025
26	**Comments**	>50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.

No Picture

WPT	Coordinates (MGA 94/Z50)	402361 mE	6184603 mN	Tree Species	Karri	Survey Date	18/10/2025
27	**Comments**	<50cm DBH karri tree, no hollows observed.				**Classification**	No Hollows.



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The conclusions are based upon field data and the environmental monitoring and/or testing carried out over a limited period and are therefore merely indicative of the environmental condition of the site at the time of preparing the report. Also, it should be recognised that site conditions, can change with time.

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