

# Habitat Tree Assessment

## CPS 9133/1



## Shire of Manjimup

December 2021

*Version 1*

***On behalf of:***

Shire of Manjimup  
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## SUMMARY

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

The Shire has applied for a permit to clear vegetation from within the road reserves (CPS 9333/1). Upon review the Department of Water and Environmental Regulation (DWER) have advised the Shire that in order to determine the impacts to conservation significant fauna, a habitat tree assessment is required of trees likely to require removal. This report details the results of an assessment carried out to satisfy this request.

The assessment was carried out at the following locations:

- Wheatley Coast Road (~SLK 13.27 to 14.45) – five trees;
- Perup Road (~SLK 32.23 to 32.91) – four trees.

It should be noted that not all the trees assessed may necessarily require removal.

### **Primary Findings**

#### **Wheatley Coast Road**

Four of the five trees marked at this location were not observed to contain hollows of any size.

One large karri tree (~SLK 13.51) had dead upper branches, some of which contain hollows of various sizes. These were examined where possible in closer detail with a drone and photographed. At least one of the hollows appeared to be of a size that may be suitable for black cockatoos however there appeared to be no residual evidence of the hollow having been used for this purpose (i.e. chew marks) or by any other fauna of significance.

#### **Perup Road**

Three of the four trees marked at this location were not observed to contain hollows of any size.

One tree (~SLK 32.83) had dead upper branches that may contain small hollows but this could not be confirmed. Because of their likely small size, location and orientation it has been concluded that they are unlikely to be suitable for any conservation significant fauna species likely to frequent the general area (e.g. black cockatoos or phascogales).

## 1. INTRODUCTION

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

The Shire has applied for a permit to clear vegetation from within the road reserves (CPS 9333/1). Upon review the Department of Water and Environmental Regulation (DWER) have advised the Shire that in order to determine the impacts to conservation significant fauna, a habitat tree assessment is required of trees likely to require removal. This report details the results of an assessment carried out to satisfy this request.

The Shire have identified the trees at each of the sites subject to current/future road works within the permit area that may require removal and therefore requiring assessment. It should be noted that not all the trees assessed may necessarily require removal.

## 2. SCOPE OF WORKS

The Shire have defined the scope of works as:

- An assessment of the previously identified trees which are located at:
  - Wheatley Coast Road (~SLK 13.27 to 14.45) – five trees;
  - Perup Road (~SLK 32.23 to 32.91) – four trees.
- GPS Locations and the species name of trees proposed to be cleared.
- Photographs and an assessment of the potential for the trees within the area to provide hollows for fauna species of conservation significance.
- If hollows potentially suitable for threatened fauna species are identified, quantify impacts to the threatened fauna species.

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).

## 3. METHODS

The previously identified trees (marked by the Shire with paint and flagging tape) were located in the field and examined from ground level using binoculars for hollows. Where considered necessary and feasible any observed hollow (or possible hollow) were also examined and photographed using a drone (DJI Mavic Mini). Details on location, tree species and other relevant details were recorded in each instance.

An assessment of each hollow's suitability for use by fauna species of conservation significance (e.g. black cockatoos, phascogales) was determined where possible and noted. This included a review of photos taken at a later date.

## **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 WHEATLEY COAST ROAD**

Four of the five trees marked at this location were not observed to contain hollows of any size.

One large karri tree (~SLK 13.51) had dead upper branches, some of which contain hollows of various sizes. These were examined where possible in closer detail with a drone and photographed. At least one of the hollows appeared to be of a size that may be suitable for black cockatoos however there appeared to be no residual evidence of the hollow having been used for this purpose (i.e. chew marks) or by any other fauna of significance.

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

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

**Table 1: Wheatly Coast Road - Summary of Tree Observations**

Wpt	SLK	Side of Road	Number of Possible Hollows	Status	Comments
5	13.74	East	0	No hollows observed	Small karri tree, no hollows observed.
6	13.63	West	0	No hollows observed	Small marri tree, no hollows observed.
7	13.62	West	0	No hollows observed	Small karri tree, no hollows observed.
8	13.54	West	0	No hollows observed	Large karri tree, no hollows observed.
9	13.51	West	2+	Several possible small hollows	Large karri tree, several possible hollows in upper dead branches, at least one possibly large enough for black cockatoos. No evidence of current or previous use by cockatoos or any other species.

## 5.2 PERUP ROAD

Three of the four trees marked at this location were not observed to contain hollows of any size. One tree (~SLK 32.83) had dead upper branches that may contain small hollows but this could not be confirmed. Because of their likely small size, location and orientation it has been concluded that they are unlikely to be suitable for any conservation significant fauna species likely to frequent the general area (e.g. black cockatoos or phascogales).

A summary of observations made are provided in Table 2 below.

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

**Table 2: Perup Road - Summary of Tree Observations**

Wpt	SLK	Side of Road	Number of Possible Hollows	Status	Comments
1	32.46	Nth	0	No hollows observed	Large jarrah tree, no hollows observed.
2	32.83	Nth	2+	Several possible small hollows	Large marri tree with some dead upper branches that may contain small hollows (<5cm diameter entrances). Unlikely to be used by any fauna species of conservation significance.
3	32.90	Sth	0	No hollows observed	Medium sized jarrah tree, no hollows observed.
4	32.91	Sth	0	No hollows observed	Small jarrah tree, no hollows observed.

# CPS 9333/1 - Map (b)

116°14.250'E

116°14.400'E

116°14.550'E

34°26.700'S

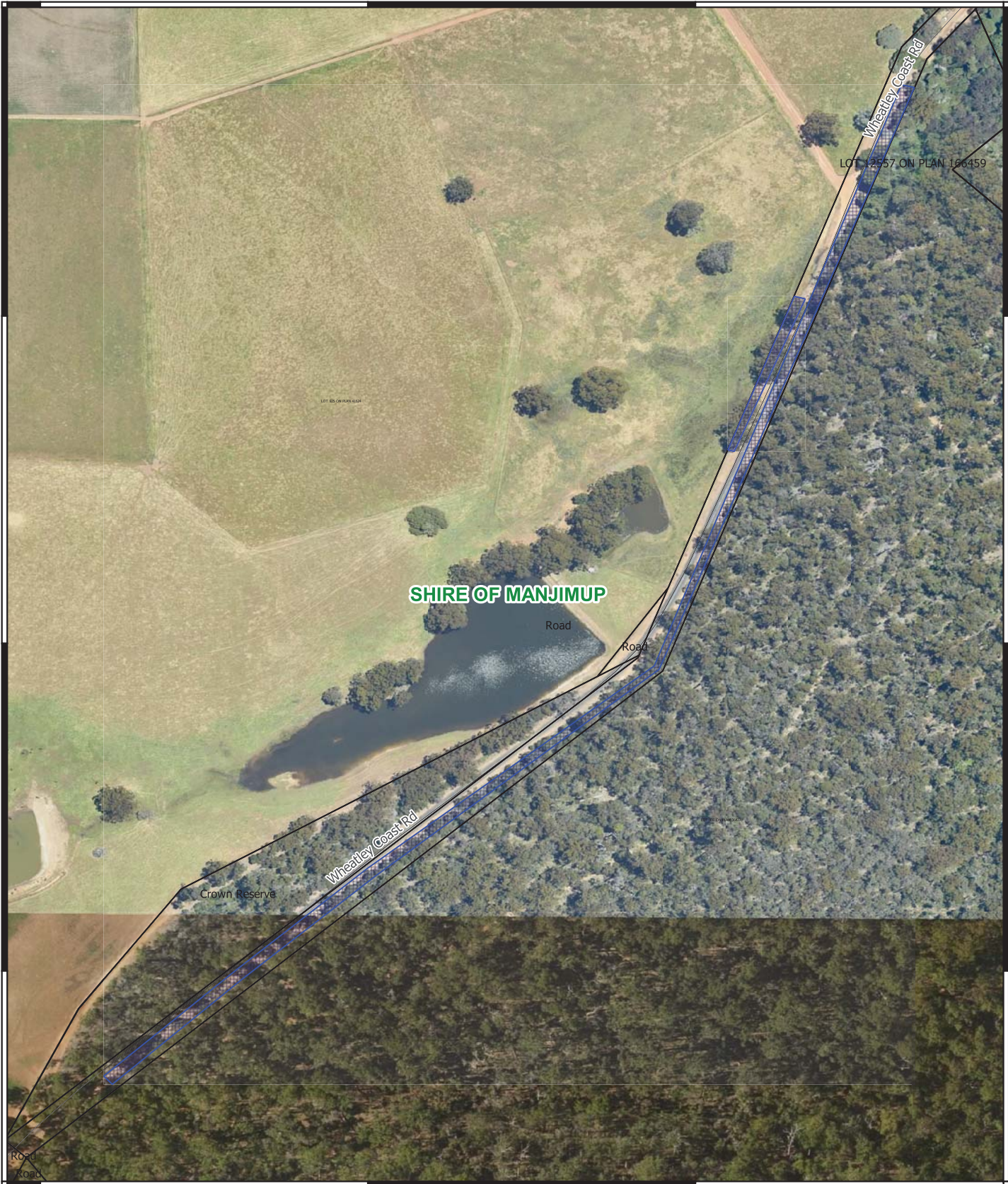
34°26.850'S

34°27.000'S

34°26.700'S

34°26.850'S

34°27.000'S







116°14.250'E

116°14.400'E

116°14.550'E

## Legend

-  CPS areas applied to clear
-  Land Tenure LGATE - 226
-  Local Government Authorities

Road Centrelines  
 Local Rd - Sealed

Image



1:2794

0 50 100 150 200 m



MGA 94  
 Geocentric Datum of Australia 1994



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 WESTERN AUSTRALIA**

# CPS 9333/1 - Map (c)

116°27.000'E

116°27.150'E

34°18.900'S

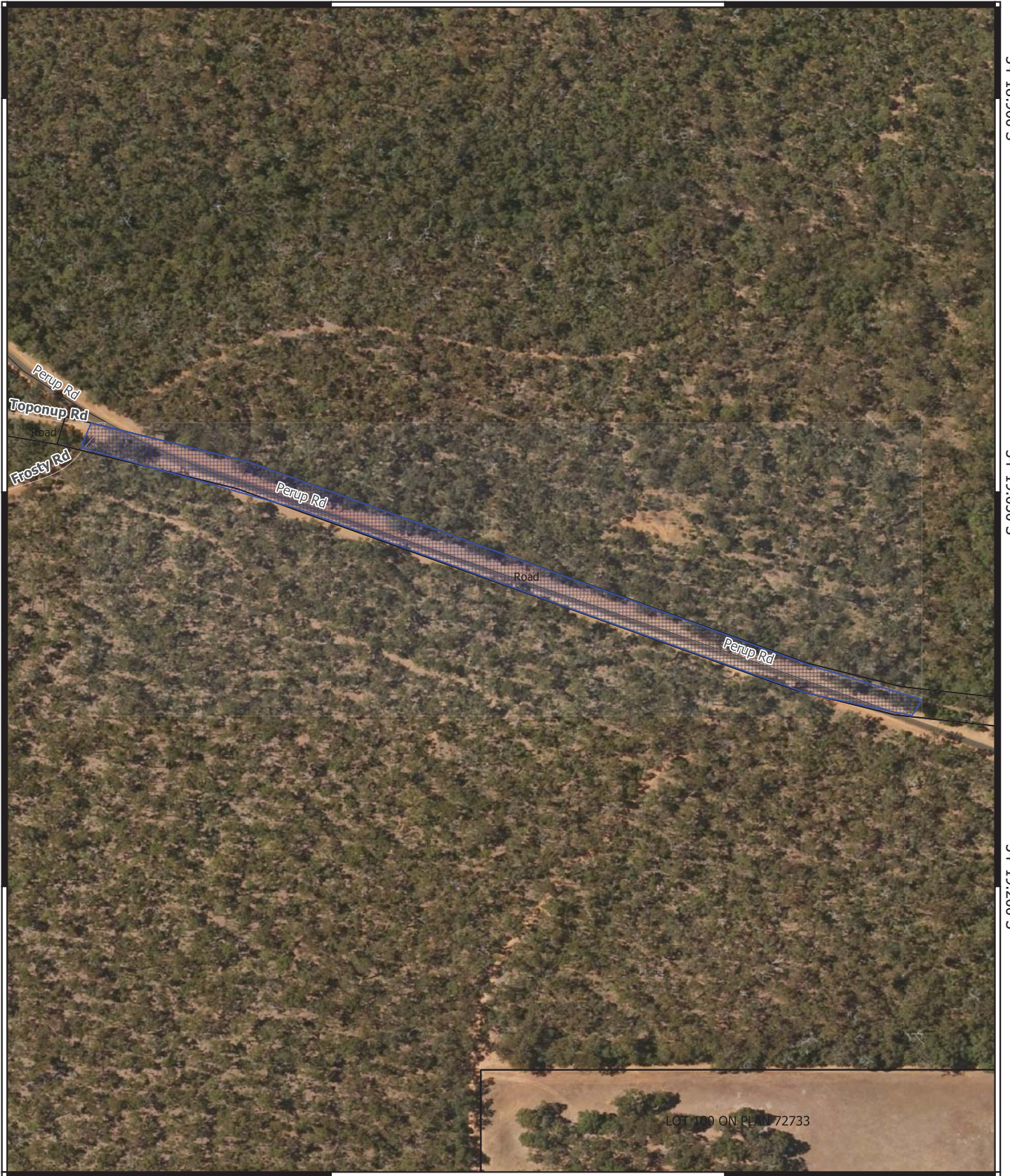
34°18.900'S

34°19.050'S

34°19.050'S

34°19.200'S






34°19.200'S



116°27.000'E

116°27.150'E

## Legend

-  CPS areas applied to clear
-  Land TenureLGATE - 226
-  Local Government Authorities
- Road Centrelines
  -  Local Rd - Sealed
  -  Local Rd - Other



1:2308

0 75 150 m



MGA 94  
Geocentric Datum of Australia 1994



GOVERNMENT OF  
WESTERN AUSTRALIA



## 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 conservation significant species.

The majority of the trees inspected were found not to contain hollows of any size. One tree contains possible small hollows that were considered by the Author to be too small for use by any of the fauna species of conservation significance generally regarded as inhabiting habitat of this type in the general area (e.g. black cockatoos and phascogales). Based on these observations these trees can, if required, be removed without impacting on any fauna species of conservation significance.

One tree, situated on the boundary of the Wheatley Coast Road (~SLK 13:51), contains at least one large hollow possibly suitable for black cockatoos to use for nesting purposes, though it showed no evidence of previous or current use for this purpose. It is unclear at this stage if this tree requires removal however it is recommended that it be re-inspected immediately prior to clearing for evidence of current use so that appropriate action can be taken to minimise any impacts if considered warranted.

# **APPENDIX A**

## **Details of Trees Inspected**

**Trees Inspected**

**Datum - GDA94**

**Entrance Size Ranges - Small = >5cm, Medium = 5 to 10cm, Large = >10cm**

Road Name	Waypoint Number	Zone	mE	mN	Side of Road	SLK	Tree Species	Tree Height (m)	Number of Hollows	Hollow Entrance Size	Occupancy	Chew Marks	Potential Cockatoo Nest Hollow
Perup	wpt001	50H	449392	6202497	N	32.46	Jarrah	20+	0				
Perup	wpt002	50H	449738	6202352	N	32.83	Marri	20+	2+	Small	No Signs	No signs	No
Perup	wpt003	50H	449796	6202314	S	32.90	Jarrah	15-20	0				
Perup	wpt004	50H	449811	6202309	S	32.91	Jarrah	15-20	0				
Wheatley Coast Road	wpt005	50H	430418	6188028	E	13.74	Karri	15-20	0				
Wheatley Coast Road	wpt006	50H	430444	6188137	W	13.63	Marri	20+	0				
Wheatley Coast Road	wpt007	50H	430447	6188144	W	13.62	Karri	15-20	0				
Wheatley Coast Road	wpt008	50H	430477	6188217	W	13.54	Karri	20+	0				
Wheatley Coast Road	wpt009	50H	430485	6188247	W	13.51	Karri	20+	2+	Medium & Large (Cockatoo)	No Signs	No Signs	Yes

ID	Coordinates (MGA 94/Z50)	449392 mE	6202497 mN	Tree Species	Jarrah	Survey Date	06/12/2021
1	Comments	Perup Road - Large jarrah tree, no hollows observed.				Classification	No Hollows.
<div style="text-align: center;"> <p>📍 355°N (M) 📍 50S 449395 6202492 ±4 m</p>  <p>Zootopia 06 Dec 2021, 10:09:59</p> </div>							



WPT	Coordinates (MGA 94/Z50)	449738 mE	6202352 mN	Tree Species	Marri	Survey Date	06/12/2021
2	Comments	Perup Road - Large marri tree with some dead upper branches that may contain small hollows (<5cm diameter entrances). Unlikely to be used by any fauna species of conservation significance.				Classification	Unsuitable Hollows.
<div style="text-align: center;"> <p>📍 354°N (M) ● 50S 449742 6202341 ±3 m</p>  <p>Zootopia 06 Dec 2021, 10:13:33</p> </div>							



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	449796 mE	6202314 mN	<b>Tree Species</b>	Jarrah	<b>Survey Date</b>	06/12/2021
<b>3</b>	<b>Comments</b>	Perup Road - Medium sized jarrah tree, no hollows observed.				<b>Classification</b>	No Hollows.



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	449811 mE	6202309 mN	<b>Tree Species</b>	Jarrah	<b>Survey Date</b>	06/12/2021
<b>4</b>	<b>Comments</b>	Perup Road - Small jarrah tree, no hollows observed.				<b>Classification</b>	No Hollows.



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	430418 mE	6188028 mN	<b>Tree Species</b>	Karri	<b>Survey Date</b>	06/12/2021
<b>5</b>	<b>Comments</b>	Wheatley Coast Road - Small karri tree, no hollows observed.				<b>Classification</b>	No Hollows.





<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	430444 mE	6188137 mN	<b>Tree Species</b>	Marri	<b>Survey Date</b>	06/12/2021
<b>6</b>	<b>Comments</b>	Wheatley Coast Road - Small marri tree, no hollows observed.				<b>Classification</b>	No Hollows.



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	430447 mE	6188144 mN	<b>Tree Species</b>	Karri	<b>Survey Date</b>	06/12/2021
<b>7</b>	<b>Comments</b>	Wheatley Coast Road - Small karri tree, no hollows observed.				<b>Classification</b>	No Hollows.



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	430477 mE	6188217 mN	<b>Tree Species</b>	Karri	<b>Survey Date</b>	06/12/2021
<b>8</b>	<b>Comments</b>	Wheatley Coast Road - Large karri tree, no hollows observed.				<b>Classification</b>	No Hollows.



<b>WPT</b>	<b>Coordinates (MGA 94/Z50)</b>	430485 mE	6188247 mN	<b>Tree Species</b>	Karri	<b>Survey Date</b>	06/12/2021
<b>9</b>	<b>Comments</b>	Wheatley Coast Road - Large karri tree, several possible hollows in upper dead branches, at least one possibly large enough for black cockatoos. No evidence of current or previous use by cockatoos or any other species.			<b>Classification</b>	Unused 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 of time 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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