

NEWest Alliance

27 March 2024

**RE: PROPOSED OFFSITE STOCKPILE ACCESS TRACK – BASIC FLORA AND VEGETATION SURVEY**

Please find enclosed the results of the basic flora and vegetation survey at an area proposed for an offsite stockpile as requested on the 18 March 2024. In summary, the survey found:

- a total of 17 flora species, consisting of ten introduced species, one dubious and six native species from 10 families within the survey area
- two vegetation type were recorded across the survey area, *Eucalyptus* spp. Open Woodland and *Eucalyptus gomphocephala* (Tuart) Open Woodland
- the vegetation condition across the survey area ranged from Completely Degraded to Degraded
- no conservation significant flora species were identified in the survey area
- no threatened/priority ecological communities were identified
- no Declared Pests or Weeds of National Significances were identified in the survey area
- one potential black cockatoo habitat tree was recorded within the survey boundary.

## Introduction

Natural Area Consulting Management Services (Natural Area) was commissioned by Newest Alliance-Yanchep Rail Extension to undertake a basic flora and vegetation survey at an area proposed for an access track (Figure 1).

Survey activities included:

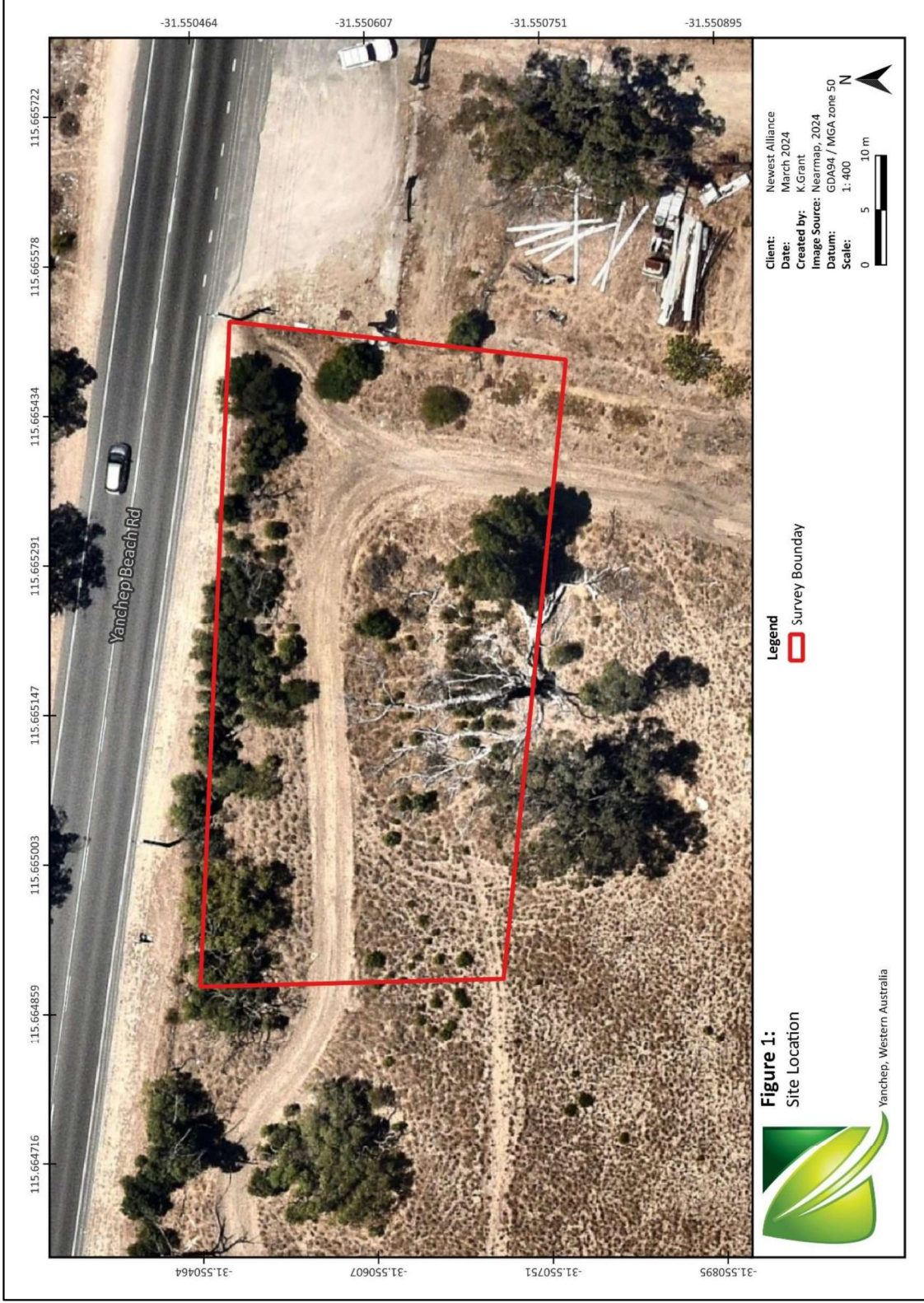
- recording a species list (native and introduced)
- recording and mapping extent of vegetation type and condition
- providing reporting and data in IBSA format.

The survey area is located in the suburb of Yanchep, approximately 48 km from Perth's CBD (Figure 1). The survey area is located within an Environmentally Sensitive Area (DWER, 2024).

## Methodology

Natural Area environmental scientist traversed the area on 22 March 2024 and conducted the survey with reference to *Technical Guidance: Flora and Vegetation Surveys for Environmental Impact Assessment (EIA)* (Environmental Protection Authority (EPA), 2016). This survey was conducted in March, outside of the optimal spring season for flora surveys within the Swan Coastal bioregion. All areas were traversed, with the following recorded:

- species present (native and introduced)
- extent of vegetation type and condition
- the location of any Declared Pests of Weeds of National Significance.



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## Survey Results

The basic flora and vegetation survey recorded the following:

- A total of 17 flora species, consisting of ten introduced species, one dubious (a species that is native to Western Australia but not local to this region) and six native species from ten families. Examples of flora species are shown in Figure 2 and a completed flora species list is provided in Appendix 1.
- No conservation significant flora species were identified in the survey area.
- No Declared Pests or Weeds of National Significance were identified in the survey area.
- Two vegetation types were recorded across the survey area (Figure 3):
  - *Eucalyptus* spp. Open Woodland over *Acacia saligna* and \**Ehrharta calycina*.
  - *Eucalyptus gomphocephala* (Tuart) Open Woodland over \**Ehrharta calycina*.
- A portion of the survey area was recorded to be partially cleared with no native vegetation present.
- The threatened/priority ecological community, Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community has the potential to occur within the survey area. The following criteria has been compared against the survey area:
  - the site does occur on the Swan Coastal Plain on the Karrakatta Sand Yellow phase system
  - the areas of the site do meet the minimum requirement of two Tuart trees with less than 60 m between the edges of the canopies (Department of Agriculture, Water and the Environment, 2019)
  - the Tuart community on site do not have a native understory present due to disturbance (previously cleared)
  - the survey area is less than 0.5 hectares.

Therefore, the Tuart (*Eucalyptus gomphocephala*) Woodlands and Forests of the Swan Coastal Plain ecological community does not occur within the survey boundary alone. This does not consider the surrounding vegetation outside of the survey area.

- Vegetation condition across the survey area ranged from Degraded to Completely Degraded (Figure 4 and Table 1).
- One potential habitat tree for threatened black cockatoos (DBH greater than 500 mm) was identified within the survey area. Two hollows (with entrance opening > 200 mm diameter) were recorded on this habitat tree (Figure 5) (Appendix 2).
- Five species recorded on site may provide potential foraging value for black cockatoos (Department of Environment and Conservation, 2011):
  - *Acacia saligna* (low value)
  - *Corymbia ficifolia* (medium value)
  - *Eucalyptus gomphocephala* (high value)
  - *Eucalyptus todtiana* (medium value)
  - *Xanthorrhoea preissii* (medium value).
- No black cockatoo individuals or evidence of foraging activities were observed.

**Table 1:** Vegetation condition within the survey area

Vegetation Condition	Pristine	Excellent	Very Good	Good	Degraded	Completely Degraded	Total
Area (ha)	0	0	0	0	0.056	0.116	0.172
Area (%)	0	0	0	0	32.56	67.44	100



Rose Pelargonium (\**Pelargonium capitatum*)



#*Corymbia calophylla* (Red-flowering Gum)

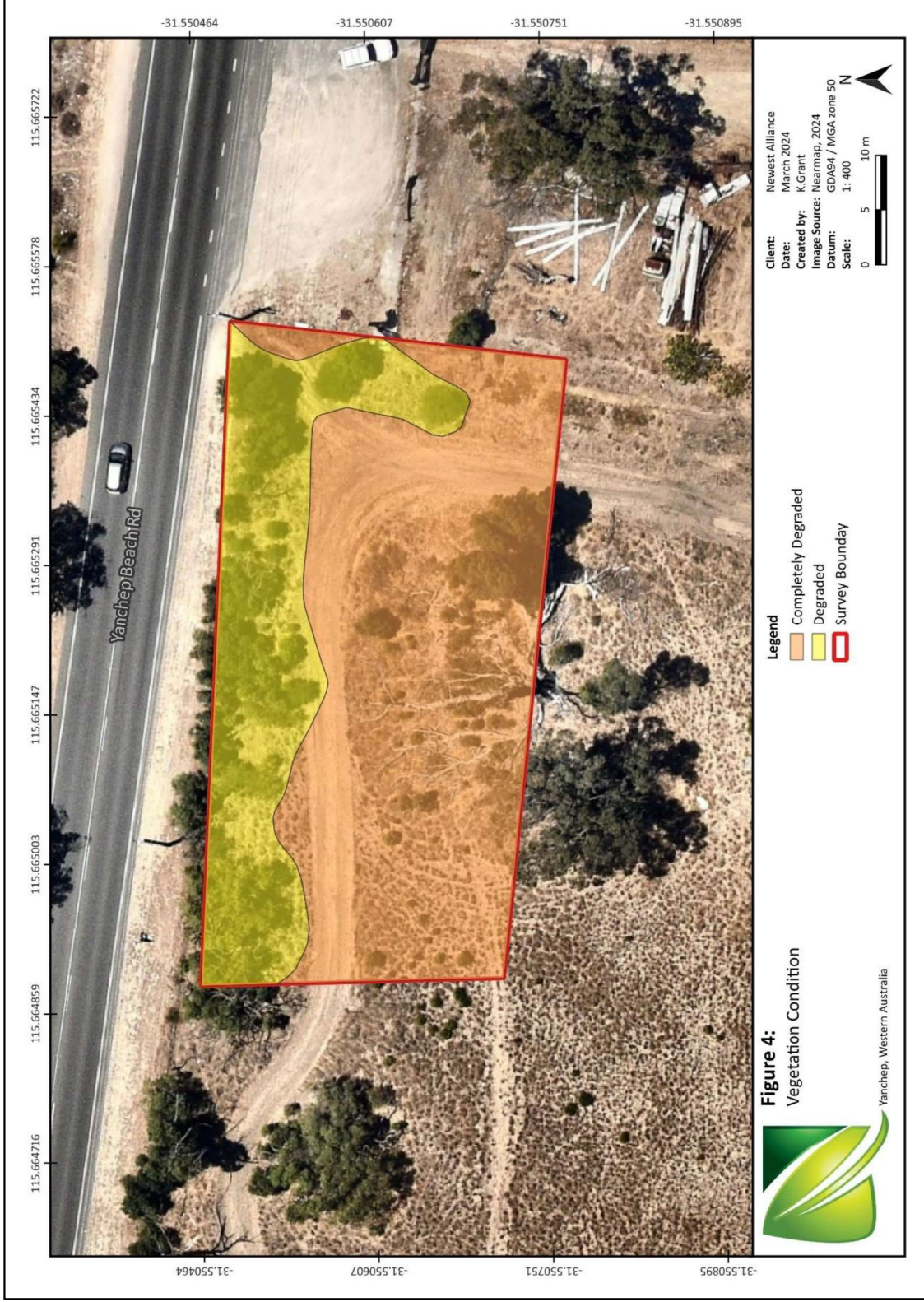
**Figure 2:** Examples of flora species within the survey area.



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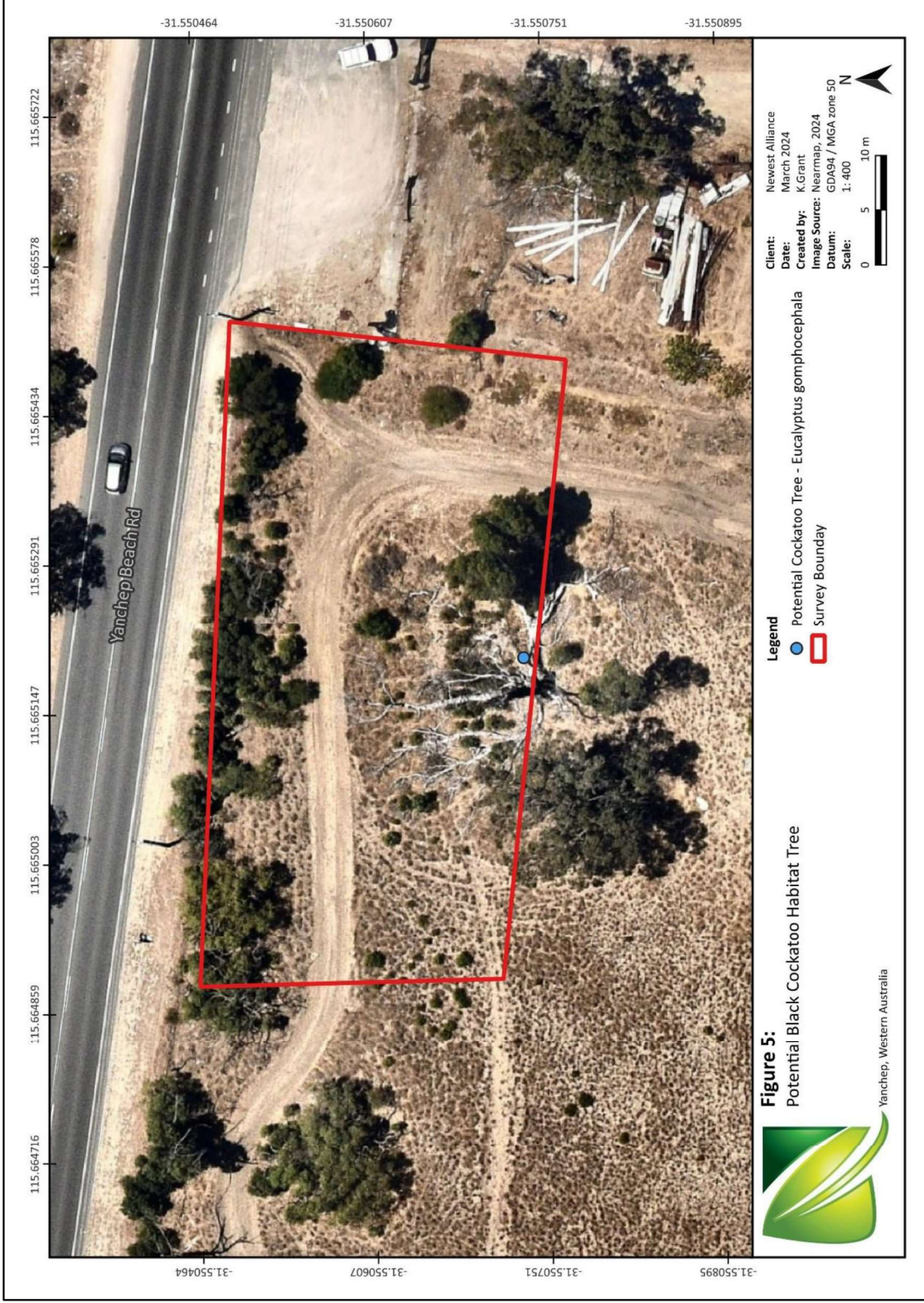
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## References

- Department of Agriculture, Water and the Environment (DAWE). (2019). *Approved Conservation Advice (incorporating listing advice) for the Tuart (Eucalyptus gomphocephala) woodlands of the Swan Coastal Plain Ecological Community*. Retrieved from <http://www.environment.gov.au/biodiversity/threatened/communities/pubs/131-conservation-advice.pdf>
- Department of Environment and Conservation. (2011). *Plants Used by Carnaby's Black Cockatoo*. Retrieved from <https://www.dpaw.wa.gov.au/apps/plantsforcarnabys/index.html>.
- Department of Water and Environmental Regulation (DWER). (2024). *Clearing Regulations - Environmentally Sensitive Areas (DWER-046)*. Retrieved from [https://services.slip.wa.gov.au/public/services/SLIP\\_Public\\_Services/Environment/MapServer/WMS/Server](https://services.slip.wa.gov.au/public/services/SLIP_Public_Services/Environment/MapServer/WMS/Server).
- Environmental Protection Authority. (2016). *Technical Guidance: Flora and Vegetation survey for Environmental Impact Assessment*. Retrieved from [http://www.epa.wa.gov.au/sites/default/files/Policies\\_and\\_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey\\_Dec13.pdf](http://www.epa.wa.gov.au/sites/default/files/Policies_and_Guidance/EPA%20Technical%20Guidance%20-%20Flora%20and%20Vegetation%20survey_Dec13.pdf).

## Appendix 1: Species List

Family	Scientific Name	Common Name
Myrtaceae	# <i>Corymbia ficifolia</i>	Red-flowering Gum
Fabaceae	* <i>Acacia iteaphylla</i>	
Poaceae	* <i>Bromus diandrus</i>	Great Brome
Aizoaceae	* <i>Carpobrotus edulis</i>	Hottentot Fig
Poaceae	* <i>Cenchrus clandestinus</i>	Kikuyu Grass
Poaceae	* <i>Ehrharta calycina</i>	Perennial Veldt Grass
Poaceae	* <i>Eragrostis curvula</i>	African Lovegrass
Asteraceae	* <i>Erigeron sumatrensis</i>	
Euphorbiaceae	* <i>Euphorbia terracina</i>	Geraldton Carnation Weed
Geraniaceae	* <i>Pelargonium capitatum</i>	Rose Pelargonium
Anacardiaceae	* <i>Schinus terebinthifolia</i>	
Fabaceae	<i>Acacia saligna</i>	Orange Wattle
Myrtaceae	<i>Eucalyptus gomphocephala</i>	Tuart
Myrtaceae	<i>Eucalyptus todtiana</i>	Pricklybark
Fabaceae	<i>Hardenbergia comptoniana</i>	Native Wisteria
Rhamnaceae	<i>Spyridium globulosum</i>	Basket Bush
Xanthorrhoeaceae	<i>Xanthorrhoea preissii</i>	Grass tree

## Appendix 2: Potential Habitat Trees

Tree No	Species	DBH (mm)	Height (m)	Hollows	Health
				Yes	
1	Eucalyptus gomphocephala	1520	15	1x Top of Trunk, 400 mm entrance diameter  1x Hollow, 800 mm entrance diameter	Dead