Reconnaissance Vegetation Survey

Lot 7 Runnymede Road, Wellesly

July 2022

REPORT PREPARED BY
LUNDSTROM ENVIRONMENTAL CONSULTANTS PTY LTD

INTRODUCTION

Background

B & J Catalano Pty Ltd (Catalano) operates as a Basic Raw Materials (BRM) extractor in the south west of Western Australia (WA) and is currently investing in the expansion of their Lot 7 Runnymede Road sand quarry. Lundstrom Environmental Consultants (LEC) was commissioned by Catalano to undertake a reconnaissance vegetation and vegetation condition assessment of 1.2ha in the north western portion of native vegetation on Lot 7 Runneymede Road, Wellesley (see Figure 1). This 1.2ha area is the subject of Department of Water and Environmental Regulation (DWER) native vegetation clearing permit and Shire of Harvey planning approval applications for the purpose of sand extraction.

Objective and Scope

The main objective was to ascertain the vegetation condition of the north western (1.2h) portion of native vegetation at Lot 7 Runnymede Road, Wellesley. A previous flora and vegetation survey by Dr Shane Chalwell in 2018 had broadly assessed and mapped approximately 16ha of vegetation which partially included this (July 2022) survey area.

In addition, this report brings into focus the fauna data that was collected in October 2021 by Greg Harewood with only data relevant to the 1.2ha footprint utilised.

METHODS

Reconnaissance Survey

A Reconnaissance Survey was considered the appropriate survey type for this assessment, given the previous surveys and reports assessment of the site values.

Initially the area was accurately pegged to ensure that all data that was collected was within the proposed clearing footprint.

The methodology used was to systematically traverse the survey area, and collect the following information and data:

- Identification of characteristic flora;
- Opportunistic species identification;
- Supplementary data;
- Vegetation transition and boundaries;
- Vegetation condition;
- Evidence of disturbance; and
- Introduced pests/weeds and disease.

The assessment was conducted on 11th July 2022 by G. Maling, who has a BSc Environmental Restoration, Diploma in Horticulture (WA Flora), and BSc Botany (Underway), and relevant experience within the Swan Coastal Plain bioregion.

RESULTS

Vegetation Structure and Description

The key characteristic overstorey species observed and identified were *Agonis flexuosa*, *Eucalyptus marginata*, *Corymbia calophylla* and one specimen of *Banksia attenuata*. There was limited understorey in the majority of the survey area. Although, there were patches of *Dasypogon bromeliifolius* and *Hibbertia hypericoides*, with a few isolated specimens of *Caustis dioica*, *Macrozamia riedlei*, *Melaleuca thymoides* observed in the southeastern portion of the survey area.

Vegetation Condition Rating

The condition of vegetation was assessed and coarsely mapped as transitioning from east to west as 'Good' to 'Degraded' to predominately 'Completely Degraded' (see Figure 2) using the vegetation condition scales outlined in Keighery (1994). Photographs were taken of the typical vegetation condition (see Appendix 1). The vegetation condition extent/area in hectares is summarised in Table 1. A description of the condition scale is summarised in Table 2.

Table 1 Vegetation Condition Extent in the Survey Area

Condition	Area (ha)	% of 1.2ha
Completely Degraded	0.62	53%
Degraded	0.37	32%
Good	0.18	15%
Total	1.17	100%

Table 2 Vegetation Condition Scale (adapted from Keighery 1994)

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

FAUNA SURVEY

The October 2021 fauna assessment by Greg Harewood has been used to extracted data from a larger survey footprint of 9.9ha and identified data only within the 1.2ha subject area.

Methods used by Greg Harewood for this survey were to assess the diameter of the trees using a pre-constructed gauge. Where a large tree (DBH[1]>50cm) was thought to have hollows, a drone was launched and close up photographs taken to examine the hollows, if present.

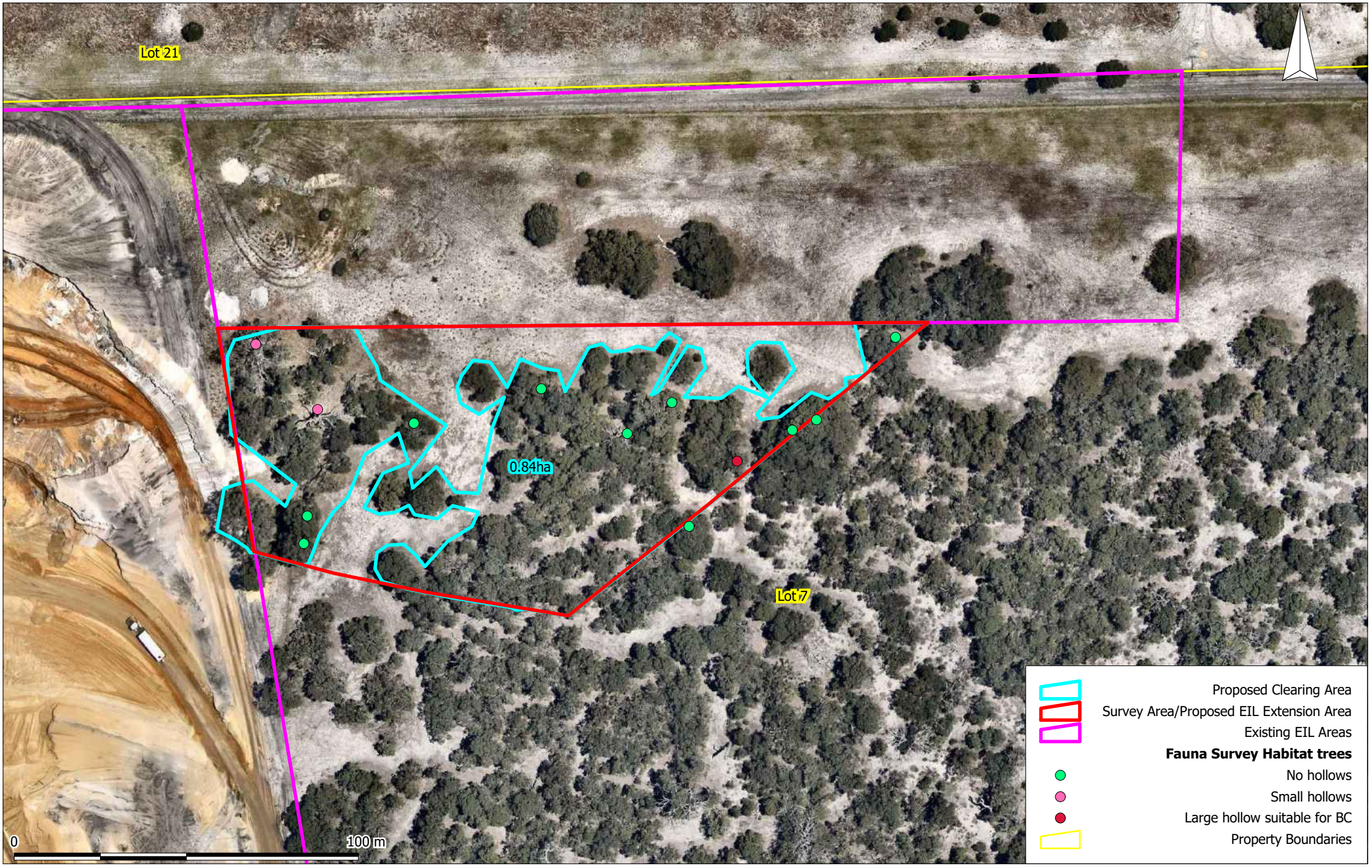
In summary, the fauna survey which covers this area shows that there is one tree with a hollow suitable for black cockatoo nesting (not used), two trees with small to medium hollows, and a total of nine trees with a DBH>50cm only. Figure 1 illustrates the location of these trees.

CONCLUSION

Based on this most recent vegetation survey, it is concluded that the vegetation that is the subject of the clearing permit and planning applications for sand extraction has a lower vegetation condition than originally identified by the 2018 Flora Survey.

In addition, the examination of the fauna habitat within the 1.2ha area does not show that there are cockatoo habitat issues that cannot be managed by the replanting of the area as cockatoo habitat after extraction, and by deployment of cockatoo nesting boxes within areas of native vegetation in close proximity.

[1] Diameter at Breast Height



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Scale: 1:1400
Original Size: A4
Air Photo Source: Nearmap Nov 2021
Datum: GDA94
Projection: Australia MGA94 (50)

Client: B & J Catalano
Project: Sand Extraction
Location: Lot 7 Runnymede Rd, Wellesley

Figure 1:
Survey Area

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Scale: 1:910
Original Size: A4
Air Photo Source: Nearmap Nov 2021
Datum: GDA94
Projection: Australia MGA94 (50)

Client: B & J Catalano
Project: Sand Extraction
Location: Lot 7 Runnymede Rd, Wellesley

Figure 2:

Vegetation Condition

\\lecserver\DATA\Catalano\Runnymede Rd Lots 4 & 7_Wellesley_SoH_Sand\Lot 7 Runnymede Rd\Lot 7 Runnymede Ministerial Briefing\Vegetation Survey LEC Jul2022\Drawings\F2 Lot 7 Veg Survey 2022.map 15/07/2022 Layout

APPENDICES

Appendix 1

Photographs Illustrating the Vegetation Condition of the Proposed Clearing Footprint

Photograph of Completely Degraded areas within the northwestern corner

Photograph of Completely Degrade area to the north facing west

Photograph of Dedgraded area facing south west

Photograph of Dedgraded area facing south west

Areas of Degraded vegetation within the middle of the 1.2ha area

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Area of Good vegetation condition in the southeast of the proposed clearing footprint

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