

Wildlife Management Plan

482 Bushells Ridge Road, Wyee, NSW

Prepared For: Wyee Land Pty Ltd

Prepared By: Anderson Environment and Planning

Date: 24/08/2022

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Above: Potential Microbat Habitat surveyed by AEP Ecologists

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1.0 Introduction

Anderson Environment & Planning (AEP) has been engaged by Wyee Land Pty Ltd (the Client) to produce this Wildlife Management (WMP) to meet recommendations from the Department of Planning and Environment Biodiversity and Conservation Division (BCD) concerning the proposed rezoning of Lot 171 DP 1212974, known as 482 Bushells Ridge Road Wyee (the Site) and is shown in **Figure 1**.

The recommendation requires an artificial habitat assessment and a wildlife management plan to be developed to manage any identified impacts concerning threatened species including Microchiropteran bats (Microbats) and amphibians.

A habitat assessment was completed by AEP Ecologist in August 2022 targeting *Crinia tinnula* (Wallum froglet) and Microbat species including *Chalinobolus dwyeri* (Large-eared pied bat), *Miniopterus australis* (Little bent-wing bat), *Miniopterus orianae oceanensis* (Large bent-wing bat) and *Myotis Macropus* (Southern myotis). No threatened species were identified during the surveys however, some marginal habitat was recorded in the form of mud nests produced by *Petrochelidon ariel* (Fairy Martin) and artificial habitat within the building structures including pipes and roofing crevices.

This WMP addresses the requirements of the BCD recommendation to manage any identified impacts to the above-mentioned species.

The WMP is informed by ecological reports for the proposed rezoning application, in particular:

- *Ecological Assessment Report for Rezoning of 482 Bushells Ridge Rd, Wyee NSW Lot 171 DP 1212974* (AEP, 2022) (the EAR)

The WMP will be actioned prior to commencement of demolition works of existing buildings and infrastructure within the Site.

A compliance report will be submitted to Council's Ecologist on completion of demolition works, or once the specific objectives of the plan have been met detailing works scheduled herein and recommended additional actions.

The Client will appoint a Project Ecologist to undertake scheduled mitigation measures and certify compliance with ecological mitigation methods scheduled in this WMP. Additionally, the Ecologist engaged must be suitably experienced with handling microbats and must be vaccinated against Australian Bat Lyssavirus (ABLV).

1.1 Wildlife Management Plan Objectives

Individual WMP objectives are to mitigate against demolition impacts on the welfare of native fauna specifically threatened Microbat species utilising the Site including but not limited to *Chalinobolus dwyeri*, *Miniopterus australis*, *Miniopterus orianae oceanensis* and *Myotis Macropus*.

1.2 Site Description

The Site comprises approx. 0.5ha and is completely disturbed and managed, the only vegetation consists of a planted row of *Corymbia maculata* along the east of the Site and managed grasslands covering the remainder of the Site.

A water processing facility currently exists within the Site including buildings, large water tanks, sheds and associated infrastructure.

The Site is bounded to the north by land zoned as C2 - Environmental Conservation which is being managed until at least 2030 under an existing Vegetation Management Plan that provides connectivity to remnant native vegetation. Land to the north, east and south are zoned as R2 – Low Density Residential. As part of remediation for the approved Radcliffe Wyee Residential Development, 52 nest boxes suitable for Microbats were installed in approx. 30ha of retained C2 lands adjoining the Site.

1.3 Management Zone

The entirety of the Site has been assessed as a single Management Zone (MZ) as shown in **Figure 1**.

MZ1 comprises the existing water processing facility and approx. 0.5ha of disturbed native and exotic vegetation and cleared areas.

Under the proposed rezoning application (**Figure 1**), all vegetation in MZ1 will be cleared. Mitigation of impacts of clearing against native biota is provided in **Section 2**.

2.0 Clearing & Wildlife Management Strategy

In the proposed rezoning application, all vegetation in MZ1 has been allocated for removal. The following methodology provides mitigation against demolition impacts upon native fauna.

2.1 Prior to Demolition Commencing;

Prior to demolition commencing, the following mitigation measures are to undertaken.

2.1.1 Fencing and Signage

To mitigate impacts on retained vegetation along the road frontage, MZ1 will be fenced off by 1.8m high temporary fencing for the duration of demolition activities.

Post-demolition fencing and signage to be installed after clearing procedures are completed.

2.1.2 Erosion and Sediment Controls

Prior to Earthworks beginning, sediment and erosion controls should be designed and installed as per the Landcom publication "*Soils and Constructions* – Volume 1 (The Blue Book).

Any areas downslope of the Site will need to be protected by sediment fencing.

2.1.3 Hygiene

With any construction Site, there is the potential for weeds, pathogens and diseases to be introduced during construction. To minimise the chances of any such introduction occurring, appropriate hygiene controls should be developed in construction plans, implemented prior to commencement of works and maintained for the duration of demolition and construction.

Response plans should be developed in construction plans and implemented to mitigate impacts of disease and pathogens. Civil Contractors to be inducted in hygiene, pre-clearing and clearing protocols, and to identify environmental features for protection;

Contractors should implement measures to ensure all machinery and contractors "*Arrive Clean and Leave Clean*", removing all weed seeds, mud and soil from clothing, footwear, tools, equipment, machinery, vehicles, and anything that touches soil with potentially diseased soils, plant material, or weed seeds

2.2 Clearing Methodology

No threatened species were recorded during ecological surveys for the EAR. Although no evidence of the target species utilising the existing buildings and infrastructure was observed, suitable habitat for Microbats exists within the Site and the following mitigation measures are to be implemented.

2.2.1 Pre-Demolition Works

Prior to commencement of demolition works, but not more than 14 days prior, the Project Ecologist will:

- Contact local native fauna carers with capacity to assist with injured or dependant fauna;
- Undertake pre-clearing inspection of building structures deemed possible habitat locations including pipes and roofing;
- Surveys will include diurnal and dusk-nocturnal surveys of the Site; and
- Mark artificial habitat with painted “H” and/or fluorescent tape to delineate structures that may require sectional dismantling.

2.2.2 Building Demolition

Ideally demolition should be undertaken outside the winter period (when microbats are in periods of torpor).

- Structures containing potential roosting habitat are to be sectionally dismantled, with methodology designed by the Project Ecologist in consultation with the contractor.
- Fauna disturbed or injured during clearing will be managed by the Project Ecologist. Works will cease if the Project Ecologist considers threatened species may be impacted, or if fauna has to be taken to a nearby veterinarian or suitable wildlife carer.
- To mitigate demolition impacts upon native fauna, the Project Ecologist will:
 - Induct demolition contractors into the artificial habitat removal methodology; and

Supervise all potential native and artificial habitat removal

3.0 Project Management

3.1 Works Timeline and Responsibilities

Project management timelines and responsibilities are scheduled in **Table 1**.

Table 1 – WMP Works Timeline and Responsibility

Action	Responsibility
Pathogen and disease controls	All contractors
Install appropriate sediment and erosion	Civil Contractor (CC)
Install temporary fencing & signage	CC
Pre-demolition surveys of structures	PE
Induct contractors into artificial habitat removal methodology	PE
Monitor demolition of structures containing potential habitat	CC Supervised by PE

3.2 Reporting

Within ten (10) working days of completion of demolition, the Project Ecologist will provide written confirmation to Council of compliance with demolition operations to the WMP schedule.

4.0 References


Landcom (2004) *Managing Urban Stormwater: Soils and Construction*. Landcom Parramatta (the Blue Book).

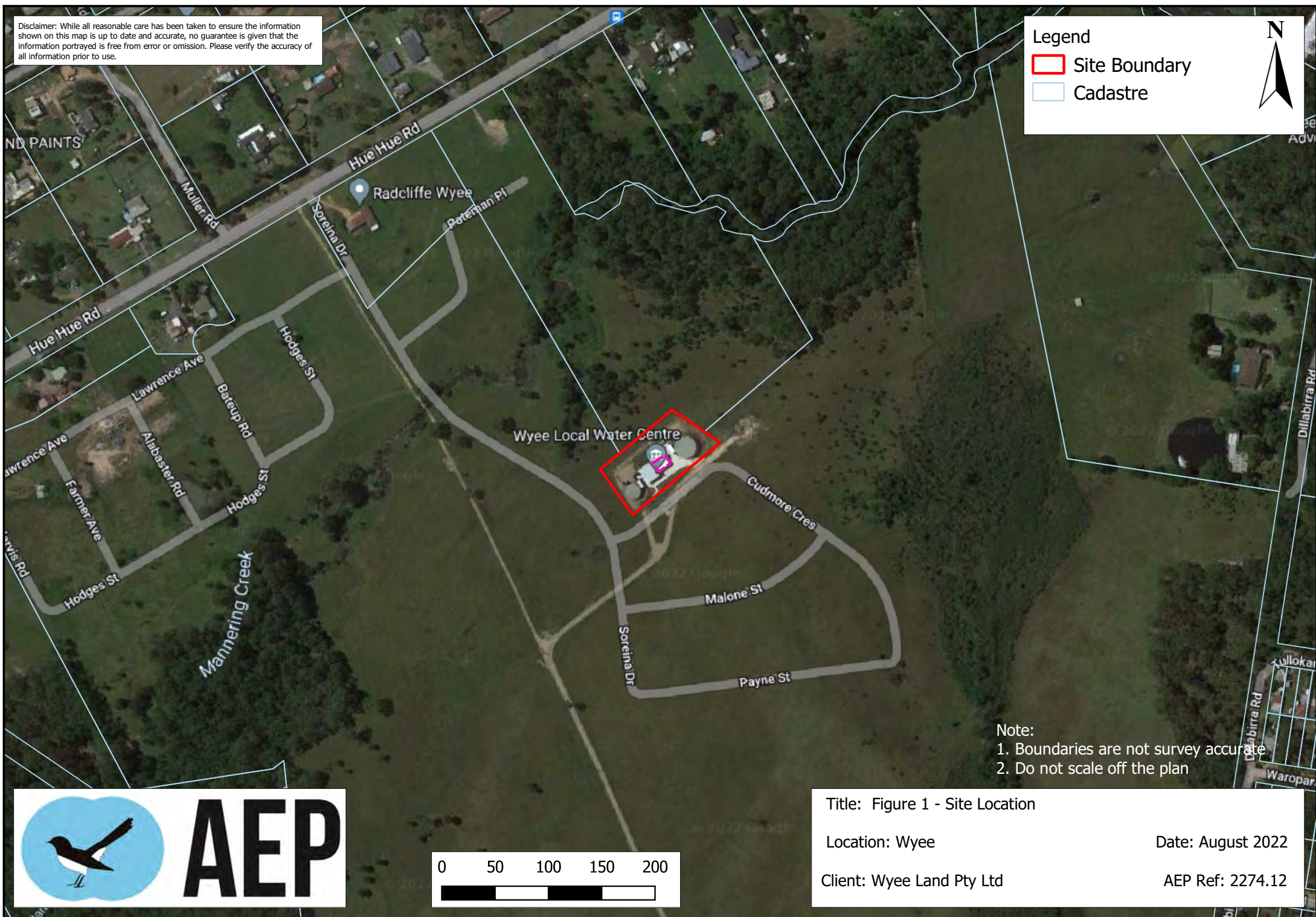
M. Schulz (1998) Bats and Other Fauna in Disused Fairy Martin *Hirundo ariel* Nests, *Emu - Austral Ornithology*, 98:3, 184-191

OEH (2014) *Threatened Species, Populations and Ecological Communities*. (<http://www.threatenedspecies.environment.nsw.gov.au/tsprofile/>)

Disclaimer: While all reasonable care has been taken to ensure the information shown on this map is up to date and accurate, no guarantee is given that the information portrayed is free from error or omission. Please verify the accuracy of all information prior to use.

Legend

-  Site Boundary
-  Cadastre



- Note:
1. Boundaries are not survey accurate
 2. Do not scale off the plan

Title: Figure 1 - Site Location

Location: Wyee



Client: Wyee Land Pty Ltd

Date: August 2022

AEP Ref: 2274.12

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Legend

-  Site Boundary - External Fence
-  Fairy Martin Nests Location



Note:

1. Boundaries are not survey accurate
2. Do not scale off the plan



Title: Figure 2 - Site Features (Ecological Considerations)

Location: Wyee

Date: August 2022

Client: Wyee Land Pty Ltd

AEP Ref: 2274.12