

Wildlife Protection and Management Plan (WPMP)

The Heights - Precinct C1& C2
Rifle Range Road, Pimpama

Tomewin Wildlife Consultancy
August 2018

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1. Introduction

1.1. Project Background

Tomewin Wildlife Consultancy (TWC) was commissioned by Golding Consulting on behalf of Sunland Property Group ('the Proponent') to produce a pre-clearing fauna management report in accordance with the 'Queensland Code of Practice for the Welfare of Wild Animals Affected by Land-Clearing and Other Habitat Impacts and Wildlife Spotter / Catchers (Draft), prepared by Hanger, J. and Nottidge, B. 2009' ('the Code') for proposed clearing works associated with The Heights residential development at Pimpama. This report also encompasses the provisions of the Commonwealth *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) and Queensland *Nature Conservation Act 1992* (NCA) and 'The Heights Koala Management Plan – EPBC Approved EPBC Act Management Plan, prepared by Saunders Havill Group. 2016' (KMP).

The objective of this report is to summarise the existing fauna values present and detail mitigation and management strategies applicable to fauna species likely to be during pre-clearing works areas or within specific habitat areas to be retained within the site. Commonwealth, State and Locally listed species and well as common fauna species threatened and common fauna species and their habitats have been considered.

1.2. Site Location and Description

Contextually, the site is located approximately 35 km north of the Gold Coast and 50 km south of Brisbane. The site is an area of approximately 18ha located on moderate slopes with dry eucalyptus forest peripheral to a large previously cleared development site adjacent to Rifle Range Road, Pimpama. The site specific area including areas of prior rural residential land use to be cleared extends from the northern boundary adjacent to an environmental retained area to the south.

The Precinct C1 & C2 clearing extent is the third clearing phase for the Heights Estate, Rifle range Road, Pimpama located to the south – west of the existing estate on both sides of Nambucca Crescent and Kiama Crescent. The specific project is tree clearance for real estate development (refer Figure 1).

The site is an area of dry eucalypt forest to wattle re-growth approximately 4ha located on a moderate slope ridge to steep slope including areas of prior rural residential land use to be cleared south of existing precincts.

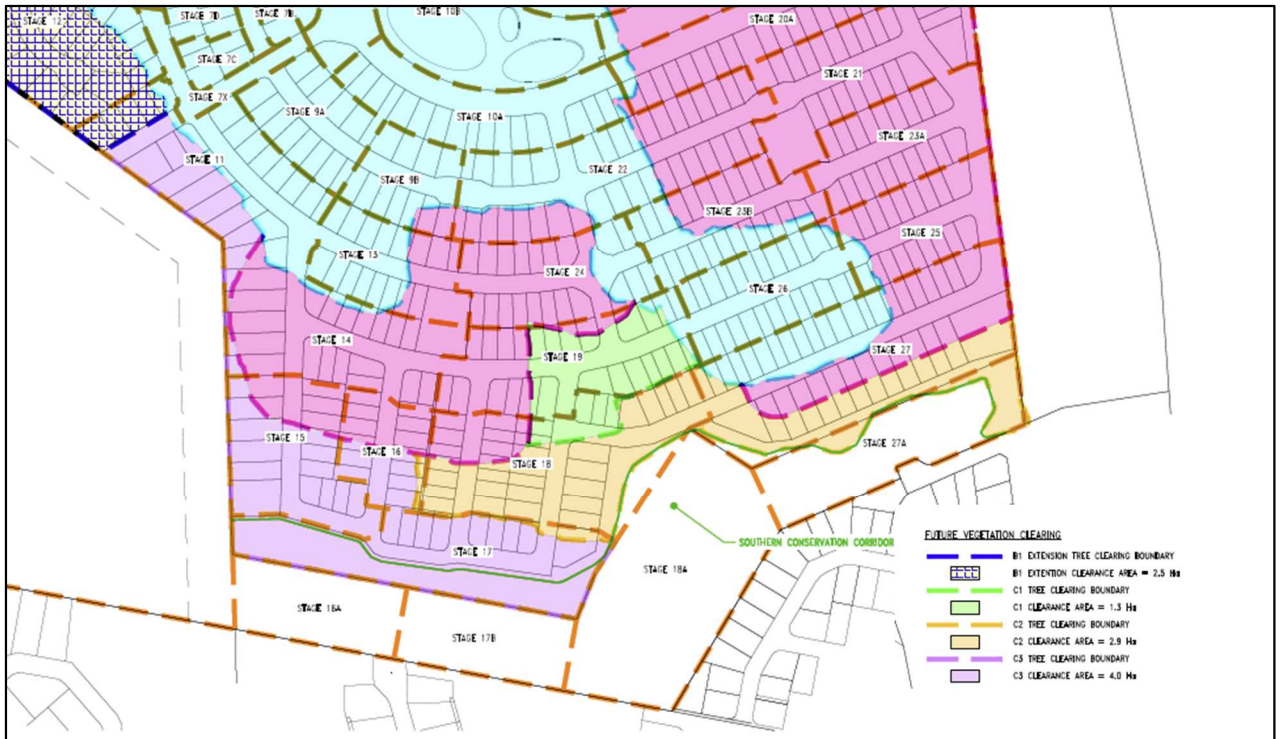


Figure 1: C1 & C2 Clearing Extent (source Bradlees)

1.3. Permits and Licenses

1.3.1 Permit

TWC is a specialist fauna spotter-catcher consultancy approved under a Queensland Department of Environment and Science (DES) Rehabilitation permit (unrestricted species / schedule) WIRP16922016, valid from 23/2/2018 to 22/2/2019.

1.3.2 Suitable capacity / experience

TWC has a staff of three with two spotter-catchers having a minimum of ten years' experience. TWC has had lengthy large scale project experience on a broad range of habitats particularly in addressing of arboreal fauna associated with habitat trees and aquatic fauna recovery. All staff have undergone extensive in-house training of core skills including development process awareness, clearing process awareness wildlife identification and handling. Additional completed training courses are listed in Table 1.

TWC has had lengthy experience in addressing Koalas within the Coomera area working with the GCCC Koala Conservation Project over the past five years and within noted Koala areas in Pine River, Redland bay, Belmont, Gatton, Amberley, Ipswich, Rosewood, Dayboro.

Table 1: Training and Experience

Qualifications and experience required to complete the task	Personnel, Duties and Responsibilities (Supervisory staff and others)
Rehabilitation permit, Registered with D.E.H	Frank Court
General safety induction card	Frank Court, Brendan Lackey,
Clearing processes awareness – internal training	Frank Court, Brendan Lackey, Adam Baker
Development processes awareness– internal training	Frank Court, Brendan Lackey, Adam Baker
Prior experience in Australian fauna – 4 years minimum	Frank Court, Brendan Lackey,
Prior experience in clearing processes– 4 years minimum	Frank Court, Brendan Lackey,
Chainsaw operation ticket	Frank Court, Brendan Lackey , Adam Baker
Fell small trees	Frank Court
EWP operators ticket	Frank Court
Working safely at heights ticket	Frank Court, Brendan Lackey,
Electrical Awareness	Frank Court, Brendan Lackey,
Operate a 4wd vehicle in the field	Frank Court, Brendan Lackey
Canoe & water safety > 2 Meters	Frank Court, Brendan Lackey
Lyssa Virus vaccination	Frank Court,
Safe venomous course snake Handling	Frank Court,

2. Survey Methodology

Field surveys were carried out on the 14th August 2018. Survey methods included walking the entire Precinct C1 & C2 clearing extent to identify key features and potential habitat for native wildlife.

The following survey techniques applied were utilised to confirm the actual and anticipated wildlife present on site.

- Short duration survey to confirm fauna value prior to clearing.
- Observation of canopy and under-story vegetation for active bird nests, possum drays and termite mounds
- Observation of site to locate and identify actual wildlife present.
- Consideration of time of year, actual and anticipated wildlife to determine current breeding status.
- Examination of favoured feed trees bark to 6 m height for Koala, possum, glider trace to assess usage/incidence
- Ground searches for scats under favoured or current feed trees were conducted.
- Binocular search of canopy vegetation to locate visibly hollow bearing trees or potentially hollow bearing trees.

2.1. Specific Methodology for Koala

The following survey techniques applied were utilised to confirm the potential presence of Koala with the designated clearing zone.

- Identification of noted Koala feed trees *Eucalyptus propinqua*, *Eucalyptus resinifera*, *Eucalytus microcorys*, *Corymbia maculata*, *Eucalytus tereticornis* within the site noting the health of growth, frequency of occurrence and the associated topography to determine core feed areas for Koalas.
- Two man binocular searches transects of core areas.
- Examination of favoured feed trees bark to 6 m height for trace with ground searches for scats under favoured feed trees was conducted.
- Spotlighting to confirm presence of nocturnal fauna

3. Results

The site and proposed clearing timeframe was surveyed in late winter during a period of low breeding activity. General field conditions were cool clear conditions following a prolonged spell of hot, dry weather.

3.1. Terrestrial Habitat Features / Vegetation Communities

The site contains a dry eucalyptus forest habitat area with canopy species including large *Eucalyptus propinqua*, *Eucalytus microcorys* *Corymbia maculata*, *Eucalytus tereticornis*, *Eucalyptus carnea*, *Eucalyptus siderophloia*, *Eucalyptus tindaliae*, *Lophostenum confertus* and sub-canopy species, *Alphitonia excelsa*, *Acacia concurrens*, *Allocasurina littoralis*.

Eucalyptus propinqua, *Eucalytus microcorys*, *Corymbia maculata*, *Eucalytus tereticornis* noted as a Koala feed trees are present on the ridge with reduced feed value due to current dry conditions.

The site has connectivity to retained and currently vegetated areas.

3.2. Arboreal Habitat Features

Areas proximal to Kiama Crescent are generally disturbed by prior rural residential land-use with a minor dam and minimal arboreal fauna shelter values.

The ridge contains 13 visibly or potentially hollow-bearing trees with complex branching structure allowing for hidden hollows to occur including 5 prior accessed arboreal termite mounds and minor stag trees.

Stick nest structures, (currently inactive) associated with common birds were located.

3.3. Actual & / or Anticipated Fauna Species List

Table 2: Actual &/or Anticipated Fauna Species List

Common name	Scientific name	Method of Detection
Echidna	<i>Tachyglossus aculeatus</i>	trace
Yellow-footed Antechinus	<i>Antechinus flaviceps</i>	anticipated
Bandicoot	<i>Isodon macrourus</i>	trace
Squirrel Glider	<i>Petaurus norfolcensis</i>	spotlighting – prior to FSC actions
Sugar Glider	<i>Petaurus breviceps</i>	spotlighting – prior to FSC actions
Brush-tail Possum	<i>Trichosurus vulpecula</i>	spotlighting – prior to FSC actions
Koala	<i>Phascolarctus cinereus</i>	observed – prior to FSC actions
Insect bats	Anticipated	anticipated

Common name	Scientific name	Method of Detection
Tawny Frogmouth	<i>Podargus strigoides</i>	observed
Aust Owllet-nightjar	<i>Aegotheles cristatus</i>	anticipated
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	observed
Scaly-breasted Lorikeet	<i>Trichoglossus chlorolepidotus</i>	observed
Red-backed Wren	<i>Malurus melanocephalus</i>	observed
Variegated Wren	<i>Malurus lamberti</i>	observed
Common territorial birds	Magpie, noisy miner, pied butcherbird, Kookaburra	observed
Robust Velvet Gecko	<i>Oedura robusta</i>	anticipated
Goanna	<i>Varanus varius</i>	anticipated
Barred-sided Skink	<i>Eulamprus tenuis</i>	anticipated
Small-eyed Snake	<i>Cryptophis nigrescens</i>	anticipated
Carpet Snake	<i>Morelia variegata</i>	anticipated
Yellow-faced Whip-snake	<i>Demansia psammophis</i>	anticipated
Bearded Dragon	<i>Pogona barbata</i>	observed
Brisbane Turtle	<i>Emydura macquarii</i>	observed
Red Bellied Black Snake	<i>Pseudoechis porphyriacus</i>	anticipated
Large Green Tree Frog	<i>Litoria caerulea</i>	anticipated
Graceful Tree Frog	<i>Litoria gracilentia</i>	anticipated

3.4. Threatened Species

Results of a using the EPBC Act Protected Matters Search Tool and NCA Wildlife Online Search, identified the potential for conservation significant fauna species to occur within proximity of the site.

3.4.1 Koala

Pre-clearing surveys identified the presence of mature Koala fodder species within the works extent including, *Eucalyptus propinqua*, *Eucalyptus resinifera*, *Eucalyptus microcorys* *Corymbia maculata*, *Eucalyptus tereticornis*, *Eucalyptus seeana* *Eucalyptus siderophloia*, *Eucalyptus tindaliae*. State Planning Policy 2017 (SPP) mapping also identified the site is mapped as containing areas of Bushland and Rehabilitation Habitat for the Koala.

Pre-clearing surveys identified one Koala had been previously recorded on the site within the last 12 months. It is recommended that dedicated methodologies be employed by a qualified Fauna Spotter specific to Koala prior to and during vegetation clearing.

3.4.2 Glossy Black Cockatoo

Pre clearing surveys identified the presence of *Allocasurina littoralis* noted as a major feed source for Glossy Black Cockatoo *Calyptorhynchus lathami* with confirmed observations of the species noted onsite during prior FSC surveys with the below techniques employed to determine the potential of occurrence.

- Observation of Allocasurina for frequency, maturity and associated fruiting bodies abundance
- Evaluation of located hollow-bearing trees for major hollow development suitable for Glossy Black Cockatoo
- Specific crepuscular searches for glossy black Cockatoo utilizing the site as a roost area were conducted

4. Wildlife Habitat Impact Assessment

The development of Precinct BC1 & C2 will have a direct impact on fauna habitat features observed by the pre-clearance survey. It is also important to consider direct impacts associated with existing and future residential developmental areas.

Impacts to fauna as a result of vegetation clearance will include the following:

- Loss of trees for foraging, roosting and nesting;
- Loss of hollow-bearing trees for nesting and refuge;
- Loss of habitat and foraging areas for terrestrial species;
- Loss of overall habitat; and
- Potential loss of abundance of some local species.

Other impacts may include:

- Injury or death during felling of trees;
- Injury or death from machinery; and
- Alteration of nesting, foraging and general activities due to disturbance.

The Heights has been designed to retain the northern, southern and central conservation corridors to ensure connectivity within and across the site is maintained. These corridors will undergo rehabilitation in the form of weed removal, revegetation and assisted regeneration.

Overall the site contains medium value refugial opportunities for arboreal and terrestrial fauna species. The species expected within the site are likely to reflect common fauna for the region, with the exception of the Koala which is listed at both the Commonwealth and State level and the Glossy Black Cockatoo listed at the State level. Specific methodologies for this species will be detailed within the Wildlife and Habitat Impact Mitigation Plan (WHIMP). A number of conclusions and recommendations will be presented in the WHIMP, to ensure facilitate minimal impact to fauna during the vegetation clearing.

It is recommended that all identified fauna habitats onsite be inspected by a DES approved Fauna Spotter prior to vegetation clearing and all vegetation removal activities be supervised during the clearing process (as per the KMP). Fauna captured will be relocated to adjacent habitat. The directives given by Fauna Spotter Catchers should embrace a “best practice” in accordance with ‘the Code’ and must include implementation of proven specific management techniques for identified habitat types and compliance with legislation relevant to the activity.

It is recommended that in the event any nests which contain chicks are identified during clearing be left until fledged, and those that are in a construction phase should be dismantled to prevent further nesting activity.