



Photo 1 – Low Heath vegetation approximately 200m west of the existing dwelling

Disturbances – This vegetation community is impacted by walking / driving tracks.

Common Species

Angophora hispida (Dwarf Apple), *Grevillea speciosa* (Red Spider Flower), *Banksia ericifolia* var. *ericifolia* (Heath-leaved Banksia), *Hemigenia purpurea* (Narrow-leaved Hemigenia), *Actinotus minor* (Lesser Flannel Flower), *Hakea teretifolia* (Dagger Hakea), *Phyllota phyllicoides* (Heath Phyllota), *Xanthorrhoea media* subsp. *media* (Forest Grass Tree), *Persoonia lanceolata* (Lance-leaved Geebung), *Tetralochea ericifolia* (Black-eyed Susan), *Dillwynia floribunda* var. *floribunda* (Parrot Pea) and *Epacris pulchella* (NSW Coral Heath).

Significance – Not endangered or threatened within the Northern Beaches LGA.

Vegetation Community B & B2 – Tall Heath and Damp Tall Heath

Occurrence – In relation to the proposed development area, this community occurs frequently to the south of Ralston Avenue, along the northern edge of Ralston Avenue, and within the North West portion of the flora study area. The Tall Heath and Damp Tall Heath vegetation is most similar to Sydney Coastal Heath as mapped by Smith and Smith (2000).

The Damp Tall Heath appears to have been artificially created by concentrated stormwater drainage from development areas upslope on adjoining lands, or is associated with an existing surface drainage line.



Photo 2 – Tall Heath vegetation in Quadrat 5 (2008) looking east

Structure – Tall heath vegetation consisting of a dominance of *Allocasuarina distyla* with several other heath species. Some emergent trees exist. The dominance by the *Allocasuarina distyla* limits the diversity of plant species within those surveyed quadrats. The average height of vegetation within this community is 2.5-5m.

Damp Tall Heath vegetation is typically a moderately dense scrub comprising of *Banksia ericifolia* with a combination of *Hakea*, *Allocasuarina* and *Leptospermum* species. South of Ralston Avenue, the vegetation community has been caused through disturbance and the structure varies more so with the presence of some tree ferns and weeds.

Disturbances – This vegetation community is impacted by walking / driving tracks.

Common Species

Allocasuarina distyla (Scrub She-oak), *Leptospermum squarrosum*, *Darwinia fascicularis*, *Banksia ericifolia* var. *ericifolia* (Heath-leaved Banksia), *Hakea teretifolia* (Dagger Hakea), *Banksia spinulosa* var. *spinulosa* (Hairpin Banksia), *Actinotus minor* (Lesser Flannel Flower), *Lepyrodia scariosa* (Scale Rush) and *Leptocarpus tenax* (Slender Twine-rush).

Significance – Likely to provide some good quality habitat for the threatened or ROTAP species *Tetratheca glandulosa*, *Eucalyptus luehmanniana*, *Angophora crassifolia* and *Lomandra brevis*.

Vegetation Community C – Low Open Forest

Occurrence – In relation to the proposed development area, this community occurs around the fringes on higher degrees of sloping land, in addition to small patches within the central portion of the site and more extensively to the north western corner. The Low Open Forest vegetation is most similar to Sydney Sandstone Ridgetop Woodland as mapped by Smith and Smith (2000). In 2005, Smith and Smith described a wider extent of communities with a description for (Vegetation Community 21). This community is a scrubland with *E. luehmanniana* and *C. gummifera* as dominants with heath and sedge understorey species.

This community is not considered threatened within the Northern Beaches local government area (LGA) but *E. luehmanniana* is a rare species.

Whilst the Low Open Forest is diverse with a mix of upper strata species, the area containing *E. luehmanniana* was prevalent within approximately 100m north and south of Ralston Avenue. It was generally never found more than 100m north of Ralston Avenue within the proposed development area, although some smaller patches were located on south westerly slopes to the west of the proposed development area. The extent of the *E. luehmanniana* to the south of Ralston Avenue was extensive and it crept downslope to the edges of the sandstone gully forest, although was less prevalent within the taller surrounding vegetation.

Structure – Low Open Forest vegetation consists of a high proportion of heath species in the lower layers of vegetation with a low proportion of grass species. This community contains trees typically to a height of between 5-10m with a projected foliage cover (PFC) of 20-35%.

Disturbances – This vegetation community is impacted by walking / driving tracks.

Common Species

Trees: *Corymbia gummifera* (Red Bloodwood), *Eucalyptus piperita* (Sydney Peppermint), *Eucalyptus haemastoma* (Scribbly Gum), *Eucalyptus luehmanniana* (Yellow top Ash), *Angophora hispida* (Dwarf Apple) and *Angophora crassifolia*.



Photo 3 – Low Open Forest within the central portion of the proposed development area

Shrubs: *Allocasuarina distyla* (Scrub She-oak), *Banksia ericifolia* var. *ericifolia* (Heath-leaved Banksia), *Hakea teretifolia* (Dagger Hakea), *Banksia spinulosa* var. *spinulosa* (Hairpin Banksia), *Leptospermum polygalifolium* (Lemon Scented Tea-tree), *Gompholobium grandiflorum* (Golden Glory Pea), *Grevillea speciosa* (Red Spider Flower), *Grevillea buxifolia*

(White Spider Flower), *Hakea sericea* (Needlebush), *Phyllota phyllicoides* (Heath Phyllota) and *Platysace linearifolia* (Narrow-leafed Platysace).

Groundcovers: *Actinotus minor* (Lesser Flannel Flower), *Caustis flexuosa* (Curly Sedge), *Xanthorrhoea media* subsp. *media* (Forest Grass Tree), *Patersonia sericea* (Wild Iris), *Xanthosia tridentata* (Rock Xanthosia), *Lomandra glauca* subsp. *glauca*, *Pimelea linifolia* subsp. *linifolia* (Slender Rice Flower) and *Lomandra gracilis*.

Significance – Two (2) rare (ROTAP) species were quite common within this community, *Eucalyptus luehmanniana* and *Angophora crassifolia*. The threatened species *Tetratheca glandulosa* has also been observed.

Vegetation Community D – Open Forest

Occurrence – The community occurs immediately west and south of the Sydney East Substation and at the terminal end of Ralston Avenue. It was extensive further north within the study area. The Open Forest vegetation could be a combination of either Sydney Sandstone Ridgetop Woodland or Duffys Forest (an EEC) as mapped by Smith and Smith (2000). Assessment of the vegetation within all 2008 and 2011 quadrats found the vegetation not to be representative of Duffys Forest (in accordance with P & J Smith's Duffys Forest Index).

Further assessment was undertaken in October 2015 against an alternative method, using a tool developed by Greg Steinbeeke which gives a fairly reliable indication of vegetation types. The results of this tool found a portion of vegetation near the Heath Track on the plateau to be commensurate with the EEC Duffys Forest. The community was delineated when broken down into the various Biometric vegetation types.

Structure – Open Forest structure but taller than the Low Open Forest, generally above 10m tall. This vegetation community contains a mixture of healthy understorey species with a moderate dominance of sclerophyllous species. Taller Eucalypt species dominate such as *Eucalyptus punctata* and *Eucalyptus sieberi*. This vegetation community comprises a partially grassy understorey unlike the low heath and tall heath vegetation communities.

Disturbances – This vegetation community is impacted by walking / driving tracks, a communications tower and an electricity substation.

Common Species

Trees: *Eucalyptus punctata* (Grey Gum), *Corymbia gummifera* (Red Bloodwood), *Angophora costata* (Smooth-barked Apple), *Eucalyptus sieberi* (Silver-top Ash) and *Allocasuarina littoralis* (Black She-oak).

Shrubs: *Acacia terminalis* (Sunshine Wattle), *Melaleuca hypericifolia*, *Banksia ericifolia* var. *ericifolia* (Heath-leaved Banksia), *Platysace linearifolia* (Narrow-leafed Platysace), *Callistemon linearis* (Narrow-leaved Bottlebrush) and *Acacia longifolia* var. *longifolia* (Sydney Golden Wattle).

Groundcovers: *Entolasia marginata* (Bordered Panic), *Entolasia stricta* (Wiry Panic), *Tetratheca ericifolia* (Black-eyed Susan), *Pimelea linifolia* subsp. *linifolia* (Slender Rice Flower), *Lomandra longifolia* (Spiky-headed Mat-rush), *Lindsaea microphylla* (Lacy Wedge-fern) and *Lomandra gracilis*.

Significance – This vegetation community provides some habitat for the recorded threatened or ROTAP species *Tetratheca glandulosa*, *Grevillea caleyi*, *Pimelea curviflora* var. *curviflora*, *Eucalyptus luehmanniana* and *Angophora crassifolia*.

Where vegetation within the canopy is dominated by *Eucalyptus sieberi* and *Corymbia gummifera*, this provides very good potential habitat for the threatened species *Grevillea caleyi*, particularly to the north and north east of the existing residence.



Photo 4 – Open Forest vegetation along the northern edge of Ralston Avenue

Vegetation Community E – Cleared, Managed, Landscaped or Weed Plume

Occurrence – In relation to the flora study area this community only occurs within the centre of the site adjacent to the intersection of some major tracks, the managed grounds and residential lot, other built structures and the weed plume along the edge of Ralston Avenue near the existing gate.

Structure – Contains shrub and heath vegetation with no trees and a grassy and annual understorey.

Disturbances – This vegetation community is impacted by walking / driving tracks, and a high proportion of annuals, exotic grasses and Pampas Grass.

Common Species

Cortaderia selloana (Pampas Grass), *Acacia saligna* (Orange Wattle), *Acacia longifolia* var. *longifolia* (Sydney Golden Wattle), *Andropogon virginicus* (Whisky Grass), *Eragrostis curvula* (African Lovegrass), *Centella asiatica* (Swamp Pennywort), *Hakea teretifolia* (Dagger Hakea), *Cynodon dactylon* (Common Couch), *Seneca madagascariensis* (Fireweed), *Paspalum dilatatum* (Paspalum) and *Bidens pilosa* (Cobbler's Pegs).



Photo 5 – Disturbed area with weed plume near the centre of the site

Vegetation Community F – Coastal Upland Swamp

Occurrence – This vegetation community occurs in patches to the south of Ralston Avenue, varying in size up to 1.27 ha.

Structure – Sedge, heath or scrub usually under 2.5m tall with few emergents and few Eucalyptus / Angophora specimens.

Disturbances – Recent fire within the remnants, south of Ralston Avenue.



Photo 6 – Coastal upland swamp vegetation with fringing low open forest or tall heath in in the background

Common Species

Baekkea imbricata, *Banksia ericifolia* (Heath-leaved Banksia), *Bauera rubioides* (River Rose), *Dillwynia floribunda* var. *floribunda* (Parrot Pea), *Hakea teretifolia* (Dagger Hakea), *Leptospermum squarrosum*, *Viminaria juncea* (Native Broom), *Empodisma minus*, *Lepidosperma* spp., *Schoenus brevifolius* (Bog-rush), *Leptocarpus tenax* (Slender Twine-rush), *Lepyrodia scariosa* (Scale Rush), *Goodenia dimorphia* and *Xyris gracilis* (Slender Yellow-eye).

Significance – This community is regionally significant and falls under the EEC Coastal Upland Swamps of the Sydney Basin Bioregion. This community may provide good habitat for the threatened frog species, Red-crowned Toadlet and Giant Burrowing Frog.

Vegetation Community G – Sandstone Gully Forest

Occurrence – This vegetation community occurs in steeper portions of land to the south of Ralston Avenue generally outside of the proposed development area and thus was not surveyed in much detail. It tends to occur on sheltered southerly facing slopes.

Structure – An open forest structure of Eucalypts, Angophoras and Corymbias with a moderately healthy understorey and some herbs, forbs and ferns in the ground layer. Trees are usually between 10-20m in height.

Disturbances – There has been recent fire within the remnant south of Ralston Avenue.

Common Species

Trees: *Eucalyptus piperita* (Sydney Peppermint), *Angophora costata* (Smooth-barked Apple) and *Corymbia gummifera* (Red Bloodwood).

Shrubs: *Banksia serrata* (Old Man Banksia), *Ceratopetalum gummiferum* (Christmas Bush), *Leptospermum trinervium*, *Lambertia Formosa* (Mountain Devil), *Leptospermum polygalifolium* (Tantoon), *Woolisia pungens*, *Acacia linifolia* (White Wattle), *Acacia terminalis* (Sunshine Wattle) and *Hakea sericea* (Needlebush).

Groundcovers: *Entolasia stricta* (Wiry panic), *Anisopogon avenaceus* (Oat Speargrass), *Gonocarpus teucrioides* (Raspwort), *Actinotus minor* (Lesser Flannel Flower), *Xanthosia pilosa* (Woolly Xanthosia), *Boronia pinnata*, *Pimelea linifolia* (Slender Rice Flower), *Calochlaena dubia* (Rainbow Fern), *Pteridium esculentum* (Bracken), *Lepidosperma laterale*, *Caustis flexuosa* (Curly Wig) and *Lomandra longifolia* (Spiny-headed Mat-rush).



Photo 7 – Sandstone Gully Forest in the northern part of the offset area

Vegetation Community H - Riparian Woodland / Forest

Occurrence – This vegetation community occurs along the edge of the creek line in the offset area. It is someone similar to the adjoining Sandstone Gully Forest however sedge species are more prevalent due to wetter soil profiles.

Structure – An open forest structure to woodland in some places containing Eucalyptus, Angophoras and Corymbias with a limited mid-storey layer but moderately dense understorey of grasses, small shrubs, sedges, ferns and herbs. Rock outcropping is common.

Disturbances – There are some moderate-severe weed infestations adjacent which have been mapped as separate vegetation polygons.

Common Species

Trees: *Eucalyptus haemastoma* (Scribbly Gum), *Eucalyptus punctata* (Grey Gum), *Corymbia gummifera* (Red Bloodwood), *Angophora costata* (Smooth-barked Apple) and *Eucalyptus oblonga* (Oblong-leaved Stringybark).

Shrubs: *Banksia serrata* (Old man Banksia), *Leptospermum trinervium* (Flaky-barked Tea-tree) and *Persoonia levis* (Broad-leaved Geebung)

Groundcovers: *Entolasia stricta* (Wiry Panic), *Anisopogon avenaceus* (Oat Speargrass), *Platysace linearifolia*, *Boronia ledifolia* (Sydney Boronia), *Tetradlea thymifolia* (Black-eyed Susan), *Dampiera stricta*, *Xanthosia pilosa* (Woolly Xanthosia), *Micrantheum ericoides*, *Bossiaea heterophylla* (Variable Bossiaea), *Lepidosperma laterale*, *Lomandra glauca* (Pale Mat-rush), *Lindsaea linearis* (Screw Fern), *Actinotus minor* (Lesser Flannel Flower), *Lomandra obliqua* and *Patersonia sericea* (Silky Purple-flag).



Photo 8 – Riparian woodland / forest with burnt understorey near Quadrat 110

3.1.3 Biometric vegetation units

For the purposes of biodiversity assessment report (*EcoLogical Australia* 2015), the original vegetation communities have been categorised into their equivalent biometric vegetation types. Consequently, some vegetation polygons have been split or combined and the number of mapped vegetation zones has increased. The following list relates the biometric vegetation zone to the observed vegetation community equivalent as mapped by *Travers bushfire & ecology*:

- Zone 1 ME012: Sydney Peppermint - Smooth-barked Apple - Red Bloodwood shrubby open forest on slopes of moist sandstone gullies, eastern Sydney Basin (G - Sandstone Gully Forest H - Riparian Woodland/Forest)
- Zone 2 ME014: Red Bloodwood - Scribbly gum healthy woodland on sandstone plateaux, Sydney Basin (C - Low Open Forest (to 10m tall) D - Open Forest (10+m tall))
- Zone 3 ME008: Hairpin Banksia - Kunzea ambigua - Allocasuarina distyla heath on coastal sandstone plateaux, Sydney Basin (A - Tall Heath (2.5- tall) B - Tall Heath (2.5-5m tall) B2 - Damp Tall Heath)
- Zone 4 ME015: Needlebush – Banksia wet heath on sandstone plateaux of the Sydney Basin (F - Coastal Upland Swamp)
- Zone 5 ME013: Hairpin Banksia - Slender Tea-tree heath on coastal sandstone plateaux, Sydney Basin Bioregion (various)
- Zone 6 ME039: Red Bloodwood - Smooth-barked Apple shrubby forest on shale or ironstone of coastal plateaux, Sydney Basin Bioregion (various)
- Cleared, Managed, Landscaped or Weed Plume

Figure 3a shows the vegetation communities as mapped by *Travers bushfire & ecology* across the entire study area. Figure 3b shows a zoom to the development area and Figure 3c shows the equivalent Biometric vegetation types.

3.2 Fauna results

Fauna species observed throughout the duration of fauna surveys are listed in Table 3.2 below.

Table 3.2 – Fauna observations for the study area

Common name	Scientific name	Method observed		
		May 2008	Dec 2011	Oct 2012+
Birds				
Australian Brush-turkey	<i>Alectura lathami</i>			R
Australian Magpie	<i>Gymnorhina tibicen</i>		O	O
Australian Owlet-nightjar	<i>Aegotheles cristatus</i>			C
Australian Raven	<i>Corvus coronoides</i>	O C	O C	O C
Bar-shouldered Dove	<i>Geopelia humeralis</i>		O	
Black-faced Cuckoo-shrike	<i>Coracina novaehollandiae</i>	O	O C	O C
Brown-headed Honeyeater	<i>Melithreptus validirostris</i>	O C		
Brown Thornbill	<i>Acanthiza pusilla</i>		O C	O C
Brown Quail	<i>Coturnix ypsilophora</i>	O	O	O T
Brush Bronzewing	<i>Phaps elegans</i>	O	C	
Channel-billed Cuckoo	<i>Scythrops novaehollandiae</i>		C	C
Common Koel	<i>Eudynamys scolopacea</i>		C	C
Common Myna *	<i>Acridotheres tristis</i>	O		O
Crested Pigeon	<i>Ocyphaps lophotes</i>	O		
Crimson Rosella	<i>Platycerous elegans</i>			O C
Eastern Spinebill	<i>Acanthorhynchus tenuirostris</i>	O C	O C	O C
Eastern Whipbird	<i>Psophodes olivaceus</i>	O C	O C	O C R
Eastern Yellow Robin	<i>Eopsaltria australis</i>	O	O C	O C
Fairy Martin	<i>Hirundo ariel</i>		O	
Fan-tailed Cuckoo	<i>Cacomantis flabelliformis</i>		C	C
Glossy Black-Cockatoo ^{TS}	<i>Calyptorhynchus lathami</i>			I
Golden Whistler	<i>Pachycephala pectoralis</i>	O		C
Grey Butcherbird	<i>Cracticus torquatus</i>	O C	C	C
Grey Fantail	<i>Rhipidura fuliginosa</i>	O C	C	O C
Grey Shrike-thrush	<i>Colluricincla harmonica</i>	O	O C	O C
Laughing Kookaburra	<i>Dacelo novaeguineae</i>		O C	O C
Little Lorikeet ^{TS}	<i>Glossopsitta pusilla</i>	C		
Little Wattlebird	<i>Anthochaera chrysoptera</i>	O C	O C	O C
Masked Lapwing	<i>Vanellus miles</i>		C	C
New Holland Honeyeater	<i>Phylidonyris novaehollandiae</i>	O C	O C	O C R
Pied Currawong	<i>Strepera graculina</i>	C	O C	O C
Powerful Owl ^{TS}	<i>Ninox strenua</i>	Sp C P		
Rainbow Lorikeet	<i>Trichoglossus haematodus</i>	C	C	O C
Red-browed Finch	<i>Neochmia temporalis</i>	O C	O C	O C
Red Wattlebird	<i>Anthochaera carunculata</i>	O C		C
Red-whiskered Bulbul *	<i>Pycnonotus jocosus</i>		C	C
Rufous Whistler	<i>Pachycephala rufiventris</i>		C	O C
Scarlet Honeyeater	<i>Myzomela sanguinolenta</i>	C		
Shining Bronze-Cuckoo	<i>Chrysococcyx lucidus</i>		C	
Silvereye	<i>Zosterops lateralis</i>	O C	O C	O C R
Southern Boobook	<i>Ninox novaeseelandiae</i>			C
Spotted Pardalote	<i>Pardalotus punctatus</i>	O C	C	O C
Spotted Quail-thrush	<i>Cinclosoma punctatum</i>			C ^{PR}
Striated Pardalote	<i>Pardalotus striatus</i>	O C		C
Striated Thornbill	<i>Acanthiza lineata</i>		O C	O C
Sulphur Crested Cockatoo	<i>Cacatua galerita</i>	C	O C	O C
Superb Fairy-wren	<i>Malurus cyaneus</i>		O C	C

Common name	Scientific name	Method observed		
Tawny Frogmouth	<i>Podargus strigoides</i>	O		
Variiegated Fairy-wren	<i>Malurus lamberti</i>		O C	O C
Welcome Swallow	<i>Hirundo neoxena</i>	O	O	O
White-browed Scrubwren	<i>Sericornis frontalis</i>	O C	O C	O C R
White-cheeked Honeyeater	<i>Phylidonyris nigra</i>			C ^{PR}
White-eared Honeyeater	<i>Lichenostomus leucotis</i>	O C	O C	O C
White-throated Nightjar	<i>Eurostopodus mystacalis</i>			O C
Yellow-faced Honeyeater	<i>Lichenostomus chrysops</i>	O C	O	C
Yellow-tailed Black-Cockatoo	<i>Calyptorhynchus funereus</i>	C		O C
Mammals				
Brown Antechinus	<i>Antechinus stuartii</i>		T R	
Bush Rat	<i>Rattus fuscipes</i>		T R	T R
Common Brushtail Possum	<i>Trichosurus vulpecula</i>		S T R	T R
Common Ringtail Possum	<i>Pseudocheirus peregrinus</i>		S	
Common Wombat	<i>Vombatus ursinus</i>			R
Dog *	<i>Canis familiaris</i>	O	O C	O R
Eastern Bentwing-bat ^{TS}	<i>Miniopterus orianae oceansis</i>			A
Eastern Pygmy Possum ^{TS}	<i>Cercatetus nanus</i>			H R
European Red Fox *	<i>Vulpes vulpes</i>			R
Forest Bat	<i>Vespadelus sp</i>	A		
Gould's Wattled Bat	<i>Chalinolobus gouldii</i>		A	A
Grey-headed Flying-fox ^{TS}	<i>Pteropus poliocephalus</i>	S C	O	O
Horse *	<i>Equus caballus</i>	O	O	O
Little Bentwing-bat ^{TS}	<i>Miniopterus australis</i>			A
Little Forest Bat	<i>Vespadelus vulturnus</i>			A ^{PR}
Long-nosed Bandicoot	<i>Parameles nasuta</i>		T R	T R
Mouse	<i>Mus</i> or <i>Pseudomys</i> sp.			R
Rabbit *	<i>Oryctolagus cuniculus</i>			O
Short-beaked Echidna	<i>Tachyglossus aculeatus</i>		O	I
Sugar Glider	<i>Petaurus breviceps</i>		T	I C
Swamp Wallaby	<i>Wallabia bicolor</i>		O R	O T R
White-striped Freetail-bat	<i>Austronomus australis</i>			A
Reptiles				
Blackish Blind Snake	<i>Ramphotyphlops nigrecens</i>		H	
Burton's Legless Lizard	<i>Lialis burtonis</i>			T
Copper Tailed Skink	<i>Ctenotus taeniolatus</i>	O	H	T
Delicate Skink	<i>Lampropholis delicata</i>		O	O T
Diamond Python	<i>Morelia spilota</i>	O	O	O
Eastern Bearded Dragon	<i>Pogona barbata</i>	O		O R
Eastern Blue Tongue Lizard	<i>Tiliqua scincoides</i>		T	T
Eastern Brown Snake	<i>Pseudonaja textilis</i>			O
Eastern Tiger Snake	<i>Notechis scutatus</i>	O		
Eastern Water Dragon	<i>Physignathus lesueurii</i>			O
Eastern Water Skink	<i>Eulamprus quoyii</i>			O
Grass Skink	<i>Lampropholis guichenoti</i>			T
Rosenberg's Goanna ^{TS}	<i>Varanus rosenbergii</i>		T	O T
Lace Monitor	<i>Varanus varius</i>		O	O T
Mainland She-oak Skink	<i>Cyclodomorphus michaeli</i>			H
Red-throated Skink	<i>Pseudemoia platynota</i>	H		
Weasel Skink	<i>Saproscincus mustelina</i>		O ^{PR}	T
Yellow-faced Whip Snake	<i>Demansia psammophis</i>	H		T
Amphibians				
Broad-palmed Frog	<i>Litoria latopalmeta</i>		C ^{PR}	
Common Eastern Froglet	<i>Crinia signifera</i>	C	O C	C T
Freycinet's Frog	<i>Litoria freycineti</i>			O

Common name	Scientific name	Method observed																																
Giant Burrowing Frog ^{TS}	<i>Heleioporus australiacus</i>			T/DNA O																														
Leaf Green Tree Frog	<i>Litoria phyllochroa</i>			C																														
Peron's Tree Frog	<i>Litoria peronii</i>			C																														
Red-crowned Toadlet ^{TS}	<i>Pseudophryne australis</i>	O C	C	H																														
Striped Marsh Frog	<i>Limnodynastes peronii</i>		C	H																														
<p>Note: * indicates introduced species ^{TS} indicates threatened species</p> <p>All species listed are identified to a high level of certainty unless otherwise noted as:</p> <p>^{PR} indicates species identified to a 'probable' level of certainty ^{PO} indicates species identified to a 'possible' level of certainty</p> <table> <tr> <td>A</td> <td>-</td> <td>Anabat II/SD-1</td> <td>C</td> <td>-</td> <td>Call Identification</td> </tr> <tr> <td>O</td> <td>-</td> <td>Observation</td> <td>P</td> <td>-</td> <td>Call playback response</td> </tr> <tr> <td>T</td> <td>-</td> <td>Trap (<i>Elliott</i>, cage, etc)</td> <td>H</td> <td>-</td> <td>Habitat search</td> </tr> <tr> <td>S</td> <td>-</td> <td>Spotlight</td> <td>I</td> <td>-</td> <td>Scat, track or sign identification</td> </tr> <tr> <td>R</td> <td>-</td> <td>Surveillance camera</td> <td>DNA</td> <td>-</td> <td>DNA Analysis</td> </tr> </table>					A	-	Anabat II/SD-1	C	-	Call Identification	O	-	Observation	P	-	Call playback response	T	-	Trap (<i>Elliott</i> , cage, etc)	H	-	Habitat search	S	-	Spotlight	I	-	Scat, track or sign identification	R	-	Surveillance camera	DNA	-	DNA Analysis
A	-	Anabat II/SD-1	C	-	Call Identification																													
O	-	Observation	P	-	Call playback response																													
T	-	Trap (<i>Elliott</i> , cage, etc)	H	-	Habitat search																													
S	-	Spotlight	I	-	Scat, track or sign identification																													
R	-	Surveillance camera	DNA	-	DNA Analysis																													

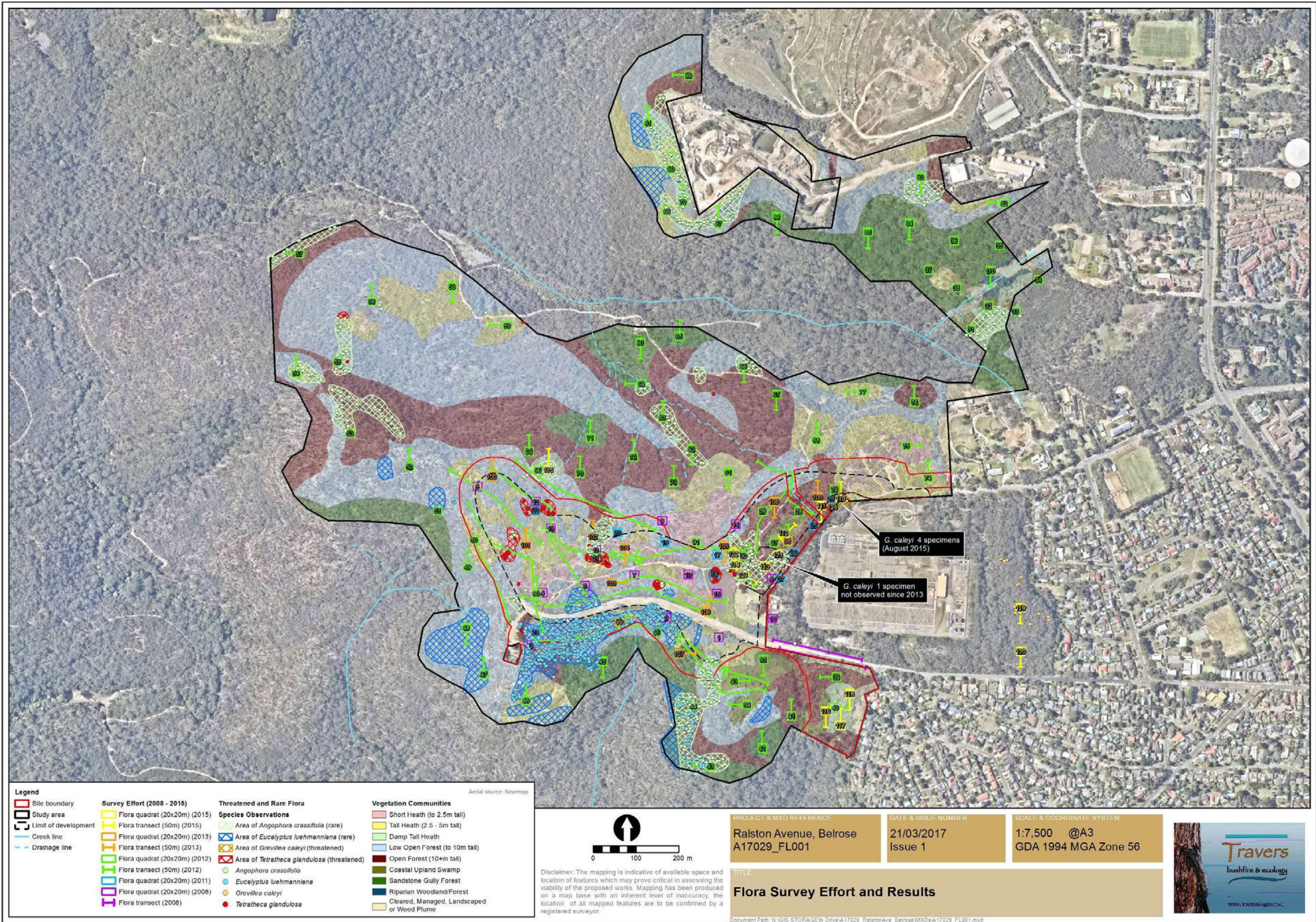


Figure 3a – Vegetation communities and flora survey results within Lot 1 DP1139826

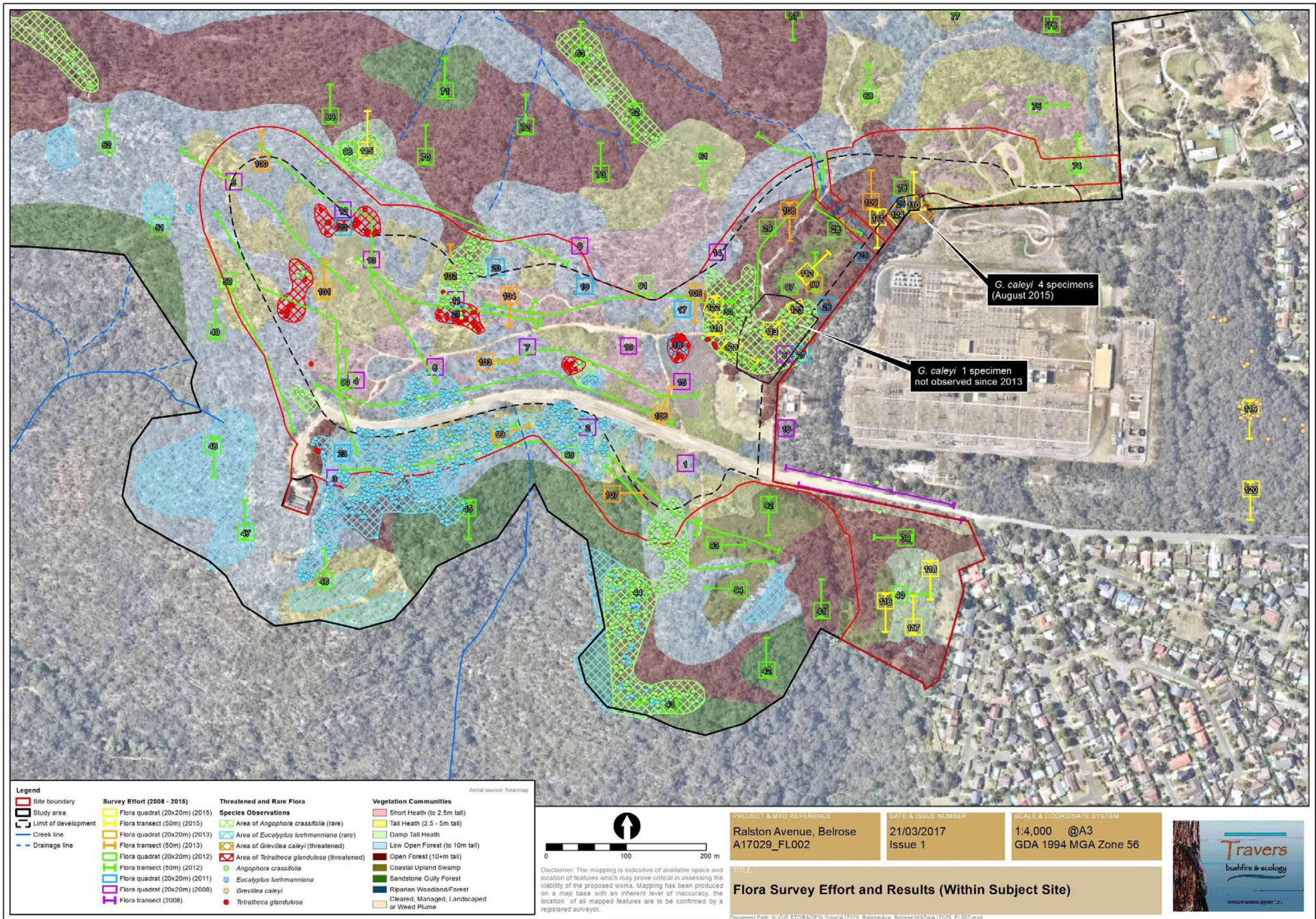


Figure 3b – Vegetation communities and flora survey results within the subject site (zoom in)

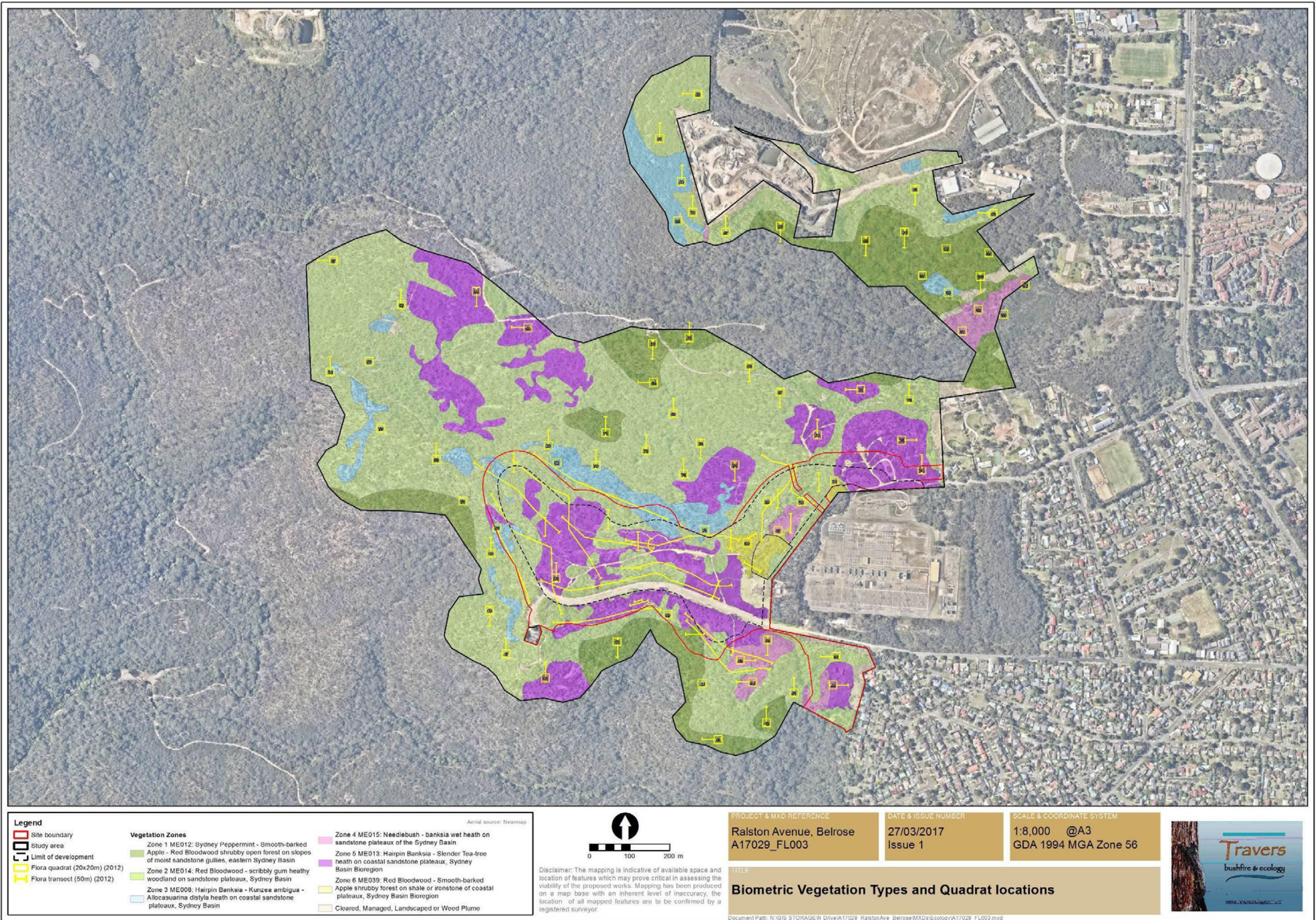


Figure 3c – Biometric vegetation types