

Ecological Assessment Report (EAR):

Project Name: 277 Black Springs Road, EURUNDEREE NSW

Prepared for: Mark Hitchenson

March 2025







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Contents

| 1. Introduction |
|--|
| 2. Site Details |
| 2.1. Project Location and Context |
| 2.2. Project Description and Background1 |
| 2.2.1. Detailed Scope of Works1 |
| 3. Statutory and Planning Framework1 |
| 3.1. Environmental Planning and Assessment Act 19791 |
| 3.2. Other Environmental Legislation |
| 4. Ecological Assessment |
| 4.1 Vegetation |
| 4.2 Biodiversity Values Map |
| 4.3 Koala Habitat |
| 4.4 Test of Significance |
| 5. Summary19 |
| 6. Certification, Review and Decision20 |
| 7. References |
| Appendix A – Historical Imagery |
| Appendix B – Bionet Atlas Search Results |
| Appendix C – Threatened Species Search27 |
| Appendix D – Protected Matters Search |
| Appendix E – Assessment of Significance - EPBC |
| Appendix F – Council LEP Maps43 |
| Appendix G – NSW DPI Fisheries – Key Fish Habitat45 |



Photos

| Photo 1: Proposed building envelope | . 8 |
|-------------------------------------|-----|
|-------------------------------------|-----|

Figures

| Figure 1: Site context plan | 0 |
|---|----|
| Figure 2: Plan of proposed subdivision. | 4 |
| Figure 3: Plan of proposed subdivision with aerial imagery | 5 |
| Figure 4: Site plan showing vegetation. | 6 |
| Figure 5: State vegetation type mapping (SVTM) for the Lot including building envelope (SEED) | 9 |
| Figure 6: BVM does not identify any areas on the proposed building envelope | 10 |
| Figure 8: Terrestrial biodiversity sensitivity. | 43 |
| Figure 9: Groundwater vulnerability | 44 |

Tables

| Table 1: Proponent details | 1 |
|--|----|
| Table 2: Summary of other environmental legislation | 2 |
| Table 3: BOS native vegetation clearing threshold (NSW Government, 2024) | 11 |
| Table 4: Koala use trees from KHP 2021 SEPP for Northwest Slopes | 11 |
| Table 5: Summary of environmental safeguards to be implemented | 19 |



1. Introduction

This Ecological Assessment Report (EAR) has been prepared by Access Environmental Planning (Access EP) for the land owner, with respect to a proposed subdivision at 277 Black Springs Road, Eurunderee NSW, approximately 7.5 km north-east of Mudgee (**Figure 1**). The planned subdivision will result in the formation of Lot 5 / DP 1223039 and allows provision of a building envelope for a future residential house.

This report addresses the impact of the proposed development on the vegetation and ecological values identified in the Mid-Western Regional Council (MWRC) Terrestrial Biodiversity mapping. A test of significance as prescribed by the Biodiversity Conservation Act 2016 is included.

In accordance with the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act 1999) a Protected Matters Search was performed on 12/03/2025 from which an EPBC Act Protected Matters Report was rendered. Details regarding the search are included later in this report.

A Bionet Atlas search was performed to establish species in or near the proposed site (NSW Government, 2025). The Bionet search performed on 12/03/2025 returned a total of 18 records of 8 species, within a 10 km² area around the site. Due to the already disturbed development site and nature of the planned activity, potential threatened species are not likely to be affected by the proposed development.

| Project Name | 277 Black Springs Road – Subdivision |
|-----------------|--------------------------------------|
| Proponent | Land holder |
| Project Manager | Mr. Mark Hitchenson |
| Contact Details | P: 0409 458 388 |

Table 1: Proponent details

2. Site Details

2.1. Project Location and Context

- Street address is 277 Black Springs Road, Eurunderee, which is formally identified as Lot 3 DP1223039 (proposed creation of Lot 5 / DP 1223039) (Figures 2 and 3).
- Mid-Western Regional Council (MWRC) Local Government Area (LGA).
- Distance from main centres or localities: 7.5 km north-east of Mudgee.





Figure 1: Site context plan



The proposed Lot will be 34.06 ha in size and has some irregularity in shape. The site has areas of moderately consistent topography near the proposed building envelope which gently slopes away in every direction. There is a small section of a minor (second Strahler stream order) waterway at the south to south-eastern corner of the site and an unmarked minor watercourse to the west of the proposed building envelope. The subject land has broadly consistent scribbly gum and rough barked apple dry sclerophyll forest type vegetation in the western section. The building envelope will be located on the south-eastern grassland portion of the proposed Lot, positioned to avoid native vegetation as much as possible.

Approximate mid-point of proposed building envelope: latitude: -32.5351, longitude: 149.6311

The site is in the NSW South Western Slopes bioregion and the Inland Slopes sub-region of the Interim Biogeographic Regionalisation for Australia (IBRA) classification.

The site is zoned both R5 (large lot residential) and C3 (environmental management), with the proposed building envelope being located within the former. It is proposed to modify the zone boundary but there is no development planned for the new section of R5 land (currently zoned C3).

2.2. Project Description and Background

2.2.1. Detailed Scope of Works

The proponent plans the development which will include:

- Subdivision (existing two Lot to three Lot),
- Modification to the R5 and C3 zone boundaries on the proposed new Lot 5, and
- Provision of a 20 m x 20 m building envelope.

3. Statutory and Planning Framework

3.1. Environmental Planning and Assessment Act 1979

Assessment of the proposal against the provisions of Clause 4.15 of the Environmental Planning and Assessment Act and related planning instruments (Local Environment Plan (LEP), any Development Control Plan (DCP) and appropriate state environmental planning policies (SEPPs)) provided to MWRC in a separate Statement of Environmental Effects.



3.2. Other Environmental Legislation

Table 2: Summary of other environmental legislation

| Legislation | Relevance to the Proposed Activity |
|--|---|
| COMMONWEALTH LEG | ISLATION |
| Environmental Protection and Biodiversity Conservation Act 1999 (EPBC Act) | The EPBC Act protects matters of <u>National Environmental Significance</u> (MNES), such as threatened species and ecological communities, migratory species (protected under international agreements), and National Heritage places (among others). There will be no significant impacts to any MNES. |
| STATE LEGISLATION | |
| <i>Biodiversity Conservation Act 2016</i> (BC Act) | Part 7 of the BC Act provides the environmental assessment requirements for activities being assessed under Part 4 of the EP&A Act 1979, where the Biodiversity Offset Scheme (BOS) is not applicable. If a significant impact is likely, a Species Impact Statement is required. A test of significance has been completed for those threatened species that may potentially use the site. |
| <i>Local Land Services Act 2013</i> (LLS Act) | The objects of the LLS Act are 'to ensure the proper management of natural resources in the social, economic and environmental interests of the State, consistently with the principles of ecologically sustainable development. Typically, regarding clearing of native vegetation for allowable activities on land for primary production. The land zoning (R5 and C3) means the subject land is excluded from the provisions of the LLS Act. |
| Fisheries Management Act 1995 (FM Act) | FM Act provides for the protection, conservation, and recovery of threatened species, populations and ecological communities of fish and marine vegetation and fish habitats, as well as promoting the development and sharing of fishery resources in NSW. Works will not impact any key fish habitat areas that are protected under the Fisheries Management Act. (Appendix G). |
| Heritage Act 1977 | The proposed activity does not involve an item or place listed on the NSW <u>State</u> <u>Heritage Register</u> or the subject of an interim heritage order or listing and is therefore not a controlled activity. Approval of works on the site is therefore not required under Part 4 of the Heritage Act. |
| Protection of the Environment Operations Act 1997 (POEO Act) | The POEO Act is the key environmental protection and pollution statute, administered by the EPA with a licensing regime for waste, air, water and pollution. Any work potentially resulting in pollution must comply with the POEO Act. Relevant licences must be obtained if required. No licences (including an Environmental Protection Licence (EPL)) have been identified as being required. |



| Water Management Act 2000 (WM Act) | The WM Act's main objective is to manage NSW water in a sustainable and integrated manner that will benefit today's generations without compromising future generations' ability to meet their needs. Section 91E of the Act establishes an approval regime for controlled activities within waterfront land. As the site is not on waterfront land and the proposal does not deal with storage or movement of water resources, approval under the WM Act is not required. |
|---|---|
| Biosecurity Act 2015 | The <i>Biosecurity Act 2015</i> and regulations provide requirements for state level priority weeds. The Act regulates all plants, with a general biosecurity duty to prevent, eliminate or minimise any biosecurity risk they may pose. A small number of individual <i>Hypericum perforatum</i> (St John's Wort) were present on site and land managers should mitigate the spread of the plant from their land. |
| State Environmental Planning Policy (Biodiversity and Conservation) 2021 | Aims to encourage the conservation and management of areas of natural vegetation that provide habitat for Koalas (<i>Phascolarctos cinereus</i>). Chapter 4 relating to koala habitat protection (2021) is the applicable chapter due to land zoning on land that has an area of greater than 1 ha, in MWRC LGA. The woody vegetation in the western zone of the subject land satisfies criteria for core koala habitat. The proposal can however be considered because future development will occur only to the grassland portion of the intended Lot, that does not contain koala habitat and is not a likely access route to other koala habitat (woody vegetation connectivity is only in the western area of the proposed Lot). |





Figure 2: Plan of proposed subdivision.





Figure 3: Plan of proposed subdivision with aerial imagery.





Figure 4: Site plan showing vegetation.

6



4. Ecological Assessment

The site was inspected on 13/03/2025 by Renae Hill and Tom McAlpine through pedestrian survey and vegetation plots and all species within the survey were documented (**Figure 4**).

4.1 Vegetation

Plant species identified in vegetation plots are shown below:

| Grassland | |
|-------------------------|------------------------|
| Scientific Name | Common Name |
| Bothriochloa macra | Red Grass |
| Cynodon dactylon | Couch grass |
| Carthamus lanatus* | Saffron Thistle |
| Centaurea solstitialis* | St Barnaby's Thistle |
| Cineraria lyratiformis* | African Marigold |
| Cirsium vulgare* | Spear Thistle |
| Conyza spp. | - |
| Digitaria ischaemum* | - |
| Digitaria ramularis | - |
| Echium plantagineum* | Paterson's Curse |
| Eragrostis lacunaria | Purple Love-grass |
| Euchiton sphaericus | - |
| Hypericum perforatum* | St John's Wort |
| Hypochaeris radicata* | Catsear |
| Juncus usitatus | - |
| Paspalum dilatatum* | Paspalum |
| Portulaca oleracea | Pigweed |
| Setaria pumila | Pale Pigeon Grass |
| Sporobolus creber | Western Rat-tail Grass |
| Tribulus terrestris* | Cat-head |
| Verbena bonariensis* | Purpletop |
| Vittadinia pterochaeta | Rough Fuzzweed |
| Vittadinia cuneata | Fuzzweed |
| Xanthium spinosum* | Bathurst burr |
| *Denotes exotic species | |

Bushland

Scientific Name Acacia buxifolia Acacia implexa Angophora floribunda Aristida benthamii Bothriochloa macra Bursaria spinosa Callitris endlicheri Calotis cuneifolia

Common Name box-leaf Wattle hickory Wattle Rough-barked Apple Three-awned spear grass Red Grass Australian Blackthorn Black Cypress Pine Purple Burr-Daisy



Cassinia quinquefaria Cassinia sifton Eucalyptus rossii Hardenbergia violacea Persoonia sp. Rytidosperma fulvum Senecio jacobaea* Wahlenbergia gracilenta * Denotes exotic species

Fauna species identified on site Scientific Name Egretta novaehollandiae Gymnorhina tibicen Rhipidura leucophrys Macropus giganteus Corcorax melanorhamphos Corvus coronoides Grallina cyanoleuca Cacatua galerita Struthidea cinerea Sifton Bush Inland Scribbly Gum False Sarsaparilla

Wallaby Grass Ragwort Annual Bluebell

Common Name White-faced Heron Australian Magpie Willie Wagtail Eastern Grey Kangaroo White-winged Chough Australian Raven Magpie-lark Sulphur-crested cockatoo Apostlebird



Photo 1: Proposed building envelope, grassland.



Native plants contained in the grassland consisted of five grass and four forb species with a total coverage of 13%. The majority (10%) of the endemic plant component was comprised of *Cynodon dactylon* (couch grass) a widely cultivated native plant. The native species composition and coverage means the grassland is of low conservation value with no identifiable associated plant community type (**Photo 1**).

The western area of the subject land has plant community types (PCTs) identified by State Vegetation Type Mapping (SVTM) (available using the Sharing and Enabling Environmental Data (SEED) online portal) (**Figure 5**).

PCT 324 – Inland Scribbly Gum grassy open forest on hills in the Mudgee Region, NSW central western slopes.



Figure 5: State vegetation type mapping (SVTM) for the Lot including building envelope (SEED)

PCT 324 - Inland Scribbly Gum grassy open forest on hills in the Mudgee Region, NSW central western slopes

Mid-high woodland to open forest dominated by inland scribbly gum (*Eucalyptus rossii*). Other tree species include red stringybark (*Eucalyptus macrorhyncha*), black cypress pine (*Callitris endlicheri*) and long-leaved box (*Eucalyptus goniocalyx*). The shrub layer is very sparse and may include Olearia elliptica subsp. Elliptica, Acacia gunnii, Hibbertia acicularis, Melichrus urceolatus, Podolobium ilicifolium, and Platysace ericoides, with the climber Billardiera scandens var. scandens often present. The ground cover is mid-dense with rock outcrops common. Grasses include Monachather paradoxus, Austrodanthonia fulva, Poa sieberiana var. sieberiana, Dichelachne sieberiana and Chionochloa pallida. The mat-rushes Lomandra filiformis subsp. Coriacea and Lomandra confertifolia subsp. Rubiginosa may be common along with the rock fern Cheilanthes sieberi. Forb species include Stellaria pungens, Brachyscome ciliaris var. subintegrifolia, Daucus glochidiatus, Hydrocotyle laxiflora, Oxalis exilis and Pomax umbellata. Occurs on skeletal soils on upper hill slopes and in hill landscapes around Mudgee in the central western slopes region NSW.

12% cleared in NSW.

There are no associated threatened ecological communities (TEC).



4.2 Biodiversity Values Map

Clearing of any vegetation identified on the biodiversity values map (BVM) (**Figure 6**) immediately triggers entry into the Biodiversity Offset Scheme (BOS), requiring assessment and reporting using the Biodiversity Assessment Method (BAM) 2020 framework. In this case, whilst most of the proposed Lot is on the BVM, the proposed building envelope is not and no clearing or modification to any vegetation identified on the BVM will occur.



Figure 6: BVM does not identify any areas on the proposed building envelope.



The other trigger for the BOS is an area threshold based on the minimum Lot size for the landholding (**Table 3**). For the subject Lot up to 0.5 ha (5000 m²) is allowed clearing before the BOS would be triggered and a Biodiversity Development Assessment Report (BDAR) required. No clearing of significant native vegetation will be required.

| Minimum lot size associated with the property | Threshold for clearing, above which the Biodiversity Assessment Method and Biodiversity Offsets Scheme apply |
|---|---|
| Less than 1 ha | 0.25 ha or more |
| 1 ha to less than 40 ha | 0.5 ha or more |
| 40 ha to less than 1000 ha | 1 ha or more |
| 1,000 ha or more | 2 ha or more |

Table 3: BOS native vegetation clearing threshold (NSW Government, 2024)

4.3 Koala Habitat

Koala Habitat Protection (KHP) for the subject land is dealt with under Chapter 4 of the Biodiversity and Conservation SEPP 2021 which applies due to the R5 land zoning, with an area of greater than 1 hectare in the Mid-Western Regional Council LGA. The pertinent definition from this chapter is *core koala habitat*, which are areas of native vegetation where 15% of the specific koala use trees (as listed (**Table 4**)) make up the total number of trees within any Plant Community Type (PCT).

The vegetated portion of the subject land does present as *core koala habitat* due to the presence of rough barked apple (*Angophora floribunda*) being in excess of 15 % of the tree canopy and records of koala sightings within 5 km of the site recorded in the last 18 years. However, no vegetation is to be cleared within the development footprint and no direct or indirect impacts to koala habitat will occur in the building envelope.

| Scientific Name | Common Name |
|--------------------------|--------------------------|
| Angophora floribunda | Rough-barked Apple |
| Callitris glaucophylla | White Cypress Pine |
| Casuarina cristata | Belah |
| Eucalyptus albens | White Box |
| Eucalyptus blakelyi | Blakely's Red Gum |
| Eucalyptus bridgesiana | Apple Box |
| Eucalyptus caleyi | Drooping Ironbark |
| Eucalyptus caliginosa | Broad-leaved Stringybark |
| Eucalyptus camaldulensis | River Red Gum |
| Eucalyptus canaliculata | Large-fruited Grey Gum |
| Eucalyptus chloroclada | Dirty Gum |
| Eucalyptus conica | Fuzzy Box |

Table 4: Koala use trees from KHP 2021 SEPP for Northwest Slopes.



| Eucalyptus coolabah | Coolibah |
|---------------------------|---------------------------|
| Eucalyptus crebra | Narrow-leaved Ironbark |
| Eucalyptus dalrympleana | Mountain Gum |
| Eucalyptus dealbata | Tumbledown Red Gum |
| Eucalyptus dwyeri | Dwyer's Red Gum |
| Eucalyptus exserta | Peppermint |
| Eucalyptus fibrosa | Broad-leaved Red Ironbark |
| Eucalyptus goniocalyx | Bundy |
| Eucalyptus laevopinea | Silver-top Stringybark |
| Eucalyptus largiflorens | Black Box |
| Eucalyptus macrorhyncha | Red Stringybark |
| Eucalyptus mannifera | Brittle Gum |
| Eucalyptus melanophloia | Silver-leaved Ironbark |
| Eucalyptus melliodora | Yellow Box |
| Eucalyptus microcarpa | Western Grey Box |
| Eucalyptus moluccana | Grey Box |
| Eucalyptus nobilis | Forest Ribbon Gum |
| Eucalyptus parramattensis | Parramatta Red Gum |
| Eucalyptus pauciflora | White Sally, Snow Gum |
| Eucalyptus pilligaensis | Narrow-leaved Grey Box |
| Eucalyptus polyanthemos | Red Box |
| Eucalyptus populnea | Bimble Box/Poplar Box |
| Eucalyptus prava | Orange Gum |
| Eucalyptus punctata | Grey Gum |
| Eucalyptus quadrangulata | White-topped Box |
| Eucalyptus sideroxylon | Mugga Ironbark |
| Eucalyptus viminalis | Ribbon Gum |

4.4 Test of Significance

The assessment of significance must be completed when a threatened species may be impacted in accordance with the requirements of section 1.7 of the *Environmental Planning and Assessment Act 1979* and the Assessment of Significance under Section 7.3 the *Biodiversity Conservation Act* 2016.

The area was assessed according to the impact of the proposed works on habitat and potential habitat for threatened species that may use or are likely to utilise the subject site.



Assessment of Significance (NSW BC Act 2016)

As per section 7.3 the *Biodiversity Conservation Act 2016*, the following factors must be taken into account when making a determination of an activity or development:

(a) in the case of a threatened species, whether the proposed development or activity is likely to have an adverse effect on the life cycle of the species such that a viable local population of the species is likely to be placed at risk of extinction,

Plants

Scientific Name Acacia ausfeldii Acacia meiantha Acacia phasmoides Ammobium craspedioides Amphibromus fluitans Austrostipa wakoolica Bossiaea fragrans Caesia parviflora var. minor Caladenia arenaria Caladenia concolor Caladenia rosella Caladenia tessellata Carex raleighii Dichanthium setosum Eucalyptus aggregata Eucalyptus alligatrix subsp. alligatrix Eucalyptus cannonii Eucalyptus robertsonii subsp. hemisphaerica Euphrasia arguta Euphrasia collina subsp. muelleri Grevillea wilkinsonii Homoranthus darwinioides Indigofera efoliata Leucochrysum albicans subsp. tricolor Persoonia marainata Pilularia novae-hollandiae Pimelea bracteata Pomaderris cotoneaster Pomaderris queenslandica Prasophyllum petilum Pultenaea humilis Senecio garlandii Swainsona recta Swainsona sericea Thesium australe Tylophora linearis

Common Name Ausfeld's Wattle Barradam-bang Wattle **Phantom Wattle** Yass Daisy Floating Swamp Wallaby-grass A spear-grass **Bossiaea** fragrans Small Pale Grass-lily Sand-hill Spider Orchid **Crimson Spider Orchid Rosella Spider Orchid** Thick Lip Spider Orchid Raleigh Sedge Bluegrass Black Gum Eucalyptus alligatrix subsp. alligatrix **Capertee Stringybark Robertson's Peppermint** Euphrasia arguta Mueller's Eyebright **Tumut Grevillea** Fairy Bells Leafless Indigo Hoary Sunray Clandulla Geebung Austral Pillwort **Rice flower Cotoneaster Pomaderris** Scant Pomaderris Tarengo Leek Orchid **Dwarf Bush-pea** Woolly Ragwort Small Purple-pea Silky Swainson-pea Austral Toadflax

Tylophora linearis



Zieria ingramii Zieria obcordata

Keith's Zieria Granite Zieria

Random meander of the proposed development site was undertaken and areas of proposed disturbance were traversed looking for potential threatened species. No threatened plants were observed during the site visit. There are limitations to the site inspection and some species may not have been encountered due to the plants' cryptic nature and possible senescence, however the previous agricultural use of the land makes the persistence of any threatened plant very unlikely. There are no shrubs or trees where the building envelope has been allocated.

Birds of Prey

| Scientific Name | Common Name |
|--------------------------|-------------------------|
| Circus assimilis | Spotted Harrier |
| Falco hypoleucos | Grey Falcon |
| Falco subniger | Black Falcon |
| Haliaeetus leucogaster | White-bellied Sea-Eagle |
| Hamirostra melanosternon | Black-breasted Buzzard |
| Hieraaetus morphnoides | Little Eagle |
| Lophoictinia isura | Square-tailed Kite |
| Pandion cristatus | Eastern Osprey |

None were observed during site visit. Birds of prey typically have large hunting ranges and can search for prey in cleared areas. Changes to the site for the proposed building envelope will not modify vegetation enough to impact significantly on nesting options or food resources.

Owls

| Scientific Name | Common Name |
|----------------------|--------------|
| Ninox connivens | Barking Owl |
| Ninox strenua | Powerful Owl |
| Tyto novaehollandiae | Masked Owl |

Owls require mature trees with large hollows (more than 20 cm across) – no trees containing adequately sized hollows were observed at the site.

Woodland Birds

| Scientific Name | Common Name |
|---------------------------------|---|
| Anthochaera phrygia | Regent Honeyeater |
| Aphelocephala leucopsis | Southern Whiteface |
| Artamus cyanopterus cyanopterus | Dusky Woodswallow |
| Certhionyx variegatus | Pied Honeyeater |
| Climacteris picumnus victoriae | Brown Treecreeper (eastern subspecies) |
| Daphoenositta chrysoptera | Varied Sittella |
| Grantiella picta | Painted Honeyeater |
| Hirundapus caudacutus | White-throated Needletail |
| Lathamus discolor | Swift Parrot |
| Melanodryas cucullata cucullata | South-eastern Hooded Robin |
| Melithreptus gularis gularis | Black-chinned Honeyeater (eastern subspecies) |
| Neophema chrysostoma | Blue-winged Parrot |
| Neophema pulchella | Turquoise Parrot |
| | |



Pachycephala inornata Parvipsitta porphyrocephala Parvipsitta pusilla Petroica boodang Petroica phoenicea Petroica rodinogaster Polytelis swainsonii Pomatostomus temporalis temporalis Pycnoptilus floccosus Pyrrholaemus sagittatus Stagonopleura guttata

Gilbert's Whistler Purple-crowned Lorikeet Little Lorikeet Scarlet Robin Flame Robin Pink Robin Superb Parrot Grey-crowned Babbler (eastern subspecies) Pilotbird Speckled Warbler Diamond Firetail

Woodland birds require structural diversity in plant communities, flowering understorey plants and access to native grasses. The proposed development will not modify the quantity, quality or access of any such resources to any significant extent and existing habitat resources will remain across the remainder of the site.

Cockatoos

| Scientific Name | Common Name |
|---------------------------------|-------------------------------------|
| Callocephalon fimbriatum | Gang-gang Cockatoo |
| Calyptorhynchus lathami lathami | South-eastern Glossy Black-Cockatoo |

Allocasuarinas, the preferred feed species for the glossy black cockatoo, were not growing in the assessed areas of the site and minimal water access would limit site use by the gang-gang cockatoo. Changes to site ecological resources are unlikely to reduce habitat required for these species.

Water Birds

| Scientific Name | Common Name |
|----------------------------|--------------------------|
| Anseranas semipalmata | Magpie Goose |
| Botaurus poiciloptilus | Australasian Bittern |
| Ephippiorhynchus asiaticus | Black-necked Stork |
| Ixobrychus flavicollis | Black Bittern |
| Limosa limosa | Black-tailed Godwit |
| Oxyura australis | Blue-billed Duck |
| Rostratula australis | Australian Painted Snipe |
| Stictonetta naevosa | Freckled Duck |
| Tringa nebularia | Common Greenshank |

These birds require swamps, wetlands or ephemeral wet areas which do not exist at the site and will not be affected by site activities.

| Amphibians | |
|-------------------------|--------------------|
| Scientific Name | Common Name |
| Crinia sloanei | Sloane's Froglet |
| Litoria booroolongensis | Booroolong Frog |
| Litoria raniformis | Southern Bell Frog |

Found in rainforest, wet open forest and disturbed habitat, there are no areas within the proposed building envelope that may support refuge for these frogs and therefore no possible effect on their life cycle.



Reptiles

| Scientific Name | Common Name |
|---------------------------|----------------------------|
| Aprasia parapulchella | Pink-tailed Legless Lizard |
| Delma impar | Striped Legless Lizard |
| Hoplocephalus bitorquatus | Pale-headed Snake |
| Varanus rosenbergi | Rosenberg's Goanna |

Both the pink-tailed and striped legless lizard inhabit grassland associated with *Themeda triandra* (kangaroo grass) of which none was present at site. The dry eucalypt forest that the pale-headed snake occurs in is present within the vegetated parcel of the Lot, none of which will be disturbed. Termite mounds which are utilised as nests by Rosenberg's goanna were not present on site. Therefore, adverse effects on the life cycle of such species, jeopardising a viable local population, is unlikely.

Mammals

| Scientific Name | Common Name |
|------------------------|---------------------------|
| Cercartetus nanus | Eastern Pygmy-possum |
| Dasyurus maculatus | Spotted-tailed Quoll |
| Petauroides volans | Southern Greater Glider |
| Petaurus australis | Yellow-bellied Glider |
| Petaurus norfolcensis | Squirrel Glider |
| Petrogale penicillata | Brush-tailed Rock-wallaby |
| Phascogale tapoatafa | Brush-tailed Phascogale |
| Phascolarctos cinereus | Koala |

Whilst the Lot does contain habitat suitable for all of the mammals, these habitat resources are not present within the building envelope and no clearing of the vegetated parcel of the Lot will occur. Therefore, no significant impact to any possible population is likely to occur.

Bats

| Scientific Name | Common Name |
|--------------------------------|-------------------------------|
| Chalinolobus dwyeri | Large-eared Pied Bat |
| Chalinolobus picatus | Little Pied Bat |
| Falsistrellus tasmaniensis | Eastern False Pipistrelle |
| Miniopterus orianae oceanensis | Large Bent-winged Bat |
| Myotis macropus | Southern Myotis |
| Pteropus poliocephalus | Grey-headed Flying-fox |
| Saccolaimus flaviventris | Yellow-bellied Sheathtail-bat |
| Scoteanax rueppellii | Greater Broad-nosed Bat |

Types of ecological resources used are tree hollows, loose bark, buildings or other built structures, caves and derelict mines. Food sources include beetles, moths, flying insects, nectar and pollen. There are no trees with hollows that will be impacted by future site works. Other types of habitat assets will not be affected by the proposed site use and resulting changes would not create a significant impact on a viable local population.

(b) in the case of an endangered ecological community or critically endangered ecological community, whether the proposed development or activity:

(i) is likely to have an adverse effect on the extent of the ecological community such that its local occurrence is likely to be placed at risk of extinction, or



(i) is likely to substantially and adversely modify the composition of the ecological community such that its local occurrence is likely to be placed at risk of extinction.

The endangered ecological communities (EECs) identified as potentially occurring at the site are:

- Coolac-Tumut serpentinite shrubby woodland in the NSW South Western Slopes and South Eastern Highlands bioregions site is not within the Coolac-Tumut area
- Fuzzy Box Woodland on alluvial soils of the South Western Slopes, Darling Riverine Plains and Brigalow Belt South Bioregions no fuzzy box present on site
- Inland grey box woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South Bioregions no Inland grey box present on site
- Sandhill pine woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregions no white cypress pine present on site
- White box yellow box Blakely's red gum grassy woodland and derived native grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions – No white box, yellow box, or Blakely's red gum present on site

As these possible endangered or critically endangered ecological communities do not occur on the subject land there can be no effect on the extent or composition of any such community.

- (c) in relation to the habitat of a threatened species, population or ecological community:
 - (i) the extent to which habitat is likely to be removed or modified as a result of the action propose, and
 - (ii) whether an area of habitat is likely to become fragmented or isolated from other areas of habitat as a result of the proposed action, and
 - (iii) the importance of the habitat to be removed, modified, fragmented or isolated to the longterm survival of the species, population or ecological community in the locality.

Disturbance resulting from the proposed development plan is small in the context of the subject Lot and surrounding rural landscape. No clearing of significant native vegetation for the proposed building envelope is required due to is location within the grassland area of the subject land.

Possible fragmentation and isolation effects are negligible because the planned disturbance is very minor and the native woody vegetation is exclusively outside of the grassland parcel of the Lot, to the west. Potential future development is in the areas previously used for agriculture and surrounding land to the east contains primary production zones with minimal native vegetation.

The vegetation that may be removed or impacted by site activities is not critically important because it is grassland of low conservation value dominated by exotic species.

(d) whether the proposed development or activity is likely to have an adverse effect on any declared area of outstanding biodiversity value (either directly or indirectly).

Whilst there are areas of high biodiversity within the Lot, the proposed house site is situated with a majority exotic grassland of low conservation value. There are no declared areas of outstanding biodiversity values within or near the site.



(e) whether the proposed development or activity constitutes or is part of a key threatening process or is likely to result in the operation of, or increase the impact of, a key threatening process (KTP).

The KTPs applicable to this development include:

Clearing of native vegetation - there is no clearing of native vegetation required for the proposed house site.

Competition and environmental degradation by feral animals including the rabbit, fox, goat, deer, pig, dog, cat – the proposed activity will not introduce feral animals and will not improve any reproductive or competitive life cycle advantage for existing pest animals that may occur at the site.

High frequency fire resulting in the disruption of life cycle processes in plants and animals and loss of vegetation structure and composition – the use of the site for a residential dwelling house is likely to reduce the frequency and potentially the severity of fire in the area. Therefore effects on life cycle processes for plants and animals will not be exacerbated by the proposed development.

Invasion and establishment of exotic plants, perennial grasses, vines and scramblers –Introduction of weedy species, garden escapee plants, non-native perennial grasses and foreign vines and scramblers can be limited by community education efforts and conditions requiring local native plants for landscaping. There is also a distance buffer to significant native vegetation which will help prevent future incursion of non-native species.

Loss of Hollow-bearing Trees - no hollow bearing trees will be removed for the proposed development.

Removal of dead wood and dead trees – dead wood and dead trees are important for habitat and nutrient cycling for plants and animals. No trees are to be removed.

Anthropogenic Climate Change – built structures will add to climate change processes. This contribution is minimised by using sustainable building principles, solar power options, water tanks and 'off-grid' site principles for the residential arrangements and the use of emerging non-fossil fuel for vehicular transport.

The proposed development will therefore not add significantly to any of the relevant KTPs.

<u>Conclusion regarding significance under the NSW BC Act listed species, ecological communities or</u> <u>populations</u>

As the proposed activities are being undertaken on previously disturbed areas of grassland with little to no conservation value and no clearing is necessary there is no significant impact to any threatened species or their habitat, EEC or CEEC and contribution to KTPs is negligible.



5. Summary

Table 5: Summary of environmental safeguards to be implemented for future works.

| Safeguards for the proposed w | ork |
|-------------------------------|--|
| General | All project workers will be inducted on the environmental sensitivities of the work site(s) and relevant safeguards prior to commencement. All work will be limited to the prescribed area. |
| | Site management will comply with the provisions of Landcom's " <u>Blue</u> <u>Book (Managing Urban Stormwater: Soils and construction - Volume 1</u> $(4^{th} edition)$. |
| | Sediment will be prevented from moving off the site and no sediment laden water will enter drainage lines or watercourses. Any fuels or chemicals must be stored in bunded areas with functional spill kits and containment procedures available for use. |
| | Should unexpected, threatened species be located at any time during future work, activities will stop, to prevent harm to the individual and professional advice will be sought. |
| | Vegetation disturbance will be kept to the minimum necessary. Works are not to harm threatened fauna or impede fauna movement. Construction machinery should be cleaned before entering and leaving the site to ensure biosecurity risks are minimised. |
| | Waste and excess materials should be removed to a licensed waste disposal facility and the site and ground surfaces restored at the completion of building activity. |



6. Certification, Review and Decision

This Ecological Assessment Report provides a true and fair review of the ecological attributes of the proposed development site and the proposal in relation to its potential effects on the environment. It addresses to the fullest extent possible all matters affecting or likely to affect the environment as a result of the proposal. It identifies the likely impacts of the proposal on the environment and details the environmental safeguards and mitigation measures to be implemented to minimise the potential impact to the environment. In light of the above assessment of the proposed activity, it is considered that the overall impact on the environment is likely to be minimal and therefore acceptable.

EAR Author Name: Tom McAlpine Title: Field Officer – Access Environmental Planning Date: 9th April 2025 <u>Reviewed by:</u> Name: Tahnee Coull & Renae Hill Title: Project Officer and Project Manager – Access Environmental Planning

Date: 9th April 2025 & 16th April 2025



7. References

- Department of Climate Change, Energy, the Environment and Water. (2024). *Protected Matters Search Tool*. Retrieved from https://www.dcceew.gov.au/environment/epbc/protected-matters-search-tool
- NSW Department of Environment and Climate Change (2008). Managing Urban Stormwater: Soils and construction Volume 2C (Unsealed roads) (<u>https://www.environment.nsw.gov.au/research-and-publications/publications-search/managing-urban-stormwater-soils-and-construction-volume-2c-unsealed-roads</u>)
- NSW Department of Climate Change, Energy, the Environment and Water. (2024). Sharing and Enabling Environmental Data (SEED)
- NSW Department of Planning, Industry and Environment. (2021). Koala SEPP 2021 Factsheet. NSW Department of Planning, Industry and Environment.
- NSW Government. (2024). *Biodiversity assessments and calculation of the scheme entry requirements*. Retrieved from NSW Government; Environment and Heritage: https://www.environment.nsw.gov.au/topics/animals-and-plants/biodiversity-offsetsscheme/clear-and-develop-land/assessments-calculation-scheme-entry-requirements
- NSW Government. (2025). *Species sightings search*. Retrieved from BIONET: https://atlas.bionet.nsw.gov.au/UI_Modules/ATLAS_/AtlasSearch.aspx

NSW Government. (2025). BioNet Vegetation Classification. Retrieved from NSW Government: https://vegetation.bionet.nsw.gov.au/LoginPR.aspx?ReturnUrl=%2fdefault.aspx



Appendix A – Historical Imagery



Development site 2009 (Google).





1993 - https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccddda8075238cb#





1980 - image https://portal.spatial.nsw.gov.au/portal/apps/webappviewer/index.html?id=f7c215b873864d44bccddda8075238cb#



Appendix B – Bionet Atlas Search Results

Search criteria: Public Report of all Valid Records of Threatened (listed on BC Act 2016) ,Commonwealth listed ,CAMBA listed ,JAMBA listed or ROKAMBA listed Entities in selected area [North: -32.48 West: 149.58 East: 149.68 South: -32.58] returned a total of 18 records of 8 species. Report generated on 12/03/2025 9:19 AM.

| | Common name | Scientific name | Map [<u>Clear all</u>] | <u>NSW</u> status | <u>Comm.</u> status | No. of records |
|--|----------------------------|---------------------------------|-----------------------------|----------------------|------------------------|-------------------|
| Animalia Aves Accipitridae | Little Eagle | Hieraaetus morphnoides | | V,P | | 1 |
| Gruidae | Brolga | Antigone rubicunda | | V,P | | 1 |
| Meliphagidae | Regent Honeyeater | ^Anthochaera phrygia | | E4A,P,2 | CE | 1 |
| Artamidae | Dusky Woodswallow | Artamus cyanopterus cyanopterus | | V,P | | 1 |
| Petroicidae | South-eastern Hooded Robin | Melanodryas cucullata cucullata | | E1,P | E | 1 |
| Mammalia Phascolarctidae | Koala | Phascolarctos cinereus | | E1,P | E | 8 |
| Pteropodidae | Grey-headed Flying-fox | Pteropus poliocephalus | | V,P | V | 3 |
| Plantae Flora Fabaceae (Mimosoideae) | Ausfeld's Wattle | Acacia ausfeldii | | V | | 2 |









Appendix C – Threatened Species Search

For the NSW South Western Slopes IBRA bioregion and Inland Slopes IBRA subregion:

| Scientific Name | Common Name | Type Of Species | NSW Status | Occurrence |
|------------------------------------|---------------------------------|--------------------------|--------------------------|------------|
| Acacia ausfeldii | Ausfeld's Wattle | Plant>Shrubs | Vulnerable | Known |
| Acacia meiantha | Barradam-bang Wattle | Plant>Shrubs | Endangered | Predicted |
| Acacia phasmoides | Phantom Wattle | Plant>Shrubs | Vulnerable | Known |
| Ammobium craspedioides | Yass Daisy | Plant>Herbs and Forbs | Vulnerable | Known |
| Amphibromus fluitans | Floating Swamp Wallaby-grass | Plant>Herbs and Forbs | Vulnerable | Known |
| Anseranas semipalmata | Magpie Goose | Animal>Birds | Vulnerable | Known |
| Anthochaera phrygia | Regent Honeyeater | Animal>Birds | Critically Endangered | Known |
| Antigone rubicunda | Brolga | Animal>Birds | Vulnerable | Known |
| Aphelocephala leucopsis | Southern Whiteface | Animal>Birds | Vulnerable | Known |
| Aprasia parapulchella | Pink-tailed Legless Lizard | Animal>Reptiles | Vulnerable | Known |
| Ardeotis australis | Australian Bustard | Animal>Birds | Endangered | Known |
| Artamus cyanopterus cyanopterus | Dusky Woodswallow | Animal>Birds | Vulnerable | Known |
| Austrostipa wakoolica | A spear-grass | Plant>Herbs and Forbs | Endangered | Predicted |
| Bossiaea fragrans | Bossiaea fragrans | Plant>Shrubs | Critically Endangered | Known |
| Botaurus poiciloptilus | Australasian Bittern | Animal>Birds | Endangered | Known |
| Burhinus grallarius | Bush Stone-curlew | Animal>Birds | Endangered | Known |
| Caesia parviflora var. minor | Small Pale Grass-lily | Plant>Herbs and Forbs | Endangered | Known |
| Caladenia arenaria | Sand-hill Spider Orchid | Plant>Orchids | Endangered | Known |
| Caladenia concolor | Crimson Spider Orchid | Plant>Orchids | Endangered | Known |
| Caladenia rosella | Rosella Spider Orchid | Plant>Orchids | Extinct | Predicted |
| Caladenia tessellata | Thick Lip Spider Orchid | Plant>Orchids | Vulnerable | Known |
| Calidris ferruginea | Curlew Sandpiper | Animal>Birds | Critically Endangered | Known |
| Callocephalon fimbriatum | Gang-gang Cockatoo | Animal>Birds | Endangered | Known |
| Calyptorhynchus lathami | South-eastern Glossy | Animal>Birds | Vulnerable | Known |
| lathami | Black-Cockatoo | | | |
| Carex raleighii | Raleigh Sedge | Plant>Herbs and Forbs | Endangered | Known |
| Cercartetus nanus | Eastern Pygmy- possum | Animal>Marsupi als | Vulnerable | Known |
| Certhionyx variegatus | Pied Honeyeater | Animal>Birds | Vulnerable | Known |
| Chalinolobus dwyeri | Large-eared Pied Bat | Animal>Bats | Endangered | Known |
| Chalinolobus picatus | Little Pied Bat | Animal>Bats | Vulnerable | Known |
| Circus assimilis | Spotted Harrier | Animal>Birds | Vulnerable | Known |



| Climacteris picumnus victoriae | Brown Treecreeper (eastern subspecies) | Animal>Birds | Vulnerable | Known |
|--|--|---|--|--|
| Crinia sloanei | Sloane's Froglet | Animal>Amphibi ans | Endangered | Known |
| Cullen parvum | Small Scurf-pea | Plant>Herbs and Forbs | Endangered | Known |
| Daphoenositta | Varied Sittella | Animal>Birds | Vulnerable | Known |
| chrysoptera | | | | |
| Dasyurus maculatus | Spotted-tailed Quoll | Animal>Marsupi als | Vulnerable | Known |
| Delma impar | Striped Legless Lizard | Animal>Reptiles | Vulnerable | Known |
| Dichanthium setosum | Bluegrass | Plant>Herbs and Forbs | Vulnerable | Known |
| Diuris tricolor | Pine Donkey Orchid | Plant>Orchids | Vulnerable | Known |
| Ephippiorhynchus asiaticus | Black-necked Stork | Animal>Birds | Endangered | Known |
| Epthianura albifrons | White-fronted Chat | Animal>Birds | Vulnerable | Known |
| Eucalyptus aggregata | Black Gum | Plant>Trees | Vulnerable | Predicted |
| Eucalyptus alligatrix subsp. alligatrix | Eucalyptus alligatrix subsp. alligatrix | Plant>Trees | Vulnerable | Known |
| Eucalyptus cannonii | Capertee Stringybark | Plant>Trees | Vulnerable | Known |
| Eucalyptus robertsonii subsp. hemisphaerica | Robertson's Peppermint | Plant>Trees | Vulnerable | Predicted |
| Euphrasia arguta | Euphrasia arguta | Plant>Herbs and Forbs | Critically Endangered | Known |
| Euphrasia collina subsp. muelleri | Mueller's Eyebright | Plant>Herbs and Forbs | Endangered | Predicted |
| Falco hypoleucos | Grey Falcon | Animal>Birds | Vulnerable | Known |
| Falco subniger | Black Falcon | Animal>Birds | Vulnerable | Known |
| Falsistrellus tasmaniensis | Eastern False Pipistrelle | Animal>Bats | Vulnerable | Known |
| Grantiella picta | Painted Honeyeater | Animal>Birds | Vulnerable | Known |
| Grevillea wilkinsonii | Tumut Grevillea | Plant>Shrubs | Critically Endangered | Known |
| Haliaeetus leucogaster | White-bellied Sea- | Animal>Birds | Vulnerable | Known |
| | Eagle | | | |
| Hamirostra melanosternon | Black-breasted Buzzard | Animal>Birds | Vulnerable | Known |
| Hamirostra melanosternon Hieraaetus morphnoides | Black-breasted Buzzard Little Eagle | Animal>Birds Animal>Birds | Vulnerable Vulnerable | Known Known |
| Hamirostra melanosternon Hieraaetus morphnoides Hirundapus caudacutus | Black-breasted Buzzard Little Eagle White-throated Needletail | Animal>Birds Animal>Birds Animal>Birds | Vulnerable Vulnerable Vulnerable | Known Known Known |
| Hamirostra melanosternon Hieraaetus morphnoides Hirundapus caudacutus Homoranthus | Black-breasted Buzzard Little Eagle White-throated Needletail Fairy Bells | Animal>Birds Animal>Birds Animal>Birds Plant>Shrubs | Vulnerable Vulnerable Vulnerable Vulnerable | Known Known Known Predicted |
| Hamirostra melanosternon Hieraaetus morphnoides Hirundapus caudacutus Homoranthus darwinioides | Black-breasted Buzzard Little Eagle White-throated Needletail Fairy Bells | Animal>Birds Animal>Birds Animal>Birds Plant>Shrubs | Vulnerable Vulnerable Vulnerable Vulnerable | Known Known Known Predicted |
| Hamirostra melanosternon Hieraaetus morphnoides Hirundapus caudacutus Homoranthus darwinioides Hoplocephalus bitorquatus | Black-breasted Buzzard Little Eagle White-throated Needletail Fairy Bells Pale-headed Snake | Animal>Birds Animal>Birds Animal>Birds Plant>Shrubs Animal>Reptiles | Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable | Known Known Known Predicted Predicted |
| Hamirostra melanosternon Hieraaetus morphnoides Hirundapus caudacutus Homoranthus darwinioides Hoplocephalus bitorquatus Indigofera efoliata | Black-breasted Buzzard Little Eagle White-throated Needletail Fairy Bells Pale-headed Snake Leafless Indigo | Animal>Birds Animal>Birds Animal>Birds Plant>Shrubs Animal>Reptiles Plant>Shrubs | Vulnerable Vulnerable Vulnerable Vulnerable Vulnerable Endangered | Known Known Known Predicted Predicted Known |



| Keyacris scurra | Key's Matchstick Grasshopper | Animal>Inverte brates | Endangered | Known |
|--|--|--------------------------|--------------------------|-----------|
| Lathamus discolor | Swift Parrot | Animal>Birds | Endangered | Known |
| Leipoa ocellata | Malleefowl | Animal>Birds | Endangered | Known |
| Leucochrysum albicans subsp. tricolor | Hoary Sunray | Plant>Herbs and Forbs | Endangered | Known |
| Limosa limosa | Black-tailed Godwit | Animal>Birds | Vulnerable | Predicted |
| Litoria booroolongensis | Booroolong Frog | Animal>Amphibi ans | Endangered | Known |
| Litoria raniformis | Southern Bell Frog | Animal>Amphibi ans | Endangered | Known |
| Lophochroa leadbeateri | Pink Cockatoo | Animal>Birds | Vulnerable | Known |
| Lophoictinia isura | Square-tailed Kite | Animal>Birds | Vulnerable | Known |
| Melanodryas cucullata cucullata | South-eastern Hooded Robin | Animal>Birds | Endangered | Known |
| Melithreptus gularis gularis | Black-chinned Honeyeater (eastern subspecies) | Animal>Birds | Vulnerable | Known |
| Miniopterus orianae oceanensis | Large Bent-winged Bat | Animal>Bats | Vulnerable | Known |
| Myotis macropus | Southern Myotis | Animal>Bats | Vulnerable | Known |
| Neophema chrysostoma | Blue-winged Parrot | Animal>Birds | Vulnerable | Known |
| Neophema pulchella | Turquoise Parrot | Animal>Birds | Vulnerable | Known |
| Ninox connivens | Barking Owl | Animal>Birds | Vulnerable | Known |
| Ninox strenua | Powerful Owl | Animal>Birds | Vulnerable | Known |
| Nyctophilus corbeni | Corben's Long-eared Bat | Animal>Bats | Vulnerable | Known |
| Oxyura australis | Blue-billed Duck | Animal>Birds | Vulnerable | Known |
| Pachycephala inornata | Gilbert's Whistler | Animal>Birds | Vulnerable | Known |
| Pandion cristatus | Eastern Osprey | Animal>Birds | Vulnerable | Known |
| Parvipsitta porphyrocephala | Purple-crowned Lorikeet | Animal>Birds | Vulnerable | Known |
| Parvipsitta pusilla | Little Lorikeet | Animal>Birds | Vulnerable | Known |
| Persoonia marginata | Clandulla Geebung | Plant>Shrubs | Vulnerable | Predicted |
| Petauroides volans | Southern Greater Glider | Animal>Marsupi als | Endangered | Known |
| Petaurus australis | Yellow-bellied Glider | Animal>Marsupi als | Vulnerable | Known |
| Petaurus norfolcensis | Squirrel Glider | Animal>Marsupi als | Vulnerable | Known |
| Petaurus norfolcensis - endangered population | Squirrel Glider in the Wagga Wagga Local Government Area | Animal>Marsupi als | Endangered Population | Known |
| Petrogale penicillata | Brush-tailed Rock- wallaby | Animal>Marsupi als | Endangered | Known |
| Petroica boodang | Scarlet Robin | Animal>Birds | Vulnerable | Known |



| Petroica phoenicea | Flame Robin | Animal>Birds | Vulnerable | Known |
|----------------------------|----------------------------------|---------------------------------|------------|-----------|
| Petroica rodinogaster | Pink Robin | Animal>Birds | Vulnerable | Known |
| Phascogale tapoatafa | Brush-tailed | Animal>Marsupi | Vulnerable | Predicted |
| | Phascogale | als | | |
| Phascolarctos cinereus | Koala | Animal>Marsupi | Endangered | Known |
| | | als | | |
| Pilularia novae-hollandiae | Austral Pillwort | Plant>Ferns and | Endangered | Known |
| Dimelea bracteata | Pice flower | | Critically | Known |
| Filleleu blucteutu | Nice nower | | Endangered | KIIOWII |
| Polytelis swainsonii | Superb Parrot | Animal>Birds | Vulnerable | Known |
| Pomaderris cotoneaster | Cotoneaster | Plant>Shrubs | Endangered | Predicted |
| | Pomaderris | | - | |
| Pomaderris queenslandica | Scant Pomaderris | Plant>Shrubs | Endangered | Known |
| Pomatostomus temporalis | Grey-crowned Babbler | Animal>Birds | Vulnerable | Known |
| temporalis | (eastern subspecies) | | | |
| Prasophyllum petilum | Tarengo Leek Orchid | Plant>Orchids | Endangered | Known |
| Pteropus poliocephalus | Grey-headed Flying- fox | Animal>Bats | Vulnerable | Known |
| Pultenaea humilis | Dwarf Bush-pea | Plant>Shrubs | Vulnerable | Known |
| Pycnoptilus floccosus | Pilotbird | Animal>Birds | Vulnerable | Known |
| Pyrrholaemus sagittatus | Speckled Warbler | Animal>Birds | Vulnerable | Known |
| Rostratula australis | Australian Painted Snipe | Animal>Birds | Endangered | Known |
| Saccolaimus flaviventris | Yellow-bellied Sheathtail-bat | Animal>Bats | Vulnerable | Known |
| Scoteanax rueppellii | Greater Broad-nosed Bat | Animal>Bats | Vulnerable | Known |
| Senecio garlandii | Woolly Ragwort | Plant>Herbs and Forbs | Vulnerable | Known |
| Stagonopleura guttata | Diamond Firetail | Animal>Birds | Vulnerable | Known |
| Stictonetta naevosa | Freckled Duck | Animal>Birds | Vulnerable | Known |
| Swainsona recta | Small Purple-pea | Plant>Herbs and Forbs | Endangered | Known |
| Swainsona sericea | Silky Swainson-pea | Plant>Herbs and Forbs | Vulnerable | Known |
| Synemon plana | Golden Sun Moth | Animal>Inverte brates | Vulnerable | Known |
| Thesium australe | Austral Toadflax | Plant>Herbs and Forbs | Vulnerable | Known |
| Tringa nebularia | Common Greenshank | Animal>Birds | Endangered | Known |
| Tylophora linearis | Tylophora linearis | Plant>Epiphytes and Climbers | Vulnerable | Known |
| Tyto novaehollandiae | Masked Owl | Animal>Birds | Vulnerable | Known |
| Varanus rosenbergi | Rosenberg's Goanna | Animal>Reptiles | Vulnerable | Known |
| Zieria ingramii | Keith's Zieria | Plant>Shrubs | Endangered | Known |



| Zieria obcordata | Granite Zieria | Plant>Shrubs | Endangered | Known |
|------------------|----------------|--------------|------------|-------|

| Riverine Plains and Brigalow Belt South BioregionsEECKnownInland Grey Box Woodland in the Riverina, NSW South Western Slopes, Cobar Peneplain, Nandewar and Brigalow Belt South BioregionsEECKnownSandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregionsEECPredictedWhite Box - Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina BioregionsCritically EECKnownInfection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredicted |
|---|
| Cobar Peneplain, Nandewar and Brigalow Belt South BioregionsEECKnownSandhill Pine Woodland in the Riverina, Murray-Darling Depression and NSW South Western Slopes bioregionsEECPredictedWhite Box - Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina BioregionsCritically EECKnownInfection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredictedInfection of native plants by Phytophthora cinnamomiKTPPredicted |
| NSW South Western Slopes bioregions EEC Predicted White Box - Yellow Box – Blakely's Red Gum Grassy Woodland and Derived Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina Bioregions Critically EEC Known Infection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populations KTP Predicted Infection of frogs by amphibian chytrid causing the disease chytridiomycosis KTP Predicted Infection of native plants by Phytophthora cinnamomi KTP Predicted |
| White Box - Yellow Box – Blakely's Red Gum Grassy Woodland and DerivedNative Grassland in the NSW North Coast, New England Tableland,Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands,NSW South Western Slopes, South East Corner and Riverina BioregionsCritically EECInfection by Psittacine Circoviral (beak and feather) Disease affectingendangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredictedInfection of native plants by Phytophthora cinnamomiKTP |
| Native Grassland in the NSW North Coast, New England Tableland, Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina BioregionsCritically EECKnownInfection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredictedInfection of native plants by Phytophthora cinnamomiKTPPredicted |
| Nandewar, Brigalow Belt South, Sydney Basin, South Eastern Highlands, NSW South Western Slopes, South East Corner and Riverina BioregionsCritically EECKnownInfection by Psittacine Circoviral (beak and feather) Disease affecting endangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredictedInfection of native plants by Phytophthora cinnamomiKTPPredicted |
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| endangered psittacine species and populationsKTPPredictedInfection of frogs by amphibian chytrid causing the disease chytridiomycosisKTPPredictedInfection of native plants by Phytophthora cinnamomiKTPPredicted |
| Infection of frogs by amphibian chytrid causing the disease chytridiomycosis KTP Predicted Infection of native plants by Phytophthora cinnamomi KTP Predicted |
| Infection of native plants by Phytophthora cinnamomi KTP Predicted |
| |
| Introduction of the Large Earth Bumblebee Bombus terrestris (L.) KTP Predicted |
| Invasion and establishment of exotic vines and scramblers KTP Predicted |
| Invasion and establishment of Scotch Broom (Cytisus scoparius) KTP Predicted |
| Invasion and establishment of the Cane Toad (Bufo marinus) KTP Predicted |
| Invasion of native plant communities by African Olive Olea europaea subsp. |
| cuspidata (Wall. ex G. Don) Cif. KTP Predicted |
| Invasion of native plant communities by Chrysanthemoides monilifera KTP Predicted |
| Invasion of native plant communities by exotic perennial grasses KTP Predicted |
| Invasion of the Yellow Crazy Ant, Anoplolepis gracilipes (Fr. Smith) into NSW KTP Predicted |
| Invasion, establishment and spread of Lantana (Lantana camara L. sens. Lat) KTP Predicted |
| Loss and degradation of native plant and animal habitat by invasion of |
| escaped garden plants, including aquatic plants KTP Predicted |
| Loss of Hollow-bearing Trees KTP Predicted |
| Loss or degradation (or both) of sites used for hill-topping by butterflies KTP Predicted |
| Predation and hybridisation by Feral Dogs, Canis lupus familiaris KTP Predicted |
| Predation by Gambusia holbrooki Girard, 1859 (Plague Minnow or Mosquito |
| FISN) KTP Predicted |
| Predation by the European Red Fox Vulpes Vulpes (Linnaeus, 1758) KTP Predicted |
| Predation by the Feral Cat Felis catus (Linnaeus, 1758) KTP Predicted |
| Freudition, natitat degradation, competition and disease transmission by Feral Pigs Sus scrofa Linnaeus 1758 KTD Prodicted |
| Removal of dead wood and dead trees KTP Predicted |



Appendix D – Protected Matters Search



Australian Government

Department of Climate Change, Energy, the Environment and Water

EPBC Act Protected Matters Report

This report provides general guidance on matters of national environmental significance and other matters protected by the EPBC Act in the area you have selected. Please see the caveat for interpretation of information provided here.

Report created: 12-Mar-2025

| World Heritage Properties: | None |
|--|------|
| National Heritage Places: | None |
| Wetlands of International Importance (Ramsar | 4 |
| Great Barrier Reef Marine Park: | None |
| Commonwealth Marine Area: | None |
| Listed Threatened Ecological Communities: | 3 |
| Listed Threatened Species: | 38 |
| Listed Migratory Species: | 8 |

| Commonwealth Lands: | None |
|---|------|
| Commonwealth Heritage Places: | None |
| Listed Marine Species: | 18 |
| Whales and Other Cetaceans: | None |
| Critical Habitats: | None |
| Commonwealth Reserves Terrestrial: | None |
| Australian Marine Parks: | None |
| Habitat Critical to the Survival of Marine Turtles: | None |



| Wetlands of International Importance (Ramsar Wetlands) | | [Resource Information] |
|--|--|------------------------|
| Ramsar Site Name | Proximity | Buffer Status |
| Banrock station wetland complex | 800 - 900km upstream from Ramsar site | In feature area |
| Riverland | 800 - 900km upstream from Ramsar site | In feature area |
| The coorong, and lakes alexandrina and albert wetland | 900 - 1000km upstream from Ramsar site | In feature area |
| The macquarie marshes | 200 - 300km upstream from Ramsar site | In feature area |

| Listed Threatened Ecological Communities | [Resource Information] |
|--|---------------------------|
| For threatened ecological communities where the distribution is well known, maps | are derived from recovery |
| plans, State vegetation maps, remote sensing imagery and other sources. Where | threatened ecological |

plans, State vegetation maps, remote sensing imagery and other sources. Where threatened ecological community distributions are less well known, existing vegetation maps and point location data are used to produce indicative distribution maps.

Status of Vulnerable, Disallowed and Ineligible are not MNES under the EPBC Act.

| Community Name Grey Box (Eucalyptus microcarpa) Grassy Woodlands and Derived Native Grasslands of South-eastern Australia | Threatened Category Endangered | Presence Text Community likely to occur within area | Buffer Status In feature area |
|--|-----------------------------------|---|----------------------------------|
| Natural Temperate Grassland of the South Eastern Highlands | Critically Endangered | Community may occu within area | rIn feature area |
| White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland | Critically Endangered | Community likely to occur within area | In feature area |

Listed Threatened Species

| Species ID | Scientific Name | Common Name | Class | Presence Text | Threatened Category |
|------------|---|--|-------|---|--------------------------|
| 84745 | Galaxias rostratus | Flathead Galaxias, Beaked Minnow, Flat- headed Galaxias, Flat- headed Jollytail, Flat- headed Minnow | Fish | Species or species habitat may occur within area | Critically Endangered |
| 81964 | Prasophyllum sp. Wybong (C.Phelps ORG 5269) | a leek-orchid | Plant | Species or species habitat may occur within area | Critically Endangered |



| 744 | Lathamus discolor | Swift Parrot | Bird | Species or species habitat may occur within area | Critically Endangered |
|-------|--|--|------------|---|--------------------------|
| 82338 | Anthochaera phrygia | Regent Honeyeater | Bird | Species or species habitat known to occur within area | Critically Endangered |
| 4325 | Euphrasia arguta | null | Plant | Species or species habitat may occur within area | Critically Endangered |
| 856 | Calidris ferruginea | Curlew Sandpiper | Bird | Species or species habitat may occur within area | Critically Endangered |
| 77037 | Rostratula australis | Australian Painted Snipe | Bird | Species or species habitat likely to occur within area | Endangered |
| 7580 | Swainsona recta | Small Purple-pea, Mountain Swainson-pea, Small Purple Pea | Plant | Species or species habitat may occur within area | Endangered |
| 67093 | Melanodryas cucullata cucullata | South-eastern Hooded Robin, Hooded Robin (south-eastern) | Bird | Species or species habitat likely to occur within area | Endangered |
| 768 | Callocephalon fimbriatum | Gang-gang Cockatoo | Bird | Species or species habitat likely to occur within area | Endangered |
| 66632 | Macquaria australasica | Macquarie Perch | Fish | Species or species habitat may occur within area | Endangered |
| 183 | Chalinolobus dwyeri | Large-eared Pied Bat, Large Pied Bat | Mamm al | Species or species habitat likely to occur within area | Endangered |
| 75184 | Dasyurus maculatus maculatus (SE mainland population) | Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) | Mamm al | Species or species habitat likely to occur within area | Endangered |
| 55144 | Prasophyllum petilum | Tarengo Leek Orchid | Plant | Species or species habitat may occur within area | Endangered |
| 85104 | Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) | Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) | Mamm al | Species or species habitat likely to occur within area | Endangered |



| 1001 | Botaurus poiciloptilus | Australasian Bittern | Bird | Species or species habitat may occur within area | Endangered |
|-------|------------------------------------|--|------------|---|--|
| 92384 | Vincetoxicum forsteri | null | Plant | Species or species habitat may occur within area | Endangered (listed as Tylophora linearis) |
| 67036 | Calyptorhynchus Iathami lathami | South-eastern Glossy Black-Cockatoo | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 863 | Gallinago hardwickii | Latham's Snipe, Japanese Snipe | Bird | Species or species habitat may occur within area | Vulnerable |
| 10976 | Lepidium aschersonii | Spiny Peppercress | Plant | Species or species habitat may occur within area | Vulnerable |
| 470 | Grantiella picta | Painted Honeyeater | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 929 | Falco hypoleucos | Grey Falcon | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 726 | Neophema chrysostoma | Blue-winged Parrot | Bird | Species or species habitat may occur within area | Vulnerable |
| 56203 | Ozothamnus tesselatus | null | Plant | Species or species habitat may occur within area | Vulnerable |
| 59398 | Stagonopleura guttata | Diamond Firetail | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 15202 | Thesium australe | Austral Toadflax, Toadflax | Plant | Species or species habitat may occur within area | Vulnerable |
| 14159 | Dichanthium setosum | bluegrass | Plant | Species or species habitat likely to occur within area | Vulnerable |
| 83395 | Nyctophilus corbeni | Corben's Long-eared Bat, South-eastern Long- eared Bat | Mamm al | Species or species habitat likely to occur within area | Vulnerable |



| 96 | Pseudomys novaehollandiae | New Holland Mouse, Pookila | Mamm al | Species or species habitat may occur within area | Vulnerable |
|-------|-----------------------------------|--|------------|---|------------|
| 1665 | Aprasia parapulchella | Pink-tailed Worm-lizard, Pink-tailed Legless Lizard | Reptile | Species or species habitat likely to occur within area | Vulnerable |
| 529 | Aphelocephala leucopsis | Southern Whiteface | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 186 | Pteropus poliocephalus | Grey-headed Flying-fox | Mamm al | Foraging, feeding or related behaviour may occur within area | Vulnerable |
| 738 | Polytelis swainsonii | Superb Parrot | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 525 | Pycnoptilus floccosus | Pilotbird | Bird | Species or species habitat may occur within area | Vulnerable |
| 874 | Calidris acuminata | Sharp-tailed Sandpiper | Bird | Species or species habitat may occur within area | Vulnerable |
| 67062 | Climacteris picumnus victoriae | Brown Treecreeper (south-eastern) | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 934 | Leipoa ocellata | Malleefowl | Bird | Species or species habitat likely to occur within area | Vulnerable |
| 682 | Hirundapus caudacutus | White-throated Needletail | Bird | Species or species habitat known to occur within area | Vulnerable |

Listed Migratory Species

| Species ID | Scientific Name | Common Name | Presence Text | Threatened Category |
|------------|----------------------|-----------------------------------|--|------------------------|
| 863 | Gallinago hardwickii | Latham's Snipe, Japanese Snipe | Species or species habitat may occur within area | Vulnerable |



| 644 | Motacilla flava | Yellow Wagtail | Species or species habitat may occur within area | |
|-------|--------------------------|------------------------------|--|--------------------------|
| 678 | Apus pacificus | Fork-tailed Swift | Species or species habitat likely to occur within area | |
| 858 | Calidris melanotos | Pectoral Sandpiper | Species or species habitat may occur within area | |
| 874 | Calidris acuminata | Sharp-tailed Sandpiper | Species or species habitat may occur within area | Vulnerable |
| 59309 | Actitis hypoleucos | Common Sandpiper | Species or species habitat may occur within area | |
| 682 | Hirundapus caudacutus | White-throated Needletail | Species or species habitat known to occur within area | Vulnerable |
| 856 | Calidris ferruginea | Curlew Sandpiper | Species or species habitat may occur within area | Critically Endangered |



Appendix E – Assessment of Significance - EPBC

Assessment of Significance (Commonwealth EPBC Act 1999)

As per Part 3 of the Environment Protection and *Biodiversity Conservation Act 1999*, the following factors must be taken into account when considering whether the matter is a controlled activity and whether the matter needs to be referred to the Commonwealth Minister for the Environment:

(a) Are there any matters of national environmental significance located in the area of the proposed action?

The protected matters search tool (PMST) listed three possible endangered ecological communities (EEC) and 38 threatened species (nine plant species and 29 animal species) that may occur in the area.

The three EEC's potentially occurring from PMST are:

- Grey Box (*Eucalyptus microcarpa*) Grassy Woodlands and Derived Native Grasslands of Southeastern Australia (endangered)
- White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland (critically endangered)
- Natural Temperate Grassland of the South Eastern Highlands (critically endangered)

- the species composition and structure of the vegetation on site does not satisfy the characteristics for any of these communities and they do not occur on the subject land. Possible threatened species and effects to migratory fauna are not likely to occur at the proposed development site because of the lack of native vegetation.

(b) Considering the proposed action at its broadest scope (that is, considering all stages and components of the action, and all related activities and infrastructure), is there potential for impacts, including indirect impacts, on matters of national environmental significance?

Potential impacts are minor because the proposed development site is in an area of previous disturbance with low conservation value.

(c) Are there any proposed measures to avoid or reduce impacts on matters of national environmental significance (and if so, is the effectiveness of these measures certain enough to reduce the level of impact below the 'significant impact' threshold)?

The building envelope placement avoids woody native vegetation minimizing potential clearing and disturbance to resources that are more important for life cycle processes of potentially occurring threatened species.

(d) Are any impacts of the proposed action on matters of national environmental significance likely to be significant impacts (important, notable, or of consequence, having regard to their context or intensity)?

There will be no significant impacts on matters of national significance.

| Species ID | Scientific Name | Common Name | Class |
|---------------|--|--|-------|
| 84745 | Galaxias rostratus | Flathead Galaxias, Beaked Minnow, Flat-headed Galaxias, Flat-headed Jollytail, Flat-headed Minnow | Fish |
| 81964 | Prasophyllum sp. Wybong (C.Phelps ORG 5269) | a leek-orchid | Plant |
| 744 | Lathamus discolor | Swift Parrot | Bird |

Critically endangered species:



| 82338 | Anthochaera phrygia | Regent Honeyeater | Bird |
|-------|---------------------|-------------------|-------|
| 4325 | Euphrasia arguta | null | Plant |
| 856 | Calidris ferruginea | Curlew Sandpiper | Bird |

Endangered species:

| Species ID | Scientific Name | Common Name | Class |
|---------------|---|--|--------|
| 77037 | Rostratula australis | Australian Painted Snipe | Bird |
| 7580 | Swainsona recta | Small Purple-pea, Mountain Swainson-pea, Small Purple Pea | Plant |
| 67093 | Melanodryas cucullata cucullata | South-eastern Hooded Robin, Hooded Robin (south- eastern) | Bird |
| 768 | Callocephalon fimbriatum | Gang-gang Cockatoo | Bird |
| 66632 | Macquaria australasica | Macquarie Perch | Fish |
| 183 | Chalinolobus dwyeri | Large-eared Pied Bat, Large Pied Bat | Mammal |
| 75184 | Dasyurus maculatus maculatus (SE mainland population) | Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) | Mammal |
| 55144 | Prasophyllum petilum | Tarengo Leek Orchid | Plant |
| 85104 | Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) | Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) | Mammal |
| 1001 | Botaurus poiciloptilus | Australasian Bittern | Bird |
| 92384 | Vincetoxicum forsteri | null | Plant |

Significant Impact Criteria for Critically Endangered and Endangered Species

a. Will it lead to a long-term decrease in the size of a population of a species

There is no known population of any such species and the extent of vegetation change is minor, limiting possible effects on any species utilizing site resources.

b. Will it reduce the area of occupancy of the species

No reduction in potential area.

c. Will it fragment an existing important population into two or more populations

Additional fragmentation impacts are negligible.

d. Will it adversely affect habitat critical to the survival of a species

Reduction in habitat is minimal to non-existent.

e. Will it disrupt the breeding cycle of a population

Proposed site use will not inhibit critical breeding processes.

f. Will it modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline



The extent of habitat modification is minimal.

g. Will it result in invasive species that are harmful to a critically endangered or endangered species becoming established in the critically endangered or endangered species' habitat

Proposed site use will not increase the prevalence of invasive species.

h. Will it introduce disease that may cause the species to decline, or

Proposed site use will not introduce disease.

i. Will it interfere substantially with the recovery of the species?

Not Applicable (N/A)

Vulnerable species:

| Species ID | Scientific Name | Common Name | Class |
|---------------|------------------------------------|---|---------|
| 67036 | Calyptorhynchus lathami Iathami | South-eastern Glossy Black-Cockatoo | Bird |
| 863 | Gallinago hardwickii | Latham's Snipe, Japanese Snipe | Bird |
| 10976 | Lepidium aschersonii | Spiny Peppercress | Plant |
| 470 | Grantiella picta | Painted Honeyeater | Bird |
| 929 | Falco hypoleucos | Grey Falcon | Bird |
| 726 | Neophema chrysostoma | Blue-winged Parrot | Bird |
| 56203 | Ozothamnus tesselatus | null | Plant |
| 59398 | Stagonopleura guttata | Diamond Firetail | Bird |
| 15202 | Thesium australe | Austral Toadflax, Toadflax | Plant |
| 14159 | Dichanthium setosum | bluegrass | Plant |
| 83395 | Nyctophilus corbeni | Corben's Long-eared Bat, South-eastern Long- eared Bat | Mammal |
| 96 | Pseudomys novaehollandiae | New Holland Mouse, Pookila | Mammal |
| 1665 | Aprasia parapulchella | Pink-tailed Worm-lizard, Pink-tailed Legless Lizard | Reptile |
| 529 | Aphelocephala leucopsis | Southern Whiteface | Bird |
| 186 | Pteropus poliocephalus | Grey-headed Flying-fox | Mammal |
| 738 | Polytelis swainsonii | Superb Parrot | Bird |
| 525 | Pycnoptilus floccosus | Pilotbird | Bird |
| 874 | Calidris acuminata | Sharp-tailed Sandpiper | Bird |
| 67062 | Climacteris picumnus victoriae | Brown Treecreeper (south-eastern) | Bird |
| 934 | Leipoa ocellata | Malleefowl | Bird |
| 682 | Hirundapus caudacutus | White-throated Needletail | Bird |

Significant Impact Criteria for Vulnerable Species

a. Will it lead to a long-term decrease in the size of an important population of a species As site ecological resources will not be modified to any large extent consequent population effects will also be minor.



b. Will it reduce the area of occupancy of an important population

Proposed site activities are to be carried out on previously disturbed zones so there will be no reduction in the area available for occupation by threatened species.

c. Will it fragment an existing important population into two or more populations Fragmentation of an important population will not increase.

d. Will it adversely affect habitat critical to the survival of a species

Modification to vegetation and habitat is minimal and proposed site use will not cause significant adverse effects to critical habitat.

e. Will it disrupt the breeding cycle of an important population

Ecological resources important for breeding (nests, hollows, remnant dead wood and riparian zones) will not be affected by the proposed site activities.

f. Will it modify, destroy, remove or isolate or decrease the availability or quality of habitat to the extent that the species is likely to decline

The effects of proposed site use on habitat quality and quantity will be minor because works will be carried out on pre-disturbed area.

g. Will it result in invasive species that are harmful to a vulnerable species becoming established in the vulnerable species' habitat

Invasive species will not be encouraged by proposed site activities and may be actively controlled to reduce pest numbers.

h. Will it introduce disease that may cause the species to decline, or The activity is unlikely to introduce or spread disease that would result in the decline of a vulnerable species. .

i. Will it interfere substantially with the recovery of the species? $\ensuremath{\mathsf{N/A}}$

No EPBC listed critically endangered or endangered ecological communities exist at the site.

| Sig | Significant Impact Criteria for Critically Endangered and Endangered Communities | | | |
|-----|--|--|--|--|
| a. | Will it reduce the extent of an ecological community | | | |
| b. | Will it fragment or increase fragmentation of an ecological community, for example by clearing vegetation for roads or transmission lines | | | |
| c. | Will it adversely affect habitat critical to the survival of an ecological community | | | |
| d. | Will it modify, destroy abiotic (non-living) factors (such as water, nutrients, or soil) necessary for an ecological community's survival. including reduction of groundwater levels, or substantial alteration of surface water drainage patterns | | | |
| e. | Will it cause a substantial change in the species composition of an occurrence of an ecological community, including causing a decline or loss of functionally important species, for example through regular burning or flora or fauna harvesting | | | |
| f. | Will it cause a substantial reduction in the quality or integrity of an occurrence of an ecological community, including, but not limited to | | | |
| | Assisting invasive species, which are harmful to the listed ecological community, to become established, or | | | |



 Causing regular mobilisation of fertilisers, herbicides or other chemicals or pollutants into the ecological community which kill or inhibit the growth of species in the ecological community.

g. Will it interfere with the recovery of an ecological community?

<u>Conclusion regarding significance under the Commonwealth EPBC Act listed species, ecological</u> <u>communities or populations.</u>

The Protected Matters Report listed potential for 38 threatened species, eight migratory species and three threatened ecological communities to utilize the site.

Works are unlikely to have a significant impact on a threatened species due to the small size of the disturbance. No endangered ecological community was observed at the site.

Reduction of habitat features would be very minor. An abundance of suitable habitat for threatened species will be left undisturbed in the surrounding area

Fragmentation effects are negligible because the proposed impact area contains grassland only and no habitat features. The surrounding area will remain grassland, allowing passage within and through vegetation to be maintained and will not introduce any additional barriers to movement.

Important habitat is not present within the impact area.

The planned site activities will not influence or disrupt breeding cycles for any threatened species or entities in an endangered community.

Habitat will not be modified, destroyed, removed or isolated to the extent that a species or ecological community will decline markedly or lose structure or functionality.

Invasive species will not be assisted in access or reproduction success or be provided with any competitive advantage through proposed site development or ongoing use.

Proposed works will not introduce disease or increase the potential for fertilizer, herbicides, chemicals or pollutants to accumulate in more biologically sensitive areas.

The proposed development is to be conducted on previously modified land that is zoned for large lot residential. Given that activities will only occupy a small proportion of the site and modification to vegetation and habitat is minor, it is highly unlikely that any of the listed species will be impacted by the proposed site use.



Appendix F – Council LEP Maps



Figure 7: Terrestrial biodiversity sensitivity.





Figure 8: Groundwater vulnerability



Appendix G – NSW DPI Fisheries – Key Fish Habitat



Source: https://webmap.industry.nsw.gov.au/Html5Viewer/index.html?viewer=Fisheries_Data_Portal