



Swallow Tail Battery Energy Storage System

Likelihood of Occurrence Assessment

PREPARED FOR
AMPYR Australia Pty Ltd

DATE
9 January 2026

REFERENCE
0755542



DOCUMENT DETAILS

DOCUMENT TITLE	Swallow Tail Battery Energy Storage System
DOCUMENT SUBTITLE	Likelihood of Occurrence Assessment
PROJECT NUMBER	0755542
DATE	9 January 2026
VERSION	03
AUTHOR	Miranda Crossley, Lauren Bridel
CLIENT NAME	AMPYR Australia Pty Ltd

DOCUMENT HISTORY

				ERM APPROVAL TO ISSUE		
VERSION	REVISION	AUTHOR	REVIEWED BY	NAME	DATE	COMMENTS
Draft	01	Miranda Crossley, Lauren Bridel	Sophie Butcher	Megan Lawson	10 September 2025	Working draft for client review
Draft	02	Miranda Crossley	Sophie Butcher	Megan Lawson	19 December 2025	Working draft for client review
Final	03	Miranda Crossley	Sophie Butcher		9 January 2026	Final for referral submission

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ACRONYMS AND ABBREVIATIONS

Acronym	Description
BAM	Biodiversity Assessment Method
BAM-C	BAM Calculator
BC Act	NSW <i>Biodiversity Conservation Act 2016</i>
BESS	Battery Energy Storage System
Development Footprint	The 71.43 hectares (ha) Development Footprint, or “Disturbance Footprint” is the area of land that would be subject to impact during the construction, operation and decommissioning of Project infrastructure. The Development Footprint has been refined to exclude the northern section of the Project Area, demonstrating avoidance of native vegetation and minimising the extent of clearing of a Critically Endangered Ecological Community (CEEC). The location has also been proposed to avoid environmental impacts as far as possible.
DCCEEW	Department of Climate Change, Energy, the Environment and Water
DoE	Department of Environment
EPBC Act	Commonwealth <i>Environment Protection and Biodiversity Conservation Act 1999</i>
EIS	Environmental Impact Statement
ERM	Environmental Resources Management Australia Pty Ltd
ha	Hectares
MNES	Matters of National Environmental Significance
OEH	Office of Environment and Heritage
PCT	Plant Community Type
PMST	Protected Matters Search Tool
Project Area	The Project Area comprises 128.66 hectares (ha) on land that is currently used for low intensity agricultural purposes. The Project Area corresponds to Lot 39 DP 750005 which has been secured by the Applicant through a lease agreement, the access road easement and the transmission line corridor extending southwards toward the Bannaby South Substation.
SPRAT	Species Profile and Threats Database

1. BACKGROUND

Environmental Resources Management Australia Pty Ltd (ERM) was engaged by AMPYR Australia Pty Ltd (the Proponent) to prepare an *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) referral for the proposed Swallow Tail Battery Energy Storage System (BESS) (the Project). Similarly, ERM is engaged by the Proponent to prepare an Environmental Impact Statement (EIS) in support of a Development Application for the Project.

This assessment is not intended as a standalone report. The likelihood of occurrence assessment has been prepared to support the EPBC Act online referral only. A detailed impact assessment, supported by the full suite of targeted surveys, will be prepared as part of the Environmental Impacts Statement (EIS) phase.

2. METHODOLOGY

Consistent with the accepted approach for biodiversity assessment, a likelihood of occurrence assessment was undertaken, informed by desktop sources and the results of initial field surveys. Desktop sources identified 56 threatened species and three ecological communities listed under the EPBC Act, that may be likely to occur within an approximate 10 square kilometre (km²) buffer centred around the Project Area. A Protected Matters Search Tool (PMST) search was conducted on 7 September 2025 to identify the potential presence of Matters of National Environmental Significance (MNES).

The likelihood of occurrence approach refines the desktop generated list using site-specific (where known at this early stage of the assessment) and species-specific habitat information. Desktop sources are indicative only and likelihood rankings, particularly regarding the presence of preferred habitat, are conservative. Desktop surveys and initial field surveys assist to consider species distribution information and the presence of specific habitat attributes. An assessment can then be made as to how likely the species is to occur within the Project Area, which is ranked as per the criteria outlined in **Table 2-1**. Extensive targeted surveys for all threatened species have not yet been undertaken, but are underway and scheduled to be completed in January 2026.

The likelihood of occurrence assessment (**Table 3-1**) also identifies those species that have been retained for further assessment under the EPBC Act based on their likelihood of occurrence and the extent of suitable habitat for each species with the potential to be directly or indirectly impacted by the Project activities. Species that have been subject to targeted surveys and have not been identified have been excluded from further assessment. This list may be refined as further surveys are completed during the EIS phase of development.

A separate document has been prepared in accordance with the *Significant impact guidelines 1.1 Environment Protection and Biodiversity Conservation Act 1999* (DoE, 2013) for those species retained for further assessment.

The habitat description has included information from the New South Wales (NSW) Office of Environment and Heritage (OEH) threatened biodiversity profile search (NSW OEH, 2025) and the Australian Government Department of Climate Change, Energy, the Environment and Water (DCCEEW) Species Profile and Threats Database (SPRAT) (DCCEEW, 2025) for the respective threatened species.

TABLE 2-1 LIKELIHOOD OF OCCURRENCE ASSESSMENT CRITERIA

Records and Distribution	Suitable habitat exists ¹	Habitat does not exist ²
Records within the Project Area (based on field investigations)	Known	Known
Records within 1 km of the Project Area	Likely	Potential
Records in the Locality ³	Potential ⁴	Unlikely
No records in the Locality, but the Project Area is within known distribution	Potential	Unlikely
No records in the Locality, and the Project Area is outside of distribution	Unlikely	Unlikely

¹ Habitat may be considered suitable but is not necessarily preferred because some desired habitat features may be present, but not all; habitat may have poor connectivity or may be disturbed.

² Based on sources reviewed and / or field survey results.

³ . 'Locality' refers to a (10 km radius around the Project Area. Records have been obtained from BioNet Atlas. Any marine species exclusively using marine environments are excluded.

⁴ 'Potential' is referred to interchangeably with 'may' as per the language in the PMST report.

3. LIKELIHOOD OF OCCURRENCE ASSESSMENT

TABLE 3-1 LIKELIHOOD OF OCCURRENCE ASSESSMENT

Scientific Name	Common Name	EPBC Act Listing	BC Act Listing	BioNet records within 1 km	BioNet records within 10 km	Habitat Description	Likelihood of Occurrence within Development Footprint	Retained for further assessment under the EPBC Act
Bird								
<i>Anthochaera phrygia</i>	Regent Honeyeater	Critically Endangered	Critically Endangered	0	0	The Regent Honeyeater mainly inhabits temperate woodlands and open forests, particularly Box – Ironbark woodland and riparian forests of River She-oak. The species inhabits woodlands that support a significantly high abundance and species richness of birds. These types of woodlands have significantly large numbers of mature trees, high canopy cover and abundance of mistletoes. The species can also be found in drier coastal woodlands and forests in some years. Non-breeding flocks of the species can be seen foraging in flowering coastal Swamp Mahogany and Spotted Gum forests. Although the species is a generalist forager, it feeds mainly on the nectar from a small number of eucalypts that produce high volumes of nectar (e.g. Mugga Ironbark, Yellow Box, White Box and Swamp Mahogany).	Potential: Suitable habitat exists (box woodland and open forest). No Mapped Important Areas within Project Area. The Project Area is within the known distribution, however there are no records in the locality. The species is associated with PCTs 3373 and 3486.	No: The species is highly mobile and is unlikely to be dependent on any of the resources present.
<i>Lathamus discolor</i>	Swift Parrot	Critically Endangered, Marine	Endangered	0	0	The Swift Parrot breeds in Tasmania and migrates to south-east Australia during its non-breeding stage (March to October). In the mainland, the species occurs in areas where eucalypts are flowering profusely or where there are abundant lerp infestations. Favoured feed trees include Swamp Mahogany (<i>Eucalyptus joe</i>), Spotted Gum (<i>Corymbia maculata</i>), Red Bloodwood (<i>C. gummifera</i>), Mugga Ironbark (<i>E. sideroxylon</i>) and White Box (<i>E. albens</i>). In NSW, they forage in forests and woodlands throughout the coastal and western slopes regions favouring coastal regions especially when inland habitats are subject to drought.	Unlikely: Suitable habitat exists (woodland and open forest) however the Project Area is outside of the known distribution and there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Calidris ferruginea</i>	Curlew Sandpiper	Critically Endangered, Migratory, Marine	Critically Endangered	0	0	The Curlew Sandpiper primarily inhabits littoral and estuarine habitats, particularly intertidal mudflats along sheltered coasts in NSW, Australia. They are also found in non-tidal swamps, lakes, and lagoons along the coast and occasionally inland.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Botaurus poiciloptilus</i>	Australasian Bittern	Endangered	Endangered	0	0	The Australasian Bittern prefers wetlands with tall, dense vegetation. It forages in still, shallow water up to 0.3 metres (m) deep, often at the edges of pools or waterways, or from vegetation platforms over deeper water. This bird favours both permanent and seasonal freshwater habitats, especially those dominated by plants like sedges, rushes, and reeds (such as <i>Phragmites</i> , <i>Cyperus</i> , <i>Eleocharis</i> , <i>Juncus</i> , <i>Typha</i> , <i>Baumea</i> , <i>Bolboschoenus</i>) or cutting grass (<i>Gahnia</i>) growing over muddy or peaty substrates.	Unlikely: No suitable habitat. No records in the locality. The Project Area is within the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Callocephalon fimbriatum</i>	Gang-gang Cockatoo	Endangered	Endangered	0	46	Occurs within a variety of forest and woodland types. Usually frequents forested areas with old growth attributes required for nesting and roosting purposes. Also utilises less heavily timbered woodlands and urban fringe areas to forage but appears to favour well-timbered country through which it habitually flies as it moves about.	Known: Marginally suitable habitat exists (remnant woodland and open forests present). The species was identified during targeted surveys in January 2026. The species is associated with PCTs 3303, 3373 and 3486.	Yes: The species is highly mobile and is unlikely to be dependent on any of the resources present. However, during surveys in January 2026, the species was identified and has therefore been retained for assessment.
<i>Melanodryas cucullata cucullata</i>	South-eastern Hooded Robin, Hooded Robin	Endangered	Endangered	0	3	The South-eastern Hooded Robin prefers dry eucalypt and acacia woodlands and shrublands characterised by an open understorey, with some grassy areas and a complex ground layer. They tend to avoid woodlands with tall trees or dense tree cover, although they may occasionally occur in tall, dense heaths with scattered open areas.	Potential: Suitable habitat present (eucalypt and acacia woodlands, grassy areas). The Project Area is within the known distribution and there are several	Yes: Suitable habitat is present within the Project Area. While the species is highly mobile, it has a relatively small home

Scientific Name	Common Name	EPBC Act Listing	BC Act Listing	BioNet records within 1 km	BioNet records within 10 km	Habitat Description	Likelihood of Occurrence within Development Footprint	Retained for further assessment under the EPBC Act
	(south-eastern)						records within 10 km of the Project Area. No records within 1 km of the Project Area. The species is associated with PCTs 330s, 3373 and 3486.	range and requires additional assessment as part of the EIS.
<i>Rostratula australis</i>	Australian Painted Snipe	Endangered, Marine	Endangered	0	0	Inhabits shallow terrestrial freshwater wetlands, including lakes, swamps, claypans, and occasionally brackish areas. They also use inundated grassland, saltmarsh, dams, rice crops, sewage farms, and bore drains. Typical sites have emergent tussocks of grass, sedges, rushes, reeds, samphire, and sometimes lignum, canegrass, or tea-tree.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Polytelis swainsonii</i>	Superb Parrot	Vulnerable	Vulnerable	0	0	The Superb Parrot primarily inhabits eucalypt-dominated forests and woodlands, especially those with River Red Gums (<i>Eucalyptus camaldulensis</i>) and box eucalypts like Yellow Box (<i>Eucalyptus melliodora</i>) and Grey Box (<i>E. microcarpa</i>). It also occurs seasonally in box-pine (<i>Callitris</i>) and Boree (<i>Acacia pendula</i>) woodlands. Breeding usually takes place in forests with large mature River Red Gums near watercourses, though nests can also be found in Blakely's Red Gum (<i>E. blakelyi</i>) and other box eucalypts. In the South-west Slope Region of NSW, it breeds in box-gum forests with various eucalypt species. The Superb Parrot inhabits threatened habitats, including grassy Yellow Box-Red Gum woodlands and White Box-Yellow Box-Blakely's Red Gum Grassy Woodland.	Unlikely: Suitable habitat (box-gum forests and White-Box Yellow Box-Blakely's Red Gum Grassy Woodland present). No records within the locality and the Project Area is not within the known distribution.	No: The Project Area is not within the known distribution and any occurrences would be infrequent and non-breeding individuals (and thus is vagrant).
<i>Pycnoptilus floccosus</i>	Pilotbird	Vulnerable	Vulnerable	0	0	Pilotbirds live on the ground in dense forests with heavy undergrowth where they forage for insects and occasionally eat seeds and fruits. They appear to be largely sedentary, occupying small territories all year round. They build a domed nest on or near the ground in which they usually lay two eggs. <i>P. floccosus</i> occur at 800–1,500 m in alpine regions.	Unlikely: The Project Area is within the known distribution although there are no records in the locality and no suitable habitat available.	No: The species is unlikely to occur within the Project Area.
<i>Neophema chrysostoma</i>	Blue-winged Parrot	Vulnerable, Marine	Vulnerable	0	0	Blue-winged Parrots inhabit a variety of habitats ranging from coastal and sub-coastal areas to inland regions, including semi-arid zones. They prefer habitats such as grasslands and grassy woodlands and are often found near wetlands, both along the coast and in semi-arid environments.	Unlikely: Suitable habitat (grasslands and grassy woodlands present). The Project Area is not within the known distribution and there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Hirundapus caudacutus</i>	White-throated Needletail	Vulnerable, Migratory, Marine	Vulnerable	0	0	The White-throated Needletail in Australia is a highly aerial bird, commonly seen flying over wooded areas such as open forests and rainforests, as well as farmland with remaining vegetation and coastal regions with updrafts. They feed exclusively in flight, ranging from near ground level to heights reaching over 1,000 m, and roost primarily in trees within forests and woodlands, sometimes using dense foliage or hollows. Breeding for this species occurs outside of Australia, typically in wooded lowlands, sparsely vegetated hills, and coniferous forests.	Potential: Suitable habitat (remnant forest and wooded areas present). The Project Area is within the known distribution although there are no records in the locality. The species is associated with PCT 3303, 3373 and 3486.	No: The species is highly mobile and is unlikely to be dependent on any of the resources present. The species feeds on flying insects at height and does not breed in Australia so any observations of the species would not equate to the species being dependent on the habitat.
<i>Aphelocephala leucopsis</i>	Southern Whiteface	Vulnerable	Vulnerable	0	0	The Southern Whiteface occurs in relatively undisturbed open woodlands and shrublands with an understorey of grasses or shrubs or both. It also occurs in habitats with low tree densities and an herbaceous understorey litter cover which provides essential foraging habitat. It roosts in living and dead trees with hollows and crevices.	Potential: Marginally suitable habitat exists (open woodlands and shrublands with grassy or shrub understorey present). The species is not associated with Plant community Types (PCTs) 3373 or 3486. The Project Area is within the known distribution	No: The species is unlikely to be dependent on the resources present, based on the disturbed nature of the habitat available.

Scientific Name	Common Name	EPBC Act Listing	BC Act Listing	BioNet records within 1 km	BioNet records within 10 km	Habitat Description	Likelihood of Occurrence within Development Footprint	Retained for further assessment under the EPBC Act
							although there are no records in the locality.	
<i>Calidris acuminata</i>	Sharp-tailed Sandpiper	Vulnerable, Migratory, Marine	Vulnerable	0	0	The Sharp-tailed Sandpiper in Australasia favours habitats with muddy edges of shallow fresh or brackish wetlands, including areas with inundated or emergent sedges, grass, saltmarsh or other low vegetation. They inhabit a variety of environments such as lagoons, swamps, coastal pools, dams, waterholes and saline lakes, as well as flooded paddocks and sedgelands but leave when dry. Sharp-tailed Sandpipers are attracted to accumulations of algae and waterweed, whether floating or washed ashore in terrestrial wetlands and coastal regions abundant with beach cast seaweed. Occasionally, they may be observed on rocky shores and, infrequently, on exposed reefs.	Unlikely: No suitable habitat and no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Falco hypoleucos</i>	Grey Falcon	Vulnerable	Vulnerable	0	0	The species frequents timbered lowland plains, particularly acacia shrublands that are crossed by tree-lined water courses. The species has been observed hunting in treeless areas and frequents tussock grassland and open woodland, especially in winter. Nesting sites are typically on cliffs, rocky ledges, or in large trees.	Unlikely: Suitable habitat (<i>acacia</i> shrublands and wooded watercourse present). The Project Area is not within the known distribution and there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Grantiella picta</i>	Painted Honeyeater	Vulnerable	Vulnerable	0	0	The species prefers habitats such as mistletoes in eucalypt forests and woodlands, riparian woodlands dominated by black box and river red gum, box-ironbark-yellow gum woodlands, acacia-dominated woodlands, paperbarks, <i>casuarinas</i> , <i>Callitris</i> , and trees in farmland or gardens. They are particularly attracted to woodlands with a higher density of mature trees, which typically host more mistletoes. The species tends to be more abundant in wider blocks of remnant woodland rather than in narrower strips.	Potential: Marginally suitable habitat (wide blocks of remnant eucalypt woodlands present) is available. Project Area is within the known distribution although there are no records in the locality. The species is associated with PCTs 3303, 3373 and 3486.	No: The species is highly mobile and is not expected to be dependent on any resources present. Based on information available, no mistletoes have been recorded in the Project Area. This would be reviewed during the EIS phase.
<i>Stagonopleura guttata</i>	Diamond Firetail	Vulnerable	Vulnerable	1	16	Diamond firetails occur in eucalypt, acacia or casuarina woodlands, open forests and other lightly timbered habitats, including farmland and grassland with scattered trees. They prefer areas with relatively low tree density, few large logs, and little litter cover but high grass cover.	Known: The species was identified during ecological surveys and suitable habitat is available.	Yes: The Project has the potential to impact habitats used by this species.
<i>Calyptorhynchus lathami lathami</i>	South-eastern Glossy Black-Cockatoo	Vulnerable	Vulnerable	0	66	<p>The movement patterns and ranging behaviour of the South-eastern Glossy Black-Cockatoo are poorly understood. It has been suggested that they are seasonal migrants in south-east Queensland, likely as a response to changing of resource availability or breeding requirements.</p> <p>South-eastern Glossy Black-Cockatoos rely on nine species of She-oaks (<i>Allocasuarina spp.</i> and <i>Casuarina spp.</i>) for feeding, with species used varying depending on the region. Birds often only feed on one or two species in one region. In south-east Queensland and north-east NSW, they show preference for Black She-oak (<i>A. littoralis</i>) and Forest She-oak (<i>A. torulosa</i>), and to a lesser extent River She-oak (<i>C. cunninghamiana</i>) and Swamp She-oak (<i>C. glauca</i>) during limited times of the year.</p> <p>In central NSW, most of the nesting hollows were in Narrowed-leaved Ironbark (<i>Eucalyptus crebra</i>; 74%), Blue-leaved Ironbark (<i>E. nubila</i>; 16%) and Blakely's Red Gum (<i>E. blakelyi</i>; 10%). Potential nest hollows for the subspecies have the following traits:</p> <ol style="list-style-type: none"> > 8 m above ground, Located in branches > 30 centimetres (cm) in diameter, Branch or stem no more than 45 degrees from vertical; and 	Potential: Marginally suitable breeding habitat exists (remnant eucalypt woodland and <i>Eucalyptus blakelyi</i> present). There are several records within 10 km of the Project Area.	No: The species is highly mobile and is unlikely to be dependent on any of the resources present. Based on information available, there has been no foraging habitat (She-oaks) recorded in the Project Area. Breeding habitat would be reviewed during the EIS phase of the Project as part of the requirements under the Biodiversity Assessment Method (BAM).

Scientific Name	Common Name	EPBC Act Listing	BC Act Listing	BioNet records within 1 km	BioNet records within 10 km	Habitat Description	Likelihood of Occurrence within Development Footprint	Retained for further assessment under the EPBC Act
						4. Minimum entrance diameter of > 15 cm.		
<i>Gallinago hardwickii</i>	Latham's Snipe, Japanese Snipe	Vulnerable, Migratory, Marine	Vulnerable	0	0	Latham's Snipe in Australia inhabits various wetlands, both permanent and ephemeral, up to 2000 meters above sea level. Preferred habitats include open, freshwater wetlands with low, dense vegetation such as swamps, flooded grasslands, and bogs, but they can also be found in saline or brackish waters and modified or artificial habitats near human activities. Their range extends from sea level to high altitudes, including regions like Lake Eyre and alpine herb fields. They forage in muddy areas with cover and roost near their foraging sites. Latham's Snipe often shares habitats with the Painted Snipe, which is listed as Vulnerable.	Unlikely: No suitable habitat. No records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Climacteris picumnus victoriae</i>	Brown Treecreeper (south-eastern)	Vulnerable	Vulnerable	0	0	Found in eucalypt woodlands (including Box-Gum Woodland) and dry open forest of the inland slopes and plains inland of the Great Dividing Range. The species mainly inhabits woodlands dominated by stringybarks or other rough-barked eucalypts, usually with an open grassy understorey, sometimes with one or more shrub species, also found in mallee and River Red Gum (<i>Eucalyptus camaldulensis</i>) Forest bordering wetlands with an open understorey of acacias, saltbush, lignum, cumbungi and grasses. Usually not found in woodlands with a dense shrub layer. Fallen timber is an important habitat component for foraging. Hollows in standing dead or live trees and tree stumps are essential for nesting. When foraging in trees and on the ground, they peck and probe for insects, mostly ants, amongst the litter, tussocks and fallen timber, and along trunks and lateral branches.	Potential: Suitable habitat (eucalypt (box-gum) woodlands with open grassy understorey present). Project Area is within the known distribution although there are no records in the locality. The species is associated with PCT 3303, 3373 and 3486.	Yes: The Brown Treecreeper is an ecosystem credit species under the BAM Calculator (BAM-C) and it is assumed to occur within associated PCTs present. The species is associated with all PCTs (3303, 3373 and 3486) present in the Development Footprint. Breeding habitat (hollows) would be investigated as part of the EIS phase.
Community								
Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion		Endangered	-	N/a	N/a	The Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion is generally confined to the Sydney Basin bioregion in NSW. However, parts of its southern extent at Sassafras, east of Nerriga, NSW may occur just outside the Sydney Basin bioregion boundary. The Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion is typically tall open eucalypt forests found on basalt and basalt-like substrates in, or adjacent to, the Sydney Basin Bioregion. The ecological community usually occurs at elevations between 650 m and 1,050 m above sea level.	Unlikely: No associated PCTs occur within the Project Area.	No: No suitable habitat and not identified during field surveys.
Natural Temperate Grassland of the South Eastern Highlands		Critically Endangered	-	N/a	N/a	The community is dominated by moderately tall (25-50 cm) to tall (50 cm-1 m), dense to open tussock grasses with up to 70% of species being forbs. The community may be treeless or contain up to 10% cover of trees, shrubs or sedges. In the Southern Tablelands natural temperate grasslands are located at altitudes between 560 – 1,200 m in valleys influenced by cold air drainage and in broad plains. The community occurs within the geographical region of the Southern Tablelands of NSW and Australian Capital Territory (ACT), which extends southwards from the Abercrombie River to the Victorian Border, from Boorowa and Jindabyne to the west and Goulburn to Braidwood and Bombala to the east.	Unlikely: No associated PCTs occur within the Project Area.	No: No suitable habitat and not identified during field surveys.
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland		Critically Endangered	Critically Endangered	N/a	N/a	The ecological community is known to occur on hilly to undulating landscapes in areas with soils of moderate fertility derived from a range of lithologies, including alkaline and acid volcanics, granites, sediments, serpentinites and metamorphic. It generally occurs in areas where average rainfall is between 400 - 900 millimeters (mm) per annum, on moderate to highly fertile soils at altitudes of 170 – 1,200 m.	Known: The community was identified during field investigations.	Yes: The Project has the potential to result in impacts to the known Critically Endangered Ecological Community (CEEC).

Scientific Name	Common Name	EPBC Act Listing	BC Act Listing	BioNet records within 1 km	BioNet records within 10 km	Habitat Description	Likelihood of Occurrence within Development Footprint	Retained for further assessment under the EPBC Act
Fish								
<i>Macquaria australasica</i>	Macquarie Perch	Endangered	Endangered (NSW Fisheries Act)	0	0	Macquarie perch continue a pattern found in native freshwater fish of the Murray-Darling system of specialisation into lowland and upland stream inhabitants.	Unlikely: No suitable habitat. No records in the locality.	No: The species is unlikely to occur within the Project Area.
Frog								
<i>Litoria booroolongensis</i>	Booroolong Frog	Endangered	Endangered	0	0	The species requires permanent or near-permanent streams with some fringing vegetation cover such as ferns, sedges or grasses. Adults occur on or near cobble banks and other rock structures within stream margins. The species will shelter under rocks or amongst vegetation near the ground on the stream edge and will sometimes bask in the sun on exposed rocks near flowing water during summer. Eggs are laid in submerged rock crevices and tadpoles grow in slow-flowing connected or isolated pools.	Potential: Suitable habitat (stream with fringing vegetation cover and rocky margins present). No records in the locality. Project Area is within the known distribution. The species is associated with PCTs 3303, 3373 and 3486.	Yes: Suitable habitat present in the form of rocky cobbles along a creek with near-permanent water flows. Targeted surveys conducted in November 2025 and no identification of the species.
Insect								
<i>Keyacris scurra</i>	Key's Matchstick Grasshopper	Endangered	Endangered	0	0	Key's Matchstick Grasshopper is usually found in native grasslands and grassy woodlands, but it has also been recorded in other vegetation associations containing a native grass understory (especially kangaroo grass <i>Themeda triandra</i>) and known food plants (particularly Asteraceae).	Potential: Suitable habitat present (native grasslands and grassy woodlands). Project Area is within the known distribution although there are no records in the locality. The species is associated with PCT 3373.	Yes: Targeted surveys conducted in September 2025 where the species was not identified. Additional information will be provided as part of the EIS. Based on information available, there has been no presence of Kangaroo Grass reported within the Project Area although several Asteraceae species have been identified (more commonly exotic).
<i>Paralucia spinifera</i>	Bathurst Copper Butterfly, Purple Copper Butterfly,	Vulnerable	Endangered	0	0	This species has highly specific habitat requirements and only occurs where the food plant <i>Bursaria spinosa subsp. lasiophylla</i> and an attendant ant species is present. Geology, soils, topographic position and dominant vegetation canopy species vary between habitat locations. However vegetation structure is consistent, commonly open woodland or open forest with a sparse understorey that is dominated by the shrub, Native Blackthorn <i>Bursaria spinosa subsp. lasiophylla</i> . The butterflies generally remain in the vicinity of <i>B. spinosa subsp. lasiophylla</i> , and are rarely observed more than 10 - 40 m distant from the plant. The species occurs above 850 m elevation.	Unlikely: No suitable habitat (Project Area is below 850 m). No records in the locality and the Project Area is not within the known distribution.	No: The species is unlikely to occur within the Project Area.
Mammal								
<i>Chalinolobus dwyeri</i>	Large-eared Pied Bat, Large Pied Bat	Endangered	Endangered	0	5	This species roosts in caves near their entrances, crevices in cliffs, old mine workings, and disused bottle-shaped mud nests of the Fairy Martin (<i>Petrochelidon ariel</i>). It inhabits low to mid-elevation dry open forests and woodlands close to these features. Females raise young in maternity roosts, typically consisting of about 20-40 females, from November to January in roof domes of caves, overhangs, mine audits, and derelict buildings. They are known to remain loyal to the same cave for many years and are found in well-timbered areas with gullies. With relatively short, broad wings, this species has manoeuvrable	Potential: Marginally suitable habitat exists (low to mid-elevation woodlands and open forest present). The species is associated with PCTs 3303, 3373 and 3486, and there are several records within 10 km of the Project Area.	No: No suitable maternity sites within Project Area. Ultrasonic call detection surveys conducted in November 2025 confirmed no Large-eared Pied Bat calls were found.

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						flight and likely forages for small flying insects beneath the forest canopy. It is also expected to hibernate during the cooler months.		
<i>Petauroides volans</i>	Greater Glider (southern and central)	Endangered	Endangered	0	24	The habitat of the Greater Glider includes attributes such as live and dead hollow-bearing trees for denning, feed trees, large trees, and landscape connectivity. Key associated tree species are <i>Corymbia citriodora</i> , <i>Eucalyptus moluccana</i> , <i>E. tereticornis</i> , <i>E. crebra</i> , <i>C. intermedia</i> , and <i>E. portuensis</i> . Tree size is crucial, with those over 30 cm Diameter at Breast Height (DBH) preferred for foraging and those over 50 cm DBH preferred for denning, as they are more likely to have suitable hollows for shelter. Hollow-bearing trees are vital for Greater Glider habitat and serve as indicators of habitat suitability.	Potential: Suitable habitat exists due to the confirmed presence of <i>Eucalyptus tereticornis</i> (as identified by Holocene Ecology, 2025) and hollow-bearing trees. The species is associated with PCTs 3303, 3373 and 3486 and there are several records within 10 km of the Project Area.	No: Targeted surveys were conducted in August 2025 did not record the presence of this species. Surveys involved 1.2 km of walked spotlighting transects repeated over two nights. Only one glider species detected (Krefft's Glider <i>Petaurus notatus</i>). The species has been excluded from further assessment.
<i>Dasyurus maculatus maculatus</i> (SE mainland population)	Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population)	Endangered	Vulnerable	0	0	The Spotted-tailed Quoll prefers mature wet forests with high rainfall and unlogged or minimally disturbed forests. It inhabits a wide range of environments, including temperate and subtropical rainforests in mountainous regions, wet sclerophyll forests, lowland forests, open and closed eucalypt woodlands, inland riparian zones, River Red Gum forests, dry 'rainshadow' woodlands, sub-alpine woodlands, coastal heathlands, and occasionally open country, grazing lands, and rocky outcrops. Predominantly nocturnal, the quoll rests in dens found in hollow logs, tree hollows, rock outcrops, or caves during the day. It requires abundant food sources, such as birds and small mammals, and large, contiguous areas of vegetation for foraging. Although primarily terrestrial, it is moderately arboreal, with about 11% of its movement occurring in trees.	Potential: Suitable habitat is present as the species is found in a wide range of environments including woodlands and forests. Project Area is within the known distribution although there are no records in the locality. The species is associated with PCTs 3303, 3373 and 3486.	Yes: The species is found in various habitats and may use the site for foraging as part of its large home range.
<i>Phascolarctos cinereus</i> (combined populations of Qld, NSW and the ACT)	Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory)	Endangered	Endangered	0	912	Koalas naturally inhabit a range of temperate, sub-tropical and tropical forest, woodland and semi-arid communities dominated by Eucalyptus species. Breeding and foraging habitat: Koala habitat can be broadly defined as any forest or woodland containing species that are known Koala food trees, or shrubland with emergent food trees. Dispersal behaviour: the species is known to traverse a matrix of landscape features from remnant and regrowth vegetation to paddock trees and grasslands.	Potential: Suitable habitat exists in the form of Eucalyptus dominated remnant woodland, paddock trees and grasslands. The species is also associated with PCTs 3303, 3373 and 3486. There are several records within 10 km of the Project Area.	No: Targeted surveys were conducted in August 2025 and November 2025 did not record the presence of this species. Koala surveys included 13 koala Spot Assessment Technique (SATs) and walked spotlighting transects. The species has been excluded from further assessment.
<i>Pteropus poliocephalus</i>	Grey-headed Flying-fox	Vulnerable	Vulnerable	0	4	It is a canopy-feeding frugivore and nectarivore, which utilises vegetation communities including rainforests, open forests, closed and open woodlands, Melaleuca swamps and Banksia woodlands. None of the vegetation communities used by the Grey-headed Flying-fox produce continuous foraging resources throughout the year. As a result, the species has adopted complex migration traits in response to ephemeral and patchy food resources. The Grey-headed Flying-fox roosts in aggregations of various sizes on exposed branches. Roost sites are typically located near water, such as lakes, rivers, or the coast. Roost vegetation includes rainforest patches, stands of Melaleuca, mangroves and riparian vegetation.	Potential: Suitable habitat exists in the form of forest and woodlands and the species is associated with PCTs 3373 and 3486. There are several records within 10 km of the Project Area.	No: The species is not expected to rely on the Project Area for foraging and is highly mobile. No Important Flying Fox Camps are located within 50 km of the Project Area. Targeted surveys are planned for October 2025 as required under the BAM.
<i>Pseudomys novaehollandiae</i>	New Holland Mouse, Pookila	Vulnerable	Vulnerable	0	0	Known to inhabit open heathlands, woodlands and forests with a heathland understorey and vegetated sand dunes. It is a social animal, living predominantly in burrows shared with other individuals. Distribution is patchy in time and space, with peaks in abundance	Unlikely: No suitable habitat. No records in the locality and the Project Area is not within the known distribution.	No: The species is unlikely to occur within the Project Area.

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						during early to mid-stages of vegetation succession typically induced by fire.		
<i>Petaurus australis australis</i>	Yellow-bellied Glider (south-eastern)	Vulnerable	Vulnerable	0	1	This species inhabits tall mature eucalypt forests, generally in regions with high rainfall and nutrient-rich soils. Its forest type preferences vary with latitude and elevation, ranging from mixed coastal forests and dry escarpment forests in the north to moist coastal gullies, creek flats, and tall montane forests in the south. They often den in hollows of large trees, typically in family groups. Highly mobile, these animals occupy large home ranges of 20 to 85 hectares (ha) to access dispersed and seasonally variable food resources.	Potential: Suitable habitat due to the presence of feed trees <i>Eucalyptus eugenioides</i> and <i>Eucalyptus tereticornis</i> . The species is associated with PCT 3486 although there is only one record 6 km east of the Project Area.	No: Targeted surveys were conducted in August 2025 did not record the presence of this species. Surveys involved 1.2 km of walked spotlighting transects repeated over two nights in August 2025. Only two glider species detected (Krefft's Glider <i>Petaurus notatus</i> and Sugar Glider <i>Petaurus breviceps</i>). Camera traps were deployed in December 2025. The species has been excluded from further assessment.
<i>Petrogale penicillata</i>	Brush-tailed Rock-wallaby	Vulnerable	Endangered	0	0	This species occupies rocky escarpments, outcrops, and cliffs, preferring complex structures with fissures, caves, and ledges, often facing north. During the day, it shelters or basks in rock crevices, caves, and overhangs, becoming most active at night for foraging. It feeds on vegetation in and around rocky areas, including grasses, forbs, and the foliage and fruits of shrubs and trees. Highly territorial and exhibiting strong site fidelity, it has an average home range of about 15 ha, with males typically having larger ranges than females. The home range includes a refuge area and a foraging range connected by frequently used commuting routes.	Unlikely: No suitable habitat (no suitable rocky cliffs or boulder piles present in the Project Area). The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
Plant								
<i>Thelymitra kangaloonica</i>	Kangaloon Sun Orchid	Critically Endangered	Critically Endangered	0	0	The Kangaloon Sun-orchid is endemic to the Central Coast and Tablelands of NSW, specifically found in the Fitzroy Falls, Robertson, and Kangaloon areas. This species typically grows in seasonally swampy sedgelands characterized by grey silty clay loam soils. Its habitat ranges in elevation from 600 - 700 m above sea level.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Cynanchum elegans</i>	White-flowered Wax Plant	Endangered	Endangered	0	0	The White-flowered Wax Plant is a climber or twiner found restricted along eastern NSW. It is usually found on the edge of dry rainforest vegetation or in littoral rainforests, coastal scrub. Associated species include Coastal Tea-tree <i>Leptospermum laevigatum</i> - Coastal Banksia <i>Banksia integrifolia subsp. integrifolia</i> , and Bracelet Honey myrtle <i>Melaleuca armillaris</i> . It is also associated with Forest Red Gum <i>Eucalyptus tereticornis</i> aligned open forest and woodland and Spotted Gum <i>Corymbia maculata</i> open forest and woodland.	Unlikely: No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Leucochrysum albicans subsp. tricolor</i>	Hoary Sunray, Grassland Paper-daisy	Endangered	Endangered	0	0	Hoary Sunray can be found in natural or semi-natural vegetation and both grazed and ungrazed habitats, with bare ground required for germination. Its unpalatability protects it in heavily grazed areas where bare ground develops, favouring recruitment. In New South Wales and the Australian Capital Territory, it occurs in grasslands, grassy areas in woodlands, dry open forests, and modified habitats on various soil types, including clays, clay loams, stony, and gravelly soils.	Unlikely: No suitable habitat (bare ground absent). The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area. The species will be surveyed and assessed as part of the EIS to fulfil requirements of the BAM.
<i>Diuris aequalis</i>	Buttercup Doubletail	Endangered	Endangered	0	0	The Buttercup doubletail is an orchid found in ranges and tablelands in South Eastern NSW (especially on the Great Dividing Range) in	Potential: Suitable habitat exists within the areas of open woodland	Yes: The species could occur in small areas of the

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						fragmented populations. The species has been recorded in forest, low open woodland with grassy understory and secondary grassland. It grows on gravelly clay-loam soils on gently undulating terrain.	with grassy understorey and grasslands. The species is associated with PCT 3373 and the Project Area is within the known distribution although there are no records in the locality.	Project Area, associated with PCT 3373 where less disturbance has occurred. Targeted surveys in November 2025 confirmed no observations within the Development Footprint.
<i>Rhizanthella slateri</i>	Eastern Underground Orchid	Endangered	Vulnerable	0	0	The Eastern Underground Orchid is known from sclerophyll eucalypt forest usually with a deep layer of organic litter. Species is highly cryptic.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Persoonia oxycoccoides</i>	null	Endangered	Endangered	0	0	<i>Persoonia oxycoccoides</i> is endemic to NSW where it is currently known from the Wingecarribee Shire in the south-eastern portion of the Central Tablelands, with the easternmost records in the municipality of Kiama, and a south-western outlier at Tallong in Goulburn-Mulwaree Shire in the Southern Tablelands. It occurs in Heath to dry sclerophyll eucalypt forest, at 600 - 700 m altitude, on acid, sandy soils derived from sandstone.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Commersonia prostrata</i>	Dwarf Kerrawang	Endangered	Endangered	0	0	In NSW, the Dwarf Kerrawang occurs on sandy, sometimes peaty soils, in a variety of habitats. These include Snow Gum (<i>Eucalyptus pauciflora</i>) woodland at Rose Lagoon, Blue-leaved Stringybark (<i>E. agglomerata</i>) open forest at Tallong, Brittle Gum (<i>E. mannifera</i>) low open woodland at Penrose, and Scribbly Gum (<i>E. haemostoma</i>), Swamp Mahogany (<i>E. robusta</i>), and Broad-leaved Paperbark (<i>Melaleuca quinquenervia</i>) ecotonal forest at Tomago. It is also found in the ecotone between sedge swamp and swamp forest, which is a groundwater-dependent ecosystem representing a substantial vegetation community of the Tomago sand beds. The species has been observed responding positively to some form of disturbance.	Unlikely: No suitable habitat. The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Pomaderris cotoneaster</i>	Cotoneaster Pomaderris	Endangered	Endangered	0	125	The species typically thrives in environments characterised by shallow soils and outcropping rock, often near cliff lines or along riverbanks. It favours dry, shrubby open forests situated on north-west to south-west facing slopes. Specimens have been observed in various specific habitats, including at the base of cliffs amidst tall open forest dominated by <i>Eucalyptus fastigata</i> , on alluvial terraces surrounded by tall open forests of <i>Eucalyptus cypellocarpa</i> and <i>Eucalyptus muelleriana</i> , and in rocky riparian sites within stands of <i>Eucalyptus viminalis</i> . It also grows on rocky river beds and on dry south-westerly facing slopes above rivers, where it coexists with a diverse range of vegetation including <i>Westringia</i> species, <i>Grevillea lanigera</i> , <i>Prostanthera</i> species, <i>Eucalyptus radiata</i> , <i>Olearia</i> species, <i>Kunzea ericoides</i> , and <i>Acacia pravissima</i> . While some riparian sites show slight invasion by willow (<i>Salix</i>) and blackberry (<i>Rubus fruticosus</i> agg.), most locations remain remote and maintain predominantly weed-free vegetation.	Potential: Marginally suitable habitat is available due to the noted presence of <i>Olearia</i> sp and <i>Eucalyptus viminalis</i> , however optimal habitat would include more rocky forested slopes in steep gullies. The closest records are over 6 km away in substantially different habitat (dense vegetation in and near Wollondilly River Nature Reserve and Guula Ngurra National Park). The Project Area is within the known distribution. The species is associated with PCT 3303 and 3486.	Yes: The species has a reduced likelihood of occurrence given the modified nature of the habitats. Targeted surveys in November 2025 confirmed no observations within the Development Footprint.
<i>Hibbertia acaulothrix</i>	null	Endangered	Endangered	0	0	<i>Hibbertia acaulothrix</i> is found on rocky outcrops and has been recorded growing in Eucalyptus sieberi woodland or in association with <i>Allocasuarina littoralis</i> (black she-oak), <i>Corymbia gummifera</i> (red bloodwood), and <i>Leptospermum trinervium</i> (flaky-barked tea-tree). This hibbertia grows on sedimentary rocks in woodland between Wollemi National Park and south to the Wadbilliga National Park.	Unlikely: No suitable habitat. The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Genoplesium baueri</i>	Yellow Gnat-orchid, Bauer's	Endangered	Endangered	0	0	The species usually grows in heathland to shrubby woodland on sands or sandy loams or open forest, and heathy forest on well-drained sandy and gravelly soils.	Unlikely: No suitable habitat. No records in the locality and the	No: The species is unlikely to occur within the Project Area.

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	Midge Orchid, Brittle Midge Orchid						Project Area is outside of the known distribution.	
<i>Phyllota humifusa</i>	Dwarf Phyllota	Vulnerable	Vulnerable	0	0	The species occurs in dry sclerophyll forest, sometimes near swamps, in deep sandy soils or gravelly loams over a sandstone substrate. Accompanying trees are often Brittle Gum <i>Eucalyptus mannifera</i> , Narrow-leaved Peppermint <i>E. radiata</i> or Sydney Peppermint <i>E. piperita</i> .	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Acacia bynoeana</i>	Bynoe's Wattle, Tiny Wattle	Vulnerable	Endangered	0	0	Bynoe's Wattle thrives in heath and dry sclerophyll forest, as well as in open woodlands with a heath understorey or sparse shrub cover, and open woodlands with grass / sedge ground cover, notably within Castlereagh Woodland. It prefers open and slightly disturbed sites such as trail margins, edges of roadsides, grading spoil mounds, and recently burnt patches, though ridge-top habitats have been largely lost to residential development. The species is often associated with overstorey species like <i>Eucalyptus gummifera</i> , <i>E. haemastoma</i> , <i>E. parramattensis</i> , <i>E. sclerophylla</i> , <i>Banksia serrata</i> , and <i>Angophora bakeri</i> , and with shrubs like <i>Banksia spinulosa</i> , <i>Acacia oxycedrus</i> , <i>A. myrtifolia</i> , and <i>Kunzea</i> species. Bynoe's Wattle typically grows in sandy and sandy clay soils, often with ironstone gravels, which are infertile and well-drained, and is commonly found among rock platforms. It is recorded at altitudes from 0 – 1,000 m above sea level, in areas with more than 600 mm annual rainfall, primarily over Triassic or Permian age geology.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Caladenia tessellata</i>	Thick-lipped Spider-orchid, Daddy Long-legs	Vulnerable	Vulnerable	0	0	The Thick-lipped Spider-orchid favours low, dry sclerophyll woodland, such as open <i>Kunzea</i> woodland, with a heathy or sometimes grassy understorey on clay loams or sandy soils. The population at Braidwood specifically occurs in dry, low Brittle Gum (<i>Eucalyptus mannifera</i>), Inland Scribbly Gum (<i>E. rossii</i>), and <i>Allocasuarina</i> spp. woodland with a sparse understorey and stony soil.	Unlikely: No suitable habitat. The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Eucalyptus aggregata</i>	Black Gum	Vulnerable	Vulnerable	0	0	Black Gum grows in the lowest parts of the landscape, on alluvial soils, and on cold, poorly-drained flats and hollows adjacent to creeks and small rivers. It often grows with other cold-adapted eucalypts such as Snow Gum (<i>Eucalyptus pauciflora</i>), Manna or Ribbon Gum (<i>E. viminalis</i>), Candlebark (<i>E. rubida</i>), Black Sallee (<i>E. stellulata</i>), and Swamp Gum (<i>E. ovata</i>). Black Gum usually occurs in open woodland formations with a grassy ground layer dominated by River Tussock (<i>Poa labillardierei</i>) or Kangaroo Grass (<i>Themeda australis</i>), with few shrubs. It can also be found as isolated paddock trees in modified native or exotic pastures. Many populations are located on traveling stock reserves, with stands and isolated individuals also on private land, but there are very few stands in conservation reserves.	Unlikely: No suitable habitat. The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Dodonaea procumbens</i>	Trailing Hop-bush	Vulnerable	Vulnerable	0	0	This species grows in low-lying, often winter-wet areas in woodland, low open forests, heathland, and grasslands on sands and clays. In South Australia, it is found in open River Red Gum, Pink Gum, and Blue Gum woodlands, native grasslands with Kangaroo Grass and various shrubs, and in Austrodanthonia low tussock grassland at Mokota Conservation Park. On Kangaroo Island and near Penola, it grows in Brown Stringy Bark open forest and sometimes in Xanthorrhoea thickets. In NSW, it is typically found in natural grassland or grassy woodland of Snow Gum, usually on crests or slopes and on tilted sediments, and also in disturbed and exposed sites such as road verges, cuttings, and sandy rocky outcrops.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.

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<i>Grevillea raybrownii</i>	null	Vulnerable	Vulnerable	0	0	This species generally occurs on ridgetops and, less often, on slopes and benches of Hawkesbury Sandstone and Mittagong Formation. It inhabits Eucalyptus open forests and woodlands with a shrubby understorey on sandy, gravelly loam soils derived from sandstone that are low in nutrients. The species has a highly restricted geographic distribution.	Unlikely: No suitable habitat (geology not suitable). No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Kunzea cabbagei</i>	null	Vulnerable	Vulnerable	0	0	The species is restricted to damp, sandy soils in wet heath or mallee open scrub at higher altitudes on sandstone outcrops or Silurian group sediments.	Unlikely: No suitable habitat. The Project Area is within the known distribution although there are no records in the locality.	No: The species is unlikely to occur within the Project Area.
<i>Helichrysum calvertianum</i>	null	Vulnerable	Vulnerable	0	0	<i>Helichrysum calvertianum</i> occurs in dry sclerophyll forest and heathland with rock outcrops, predominantly on Hawkesbury sandstone soils at altitudes between approximately 650 - 855 m.	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Pomaderris brunnea</i>	Rufous Pomaderris, Brown Pomaderris	Vulnerable	Endangered	0	0	The Brown Pomaderris is found in a very limited area around the Colo, Nepean and Hawkesbury Rivers. This species grows in open forest, often in association with <i>Eucalyptus amplifolia</i> , <i>Angophora floribunda</i> , <i>Acacia parramattensis</i> , <i>Bursaria spinosa</i> , and <i>Kunzea ambigua</i> .	Potential: Marginally suitable habitat is present along St Pauls Creek. The Project Area is within the known distribution although there are no records in the locality.	Yes: Areas of potential habitat may be indirectly impacted by the Project. Targeted surveys in September 2025 confirmed no observations within the Development Footprint.
<i>Persoonia mollis subsp. revoluta</i>	null	Vulnerable	Vulnerable	0	91	This species mainly occurs on relatively deep sandy soils on broad ridgetops and upper slopes, frequently on Hawkesbury Sandstone in Soapy Flat or Sandy Flat soil landscapes. Notably it occurs in dry sclerophyll forests.	Unlikely: No suitable habitat. The closest records are over 8 km away in substantially different habitat (dense vegetation in and near Bangadilly National Park).	No: The species is unlikely to occur within the Project Area.
<i>Pomaderris pallida</i>	Pale Pomaderris	Vulnerable	Vulnerable	0	0	The Pale Pomaderris is primarily found at numerous small sites along the plateau edges and steep upper slopes and cliffs of river valleys, typically at elevations ranging from 480 - 600 m above sea level. The soils in these areas are shallow, consisting of pale brown sandy loams overlaying granite rock, often with large exposed granite boulders present. The species forms near-monospecific stands within shrublands, which are surrounded by Eucalyptus or Callitris woodlands, or occasionally in open forests. The dominant species in these shrublands include <i>Bursaria spinosa</i> (Blackthorn/Boxthorn), <i>Grevillea juniperina</i> (Juniper Grevillea), <i>Acacia rubida</i> (Red-stemmed Wattle), and <i>Kunzea ericoides</i> (formerly <i>Leptospermum phylloides</i>).	Unlikely: No suitable habitat. No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Thesium australe</i>	Austral Toadflax, Toadflax	Vulnerable	Vulnerable	0	0	Austral Toadflax is a semi-parasitic plant that depends on the roots of various grass species, especially Kangaroo Grass (<i>Themeda triandra</i>). It is distributed across subtropical, temperate, and subalpine climates at different altitudes, thriving in soils from sedimentary, igneous, and metamorphic origins, including black clay loams, yellow podzolics, and peaty loams. This plant prefers moist environments and is commonly found in shrublands, grasslands, and woodlands. It often grows in open grassy heaths alongside species like Swamp Myrtle and Woolly Grevillea, as well as Kangaroo Grass grasslands adjacent to Eucalyptus woodlands and Barbed-wire Grass-dominated areas. In coastal NSW, it can be found alongside Coastal Wattle, Coast Banksia, <i>Zieria prostrata</i> , and Bitou Bush.	Unlikely: Suitable habitat exists (grassland and grassy woodland away from coast). No records in the locality and the Project Area is outside of the known distribution.	No: The species is unlikely to occur within the Project Area.
Reptile								

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<i>Hoplocephalus bungaroides</i>	Broad-headed Snake	Endangered	Endangered	0	0	The Broad-headed Snake is often found in rocky outcrops and adjacent sclerophyll forest and woodland. The most suitable sites occur in sandstone ridgetops. Common canopy species include <i>Corymbia eximia</i> , <i>C. gummifera</i> , <i>Eucalyptus sieberi</i> , <i>E. punctata</i> and <i>E. piperita</i> .	Unlikely: No suitable habitat. No records in the locality. The Project Area is within the known distribution.	No: The species is unlikely to occur within the Project Area.
<i>Aprasia parapulchella</i>	Pink-tailed Worm-lizard, Pink-tailed Legless Lizard	Vulnerable	Vulnerable	0	0	This species inhabits sloping, open woodlands with native grassy ground layers, particularly dominated by Kangaroo Grass (<i>Themeda australis</i>). It prefers well-drained sites with rocky outcrops or partially-buried rocks and is commonly found beneath small rocks. The species spends significant time in burrows beneath these rocks, often constructed by ants and termites. It also occurs in other habitats, such as disturbed ant nests in chenopod shrubland on the Hay Plains and mallee woodland in the West Wyalong population.	Potential: Suitable habitat is present in the form of open woodlands and native grassy ground layers with three rocky areas noted during recent surveys. The species is associated with PCTs 3373 and 3486, and the Project Area is within the known distribution.	Yes: The species may occur where rocky habitat is present. The species would be assessed as part of the EIS.
<i>Delma impar</i>	Striped Legless Lizard, Striped Snake-lizard	Vulnerable	Vulnerable	0	0	This species primarily inhabits Natural Temperate Grassland but can also be found in grasslands with a high exotic component, as well as secondary grassland near Natural Temperate Grassland and occasionally in open Box-Gum Woodland. Its habitat features perennial, tussock-forming grasses like Kangaroo Grass (<i>Themeda australis</i>), spear-grasses (<i>Austrostipa</i> spp.), and poa tussocks (<i>Poa</i> spp.), with occasional wallaby grasses (<i>Austrodanthonia</i> spp.). It may also occur in modified grasslands with significant exotic grasses and areas with surface rocks used for shelter, including dried cowpats. The species actively hunts for spiders, crickets, moth larvae, and cockroaches. It lays two papery eggs in early summer and seeks refuge below ground or under rocks or logs during winter.	Potential: Marginally suitable habitat is present in the form of grasslands and box-gum woodland. No records in the locality although the Project Area is within the known distribution. The species is associated with PCT 3373.	Yes: The species could occur in areas of the Project Area associated with PCT 3373. Targeted surveys involving placing 10 tile grids occurred between October 2025 and January 2026.

4. REFERENCES

DCCEEW, C. (2025). *Species Profile and Threats Database*. Retrieved from Australian Government Department of Climate Change, Energy, the Environment and Water: <https://www.environment.gov.au/cgi-bin/sprat/public/sprat.pl>

DoE. (2013). *MNES Significant Impact Guidelines 1.1 EPBC Act*. Canberra: Department of Environment Commonwealth of Australia. Retrieved from https://www.dcceew.gov.au/sites/default/files/documents/nes-guidelines_1.pdf

NSW OEH. (2025). *Threatened biodiversity profile search*. Retrieved from NSW Office of Environment & Heritage: <https://threatenedspecies.bionet.nsw.gov.au/>

APPENDIX A BIONET RECORDS

Data from the BioNet Atlas website, which holds records from a number of custodians. The data are only indicative and cannot be considered a comprehensive inventory, and may contain errors and omissions. Species listed under the Sensitive Species Data Policy may have their locations denatured (^ rounded to 0.1°C; ^^ rounded to 0.01°C. Copyright the State of NSW through the Department of Planning, Industry and Environment. Search criteria : Licensed 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: -34.32 West: 149.95 East: 150.16 South: -34.54] recorded since 01 Jan 2005 until 07 Sep 2025 returned a total of 1,421 records of 30 species.
Report generated on 7/09/2025 7:08 PM

Kingdom	Class	Family	Species Code	Scientific Name	Exotic	Common Name	NSW status	Com m. status	Records	Info
Animalia	Aves	Accipitridae	0226	<i>Haliaeetus leucogaster</i>		White-bellied Sea-Eagle	V,P		2	
Animalia	Aves	Accipitridae	0225	<i>Hieraetus morphnoides</i>		Little Eagle	V,P		3	
Animalia	Aves	Falconidae	0238	<i>Falco subniger</i>		Black Falcon	V,P		1	
Animalia	Aves	Cacatuidae	0268	<i>Callocephalon fimbriatum</i>		Gang-gang Cockatoo	E1,P,3	E	46	
Animalia	Aves	Cacatuidae	8862	^^ <i>Calyptorhynchus lathami lathami</i>		South-eastern Glossy Black-Cockatoo	V,P,2	V	66	
Animalia	Aves	Psittacidae	0302	<i>Neophema pulchella</i>		Turquoise Parrot	V,P,3		4	
Animalia	Aves	Strigidae	0248	<i>Ninox strenua</i>		Powerful Owl	V,P,3		7	
Animalia	Aves	Tytonidae	0250	<i>Tyto novaehollandiae</i>		Masked Owl	V,P,3		4	
Animalia	Aves	Acanthizidae	0504	<i>Pyrrholaemus sagittatus</i>		Speckled Warbler	V,P		8	
Animalia	Aves	Meliphagidae	8303	<i>Melithreptus gularis gularis</i>		Black-chinned Honeyeater (eastern subspecies)	V,P		1	
Animalia	Aves	Neosittidae	0549	<i>Daphoenositta chrysoptera</i>		Varied Sittella	V,P		6	
Animalia	Aves	Artamidae	8519	<i>Artamus cyanopterus cyanopterus</i>		Dusky Woodswallow	V,P		21	
Animalia	Aves	Petroicidae	8367	<i>Melanodryas cucullata cucullata</i>		South-eastern Hooded Robin	E1,P	E	3	
Animalia	Aves	Petroicidae	0380	<i>Petroica boodang</i>		Scarlet Robin	V,P		23	
Animalia	Aves	Petroicidae	0382	<i>Petroica phoenicea</i>		Flame Robin	V,P		2	
Animalia	Aves	Estrildidae	0652	<i>Stagonopleura guttata</i>		Diamond Firetail	V,P	V	16	
Animalia	Mammalia	Phascolarctidae	1162	<i>Phascolarctos cinereus</i>		Koala	E1,P	E	912	
Animalia	Mammalia	Burramyidae	1150	<i>Cercartetus nanus</i>		Eastern Pygmy-possum	V,P		7	
Animalia	Mammalia	Petauridae	1136	<i>Petaurus australis</i>		Yellow-bellied Glider	V,P	V	1	
Animalia	Mammalia	Petauridae	1137	<i>Petaurus norfolcensis</i>		Squirrel Glider	V,P		5	
Animalia	Mammalia	Pseudocheiridae	1133	<i>Petauroides volans</i>		Southern Greater Glider	E1,P	E	24	
Animalia	Mammalia	Pteropodidae	1280	<i>Pteropus poliocephalus</i>		Grey-headed Flying-fox	V,P	V	4	
Animalia	Mammalia	Vespertilionidae	1353	<i>Chalinotobus dwyeri</i>		Large-eared Pied Bat	E1,P	E	5	
Animalia	Mammalia	Vespertilionidae	1372	<i>Falsistrellus tasmaniensis</i>		Eastern False Pipistrelle	V,P		7	
Animalia	Mammalia	Vespertilionidae	1357	<i>Myotis macropus</i>		Southern Myotis	V,P		1	
Animalia	Mammalia	Vespertilionidae	1361	<i>Scoteanax rueppellii</i>		Greater Broad-nosed Bat	V,P		3	
Animalia	Mammalia	Miniopteroidea	3330	<i>Miniopterus orianae oceanensis</i>		Large Bent-winged Bat	V,P		8	
Plantae	Flora	Proteaceae	8997	<i>Persoonia mollis subsp. revoluta</i>			V,P	V	91	
Plantae	Flora	Rhamnaceae	5576	<i>Pomaderris cotoneaster</i>		Cotoneaster Pomaderris	E1	E	125	
Plantae	Flora	Solanaceae	14044	<i>Solanum armourense</i>			E1		15	

APPENDIX B PROTECTED MATTERS SEARCH TOOL RESULTS



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: 07-Sep-2025

[Summary](#)

[Details](#)

[Matters of NES](#)

[Other Matters Protected by the EPBC Act](#)

[Extra Information](#)

[Caveat](#)

[Acknowledgements](#)

Summary

Matters of National Environment Significance

This part of the report summarises the matters of national environmental significance that may occur in, or may relate to, the area you nominated. Further information is available in the detail part of the report, which can be accessed by scrolling or following the links below. If you are proposing to undertake an activity that may have a significant impact on one or more matters of national environmental significance then you should consider the [Administrative Guidelines on Significance](#).

World Heritage Properties:	None
National Heritage Places:	None
Wetlands of International Importance (Ramsar)	None
Great Barrier Reef Marine Park:	None
Commonwealth Marine Area:	None
Listed Threatened Ecological Communities:	3
Listed Threatened Species:	56
Listed Migratory Species:	9

Other Matters Protected by the EPBC Act

This part of the report summarises other matters protected under the Act that may relate to the area you nominated. Approval may be required for a proposed activity that significantly affects the environment on Commonwealth land, when the action is outside the Commonwealth land, or the environment anywhere when the action is taken on Commonwealth land. Approval may also be required for the Commonwealth or Commonwealth agencies proposing to take an action that is likely to have a significant impact on the environment anywhere.

The EPBC Act protects the environment on Commonwealth land, the environment from the actions taken on Commonwealth land, and the environment from actions taken by Commonwealth agencies. As heritage values of a place are part of the 'environment', these aspects of the EPBC Act protect the Commonwealth Heritage values of a Commonwealth Heritage place. Information on the new heritage laws can be found at <https://www.dcceew.gov.au/parks-heritage/heritage>

A [permit](#) may be required for activities in or on a Commonwealth area that may affect a member of a listed threatened species or ecological community, a member of a listed migratory species, whales and other cetaceans, or a member of a listed marine species.

Commonwealth Lands:	None
Commonwealth Heritage Places:	None
Listed Marine Species:	20
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

Extra Information

This part of the report provides information that may also be relevant to the area you have

State and Territory Reserves:	5
Regional Forest Agreements:	1
Nationally Important Wetlands:	None
EPBC Act Referrals:	6
Key Ecological Features (Marine):	None
Biologically Important Areas:	None
Bioregional Assessments:	1
Geological and Bioregional Assessments:	None

Details

Matters of National Environmental Significance

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 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	Threatened Category	Presence Text	Buffer Status
Natural Temperate Grassland of the South Eastern Highlands	Critically Endangered	Community may occur	In feature area within area
Upland Basalt Eucalypt Forests of the Sydney Basin Bioregion	Endangered	Community may occur	In buffer area only within area
White Box-Yellow Box-Blakely's Red Gum Grassy Woodland and Derived Native Grassland	Critically Endangered	Community likely to occur	In feature area within area

Listed Threatened Species

[[Resource Information](#)]

Status of Conservation Dependent and Extinct are not MNES under the EPBC Act.

Number is the current name ID.

Scientific Name	Threatened Category	Presence Text	Buffer Status
BIRD			
Anthochaera phrygia Regent Honeyeater [82338]	Critically Endangered	Species or species habitat known to occur	In feature area within area
Aphelocephala leucopsis Southern Whiteface [529]	Vulnerable	Species or species habitat likely to occur	In feature area within area
Botaurus poiciloptilus Australasian Bittern [1001]	Endangered	Species or species habitat may occur	In feature area within area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur	In feature area within area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Callocephalon fimbriatum Gang-gang Cockatoo [768]	Endangered	Species or species habitat known to occur within area	In feature area
Calyptorhynchus lathami lathami South-eastern Glossy Black-Cockatoo [67036]	Vulnerable	Species or species habitat known to occur within area	In feature area
Climacteris picumnus victoriae Brown Treecreeper (south-eastern) [67062]	Vulnerable	Species or species habitat known to occur within area	In feature area
Falco hypoleucos Grey Falcon [929]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Grantiella picta Painted Honeyeater [470]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area	In feature area
Melanodryas cucullata cucullata South-eastern Hooded Robin, Hooded Robin (south-eastern) [67093]	Endangered	Species or species habitat known to occur within area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Polytelis swainsonii Superb Parrot [738]	Vulnerable	Species or species habitat may occur within area	In feature area
Pycnoptilus floccosus Pilotbird [525]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Rostratula australis Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area	In feature area
Stagonopleura guttata Diamond Firetail [59398]	Vulnerable	Species or species habitat known to occur within area	In feature area
FISH			
Macquaria australasica Macquarie Perch [66632]	Endangered	Species or species habitat known to occur within area	In feature area
FROG			
Litoria booroolongensis Booroolong Frog [1844]	Endangered	Species or species habitat likely to occur within area	In buffer area only
INSECT			
Keyacris scurra Key's Matchstick Grasshopper [89739]	Endangered	Species or species habitat may occur within area	In buffer area only
Paralucia spinifera Bathurst Copper Butterfly, Purple Copper Butterfly, Bathurst Copper, Bathurst Copper Wing, Bathurst-Lithgow Copper, Purple Copper [26335]	Vulnerable	Species or species habitat may occur within area	In buffer area only
MAMMAL			
Chalinolobus dwyeri Large-eared Pied Bat, Large Pied Bat [183]	Endangered	Species or species habitat known to occur within area	In feature area
Dasyurus maculatus maculatus (SE mainland population) Spot-tailed Quoll, Spotted-tail Quoll, Tiger Quoll (southeastern mainland population) [75184]	Endangered	Species or species habitat known to occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Petauroides volans Greater Glider (southern and central) [254]	Endangered	Species or species habitat known to occur within area	In feature area
Petaurus australis australis Yellow-bellied Glider (south-eastern) [87600]	Vulnerable	Species or species habitat known to occur within area	In feature area
Petrogale penicillata Brush-tailed Rock-wallaby [225]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Phascolarctos cinereus (combined populations of Qld, NSW and the ACT) Koala (combined populations of Queensland, New South Wales and the Australian Capital Territory) [85104]	Endangered	Species or species habitat known to occur within area	In feature area
Pseudomys novaehollandiae New Holland Mouse, Pookila [96]	Vulnerable	Species or species habitat may occur within area	In feature area
Pteropus poliocephalus Grey-headed Flying-fox [186]	Vulnerable	Foraging, feeding or related behaviour known to occur within area	In feature area
PLANT			
Acacia bynoeana Bynoe's Wattle, Tiny Wattle [8575]	Vulnerable	Species or species habitat may occur within area	In feature area
Caladenia tessellata Thick-lipped Spider-orchid, Daddy Long-legs [2119]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Commersonia prostrata Dwarf Kerrawang [87152]	Endangered	Species or species habitat likely to occur within area	In buffer area only
Cynanchum elegans White-flowered Wax Plant [12533]	Endangered	Species or species habitat may occur within area	In buffer area only
Diuris aequalis Buttercup Doubletail [21588]	Endangered	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Dodonaea procumbens Trailing Hop-bush [12149]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Eucalyptus aggregata Black Gum [20890]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Genoplesium baueri Yellow Gnat-orchid, Bauer's Midge Orchid, Brittle Midge Orchid [7528]	Endangered	Species or species habitat may occur within area	In buffer area only
Grevillea raybrownii [65665]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Helichrysum calvertianum [5702]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hibbertia acaulothrix [87409]	Endangered	Species or species habitat may occur within area	In feature area
Kunzea cabbagei [11420]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Leucochrysum albicans subsp. tricolor Hoary Sunray, Grassland Paper-daisy [89104]	Endangered	Species or species habitat likely to occur within area	In feature area
Persoonia mollis subsp. revoluta [56094]	Vulnerable	Species or species habitat known to occur within area	In buffer area only
Persoonia oxycoccoides [16114]	Endangered	Species or species habitat may occur within area	In buffer area only
Phyllota humifusa Dwarf Phyllota [10133]	Vulnerable	Species or species habitat may occur within area	In buffer area only

Scientific Name	Threatened Category	Presence Text	Buffer Status
Pomaderris brunnea Rufous Pomaderris, Brown Pomaderris [16845]	Vulnerable	Species or species habitat likely to occur within area	In buffer area only
Pomaderris cotoneaster Cotoneaster Pomaderris [2043]	Endangered	Species or species habitat known to occur within area	In feature area
Pomaderris pallida Pale Pomaderris [13684]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Rhizanthella slateri Eastern Underground Orchid [11768]	Endangered	Species or species habitat may occur within area	In feature area
Thelymitra kangaloonica Kangaloon Sun Orchid [81861]	Critically Endangered	Species or species habitat may occur within area	In buffer area only
Thesium australe Austral Toadflax, Toadflax [15202]	Vulnerable	Species or species habitat likely to occur within area	In feature area

REPTILE

Aprasia parapulchella Pink-tailed Worm-lizard, Pink-tailed Legless Lizard [1665]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Delma impar Striped Legless Lizard, Striped Snake-lizard [1649]	Vulnerable	Species or species habitat may occur within area	In buffer area only
Hoplocephalus bungaroides Broad-headed Snake [1182]	Endangered	Species or species habitat may occur within area	In buffer area only

Listed Migratory Species

[[Resource Information](#)]

Scientific Name	Threatened Category	Presence Text	Buffer Status
Migratory Marine Birds			
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area	In feature area

Migratory Terrestrial Species

Scientific Name	Threatened Category	Presence Text	Buffer Status
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area	In feature area
Migratory Wetlands Species			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In feature area

Other Matters Protected by the EPBC Act

Listed Marine Species			[Resource Information]
Scientific Name	Threatened Category	Presence Text	Buffer Status
Bird			
Actitis hypoleucos Common Sandpiper [59309]		Species or species habitat may occur within area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Apus pacificus Fork-tailed Swift [678]		Species or species habitat likely to occur within area overfly marine area	In feature area
Bubulcus ibis as Ardea ibis Cattle Egret [66521]		Species or species habitat may occur within area overfly marine area	In feature area
Calidris acuminata Sharp-tailed Sandpiper [874]	Vulnerable	Species or species habitat may occur within area	In feature area
Calidris ferruginea Curlew Sandpiper [856]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area
Calidris melanotos Pectoral Sandpiper [858]		Species or species habitat may occur within area overfly marine area	In feature area
Chalcites osculans as Chrysococcyx osculans Black-eared Cuckoo [83425]		Species or species habitat likely to occur within area overfly marine area	In feature area
Gallinago hardwickii Latham's Snipe, Japanese Snipe [863]	Vulnerable	Species or species habitat likely to occur within area overfly marine area	In feature area
Haliaeetus leucogaster White-bellied Sea-Eagle [943]		Species or species habitat known to occur within area	In feature area
Hirundapus caudacutus White-throated Needletail [682]	Vulnerable	Species or species habitat known to occur within area overfly marine area	In feature area
Lathamus discolor Swift Parrot [744]	Critically Endangered	Species or species habitat may occur within area overfly marine area	In feature area

Scientific Name	Threatened Category	Presence Text	Buffer Status
Merops ornatus Rainbow Bee-eater [670]		Species or species habitat may occur within area overfly marine area	In feature area
Monarcha melanopsis Black-faced Monarch [609]		Species or species habitat known to occur within area overfly marine area	In feature area
Motacilla flava Yellow Wagtail [644]		Species or species habitat may occur within area overfly marine area	In feature area
Myiagra cyanoleuca Satin Flycatcher [612]		Breeding known to occur within area overfly marine area	In feature area
Neophema chrysostoma Blue-winged Parrot [726]	Vulnerable	Species or species habitat may occur within area overfly marine area	In feature area
Pandion haliaetus Osprey [952]		Species or species habitat likely to occur within area	In feature area
Pterodroma cervicalis White-necked Petrel [59642]		Species or species habitat may occur within area	In feature area
Rhipidura rufifrons Rufous Fantail [592]		Species or species habitat known to occur within area overfly marine area	In feature area
Rostratula australis as Rostratula benghalensis (sensu lato) Australian Painted Snipe [77037]	Endangered	Species or species habitat likely to occur within area overfly marine area	In feature area

Extra Information

State and Territory Reserves [\[Resource Information \]](#)

Protected Area Name	Reserve Type	State	Buffer Status
Bangadilly	National Park	NSW	In buffer area only
Guula Ngurra	National Park	NSW	In buffer area only
Kerrawary	Nature Reserve	NSW	In buffer area only
Tarlo River	National Park	NSW	In buffer area only
Wollondilly River	Nature Reserve	NSW	In buffer area only

Regional Forest Agreements [\[Resource Information \]](#)

Note that all areas with completed RFAs have been included. Please see the associated resource information for specific caveats and use limitations associated with RFA boundary information.

RFA Name	State	Buffer Status
Southern RFA	New South Wales	In buffer area only

EPBC Act Referrals [\[Resource Information \]](#)

Title of referral	Reference	Referral Outcome	Assessment Status	Buffer Status
New transmission infrastructure, HumeLink	2021/9121		Post-Approval	In feature area
Wattle Creek Energy Hub Battery Energy Storage System Project	2024/09970		Assessment	In buffer area only
Wattle Creek Energy Hub Solar Farm Project	2024/09969		Assessment	In buffer area only

Not controlled action

Improving rabbit biocontrol: releasing another strain of RHDV, sthrn two thirds of Australia	2015/7522	Not Controlled Action	Completed	In feature area
INDIGO Central Submarine Telecommunications Cable	2017/8127	Not Controlled Action	Completed	In feature area

Not controlled action (particular manner)

INDIGO Marine Cable Route Survey (INDIGO)	2017/7996	Not Controlled Action (Particular Manner)	Post-Approval	In feature area
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Bioregional Assessments [\[Resource Information \]](#)

SubRegion	BioRegion	Website	Buffer Status
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SubRegion	BioRegion	Website	Buffer Status
Sydney	Sydney Basin	BA website	In buffer area only

Caveat

1 PURPOSE

This report is designed to assist in identifying the location of matters of national environmental significance (MNES) and other matters protected by the Environment Protection and Biodiversity Conservation Act 1999 (Cth) (EPBC Act) which may be relevant in determining obligations and requirements under the EPBC Act.

The report contains the mapped locations of:

- World and National Heritage properties;
- Wetlands of International and National Importance;
- Commonwealth and State/Territory reserves;
- distribution of listed threatened, migratory and marine species;
- listed threatened ecological communities; and
- other information that may be useful as an indicator of potential habitat value.

2 DISCLAIMER

This report is not intended to be exhaustive and should only be relied upon as a general guide as mapped data is not available for all species or ecological communities listed under the EPBC Act (see below). Persons seeking to use the information contained in this report to inform the referral of a proposed action under the EPBC Act should consider the limitations noted below and whether additional information is required to determine the existence and location of MNES and other protected matters.

Where data is available to inform the mapping of protected species, the presence type (e.g. known, likely or may occur) that can be determined from the data is indicated in general terms. It is the responsibility of any person using or relying on the information in this report to ensure that it is suitable for the circumstances of any proposed use. The Commonwealth cannot accept responsibility for the consequences of any use of the report or any part thereof. To the maximum extent allowed under governing law, the Commonwealth will not be liable for any loss or damage that may be occasioned directly or indirectly through the use of, or reliance on the contents of this report.

3 DATA SOURCES

Threatened ecological communities

For threatened ecological communities where the distribution is well known, maps are generated based on information contained in recovery plans, State vegetation maps and 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.

Threatened, migratory and marine species

Threatened, migratory and marine species distributions have been discerned through a variety of methods. Where distributions are well known and if time permits, distributions are inferred from either thematic spatial data (i.e. vegetation, soils, geology, elevation, aspect, terrain, etc.) together with point locations and described habitat; or modelled (MAXENT or BIOCLIM habitat modelling) using point locations and environmental data layers.

Where little information is available for a species or large number of maps are required in a short time-frame, maps are derived either from 0.04 or 0.02 decimal degree cells; by an automated process using polygon capture techniques (static two kilometre grid cells, alpha-hull and convex hull); or captured manually or by using topographic features (national park boundaries, islands, etc.).

In the early stages of the distribution mapping process (1999-early 2000s) distributions were defined by degree blocks, 100K or 250K map sheets to rapidly create distribution maps. More detailed distribution mapping methods are used to update these distributions when time permits.

4 LIMITATIONS

The following species and ecological communities have not been mapped and do not appear in this report:

- threatened species listed as extinct or considered vagrants;
- some recently listed species and ecological communities;
- some listed migratory and listed marine species, which are not listed as threatened species; and
- migratory species that are very widespread, vagrant, or only occur in Australia in small numbers.

The following groups have been mapped, but may not cover the complete distribution of the species:

- listed migratory and/or listed marine seabirds, which are not listed as threatened, have only been mapped for recorded breeding sites; and
- seals which have only been mapped for breeding sites near the Australian continent

The breeding sites may be important for the protection of the Commonwealth Marine environment.

Refer to the metadata for the feature group (using the Resource Information link) for the currency of the information.

Acknowledgements

This database has been compiled from a range of data sources. The department acknowledges the following custodians who have contributed valuable data and advice:

- [-Office of Environment and Heritage, New South Wales](#)
- [-Department of Environment and Primary Industries, Victoria](#)
- [-Department of Primary Industries, Parks, Water and Environment, Tasmania](#)
- [-Department of Environment, Water and Natural Resources, South Australia](#)
- [-Department of Land and Resource Management, Northern Territory](#)
- [-Department of Environmental and Heritage Protection, Queensland](#)
- [-Department of Parks and Wildlife, Western Australia](#)
- [-Environment and Planning Directorate, ACT](#)
- [-Birdlife Australia](#)
- [-Australian Bird and Bat Banding Scheme](#)
- [-Australian National Wildlife Collection](#)
- Natural history museums of Australia
- [-Museum Victoria](#)
- [-Australian Museum](#)
- [-South Australian Museum](#)
- [-Queensland Museum](#)
- [-Online Zoological Collections of Australian Museums](#)
- [-Queensland Herbarium](#)
- [-National Herbarium of NSW](#)
- [-Royal Botanic Gardens and National Herbarium of Victoria](#)
- [-Tasmanian Herbarium](#)
- [-State Herbarium of South Australia](#)
- [-Northern Territory Herbarium](#)
- [-Western Australian Herbarium](#)
- [-Australian National Herbarium, Canberra](#)
- [-University of New England](#)
- [-Ocean Biogeographic Information System](#)
- [-Australian Government, Department of Defence](#)
- [Forestry Corporation, NSW](#)
- [-Geoscience Australia](#)
- [-CSIRO](#)
- [-Australian Tropical Herbarium, Cairns](#)
- [-eBird Australia](#)
- [-Australian Government – Australian Antarctic Data Centre](#)
- [-Museum and Art Gallery of the Northern Territory](#)
- [-Australian Government National Environmental Science Program](#)
- [-Australian Institute of Marine Science](#)
- [-Reef Life Survey Australia](#)
- [-American Museum of Natural History](#)
- [-Queen Victoria Museum and Art Gallery, Inveresk, Tasmania](#)
- [-Tasmanian Museum and Art Gallery, Hobart, Tasmania](#)
- Other groups and individuals

The Department is extremely grateful to the many organisations and individuals who provided expert advice and information on numerous draft distributions.

Please feel free to provide feedback via the [Contact us](#) page.

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